The statements set forth in this catalog outline the current rules, regulations and policies of Arapahoe Community College and the Colorado Community College System. While the provisions of this catalog will normally be applied as stated, the College reserves the right to make changes at any time. The Web site, therefore, will contain any changes and is the most current source of information and is the basis of the College’s contract with its students. It is the responsibility of each student to stay abreast of changes to his/her area of study as presented on the Arapahoe Community College Web site (http://www.arapahoe.edu).
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 College acquired the West Alamo Center in downtown Littleton in 1990 and renamed it 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.

Our Door is Always 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.

VISION STATEMENT
(Pending CCCS Board Approval)

To be the leader in community college education for the State of Colorado.

MISSION STATEMENT
(Pending CCCS Board Approval)

To provide innovative and responsive educational and economic opportunities in an accessible, inclusive environment that promotes success for students, employees and the community.

Institutional Accreditation

Arapahoe Community College is accredited by The Higher Learning Commission and a member of the North Central Association of Colleges and Schools. The Commission can be reached at 312.263.0456. Web address: www.ncahiclearningcommission.org.

ACC Program Accreditations

The following programs hold accreditation and/or approval 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.
A MESSAGE FROM THE PRESIDENT

Welcome to Arapahoe Community College where learning is the focal point of everything we do. We provide engaging and innovative educational opportunities for learners with a myriad of academic, professional and personal goals. We aim to improve the quality of life and the economic health of Douglas, South Jefferson and Arapahoe counties.

We are proud to be in our 43rd year of serving this diverse community with flexible and adaptable programs. Arapahoe Community College students pursue coursework and degrees for transfer into university programs; career preparation and advancement; and personal fulfillment. In addition to typical college programs, we offer many opportunities for lifelong learners, including community education, continuing education for practicing professionals, customized training for industry needs, special programs for seniors, developmental programs to help students prepare for college coursework, and many more exceptional academic programs.

Arapahoe Community College’s courses and programs are not only offered at our two campuses – our Main Campus in downtown Littleton and our Douglas County-based University Center at Chaparral in Parker – but at various Douglas County Schools and Community Centers. For students whose schedules do not permit them to personally attend classes, we have an extensive number of online courses.

Arapahoe Community College is dedicated to your success. We provide a variety of support services such as: financial aid; advising; disability resources; veterans’ services; an international center; career resources; and an award-winning child care center. To enhance your college experience, we provide many student organizations, activities and events.

Remaining actively linked to our community is a main priority. We stay connected via numerous community advisory groups and local partnerships.

On behalf of the entire Arapahoe Community College community, I am pleased to welcome you and wish every success.

With warmest regards,
Dr. Bert Glandon
President
# Academic Calendar 2009-2010

## Summer Semester 2009 (201010)  5/26/09-8/03/09

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 1</td>
<td>Graduation application deadline for the Summer Semester</td>
</tr>
<tr>
<td>April 13-May 17</td>
<td>Summer registration for all students</td>
</tr>
<tr>
<td>May 18-22</td>
<td>Last Minute registration on MTWR 8 a.m.-6 p.m.; F 8 a.m.-5 p.m.</td>
</tr>
<tr>
<td>May 23-25</td>
<td>Memorial Day holiday – College Closed: no services available</td>
</tr>
<tr>
<td>May 26 (Tue.)</td>
<td><strong>Summer Term Begins</strong> (10-week classes begin)</td>
</tr>
<tr>
<td>June 8 (Mon.)</td>
<td><strong>8-Week Classes Begin</strong></td>
</tr>
<tr>
<td>June 30</td>
<td>Late graduation application deadline date for the Summer Semester</td>
</tr>
<tr>
<td>July 1</td>
<td>Graduation application deadline date for Fall Semester</td>
</tr>
<tr>
<td>July 3-4</td>
<td>Independence Day recognized – College Closed: no services available</td>
</tr>
<tr>
<td>August 3 (Mon.)</td>
<td>Last day of classes, End of Summer semester</td>
</tr>
<tr>
<td>August 7</td>
<td>Grading deadline</td>
</tr>
</tbody>
</table>

**Class Sessions**

<table>
<thead>
<tr>
<th>Session</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>10 week</td>
<td>May 26 - August 3</td>
</tr>
<tr>
<td>8 week</td>
<td>June 8 - August 3</td>
</tr>
</tbody>
</table>

*Classes that meet on Friday and Saturday will have to schedule extra time during the term due to the July 4th holiday.*

## Fall Semester 2009 (201020)  8/17/09-12/07/09

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 13-Aug. 9</td>
<td>Fall registration for all students</td>
</tr>
<tr>
<td>July 1</td>
<td>Graduation application deadline date for Fall Semester</td>
</tr>
<tr>
<td>Aug. 10-15</td>
<td>Last Minute registration on MTWR 8 a.m.-6 p.m.; F 8 a.m.-5 p.m.; S 10 a.m.-1 p.m.</td>
</tr>
<tr>
<td>Aug. 17</td>
<td><strong>Fall Semester Begins</strong></td>
</tr>
<tr>
<td>Sept. 5-6</td>
<td>Labor Day holiday – <strong>Classes Not In Session</strong>: most administrative services not available</td>
</tr>
<tr>
<td>Sept. 7</td>
<td>Labor Day holiday – College closed: no services available</td>
</tr>
<tr>
<td>Oct. 12</td>
<td>Columbus Day – College open – classes in session</td>
</tr>
<tr>
<td>Oct. 31</td>
<td>Late graduation application deadline date for the Fall Semester</td>
</tr>
<tr>
<td>Nov. 1</td>
<td>Graduation application deadline for Spring Semester</td>
</tr>
<tr>
<td>Nov. 11</td>
<td>Veteran’s Day – College open – classes in session</td>
</tr>
<tr>
<td>Nov. 23-25</td>
<td>Fall Break, <strong>Classes Not In Session</strong>, offices open 8 a.m.-5 p.m.</td>
</tr>
<tr>
<td>Nov. 26</td>
<td>Thanksgiving – College closed: no services available</td>
</tr>
<tr>
<td>Nov. 27</td>
<td>Fall Break – <strong>Classes Not In Session</strong>, offices open 8 a.m.-5 p.m.</td>
</tr>
<tr>
<td>Nov. 28-29</td>
<td>Fall Break – <strong>Classes Not In Session</strong>, most administrative services not available</td>
</tr>
<tr>
<td>Dec. 7 (Mon.)</td>
<td>Last day of classes, end of Fall semester</td>
</tr>
<tr>
<td>Dec. 11</td>
<td>Grading deadline</td>
</tr>
<tr>
<td>Dec. 25-Jan. 1</td>
<td>Holiday Season – college closed: no services available</td>
</tr>
<tr>
<td>Jan. 4 (Mon.)</td>
<td>College re-opens</td>
</tr>
</tbody>
</table>

**Class Sessions**

<table>
<thead>
<tr>
<th>Session</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 week</td>
<td>Aug. 17 - December 7 (Mon)</td>
</tr>
</tbody>
</table>

## Spring Semester 2010 (201030)  1/19/10-5/10/10

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nov. 1</td>
<td>Graduation application deadline date for Spring Semester</td>
</tr>
<tr>
<td>Nov. 9-Jan. 10</td>
<td>Spring registration for all students</td>
</tr>
<tr>
<td>Jan. 11-16</td>
<td>Last Minute registration on MTWR, 8 a.m.-6 p.m.; F 8 a.m.- 5 p.m.; S 10 a.m.-1 p.m.</td>
</tr>
<tr>
<td>Jan. 18</td>
<td>Martin Luther King, Jr. Birthday – College open</td>
</tr>
<tr>
<td>Jan. 19 (Tue.)</td>
<td><strong>Spring Semester Begins</strong></td>
</tr>
<tr>
<td>Feb. 15</td>
<td>President’s Day – College open, classes in session</td>
</tr>
<tr>
<td>Mar. 8-14</td>
<td>Spring Break – <strong>Classes Not In Session</strong>, Offices Open 8 a.m.-5 p.m.</td>
</tr>
<tr>
<td>Mar. 31</td>
<td>Late graduation application deadline date for the Spring Semester</td>
</tr>
<tr>
<td>April 1</td>
<td>Graduation application deadline date for Summer Semester</td>
</tr>
<tr>
<td>May 10 (Mon.)</td>
<td>Last day of classes – End of Spring Semester</td>
</tr>
<tr>
<td>May 14</td>
<td>Grading deadline</td>
</tr>
<tr>
<td>May 15</td>
<td><strong>Annual Commencement Ceremony</strong></td>
</tr>
</tbody>
</table>

**Class Sessions**

<table>
<thead>
<tr>
<th>Session</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 week</td>
<td>January 19 - May 10</td>
</tr>
</tbody>
</table>

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Please visit [www.arapahoe.edu](http://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 (Room 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 17+ 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 from ACC’s International Student Advisor at 303.797.5652.

High School Students: High school students must be at least 17+ 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 the Pre-enrollment Services Office, Arapahoe Community College, P.O. Box 9002, Littleton CO 80160-9002. These forms may be obtained at your high school, or at ACC’s Pre-enrollment Services Office.

* Students under 17 may contact the Pre-enrollment Services Office for more information about the Underage Waiver process.

2. Financial Aid
Apply for Financial Aid if needed and complete a Free Application for Federal Student Aid (FAFSA).
   In person: Office of Financial Aid (Room 2115)
   or call 303.797.5661 for an appointment
   Online: www.fafsa.ed.gov

3. Assessment
Take the ACCUPLACER in the Testing Office (Room M2280). Call 303.797.5993 for hours.

To take the ACCUPLACER at UCC (Parker), call 303.734.4UCC (4822) to make an appointment. This no-fail, un-timed 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 ACCUPLACER. All students enrolling in a degree program, recent high school graduates and students enrolling in college-level English or math classes MUST take the ACCUPLACER 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. Allow approximately 2 hours for ACCUPLACER completion before closing times at the Testing Center.

You must present a photo ID when taking the test. There is a $10.00 charge to take the ACCUPLACER test. Results are available immediately.

ACCUPLACER test accommodations are provided to qualified students with disabilities by contacting Disability Services in Room M2710, 303.797.5937 v/t. For more information, please refer to Student Services/Information-Assessment-Basic Skills section of this catalog.

4. Advising/New Student Orientation
New degree or certificate-seeking students: Attend a mandatory New Student Orientation session (dates, times and reservations at the Advising Office, Room M2010 or 303.797.5664. For academic planning, bring ACCUPLACER, ACT, SAT scores and/or college transcripts with you.

Transfer and continuing ACC students: Meet with an Advisor in the Advising Office at Room M2010. The advisor 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 ACCUPLACER results and discuss course selections. Call 303.797.5664 for walk-in advising times or to set an appointment. We strongly recommended one of the advising options listed above. Students taking classes to enhance job skills or for personal interest are always welcome, but not required to meet with an advisor.

5. Contact Disability Services
Visit Room M2710 or call 303.797.5937 v/t to request academic accommodations and for specialized consultation if needed. Appropriate documentation is required for accommodations.

6. Register for classes
We will notify you of your assigned Student Identification Number and when and how to register after you have completed your application. More information and instructions are available on the ACC Web site.

7. Tuition
Pay for your classes with a credit card online via the My Community EDucation system or with cash, check or credit card at the Cashier’s window (Room M2300) by the deadline listed in the semester schedule. See the Schedule of Classes for information about deferred payments.

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

Congratulations! You are now an ACC student! We encourage you to use the many support services available to you as a student. Read this course catalog 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 17 AND OLDER)

Post-secondary Enrollment Options
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: Pre-enrollment Services Office, 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 items on the Checklist for Application/Registration in this catalog.

Home-schooled students:
If you are home-schooled and age 17 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 the Pre-enrollment Services Office Manager, Howard Fukaye at 303.797.5622.

RESIDENCY, TUITION AND FEES

Residency
We classify you as a resident or non-resident 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 Admissions Manager 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 Resident Status
To qualify for resident 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.

Resident Status for Active Duty Military
Non-resident active duty military personnel and their dependents qualify for resident status by providing the following documents within 10 days of the start of the semester in which you are enrolling:

- Certification from your base personnel office that you are on active duty with a permanent duty station in Colorado
- A photocopy of both sides of your military or dependent ID card

U.S. Military Service members of TDY (Temporary Duty) orders to Colorado and their dependents qualify for in-state tuition (but not COF) by providing the following documents within 10 days of the start of each semester in which they are enrolling:

- Documentation of assignment or orders and copy of sponsor’s and student’s Military ID are required.

Colorado National Guard members and their dependents qualify for in-state tuition (but not COF) by providing the following documents within 10 days of the start of each semester in which they are enrolling:

- Verification of Colorado residency, such as copies of lease agreements, warranty deed, Colorado state tax returns or Colorado driver’s license.

Please re-submit your documentation for each semester that you wish to be classified as a resident. You can submit the above forms to Information Central.
WUE (Western Undergraduate Exchange)
WUE is 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, and remain, a resident of one of the participating states: Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Utah, Washington or Wyoming. If you have moved to Colorado within the past 12 months from one of the qualifying states you may be eligible for the program. No semesters in which a student is classified as WUE may be counted towards the 12 month domicile requirement to establish Colorado residency.

To qualify, a WUE application form must be submitted no later than 10 days from the beginning of each term in which you are enrolling. Applications are available on campus at Information Central or our Web site. Go to www.arapahoe.edu, click on Apply/Register and on Commonly Used Forms. The forms can be submitted to Information Central, faxed or mailed. Please contact the Admissions and Records Office for further information at 303.797.5624, or e-mail linda.sulisberger@arapahoe.edu.

Information on WUE is available at www.wue.wiche.edu. Questions may also be emailed to info-sep@wiche.edu or sent to Student Exchange Programs, Western Interstate Commission for Higher Education, PO Box 9752, Boulder, CO 80301-9752.

HB-06S-1023
In July 2006, the Colorado State Legislature enacted HB-06S-1023, which became effective on August 1, 2006.

The legislation requires all citizens who apply for state-funded benefits that entail any payment or financial assistance provide proof that they are lawfully present in the United States. Visit http://highered.colorado.gov for more information regarding this legislation.

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 are paid. For detailed tuition and fee rates, please see the Schedule of Classes 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 are granted after that time. Deadline dates for refunds are listed in the semester Schedule of Classes. You can drop online at www.arapahoe.edu under (MyCommunityEducation) or by submitting a Schedule Adjustment Form to Information Central prior to the Drop Deadline.

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 online at www.arapahoe.edu under (MyCommunityEducation) 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.

Appeal for Tuition Credit
The College gives students the opportunity to submit an Appeal for Tuition Credit if there is an unforeseeable or extraordinary circumstance that prevents the student from meeting the drop deadline. For more information please see Appeal Instructions or download and fill out the Appeal for Tuition Credit form, available online at www.arapahoe.edu. Additional forms that may be needed are the Financial Aid Acknowledgement Form and the Medical Documentation Form.

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 online at www.arapahoe.edu under (MyCommunityEducation). 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 (COF), is applied to a resident 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.

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

Applying 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 can assist you with completing the online application should you choose this option.

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

- Your (and your parents’) tax returns
- Additional Income and 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 in awarding grant and work-study funds.

Student Rights and Responsibilities

Students applying for financial aid have these rights and responsibilities:

Student Rights: You have the right to:

1. Know what financial assistance is available from ACC, including information on Federal, State and other financial aid programs.
2. Know the deadline or priority dates for submitting applications for financial programs.
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, including 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 or 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. ACC advises students 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 the Office of 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 Office of Financial Aid for the many scholarship opportunities available. 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 sites:

- 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 the borrower remains enrolled in at least six (6) or more credit hours. Repayment begins six months after the student is no longer enrolled in six (6) or more credit hours. Students who cannot demonstrate financial need for 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. 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 insured 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 State of Colorado funds the program.

**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. You must submit a Free Application for Federal Student Aid to apply. Please contact the Office of Financial Aid for application forms and additional information.

**Federal Financial Aid Return of Title IV Funds Policy**
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 regulation. 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
- Academic Competitiveness 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.

**Veteran Educational Assistance Programs**
ACC has been approved for most education and training programs by the Colorado State Approving Agency. Some of those programs include:

- The GI Bill (Chapter 30)
- National Guard/Reserve GI Bill (Chapter 1606)
- Dependents’ Benefits for Deceased or Disabled Veterans (Chapter 35)
- Vocational Rehabilitation

**To Apply**
Visit the Office of Financial Aid and VA Web site (www.gibill.va.gov) to begin the application process. In general, you will need the following before your benefits can be determined and awarded:

- Copy of your DD214
- NOBE- Notice of Basic Eligibility for National Guard or Reserve
- Form 22/1990 for New Veterans Obtaining Benefits
- Form 22/1995 for Veterans Continuing their Benefits
- Form 22/5490 for New Dependent benefit recipients
- Form 22/5495 for Continuing Dependent benefit recipients

To be considered for Advanced Payment, you must complete your application a minimum of 60 days prior to the semester start. Applicants must be prepared to pay their own tuition, fees, books, and supplies while the VA processes their certification/application. Please contact the ACC Veterans Certifying Official at 303.797.5661 for more information. See also Academic Policies and Procedures – Attendance section of this catalog.

**STUDENT SERVICES**

**Accommodations for Students with Disabilities**
In accordance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act, ACC provides students with documented 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 Checklist 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, click in the “My CommunityEDucation” box and enter your login information.
Academic Advising

Academic advising is a crucial first step for new students beginning a college program. 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. The ACC Academic Advising office also 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
- 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 School 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 math.

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 ACCUPLACER test 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 (Room M2280) on a walk-in basis. (Call the Testing Center at 303.797.5993 for days and hours). Please plan to begin testing at least two hours BEFORE the closing time.

Testing is also available at the University Center at Chaparral (303.734.4822). ACCUPLACER test accommodations are provided to qualified students with disabilities. To request accommodations, contact Disability Services in Room M2710 or call 303.797.5937 v/tty.

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

- Have achieved these minimum scores on the ACT college entrance exam within the past five years: Mathematics 19, Writing 18 and Reading 17; or:
- Have achieved these minimum scores on the SAT college entrance exam within the past five years: Mathematics 460, Writing 440 and Reading 430; or:
- Have achieved these minimum scores on the ACCUPLACER placement test within the past five 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;
  c. Have earned an Associate Degree or higher;
  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 the Testing Center, an advisor or Admissions & Records staff member. Some programs at ACC require specific minimum ACCUPLACER 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 ACCUPLACER 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 ACCUPLACER 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 ACCUPLACER. 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 Policies and Procedures – 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 order books, review our refund and buy-back policies, and access other store information online at www.efollett.com. Also available in the campus bookstore are school supplies, bargain books, laptops, 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 and Design Center and UCC lots require an ACC permit. Permit costs are automatically charged to your account when you register for classes. 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 and Design Center Lot J requires a “J” permit, which is ONLY available to current students registered for classes at the 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**
This service is designed to assist the campus community experiencing vehicle problems on the main campus and the Art and Design Center. Services include jump-starting a battery or unlocking a car door. To obtain this service, call ext. 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 and Design Center also has in-house phones in open public areas 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 and 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, Room M2600, 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.

**Jeanne Clery Disclosure Of Campus Security Policy and Campus Crime Statistics Act**
The Clery Act Report is accessible on the ACC Web site (www.arapahoe.edu). 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:

- Campus crime and security policy disclosures
- Statistical reporting and publication
- Timely warning provisions
- Substantive policy, procedural and victims’ rights provisions and
- 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 ext. 5911 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 will be posted near the classroom. If there is no posted notice and your Instructor does not appear, check with the school office (Room A2000).
**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.

**Closure of College**

Call 303.797.5700, ext. 9, or check our Web site at www.arapahoe.edu to learn 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 Policies and Procedures – Student Rights, Freedoms and Responsibilities section of this catalog.

**Comment Cards**

ACC is committed to listening 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 Graduation Coordinator at 303.797.5630 to find out if your experience qualifies.

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**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 section of this catalog.

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**Career Center**

**Career Exploration**

Undecided about a major or 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)

Free assessments are also offered through online programs.

- Choices Planner and Explorer – skills, values, interests assessments
- ECOCIS – personality, interests, skills assessments

**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.
- 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.
- We have computer programs that provide free updated information on current occupations, salary ranges, job outlook, schools offering programs, career videos and scholarships.

**Employment Services Available**

- 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.

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Please visit www.arapahoe.edu for the most current, updated catalog information
Credit for Prior Learning

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 (CPL) 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

THE LAW
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 law is on file in the Human Resources Office for your reference. The College has adopted the following Drug and Alcohol Abuse Prevention Program:

CODE OF CONDUCT
Students shall not engage in the unauthorized or unlawful manufacture, distribution, dispensation, possession, use/abuse of alcohol and/or illicit drugs on College property or as a part of any College activity.

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

COLLEGE PENALTIES
The College will impose penalties against students who violate the above Code of Conduct. Violators will be subject to disciplinary action under student disciplinary policies. The sanctions include, but are not limited to, probation, suspension or expulsion from the college or probation, suspension or termination of employment; and referral to authorities for prosecution, as appropriate.

HEALTH RISKS
A myriad of health risks are associated with drug and alcohol abuse. Risks include but are not limited to: malnutrition, brain damage, heart disease, pancreatitis, cirrhosis of the liver, mental illness, death, low birth-weight babies, and babies with drug addictions. Personal relationships, family dynamics, ability to work and study are also at risk.
Drug and Alcohol Abuse Prevention Program information is available through Human Resources. Counseling resources are available through the Student Affairs office.

**ILLEGAL SUBSTANCES**
A controlled substances schedule is on file for your reference in the Student Affairs Office.

**REFERRAL RESOURCES**
- Referral for counseling, treatment, rehabilitation, and re-entry programs is available through the community:
  - Mental Health Center, Arapahoe
    5500 S. Sycamore St.
    Littleton, CO
    303.797.9346, emergency line: 303.795.6187
  - Mental Health Center, Jefferson
    5265 Vance
    Arvada, CO
    303.425.0300
    (Jefferson County Residents Only)
  - Professional Psychology Center at University of Denver
    303.871.3626
  - Alcoholics Anonymous (24 hr.)
    Denver Area Central Office
    2785 N. Steer Blvd. Suite 116
    Denver CO 80211
    303.322.4440
    E-mail: denveraa@daccaa.org, http://www.daccaa.org
  - Narcotics Anonymous, Main Office
    PO Box 9999
    Van Nuys, California 91409 USA
    Telephone: (818) 773.9999, Fax: (818) 700.0700
  - Focus on Recovery
    Helpline: 1-800.234.0420

Consult the yellow pages of the local telephone book for a listing of all private and community based programs. Check listings under “Alcoholism Treatment” and “Drug Abuse Information and Treatment.” For further information contact the Student Affairs office at 303.797.5668. This information is provided in compliance with the Drug Free Schools and Communities Amendments of 1989 (PL 101-226).

**Emergency Messages**
There is no paging system at ACC, but emergency message delivery will be provided through the Campus Police Department (303.797.5800). 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.

**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, and salad bar along with a variety of beverages. Hours are posted outside the cafeteria. Family members and the public are welcome. A microwave oven is available for students who wish to heat food brought from home. Catering for meetings and events is available. There are several food locations near UCC.

**Vending Machines**
ACC has 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; problems with vending machines at the Art and Design Center should be taken to Room AD427E between 8 a.m. and 4 p.m. Difficulties with vending machines at the UCC facility will be handled at the front desk.
Starbucks
The cafeteria operates a Starbucks, serving espresso beverages, chai tea, flavored hot teas, coffees, hot chocolate, sweet rolls, biscotti, muffins and iced beverages.

Grade Reports
Grades are not mailed automatically. Students may access grades through MyCommunityEDucation online at www.arapahoe.edu.

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, Room M2010 or call 303.797.6568.

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).

Lost and Found
Please refer to Student Services/Information – Campus Police Department listing for the main campus. Students at the 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 Academic Advising, 303.797.5976.

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 Academic Advising office, 303.797.5976 or stop by Room M2010.

Minority Student Support
UMOJA (Unity) Student Alliance enhances cultural diversity at ACC and provides a support system for minority students. Call 303.797.5976 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 Academic Advising, 303.797.5976.

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 the Schedule of Classes for payment option details.

Peer Mentoring and Tutoring Center
The Center is operated for students by students to ensure academic success and well-being at ACC. Free one-on-one tutoring is available along with group sessions and the use of tutorial software. Located on the second floor of the Main building, the Center serves as a welcoming and gathering place for various learning opportunities. Please see separate listings under Mentoring and Tutoring for more information, or call the Student Success Center at 303.797.5824.

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:

- 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 ACC 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
Official transcript copies ordered by students are free. Same day transcript processing is available for $10 per copy. You must request official transcripts in writing 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;
- Filling out the request online at www.arapahoe.edu (MyCommunityEducation)

Please allow 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, order your official transcripts and have them sent DIRECTLY to ACC from the institution(s) you attended. Your transfer credit will be examined course by course based upon your degree or certificate requirements. You will receive confirmation of your evaluation – generally within two to three days after your transcript(s) is received by ACC. You can check what courses were transferred in under Unofficial Transcripts on your MyCommunity Education account.

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. Directory information, 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 field of study
- Dates of your attendance
- Participation in officially recognized organizations and sports
- Degrees and awards received
- Most recent educational institution attended

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:

- 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
- 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.
- In compliance with the Solomon Amendment.

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.

School E-mail Address

Effective in Spring 2008, students were assigned a school e-mail address upon successful application and acceptance to Arapahoe Community College. Students will be notified of the e-mail address in their acceptance letter. Students will also be able to view and access their e-mail address by logging into www.arapahoe.edu (MyCommunityED), the student information system. Students must activate the e-mail address.

The school issued e-mail address will be the only e-mail address used by ACC to communicate with students.

Security Phones

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

Sexual Harassment


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, 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 student’s 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 Definition

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. The Handbook includes detailed information about renting a locker posting items on the bulletin boards, Student Rights and Responsibilities, the Code of Conduct and much more. Pick up your free copy at the Student Affairs Office, Room M2820, and at the front desk of the 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, to use the pool or Open Computer Lab and to buy/sell books in the bookstore. Cards are valid for 2 years. Replacement cards cost $10.00.

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 these services and 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 Room M2820 or call 303.797.5668.

Student Government

Student Government is a group of students who represent your interests in issues such as student activities, student welfare and jurisdiction. With the assistance of the Director of Student Affairs, student government members participate in community service activities, student activity fee budget process, State Student Advisory Council, in addition to serving as student ambassadors for various college-related events.

For more information, stop by the Student Affairs Office or call 303.797.5674.

Clubs and Organizations

Over 20 clubs and organizations are available for students. Stop by the Student Affairs office, Room 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 Policies and Procedures – 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.

Please visit www.arapahoe.edu for the most current, updated catalog information.
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 anytime after the second week of the semester.

Online Courses
Online courses are regular college-credit 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.

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.

Telephones
The Main campus building, the Church Street Building and University Center at Chaparral have pay phones for student use. The North building has courtesy phones in the hallways. 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 Room M1950.

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

Tutorial Services
The Student Success Center provides a student-centered learning environment that will augment instructional offerings at Arapahoe Community College. We offer tutorial services to enhance self-directed learning strategies that 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 ACCUPLACER course recommendations and/or fulfill prerequisite course requirements to qualify for tutoring.

The Student Success Center is a free, drop-in service where students who have excelled in certain subject areas provide help for those courses. Also available is a Web-based instructional program focusing on basic reading, vocabulary, writing, math and algebra skills. Students can take advantage of diagnostic pretests, interactive lessons and mastery posttests. For more information, come by the Student Success Center office, Room M2720 or call 303.797.5669.

Wireless Internet Access
ACC provides open wireless Internet access in almost all common areas of the classroom buildings of the Main Campus and the University Center at Chaparral. If you have problems connecting your laptop to this network please contact Information Technology at 3199 from a campus phone, or 303.797.5700 extension 3199 from off-campus.
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 by enrolling in related fields of study at community colleges and universities. The Carpentry and Culinary Arts programs are 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 an academic advisor.

**Auditing Courses**

Please refer to the Academic Policies and Procedures – Auditing Courses section of this catalog.

**CCCOnline**

Colleges in the Colorado Community College System are sharing human and financial resources to deliver degree programs via the Internet. CCCOnline 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, webiographics, and more. CCCOnline is located at 9026 E. Severn Place, Denver, CO 80230, 1.800.801.5040. For more information visit the CCCOnline Web site at www.ccconline.org.

**Cultural Opportunities**

**Performance Opportunities**

Students are invited to join the ACC Jazz Band, ACC Orchestra, ACC Choir or one of the vocal ensembles for performance opportunities.

**Art Galleries**

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 and Illustration Students’ exhibitions each spring. Exhibitions generally last four to five weeks. Admission is free. 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 in Room A1300.

The Jantzen Gallery is a smaller gallery hosting exhibitions of art by current students and visiting artists-in-residence.

**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 Student Affairs office at 303.797.5665 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 Student Services at 303.797.5668 for information about upcoming events or check for press releases posted at www.arapahoe.edu.

**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 030 Basic Writing Skills
- ENG 060 Writing Fundamentals
- ENG 090 Basic Composition
- MAT 030 Fundamentals of Mathematics
- MAT 060 Pre-Algebra
- MAT 090 Introductory Algebra
- MAT 099 Intermediate Algebra
- REA 030 Basic Reading Skills
- 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. Most Developmental Studies courses may not be used to satisfy program graduation requirements.

**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.
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 noted in the schedule as Great Books sections include 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, and will be honored at the Arts and Letters Honors Ceremony in April.

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 Service-members 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. Many four-year schools designate transfer scholarships for members of Phi Theta Kappa.

If you are interested in joining Phi Theta Kappa, contact Advisor Erica Hastert at erica.hastert@arapahoe.edu.

Army Reserve Officer 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. Army ROTC classes begin with the ARM prefix. For more information, contact an Army ROTC representative (303.492.6495), or send an e-mail to armysrotc@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.

**Weber Center for Learning Resources (Library)**

The Library is located in the Main Building, Room M2500, on the second floor, at the top of the stairs from the north entrance (or via elevator), unmistakable by its bright red doors. Come to the ACC Library for books, periodicals, online research databases, computers, research assistance, wireless Internet, and a quiet oasis all in one location. Your ACC ID serves as your library card.

The Library’s collection consists of over 51,000 print books; 7,733 electronic books; 216 print periodicals; a dozen electronic databases with full-text periodical articles; and over 50 audio books. Interlibrary loan service for books and periodicals is also available. During the semester, the Library is open seven days a week for a total of 72.5 hours. The Library’s highly-trained staff includes five professional librarians.

The Library has twelve public computer workstations that do not require a login; and a computer lab with sixteen computers for student research and word processing. We also have laptop computers at the circulation desk that can be checked out for use within the Library. A total of six group study/meeting rooms are located on the first and second floors of the Library.

Please call 303.797.5090 to renew Library materials and 303.797.5726 with research questions. You can also e-mail us at librarians@arapahoe.edu. General information about the Library can be found on our Web site at www.arapahoe.edu/lrc.

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**ACADEMIC POLICIES AND PROCEDURES**

**Here is what you can expect of us…**

**And what we will expect from you**

Please read this section carefully. If you have additional questions, talk to your Advisor, or someone at the Office of Admissions and Records. School 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**

<table>
<thead>
<tr>
<th>Status</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Time</td>
<td>12 or more</td>
</tr>
<tr>
<td>3/4 Time</td>
<td>9-11.5</td>
</tr>
<tr>
<td>1/2 Time</td>
<td>6-8.5</td>
</tr>
<tr>
<td>Less than half-time</td>
<td>Less than 6</td>
</tr>
</tbody>
</table>

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 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 academic standing at other Colorado community colleges. Academic Probation/Suspension rules do not apply to Developmental Studies.

- 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 2.0.

**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 Director of Advising and Retention 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 Director. The Director 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 academic standing 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 cumulative 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 add and drop deadlines 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 with instructor permission. 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. To audit a course, an Alternate Grading Option Form must be completed and submitted; the form is 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 Chair or Coordinator and the appropriate Dean; substitutions for other courses must be approved by the Chair or Coordinator, Dean and the Academic Standards committee. Your Departmental Chair or Coordinator 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 Systems**

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  Superior
B  Above Average Achievement
C  Average
D  Deficient, but passing
F  Failure
I  Incomplete
S  Satisfactory Completion
U  Unsatisfactory Completion
CR  Credit
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  Audit
AW  Administrative Withdrawal.
CNG  Conversion – No Grade
CPL  Credit for Prior Learning
W  Withdrawal
SP  Placeholder – Satisfactory Progress
Z  Placeholder – Grade not yet reported

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.

I – Incomplete
Incompletes may be given to students who, because of illness or circumstances beyond their control, are unable to complete their coursework within the semester.

An Incomplete is given only if you have completed at least 80% 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 Alternate Grading Option Form to Information Central by the census (drop) date for the course.

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 – Placeholder - 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 – Withdrawal
You may withdraw from a class at any time within the first 80 percent of the class term; you may withdraw online by logging into ED, the student information system, at Information Central or the Office of Admissions & Records. 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 – Placeholder - Grade not yet reported
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 course credits by the grade points for the grade earned. Total the course credits and total the grade points. Divide the total grade points by the total course credits. The result is your GPA.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Points</th>
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<tbody>
<tr>
<td>A</td>
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<td>B</td>
<td>3</td>
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<tr>
<td>C</td>
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<td>D</td>
<td>1</td>
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<tr>
<td>F</td>
<td>0</td>
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</table>

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
- Vice President’s List – 3.75 to 3.99 term GPA
- Dean’s List – 3.5 to 3.74 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 of 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 by logging into MyCommunityEDucation, the student information system.

Grades and Veteran Benefits
If you are eligible to receive veteran 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 Advising, 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 Veteran Services (Room M2110) 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. Failure to do so may affect payment of your monthly benefits.

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

1. 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. 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.

2. 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.

3. All credit hours earned for initial and repeated courses will be deducted from students remaining College Opportunity Fund Stipend eligible hours. 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, and 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 Director of Student Affairs and Disability Services. 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, Room 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 have been out of attendance at ACC for 365 days or more, you must reapply for admission and 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:

- File an application for graduation at Information Central. Deadline Dates are: Summer Semester—April 1; Fall Semester—July 1; Spring Semester—November 1
- 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.
- Fulfill the published course and program requirements applicable to your degree or certificate.
- 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:
  a. You submit a medical exemption from your physician, chiropractor, or podiatrist to the Office of Admissions and Records

b. 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
c. 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).

- Fulfill published degree or certificate residency requirements in ANY of the following ways:
  a. All of your program requirements at ACC or
  b. 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
  c. 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
  d. Complete at least 50% of courses applicable to your degree or certificate credit requirements at ACC.

Special Graduation Considerations:
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 Graduation Coordinator.

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.

If any of the following apply to you, please refer to the appropriate sections of this catalog for specific requirements and limitations:

1. Credit for Prior Learning
2. ROTC Credit
3. Developmental Studies Courses

Graduation Honors
Graduation honors recognize outstanding academic achievement throughout a student’s academic career at the home institution. The honors are awarded to students who complete the requirements for an Associate Degree and earn a 3.5 or better cumulative grade point average at the institution. Only college level courses completed at the institution will be included in the GPA calculation. Students must earn 30 degree-applicable credit hours in residence at ACC to be eligible for graduation honors. The three levels of recognition are defined as follows and will be posted on the student’s transcript.

Cum Laude (“with honor”):
3.50 to 3.749 Cumulative GPA

Magna Cum Laude (“with great honor”):
3.75 to 3.99 Cumulative GPA

Summa Cum Laude (“with highest honor”):
4.00 Cumulative GPA

Please visit www.arapahoe.edu for the most current, updated catalog information 27
GRADUATION CHECKLIST

Students who complete their degree and/or certificate requirements may receive their diplomas within the semester in which they satisfy the requirements, provided they have also completed the graduation application process described below. Students are encouraged to participate in Commencement exercises.

A full semester before you intend to graduate
- Complete a Graduation Application available on ACC’s Web site or you can pick one up at Information Central or the Cashier’s Office.
- 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 by logging into MyCommunityEDucation, the student information system or by calling the Office of Admissions and Records at 303.797.5621.
- Expect an 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.

Commencement Ceremony
The ACC graduation and commencement are two separate events. Graduation is the actual conferral of degrees/certificates and the mailing of diplomas. Commencement is the ceremony that celebrates graduation.

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 students who indicated on their graduation application that they were interested in participating in the commencement ceremony, should expect to receive detailed ceremony information via mail or e-mail by the second week of March. If you do not receive a letter by the third week of March, call the Graduation Coordinator at 303.797.5630.
- The annual commencement ceremony will be held at Orchard Road Christian Center with unlimited guest seating. The date of the ceremony is published in this document under College Calendar.
- 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 the Graduation Coordinator at 303.797.5630.

Within 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.
COLORADO’S GUARANTEE
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 changed as reflected in the following categories:

General Education Categories and Courses Semester Hour Credits

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

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

Arts and Humanities ............ (6-9 credit hours)
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 credit hours)
Select at least two courses, one of which must be history, with no more than two courses from any one category:
History:
HIS 101, 102, 201, 202, 247
Economic or Political Systems (GT-SS1):
ECO 201, 202; POS 105, 111
Geography (GT-SS2):
GEO 105, 106
Human Behavior, Culture or Social Frameworks (GT-SS3):
**ANT 101, 111; PSY 101,102, 235; SOC 101,102
*NOTE: To reach a minimum of 15 credits, select one additional course in Arts and Humanities, History or Social and Behavioral Sciences.

Physical and Life Sciences
(GT-SC1, GT-SC2) ...................... (8 credit hours)
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

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 coursework 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 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 statewide 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 Office, 303.797.5664.

For the most current, updated catalog information, please visit www.arapahoe.edu
**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

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<td>Certificate</td>
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<tr>
<td><strong>CCNA (Cisco Network Administrator)</strong></td>
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<tr>
<td><strong>UNIX Network Administration</strong></td>
<td>Certificate</td>
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</tr>
<tr>
<td><strong>Computer and Networking Security</strong></td>
<td>Certificate</td>
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<tr>
<td><strong>Computer Science</strong></td>
<td>A.A.S.</td>
<td>61</td>
</tr>
<tr>
<td><strong>Computer Support Professional</strong></td>
<td>A.A.S.</td>
<td>62</td>
</tr>
<tr>
<td><strong>Construction Supervision</strong></td>
<td>Certificate</td>
<td>62</td>
</tr>
<tr>
<td><strong>Construction Estimating</strong></td>
<td>Certificate</td>
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<tr>
<td><strong>Criminal Justice</strong></td>
<td>Certificate</td>
<td>64</td>
</tr>
<tr>
<td><strong>Crime Analysis</strong></td>
<td>Certificate</td>
<td>64</td>
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<tr>
<td><strong>Emergency Dispatch</strong></td>
<td>Certificate</td>
<td>64</td>
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<tr>
<td><strong>Culinary Arts</strong></td>
<td>Certificate</td>
<td>65</td>
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<tr>
<td><strong>Early Childhood Education Group Leader</strong></td>
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<tr>
<td><strong>Early Childhood Education Director</strong></td>
<td>Certificate</td>
<td>65</td>
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<tr>
<td><strong>Electronics and Computer Technology</strong></td>
<td>A.A.S.</td>
<td>66</td>
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<tr>
<td><strong>EMS Paramedicine</strong></td>
<td>A.A.S.</td>
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<td><strong>Emergency Medical Services Basic</strong></td>
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<tr>
<td><strong>Emergency Medical Services Basic Enhanced</strong></td>
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<tr>
<td><strong>Emergency Medical Services Paramedic</strong></td>
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<td><strong>Engineering Technologies</strong></td>
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<tr>
<td><strong>Mechanical Drafting</strong></td>
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<td><strong>Financial Services</strong></td>
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<td><strong>Financial Services Finance Concentration</strong></td>
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<tr>
<td><strong>Financial Services Banking Concentration</strong></td>
<td>Certificate</td>
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<tr>
<td><strong>Financial Services Mortgage Banking Concentration</strong></td>
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<tr>
<td><strong>Mortgage Banking</strong></td>
<td>Certificate</td>
<td>72</td>
</tr>
<tr>
<td><strong>Game Design and Development</strong></td>
<td>Certificate</td>
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<tr>
<td><strong>Health Information Technology (Medical Records)</strong></td>
<td>A.A.S.</td>
<td>73</td>
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<tr>
<td><strong>Medical Office Technology Billing and Reimbursement</strong></td>
<td>Certificate</td>
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<tr>
<td><strong>Medical Office Technology Medical Administrative Assistant</strong></td>
<td>Certificate</td>
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<tr>
<td><strong>Mortuary Science</strong></td>
<td>Certificate</td>
<td>77</td>
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<tr>
<td><strong>Multimedia/Graphic Design</strong></td>
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<td><strong>Computer Graphics</strong></td>
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<td><strong>Nurse Aide</strong></td>
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<td><strong>Practical Nursing</strong></td>
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<td><strong>Paralegal</strong></td>
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<tr>
<td><strong>Pharmacy Technician</strong></td>
<td>Certificate</td>
<td>82</td>
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<tr>
<td><strong>Physical Therapist Assistant</strong></td>
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<tr>
<td><strong>Retail Management</strong></td>
<td>Certificate</td>
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</tr>
<tr>
<td><strong>Telecommunications Technology</strong></td>
<td>Certificate</td>
<td>84</td>
</tr>
</tbody>
</table>

Programs marked with an * are also offered online.
DEGREE REQUIREMENTS

General Education

All students receiving degrees from Arapahoe Community College should achieve a general education component to their education. ACC has determined that the following list reflects the expected outcomes of this general education component:

- Students will demonstrate a college-level ability to read and to communicate effectively through speaking, writing, listening and artistic expression.
- Students will develop the skills necessary to understand and apply mathematical concepts and reasoning to analyze and interpret various types of data.
- Students will demonstrate the ability to analyze, synthesize, evaluate, make decisions, think critically and creatively, solve problems effectively and extend knowledge to new environments and situations.
- Students will use appropriate and current technologies to collect, retrieve, organize and process information from various sources and produce original work in various ways.
- Students will demonstrate knowledge, appreciation and understanding of individual and social responsibility, good citizenship, and diverse cultural customs, beliefs, traditions and lifestyles.
- Students will develop effective leadership, teamwork, relationship management and conflict resolution skills.

Through its college-wide assessment activities, Arapahoe Community College is constantly working to ensure that its graduates have all of these skills required by the degree program.

Customized Articulation

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 public 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 http://www.state.co.us/cche/academic/transfer/agreements/index.html

The Community Colleges of Colorado are approved to offer one Associate of Arts degree, one Associate of Science degree, and one Associate of General Studies degree. All degrees have a generic major of liberal arts. While the Catalog may indicate areas of emphasis for the A.A., A.S. and A.G.S degrees, all official documents and diplomas issued by the College will only indicate the awarding of an A.A., A.S. and A.G.S degrees, without any indication of an area of emphasis.

Associate Of Arts Degree

Students completing any Guaranteed Transfer Course 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
COM 115 Public Speaking OR
COM 125 Interpersonal Communication .......... 3

II. Art and Humanities (9 credit hours)

Select three 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
ART 207 Art History 1900 to present .......... 3
MUS 120 Music Appreciation ................. 3
MUS 121 Introduction to Music History I .... 3
MUS 122 Introduction to Music History II .... 3
MUS 123 Survey of World Music .......... 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 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 225 Introduction to Shakespeare ........ 3

Ways of Thinking

PHI 111 Introduction 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

Please visit www.arapahoe.edu for the most current, updated catalog information.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>JPN 211</td>
<td>Japanese III</td>
<td>3</td>
</tr>
<tr>
<td>JPN 212</td>
<td>Japanese IV</td>
<td>3</td>
</tr>
<tr>
<td>BIO 112</td>
<td>General College Biology II with Lab</td>
<td>3</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Human Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>BIO 105</td>
<td>Science of Biology</td>
<td>3</td>
</tr>
<tr>
<td>AST 101</td>
<td>Astronomy I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 120</td>
<td>Mathematics for Liberal Arts</td>
<td>4</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MAT 122</td>
<td>College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MAT 123</td>
<td>Finite Math</td>
<td>3</td>
</tr>
<tr>
<td>MAT 125</td>
<td>Survey of Calculus</td>
<td>4</td>
</tr>
<tr>
<td>MAT 135</td>
<td>Introduction to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MAT 201</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MAT 202</td>
<td>Calculus II</td>
<td>5</td>
</tr>
<tr>
<td>MAT 265</td>
<td>Differential Equations</td>
<td>3</td>
</tr>
</tbody>
</table>

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

Select three courses, one of which must be History, with no more than two courses from any one category.

**Economic and Political Systems**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ECO 101</td>
<td>Economics of Social Issues</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
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<td>ECO 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>POS 105</td>
<td>Introduction to Political Science</td>
<td>3</td>
</tr>
<tr>
<td>POS 111</td>
<td>American Government</td>
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**Human Behavior and Social Systems**

<table>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
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<td>ANT 101</td>
<td>Cultural Anthropology</td>
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</tr>
<tr>
<td>ANT 111</td>
<td>Physical Anthropology</td>
<td>3</td>
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<tr>
<td>ANT 215</td>
<td>Indians of North America</td>
<td>3</td>
</tr>
<tr>
<td>JOU 105</td>
<td>Introduction to Mass Media</td>
<td>3</td>
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<tr>
<td>PSY 101</td>
<td>General Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>General Psychology II</td>
<td>3</td>
</tr>
<tr>
<td>PSY 235</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology I</td>
<td>3</td>
</tr>
<tr>
<td>SOC 102</td>
<td>Introduction to Sociology II</td>
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</tr>
<tr>
<td>SOC 205</td>
<td>Sociology of Family Dynamics</td>
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<td>SOC 220</td>
<td>Sociology of Religion</td>
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**Geography**

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<td>GEO 105</td>
<td>World Regional Geography</td>
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<td>GEO 106</td>
<td>Human Geography</td>
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**History**

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<th>Course Title</th>
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<tr>
<td>HIS 101</td>
<td>Western Civilization I</td>
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<td>HIS 102</td>
<td>Western Civilization II</td>
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<tr>
<td>HIS 111</td>
<td>World Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>HIS 112</td>
<td>World Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>HIS 201</td>
<td>U.S. History</td>
<td>3</td>
</tr>
<tr>
<td>HIS 202</td>
<td>U.S. History</td>
<td>3</td>
</tr>
<tr>
<td>HIS 247</td>
<td>Contemporary World History</td>
<td>3</td>
</tr>
</tbody>
</table>

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

Select two courses.

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
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<tr>
<td>AST 101</td>
<td>Astronomy I</td>
<td>4</td>
</tr>
<tr>
<td>AST 102</td>
<td>Astronomy II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 105</td>
<td>Science of Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 111</td>
<td>General College Biology I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>BIO 112</td>
<td>General College Biology II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
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<tr>
<td>BIO 202</td>
<td>Human Anatomy and Physiology II</td>
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<tr>
<td>BIO 204</td>
<td>Microbiology</td>
<td>4</td>
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<tr>
<td>BIO 221</td>
<td>Botany</td>
<td>5</td>
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<tr>
<td>CHE 101</td>
<td>Introduction to Chemistry I with Lab</td>
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<tr>
<td>CHE 102</td>
<td>Introduction to Chemistry II with Lab</td>
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</tr>
<tr>
<td>CHE 111</td>
<td>General College Chemistry I with Lab</td>
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<td>CHE 112</td>
<td>General College Chemistry II with Lab</td>
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<tr>
<td>GEY 111</td>
<td>Physical Geology</td>
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<td>GEY 121</td>
<td>Historical Geology</td>
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<tr>
<td>MET 150</td>
<td>General Meteorology</td>
<td>4</td>
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<td>PHY 105</td>
<td>Conceptual Physics</td>
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<tr>
<td>PHY 111</td>
<td>Physics: Algebra-Based I with Lab</td>
<td>5</td>
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<td>PHY 112</td>
<td>Physics: Algebra-Based II with Lab</td>
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<td>PHY 211</td>
<td>Physics: Calculus-Based I with Lab</td>
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<tr>
<td>PHY 212</td>
<td>Physics: Calculus-Based II with Lab</td>
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</table>

**VI. Electives (22 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), COM, CSC (160, 161, 225, 230 only), ECO, ECE (101, 102, 111, 205, 220, 226, 285 only), EDU, ENG (131 or above), GEO, GEY, HIS, HUM, HWE (108, 124 only), JOU, LIT, MAT (MAT 120 or higher), MET MUS, PED, PHI, PHY (PHY 105 or above), POS, PSY, SCI (155, 156), SOC, SPA 114, THE and any foreign language numbered 111-112, 211-212.

**Total ........................................ 60 credit hours**

*Not all independent study or Special Topics courses may apply.*

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**Associate Of Arts Degree – Business Transfer Concentration**

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 “C” 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 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)

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<tr>
<th>Course Code</th>
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<th>Hours</th>
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<td>ENG 121</td>
<td>English Composition I</td>
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<td>ENG 122</td>
<td>English Composition II</td>
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</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking</td>
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II. Mathematics  
(8 credit hours)

<table>
<thead>
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<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>MAT 123</td>
<td>Finite Mathematics OR</td>
<td></td>
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<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
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<tr>
<td>MAT 125</td>
<td>Survey of Calculus</td>
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III. Social Sciences  
(9 credit hours)

<table>
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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
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</table>

Select one History Elective from the following list:

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 101</td>
<td>Western Civilization I</td>
<td></td>
</tr>
<tr>
<td>HIS 102</td>
<td>Western Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>HIS 111</td>
<td>World Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>HIS 112</td>
<td>World Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>HIS 201</td>
<td>U.S. History I</td>
<td>3</td>
</tr>
<tr>
<td>HIS 202</td>
<td>U.S. History II</td>
<td>3</td>
</tr>
<tr>
<td>HIS 247</td>
<td>Contemporary World History</td>
<td>3</td>
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IV. Arts and Humanities  
(6 credit hours)

Select two Arts and Humanities Electives from the following list:

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<th>Course Title</th>
<th>Hours</th>
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<tr>
<td>ART 110</td>
<td>Art Appreciation</td>
<td>3</td>
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<tr>
<td>ART 111</td>
<td>Art History I</td>
<td>3</td>
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<td>ART 112</td>
<td>Art History II</td>
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<tr>
<td>ART 207</td>
<td>Art History 1900 to present</td>
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<td>HUM 121</td>
<td>Early Civilizations</td>
<td>3</td>
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<tr>
<td>HUM 122</td>
<td>From Medieval to Modern</td>
<td>3</td>
</tr>
<tr>
<td>HUM 123</td>
<td>The Modern World</td>
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<tr>
<td>FRE 211</td>
<td>French III</td>
<td>3</td>
</tr>
<tr>
<td>FRE 212</td>
<td>French IV</td>
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<tr>
<td>SPA 211</td>
<td>Spanish III</td>
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<td>Spanish IV</td>
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<td>JPN 211</td>
<td>Japanese III</td>
<td>3</td>
</tr>
<tr>
<td>JPN 212</td>
<td>Japanese IV</td>
<td>3</td>
</tr>
<tr>
<td>LIT 115</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT 201</td>
<td>Masterpieces of Literature I</td>
<td>3</td>
</tr>
<tr>
<td>LIT 202</td>
<td>Masterpieces of Literature II</td>
<td>3</td>
</tr>
<tr>
<td>LIT 205</td>
<td>Ethnic Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT 211</td>
<td>Survey of American Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT 212</td>
<td>Survey of American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>LIT 221</td>
<td>Survey of British Literature I</td>
<td>3</td>
</tr>
<tr>
<td>LIT 222</td>
<td>Survey of British Literature II</td>
<td>3</td>
</tr>
<tr>
<td>LIT 225</td>
<td>Introduction to Shakespeare</td>
<td>3</td>
</tr>
<tr>
<td>MUS 120</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>MUS 121</td>
<td>Introduction to Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 122</td>
<td>Introduction to Music History II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 123</td>
<td>Survey of World Music</td>
<td>3</td>
</tr>
<tr>
<td>PHI 111</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHI 112</td>
<td>Ethics</td>
<td>3</td>
</tr>
<tr>
<td>PHI 113</td>
<td>Logic</td>
<td>3</td>
</tr>
<tr>
<td>THE 105</td>
<td>Introduction to Theatre Arts</td>
<td>3</td>
</tr>
<tr>
<td>THE 211</td>
<td>Development of Theatre I</td>
<td>3</td>
</tr>
<tr>
<td>THE 212</td>
<td>Development of Theatre II</td>
<td>3</td>
</tr>
</tbody>
</table>

V. 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.)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 101</td>
<td>Astronomy I</td>
<td>4</td>
</tr>
<tr>
<td>AST 102</td>
<td>Astronomy II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 105</td>
<td>Science of Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 111</td>
<td>General College Biology I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>BIO 112</td>
<td>General College Biology II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 202</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 204</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 221</td>
<td>Botany</td>
<td>5</td>
</tr>
<tr>
<td>CHE 101</td>
<td>Introduction to Chemistry I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>CHE 102</td>
<td>Introduction to Chemistry II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>CHE 111</td>
<td>General College Chemistry II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>CHE 112</td>
<td>General College Chemistry II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>GEY 111</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEY 121</td>
<td>Historical Geology</td>
<td>4</td>
</tr>
<tr>
<td>MET 150</td>
<td>Meteorology</td>
<td>4</td>
</tr>
<tr>
<td>PHY 105</td>
<td>Conceptual Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHY 111</td>
<td>Physics: Algebra-Based I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>PHY 112</td>
<td>Physics: Algebra-Based II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>PHY 211</td>
<td>Physics: Calculus-Based I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>PHY 212</td>
<td>Physics: Calculus-Based II with Lab</td>
<td>5</td>
</tr>
</tbody>
</table>

Business Graduation Requirements  
(20 credit hours)

VI. Accounting  
(8 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACC 122</td>
<td>Principles of Accounting II</td>
<td>4</td>
</tr>
</tbody>
</table>

VII. General Business  
(12 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 115</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 216</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 217</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 226</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Associate of Arts Business ........... 60 credit hours

Associate of Arts Degree – Creative Writing Emphasis

This Associate of Arts degree with a Creative Writing Program of Study is designed to help students interested in joining the literary community, pursuing a career in writing or in transferring to a four year program. Students are offered a comprehensive program of creative writing and literature courses designed to nurture beginning and experienced writers in the craft of writing.

The program is divided into General Education, Core Creative Writing and Genre Specific Creative Writing course requirements. The program encourages students to explore multiple genres before focusing on a specific one. The introductory workshops allow for experimentation in craft through exercises and modeling while the advanced workshops stress the individual student’s work. Classes in creative writing include introduction to creative writing, poetry, fiction, creative nonfiction, playwriting and screenwriting.

Please visit [www.arapahoe.edu](http://www.arapahoe.edu) for the most current, updated catalog information
ACC has an articulation agreement with Adams State College in Alamosa, Colorado that allows for a complete credit A.A. to B.A. transfer. Students transferring to ASC need only complete 21 credit hours to receive a B.A. in creative writing. Additional upper level credit hours can be completed for a minor or another major at ASC.

Students interested in this program of study should contact Dr. Kathryn Winograd for more information at 303.787.5815 or kathryn.winograd@arapahoe.edu.

General Education Requirements (38 credit hours)

<table>
<thead>
<tr>
<th>I. Communications (9 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 121 English Composition I .......... 3</td>
</tr>
<tr>
<td>ENG 122 English Composition II .......... 3</td>
</tr>
<tr>
<td>COM 115 Public Speaking OR</td>
</tr>
<tr>
<td>COM 125 Interpersonal Communication .......... 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>II. Mathematics (3 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any courses that fulfill A.A. requirement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>III. Social Sciences (9 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any courses that fulfill A.A. requirement</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IV. Arts and Humanities (9 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose three of the following classes:</td>
</tr>
<tr>
<td>ART 110 Art Appreciation ............... 3</td>
</tr>
<tr>
<td>HUM 121 Early Civilizations .......... 3</td>
</tr>
<tr>
<td>HUM 122 From Medieval to Modern .......... 3</td>
</tr>
<tr>
<td>HUM 123 The Modern World ............. 3</td>
</tr>
<tr>
<td>LIT 115 Introduction to Literature .......... 3</td>
</tr>
<tr>
<td>LIT 201 Masterpieces of Literature I .......... 3</td>
</tr>
<tr>
<td>LIT 202 Masterpieces of Literature II .......... 3</td>
</tr>
<tr>
<td>THE 105 Introduction to Theatre Arts .......... 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>V. Science (8 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any courses that fulfill A.A. requirement</td>
</tr>
</tbody>
</table>

Creative Writing Specific Courses (22 credit hours)

<table>
<thead>
<tr>
<th>VI. Core Creative Writing Courses (10 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 221 Creative Writing I .......................... 3</td>
</tr>
<tr>
<td>ENG 222 Creative Writing II .......................... 3</td>
</tr>
<tr>
<td>ENG 289 Capstone .................................... 1</td>
</tr>
</tbody>
</table>

Choose one of the following classes:

<table>
<thead>
<tr>
<th>ENG 215 Playwriting OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 226 Fiction Writing OR</td>
</tr>
<tr>
<td>ENG 227 Poetry Writing OR</td>
</tr>
<tr>
<td>ENG 230 Creative Nonfiction .................................. 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VII. Genre Specific courses (9 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Choose one of the following genres:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fiction Genre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Course:</td>
</tr>
<tr>
<td>ENG 226 Fiction Writing ...................... 3</td>
</tr>
</tbody>
</table>

In addition, please choose three of the following courses:

| ENG 215 Playwriting ...................... 3 |
| ENG 227 Poetry Writing .................... 3 |
| ENG 230 Creative Nonfiction ............. 3 |
| ENG 231 Progenitor ......................... 3 |
| ENG 275 Special Topics: Publish Your Writing .......... 3 |
| HUM 115 World Mythology .................... 3 |
| JOU 105 Introduction to Mass Media .......... 3 |
| LIT 267 The Bible As Literature .......... 3 |
| LIT 269 Popular Literature and Culture .......... 3 |
| LIT 275 The Novel Approach To Language Arts .......... 3 |

<table>
<thead>
<tr>
<th>Poetry Genre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Required Courses</td>
</tr>
<tr>
<td>ENG 227 Poetry Writing .................... 3</td>
</tr>
</tbody>
</table>

In addition, please choose three of the following courses:

| ENG 215 Playwriting ...................... 3 |
| ENG 226 Fiction Writing .................... 3 |
| ENG 227 Poetry Writing .................... 3 |
| ENG 230 Creative Nonfiction ............. 3 |
| ENG 231 Progenitor ......................... 3 |
| ENG 275 Special Topics: Publish Your Writing .......... 3 |
| HUM 115 World Mythology .................... 3 |
| HUM 220 The Cultural History Of Rock And Roll .......... 3 |
| LIT 221 Introduction To Shakespeare .......... 3 |
| LIT 240 Poets And Their Poems .......... 3 |
| LIT 267 The Bible As Literature .......... 3 |

Creative Non-Fiction Genre

<table>
<thead>
<tr>
<th>Required Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 230 Creative Nonfiction ................ 3</td>
</tr>
</tbody>
</table>

In addition, please choose three of the following courses:

| ENG 131 Technical Writing .................... 3 |
| ENG 226 Fiction Writing .................... 3 |
| ENG 227 Poetry Writing .................... 3 |
| ENG 231 Progenitor ......................... 3 |
| ENG 235 Rhetoric And Propaganda .......... 3 |
| ENG 275 Special Topics: Publish Your Writing .......... 3 |
| HUM 115 World Mythology .................... 3 |
| JOU 105 Introduction to Mass Media .......... 3 |
| JOU 106 Fundamentals of Reporting .......... 3 |

Playwriting (Screenwriting) Genre

<table>
<thead>
<tr>
<th>Required Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 215 Playwriting ...................... 3</td>
</tr>
</tbody>
</table>

In addition, please choose three of the following courses:

| ENG 226 Fiction Writing .................... 3 |
| ENG 227 Poetry Writing .................... 3 |
| ENG 230 Creative Nonfiction ............. 3 |
| ENG 231 Progenitor ......................... 3 |
| ENG 275 Special Topics: Publish Your Writing .......... 3 |
| HUM 115 World Mythology .................... 3 |
| JOU 105 Introduction to Mass Media .......... 3 |
| LIT 257 Literature And Film .......... 3 |
| LIT 269 Popular Literature and Culture .......... 3 |
| THE 105 Introduction to Theatre Arts .......... 3 |

VIII. Creative Writing Course:

Outside of Chosen Genre (3 credit hours)

(Choose one of the following courses)

<table>
<thead>
<tr>
<th>OUTSIDE chosen genre</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 215 Playwriting .......... 3</td>
</tr>
<tr>
<td>ENG 226 Fiction Writing .......... 3</td>
</tr>
<tr>
<td>ENG 227 Poetry Writing .......... 3</td>
</tr>
<tr>
<td>ENG 230 Creative Nonfiction .......... 3</td>
</tr>
<tr>
<td>ENG 275 Special Topics: Publish Your Writing .......... 3</td>
</tr>
<tr>
<td>HUM 115 World Mythology .......... 3</td>
</tr>
<tr>
<td>LIT 221 Introduction To Shakespeare .......... 3</td>
</tr>
<tr>
<td>LIT 257 Literature And Film .......... 3</td>
</tr>
<tr>
<td>LIT 269 Popular Literature and Culture .......... 3</td>
</tr>
<tr>
<td>THE 105 Introduction to Theatre Arts .......... 3</td>
</tr>
</tbody>
</table>

VIII. Creative Writing Course:

Outside of Chosen Genre (3 credit hours)

(Choose one of the following courses)

<table>
<thead>
<tr>
<th>OUTSIDE chosen genre</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 215 Playwriting .......... 3</td>
</tr>
<tr>
<td>ENG 226 Fiction Writing .......... 3</td>
</tr>
<tr>
<td>ENG 227 Poetry Writing .......... 3</td>
</tr>
<tr>
<td>ENG 230 Creative Nonfiction .......... 3</td>
</tr>
<tr>
<td>ENG 275 Special Topics: Publish Your Writing .......... 3</td>
</tr>
<tr>
<td>HUM 115 World Mythology .......... 3</td>
</tr>
<tr>
<td>LIT 221 Introduction To Shakespeare .......... 3</td>
</tr>
<tr>
<td>LIT 257 Literature And Film .......... 3</td>
</tr>
<tr>
<td>LIT 269 Popular Literature and Culture .......... 3</td>
</tr>
<tr>
<td>THE 105 Introduction to Theatre Arts .......... 3</td>
</tr>
</tbody>
</table>

Total A.A. Degree with Creative Writing

Course of Study ............................................. 60 credit hours

NOTE: This degree will be conferred as an Associate of Arts. Creative Writing Program of Study will not be listed on students’ transcript or diploma, but will be recognized by transfer institutions for program admission.
Associate Of Arts Degree – Statewide Elementary Education Transfer

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 four-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 four-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 (41 credit hours)

I. Communication (9 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 122</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Math (6 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 155</td>
<td>Integrated Math I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 156</td>
<td>Integrated Math II</td>
<td>3</td>
</tr>
</tbody>
</table>

III. Humanities (3 credit hours)

Choose one from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIT 115</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT 201</td>
<td>Masterpieces of Literature I</td>
<td>3</td>
</tr>
<tr>
<td>LIT 202</td>
<td>Masterpieces of Literature II</td>
<td>3</td>
</tr>
<tr>
<td>LIT 211</td>
<td>Survey of American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>LIT 221</td>
<td>Survey of British Literature I</td>
<td>3</td>
</tr>
<tr>
<td>SCI 155</td>
<td>Integrated Science I</td>
<td>4</td>
</tr>
<tr>
<td>SCI 156</td>
<td>Integrated Science II</td>
<td>4</td>
</tr>
</tbody>
</table>

IV. Science (8 credit hours)

V. Social Sciences (9 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEO 105</td>
<td>World Regional Geography</td>
<td>3</td>
</tr>
<tr>
<td>HIS 201</td>
<td>U.S. History I</td>
<td>3</td>
</tr>
<tr>
<td>POS 111</td>
<td>American Government</td>
<td>3</td>
</tr>
<tr>
<td>FRE 211</td>
<td>French III</td>
<td>3</td>
</tr>
<tr>
<td>FRE 212</td>
<td>French IV</td>
<td>3</td>
</tr>
<tr>
<td>SPA 211</td>
<td>Spanish III</td>
<td>3</td>
</tr>
</tbody>
</table>

VI. Education Requirements (6 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 221</td>
<td>Introduction to Education</td>
<td>3</td>
</tr>
<tr>
<td>PSY 238</td>
<td>Child Development</td>
<td>3</td>
</tr>
</tbody>
</table>

VII. Electives based on transfer institution (19 credit hours)

Consult an advisor and the transfer institution to determine appropriate electives.

Total .................................. 60 credit hours

Associate Of Arts Degree – Music Emphasis

General Education Requirements (38 credit hours)

I. Communications (9 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 122</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking OR</td>
<td>3</td>
</tr>
<tr>
<td>COM 125</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Art and Humanities (9 credit hours)

Required Music Courses: (6 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 121</td>
<td>Music History I</td>
<td>3</td>
</tr>
<tr>
<td>MUS 122</td>
<td>Music History II</td>
<td>3</td>
</tr>
</tbody>
</table>

Select one course from the following category:

Art

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 110</td>
<td>Art Appreciation</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Art History I</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>Art History II</td>
<td>3</td>
</tr>
<tr>
<td>MUS 120</td>
<td>Music Appreciation</td>
<td>3</td>
</tr>
</tbody>
</table>

Literature and Humanities

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 122</td>
<td>Early Civilizations</td>
<td>3</td>
</tr>
<tr>
<td>HUM 123</td>
<td>From Medieval to Modern</td>
<td>3</td>
</tr>
<tr>
<td>HUM 124</td>
<td>The Modern World</td>
<td>3</td>
</tr>
<tr>
<td>LIT 115</td>
<td>Introduction to Literature</td>
<td>3</td>
</tr>
<tr>
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<td>Masterpieces of Literature I</td>
<td>3</td>
</tr>
<tr>
<td>LIT 202</td>
<td>Masterpieces of Literature II</td>
<td>3</td>
</tr>
<tr>
<td>LIT 205</td>
<td>Ethnic Literature</td>
<td>3</td>
</tr>
<tr>
<td>LIT 211</td>
<td>Survey of American Literature I</td>
<td>3</td>
</tr>
<tr>
<td>LIT 212</td>
<td>Survey of American Literature II</td>
<td>3</td>
</tr>
<tr>
<td>LIT 221</td>
<td>Survey of British Literature I</td>
<td>3</td>
</tr>
<tr>
<td>LIT 222</td>
<td>Survey of British Literature II</td>
<td>3</td>
</tr>
<tr>
<td>LIT 225</td>
<td>Introduction to Shakespeare</td>
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</tbody>
</table>

Ways of Thinking

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>PHI 111</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PHI 112</td>
<td>Ethics</td>
<td>3</td>
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<tr>
<td>PHI 113</td>
<td>Logic</td>
<td>3</td>
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Foreign Language

<table>
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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>FRE 211</td>
<td>French III</td>
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<td>FRE 212</td>
<td>French IV</td>
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<tr>
<td>SPA 211</td>
<td>Spanish III</td>
<td>3</td>
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<tr>
<td>SPA 212</td>
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Please visit www.arapahoe.edu for the most current, updated catalog information
<table>
<thead>
<tr>
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<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
<td>JPN 211</td>
<td>Japanese III</td>
<td>3</td>
</tr>
<tr>
<td>JPN 212</td>
<td>Japanese IV</td>
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</table>

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

<table>
<thead>
<tr>
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<th>Course Title</th>
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</tr>
</thead>
<tbody>
<tr>
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<td>Mathematics for Liberal Arts</td>
<td>4</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>4</td>
</tr>
<tr>
<td>MAT 122</td>
<td>College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>MAT 123</td>
<td>Finite Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MAT 125</td>
<td>Survey of Calculus</td>
<td>4</td>
</tr>
<tr>
<td>MAT 135</td>
<td>Introduction to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MAT 201</td>
<td>Calculus I</td>
<td>5</td>
</tr>
<tr>
<td>MAT 202</td>
<td>Calculus II</td>
<td>5</td>
</tr>
</tbody>
</table>

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

Select three courses, one of which must be History, with no more than two courses from any one category.

**Economic and Political Systems**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ECO 101</td>
<td>Economics of Social Issues</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>POS 105</td>
<td>Introduction to Political Science</td>
<td>3</td>
</tr>
<tr>
<td>POS 111</td>
<td>American Government</td>
<td>3</td>
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</table>

**Human Behavior and Social Systems**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ANT 101</td>
<td>Cultural Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANT 111</td>
<td>Physical Anthropology</td>
<td>3</td>
</tr>
<tr>
<td>ANT 215</td>
<td>Indians of North America</td>
<td>3</td>
</tr>
<tr>
<td>JOU 105</td>
<td>Introduction to Mass Media</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 102</td>
<td>General Psychology II</td>
<td>3</td>
</tr>
<tr>
<td>PSY 235</td>
<td>Human Growth and Development</td>
<td>3</td>
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<tr>
<td>SOC 101</td>
<td>Introduction to Sociology I</td>
<td>3</td>
</tr>
<tr>
<td>SOC 102</td>
<td>Introduction to Sociology II</td>
<td>3</td>
</tr>
<tr>
<td>SOC 205</td>
<td>Sociology of Family Dynamics</td>
<td>3</td>
</tr>
<tr>
<td>SOC 220</td>
<td>Sociology of Religion</td>
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**Geography**

<table>
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<tbody>
<tr>
<td>GEO 105</td>
<td>World Regional Geography</td>
<td>3</td>
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<tr>
<td>GEO 106</td>
<td>Human Geography</td>
<td>3</td>
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**History**

<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
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<td>Western Civilization I</td>
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<td>HIS 102</td>
<td>Western Civilization II</td>
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<tr>
<td>HIS 111</td>
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<td>3</td>
</tr>
<tr>
<td>HIS 112</td>
<td>World Civilization II</td>
<td>3</td>
</tr>
<tr>
<td>HIS 201</td>
<td>U.S. History I</td>
<td>3</td>
</tr>
<tr>
<td>HIS 202</td>
<td>U.S. History II</td>
<td>3</td>
</tr>
<tr>
<td>HIS 247</td>
<td>Contemporary World History</td>
<td>3</td>
</tr>
</tbody>
</table>

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

Select two courses.

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>AST 101</td>
<td>Astronomy I</td>
<td>4</td>
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<tr>
<td>AST 102</td>
<td>Astronomy II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 105</td>
<td>Science of Biology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 111</td>
<td>General College Biology I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>BIO 112</td>
<td>General College Biology II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 202</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 204</td>
<td>Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>BIO 221</td>
<td>Botany</td>
<td>5</td>
</tr>
<tr>
<td>CHE 101</td>
<td>Introduction to Chemistry I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>CHE 102</td>
<td>Introduction to Chemistry II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>CHE 111</td>
<td>General College Chemistry I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>CHE 112</td>
<td>General College Chemistry II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>GEY 111</td>
<td>Physical Geology</td>
<td>4</td>
</tr>
<tr>
<td>GEY 121</td>
<td>Historical Geology</td>
<td>4</td>
</tr>
<tr>
<td>MET 150</td>
<td>General Meteorology</td>
<td>4</td>
</tr>
<tr>
<td>PHY 105</td>
<td>Conceptual Physics</td>
<td>4</td>
</tr>
<tr>
<td>PHY 111</td>
<td>Physics: Algebra-Based I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>PHY 112</td>
<td>Physics: Algebra-Based II with Lab</td>
<td>5</td>
</tr>
<tr>
<td>PHY 211</td>
<td>Physics: Calculus-Based I with Lab</td>
<td>5</td>
</tr>
<tr>
<td>PHY 212</td>
<td>Physics: Calculus-Based II with Lab</td>
<td>5</td>
</tr>
</tbody>
</table>

**VI. MUS Core Classes:** *(10 credit hours)*

- *MUS 110 Music Theory I* ........................................... 3
- *MUS 112 Ear Training – Singing Lab I* ......................... 1
- *MUS 111 Music Theory I* ........................................... 3
- *MUS 113 Ear Training - Singing Lab II* ......................... 1
- *MUS 131 Music Class* ............................................... 2

*MUS 132 can be substituted for MUS 131 for those with a background in various instruments and voice. Please see the Department Chair for approval.*

**Students with no background in theory should take Music Fundamentals (MUS 100) or pass an equivalency exam before taking MUS 110 and MUS 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.**

**VII. MUS Area of Emphasis:**

**Option A: Piano/Voice/Instrument majors:** *(12 credit hours)*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 141</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td>MUS 142</td>
<td>Private Instruction II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 241</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td>MUS 242</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td>MUS 243</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td>MUS 244</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MUS 151</td>
<td>Ensemble I</td>
<td>1</td>
</tr>
<tr>
<td>MUS 152</td>
<td>Ensemble II</td>
<td>1</td>
</tr>
<tr>
<td>MUS 251</td>
<td>Ensemble I</td>
<td>1</td>
</tr>
<tr>
<td>MUS 252</td>
<td>Ensemble II</td>
<td>1</td>
</tr>
</tbody>
</table>

**OR**

**Option B: Theory/Composition majors:** *(12 credit hours)*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 141</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td>MUS 142</td>
<td>Private Instruction II</td>
<td>2</td>
</tr>
<tr>
<td>MUS 241</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td>MUS 242</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td><strong>AND</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MUS 241</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td>MUS 242</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td>MUS 243</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td>MUS 244</td>
<td>Private Instruction</td>
<td>2</td>
</tr>
<tr>
<td><strong>AND</strong></td>
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<td></td>
</tr>
</tbody>
</table>

Please visit www.arapahoe.edu for the most current, updated catalog information
Ensemble (4 Semesters – 4 credits)
MUS 151 Ensemble I .................................. 1
MUS 152 Ensemble II .................................. 1
MUS 251 Ensemble I .................................. 1
MUS 252 Ensemble II .................................. 1

OR

C) Music Industry/ 
Business/Technology majors (12 credit hours)
Required Courses:
MUS 161 Music Technology .......................... 3
MUS 167 Business Music .................................. 3
MUS 261 Audio Production ............................. 3

Please choose 3 credit hours from the following:
MUS 123, MUS 125, MUS 141, MUS 142, MUS 151, MUS 152, MUS 241, MUS 242, MUS 243, MUS 244, MUS 251 or MUS 252.

Ensemble (4 credits)
MUS 151 Ensemble I .................................. 1
MUS 152 Ensemble II .................................. 1
MUS 251 Ensemble I .................................. 1
MUS 252 Ensemble II .................................. 1
And other classes related to subject:
MUS 125 History of Jazz .................................. 3

Total ........................................ 60 credit hours

NOTE: This degree will be conferred as an Associate of Arts. Music Program of Study will not be listed on students’ transcript or diploma, but will be recognized by transfer institutions for program admission.

Associate Of Science Degree

Students successfully completing any Guaranteed Transfer Courses with a “C” or better, 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 Requirements (38 credit hours)

I. Communications (9 credit hours)
ENG 121 English Composition I ....................... 3
ENG 122 English Composition II ..................... 3
COM 115 Public Speaking OR COM 125 Interpersonal Communication ...................... 3

II. Arts and Humanities (9 credit hours)
Select three 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
MUS 123 Survey of World Music ......................... 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 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 225 Introduction to Shakespeare .................. 3

Ways of Thinking
PHI 111 Introduction 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)
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 (9 credit hours)
Select three 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 111 World Civilization I ........................... 3
HIS 112 World 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

Please visit www.arapahoe.edu for the most current, updated catalog information
### Degree Requirements

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

Select two courses.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 101</td>
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</tr>
<tr>
<td>AST 102</td>
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</tr>
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<td>BIO 111</td>
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<tr>
<td>BIO 112</td>
<td>5</td>
</tr>
<tr>
<td>BIO 201</td>
<td>4</td>
</tr>
<tr>
<td>BIO 202</td>
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<td>PHY 204</td>
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<td>BIO 221</td>
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<td>CHE 111</td>
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<td>CHE 112</td>
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<td>GEY 111</td>
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<td>GEY 121</td>
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<td>MET 150</td>
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<td>PHY 211</td>
<td>4</td>
</tr>
<tr>
<td>PHY 212</td>
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</tbody>
</table>

**VI. Restricted Math/Science Electives** *(22 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.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>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)</td>
<td>60 credit hours</td>
</tr>
</tbody>
</table>

*Not all independent study or Special Topics courses may apply.

### Associate of Science Degree – Engineering Program of Study

To assist students interested in pursuing an Associate of Science Degree with a Program of Study in Engineering, which is designed to transfer to the engineering program at 4-year institutions, ACC is developing this Engineering program of study.

We anticipate having this option available for the 2009-2010 academic year. Interested students should contact Hank Weigel at 303.797.5924, kay.sloan@arapahoe.edu or Kay Uchiyama at 303.797.5924, kay.uchiyama@arapahoe.edu

This degree is currently being developed. Upon approval, the complete degree plan will be posted online at www.arapahoe.edu as an addendum to the Catalog.

### Associate of Science Degree – Secondary Mathematics Education Program Of Study

The Associate of Science Degree with a Program of Study in Secondary Mathematics Education is designed for the community college student who wishes to transfer to a four-year secondary mathematics education licensure program. Students who complete the program and concentration at Arapahoe Community College with a grade point average of 2.5 or better (with a grade of “C” or better in all mathematics coursework) will qualify for acceptance to the Regis University Secondary Mathematics Education program offered through the College of Professional Studies and may complete their baccalaureate program by completing just 48 additional credit hours.

We anticipate having this option available for the 2009-2010 academic year. Interested students should contact Mary Sloan at 303.797.5836, mary.sloan@arapahoe.edu or Kay Uchiyama at 303.797.5924, kay.uchiyama@arapahoe.edu

This degree is currently being developed. Upon approval, the complete degree plan will be posted online at www.arapahoe.edu as an addendum to the Catalog.

### Associate of General Studies Degree

**General Education Requirements** *(33 credit hours)*

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

Select two courses:

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>*ENG 121</td>
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<td>*ENG 122</td>
<td>3</td>
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<tr>
<td>ENG 131</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>3</td>
</tr>
<tr>
<td>COM 125</td>
<td>3</td>
</tr>
<tr>
<td>COM 225</td>
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</table>

**II. Humanities** *(9 credit hours)*

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>*ART 110</td>
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<tr>
<td>*ART 111</td>
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<td>*ART 122</td>
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</tr>
<tr>
<td>ART 121</td>
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</tr>
<tr>
<td>ART 138</td>
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</tr>
<tr>
<td>ART 141</td>
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</tr>
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<td>ART 161</td>
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<tr>
<td>ART 211</td>
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<tr>
<td>ART 231</td>
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**Foreign Language I-II:**

<table>
<thead>
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<th>Language</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>ARA, CHI, FRE, JPN, LAT, SPA, 111-112</td>
<td>5</td>
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</table>

**Foreign Language III:**

<table>
<thead>
<tr>
<th>Language</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>FRE, JPN, LAT, SPA 211</td>
<td>3</td>
</tr>
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</table>

**Foreign Language IV:**

<table>
<thead>
<tr>
<th>Language</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRE, JPN, LAT, SPA 212</td>
<td>3</td>
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<table>
<thead>
<tr>
<th>Language</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>ASL 121-122</td>
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<tr>
<td>COM 115</td>
<td>3</td>
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<tr>
<td>COM 125</td>
<td>3</td>
</tr>
<tr>
<td>COM 225</td>
<td>3</td>
</tr>
<tr>
<td>*HUM 121</td>
<td>3</td>
</tr>
<tr>
<td>*HUM 122</td>
<td>3</td>
</tr>
<tr>
<td>*HUM 123</td>
<td>3</td>
</tr>
<tr>
<td>*LIT 115</td>
<td>3</td>
</tr>
<tr>
<td>*LIT 201</td>
<td>3</td>
</tr>
<tr>
<td>*LIT 202</td>
<td>3</td>
</tr>
<tr>
<td>*LIT 205</td>
<td>3</td>
</tr>
<tr>
<td>*LIT 211</td>
<td>3</td>
</tr>
<tr>
<td>*LIT 212</td>
<td>3</td>
</tr>
<tr>
<td>*LIT 221</td>
<td>3</td>
</tr>
<tr>
<td>*LIT 222</td>
<td>3</td>
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</tbody>
</table>

Please visit [www.arapahoe.edu](http://www.arapahoe.edu) for the most current, updated catalog information.
*CHE 101 Introduction to Chemistry II ............... 5
*CHE 111 General College Chemistry II/ Lab. ......... 5
*CHE 112 General College Chemistry II/ Lab. ......... 5
CIS 115 Introduction to Computer Information Systems . 3
CIS 118 Introduction 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
*MET 150 General Meteorology .......... 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 Introduction to Statistics ............. 3
*MAT 155 Integrated Math I ............. 3
*MAT 156 Integrated Math II ............. 3
*MAT 201 Calculus I .......... 5
*MAT 202 Calculus II .......... 5
*MAT 265 Differential Equations .......... 3
VI. Electives (27 credit hours)
Selected from any credit-bearing course numbered
at or above 100 that is offered by the College.
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 ........................................ 60 credit hours

GREAT BOOKS ACHIEVEMENT AWARDS
ACC is proud to be one of the six community colleges
nationwide chosen to participate in the National Great
Books Consortium. Selected sections of transfer courses,
which are noted on the course schedule each semester,
will include reading from authors identified in the 1990
Great Books series published by Encyclopedia Britannica
and the University of Chicago. The sections differ in no
other way from other sections of the same course or equi-

Please visit www.arapahoe.edu for the most current, updated catalog information
GET A NEW PHARMACEUTICAL CAREER – FAST

Pharmacy Technicians are in demand. As Americans age and pharmaceutical companies step up their advertising, the nation needs more Pharmacy Technicians. In less than six months, students who complete the Pharmacy Technician Program at Arapahoe Community College are ready to become one of the highly successful alumni who have passed the national pharmacy technician certification exam. Certified pharmacy technicians are highly attractive candidates for employment by local area companies. For more information, call Larry Allen at 303.797.5944.

JOIN THE FAST-GROWING FIELD OF HUMAN PERFORMANCE

Arapahoe Community College has the only Human Performance program at a community college in the state. According to U.S. Bureau of Labor projections, opportunities are expected to increase much faster than average through 2014 in the human performance field. ACC students have a 100 percent success rate on the American College of Sports Medicine national exams in personal training and health fitness specialist. For those wishing to continue their education in the field, the program has articulation agreements with four-year schools in Colorado.

For more information, visit our Web page at www.arapahoe.edu or contact Sophie Mabry at 303.797.5856 or sophie.mabry@arapahoe.edu. Follow the updates with the HUP program on Facebook, Linkedin, MySpace and Twitter.

TAKING CARE OF BUSINESS

Working in “business” is more wide-ranging than most students realize. People who choose to study business often concentrate on accounting, management, marketing, finance, insurance, purchasing, sales, administration or dozens of other specialties. One of the biggest advantages you’ll have as a business major is that your skills are transferable to an unlimited number of fields, including owning your own business. Arapahoe Community College offers Associate degrees and certificates that enable students to go to work immediately upon completion and additional Associate degrees that prepare students to move into bachelor’s degree programs at four-year institutions. For more information call Connie Strain at 303.797.5872.

TELECOMMUNICATIONS – ONLINE!

ACC’s new Telecommunications Technology online degree is designed for individuals seeking a career or currently working in the telecommunications and broadband industries. These technologies continue to expand with digital, voice and video merging. This new ACC program includes VoIP, in-depth AC/DC, wired and wireless technology, industry standards, and substantial training on video, voice and data technologies, troubleshooting and network security. For more information call Janna Oakes, 303.797.5930.
TAKE CLASSES FROM THE CONVENIENCE OF HOME!

Sure, ACC offers plenty of classes in classrooms, but we also offer a huge number of online classes. You can take online courses in the comfort of your home or anywhere you have access to a computer.

ONLINE COURSES, CONDUCTED VIA THE INTERNET, FEATURE:

- Learning tools for course content access
- Research
- Class communication
- Assignments and testing

In addition, you can follow the Instructor’s online syllabus and lectures, read assigned materials, participate in discussions with the Instructor and fellow students, complete and deliver assignments and take tests.

Instructors facilitate online courses and create warm and supportive communities of learners. Online courses are:

- Informative
- Fun
- Convenient and
- Highly Interactive.

Online is all about CONVENIENCE! If you have to balance school, work and family responsibilities, online courses at ACC might be the perfect solution. If you are motivated and willing to work hard, online classes could help make your goal of earning an Associate degree or completing one of ACC’s many career-oriented programs more achievable than ever!

For more information about ACC online courses, go to ONLINE LEARNING on our Web site, www.arapahoe.edu.
“I began teaching full-time at ACC in fall 2001 as Chair of the Multimedia and Graphic Design Program. I moved to the Photography Program in 2003 and served as Chair of the Art Department from 2003-2006. The thing that I enjoy most about teaching at ACC is the caliber and diversity of the students. They are dedicated and eager to learn. I also enjoy working with colleagues in all three estates throughout ACC. They are devoted and caring individuals who are making a difference in the lives of our students.”

JIM CANNATA, ACC PHOTOGRAPHY PROGRAM COORDINATOR

ACC Faculty Member of the Year Karin Blaske has served the College since 1994. Blaske approaches the classroom with the passion of a first-year teacher and the skill of a master teacher. Her students show enthusiasm for learning, and they display growth in their academic skills. She has served on multiple committees and task forces working with all the Schools and Estates on campus.

KARIN BLASKE

“I want to be a Christian counselor, so ACC is a stepping stone for me. I dropped out of school when I was in tenth grade with a grade-point average of .873, so it was a very difficult decision to go back to school. My Dad dropped out of high school because of illness when he was in eighth grade, and my Mom barely got her high school diploma. Going back to school was quite a leap of faith, but now I’m vice president of Phi Theta Kappa and have a 3.7 grade-point average. I’m very grateful to ACC for allowing me to be capable of going on to the career that is my calling.”

CARLA MARIE ARELLANO, ACC NOMINEE FOR THE JACK KENT COOKE UNDERGRADUATE TRANSFER

“This is the Harvard of the West for automotive training, and most students pass all eight certifications. When you’re certified, they trust you more, and they pay you more. It’s kind of like having an engineer’s license. This is a rigorous program. You have to take academic classes like physics and math, and you have to pass those classes or you’re on academic probation.”

DONOVAN BRAY, RECIPIENT OF THE 2009 ELLIE AND MANNY GREENBURG SCHOLARSHIP THROUGH THE ARAPAHOE COMMUNITY COLLEGE FOUNDATION
Associate Of General Studies Degree – Broadband Technical Management Concentration

151201
This 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.

Upon completion at ACC, 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, 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.

NOTE: Broadband degrees and certificates are available ONLY to Jones/NCTI participants.

I. General Education Courses (31 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 115</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 216</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
<td>3</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MAN 226</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 216</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra OR higher</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology I OR</td>
<td></td>
</tr>
<tr>
<td>PSY 116</td>
<td>Stress Management</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking OR</td>
<td>3</td>
</tr>
<tr>
<td>COM 125</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

II. Major Courses (23 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTC 107</td>
<td>Installer</td>
<td>3</td>
</tr>
<tr>
<td>(or choose from restricted electives)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTC 109</td>
<td>Installer Technician</td>
<td>4</td>
</tr>
<tr>
<td>CTC 111</td>
<td>Service Technician</td>
<td>4</td>
</tr>
<tr>
<td>CTC 113</td>
<td>System Technician</td>
<td>4</td>
</tr>
<tr>
<td>CTC 127</td>
<td>Fiber Installation and Activation</td>
<td>2</td>
</tr>
<tr>
<td>CTC 128</td>
<td>Fiber Testing and Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>CTC 165</td>
<td>Advanced Technician</td>
<td>4</td>
</tr>
</tbody>
</table>

Please choose three of the following restricted electives: (9 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTC 118</td>
<td>Broadband Digital Installer</td>
<td>3</td>
</tr>
<tr>
<td>CTC 117</td>
<td>Computers and Broadband Modems</td>
<td>3</td>
</tr>
<tr>
<td>CTC 120</td>
<td>Understanding Voice and Data Networks</td>
<td>3</td>
</tr>
<tr>
<td>CTC 124</td>
<td>Troubleshooting Advanced Services</td>
<td>3</td>
</tr>
</tbody>
</table>

Total ........................................................................ 63 credit hours

NOTE: This degree will be conferred as an Associate of General Studies. Broadband Technical Management Concentration will not be listed on student’s transcript or diploma.

Broadband Digital Management

151201
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, head-end technicians, NOC technicians, etc., with broadband companies that are deploying advanced services.

NOTE: Broadband degrees and certificates are available ONLY to Jones/NCTI participants.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 115</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>CTC 107</td>
<td>Installer</td>
<td>3</td>
</tr>
<tr>
<td>(or choose one from restricted electives)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTC 109</td>
<td>Installer Technician</td>
<td>4</td>
</tr>
<tr>
<td>CTC 111</td>
<td>Service Technician</td>
<td>4</td>
</tr>
<tr>
<td>CTC 117</td>
<td>Computers and Broadband Modems</td>
<td>3</td>
</tr>
<tr>
<td>CTC 118</td>
<td>Broadband Digital Installer</td>
<td>3</td>
</tr>
<tr>
<td>CTC 124</td>
<td>Troubleshooting Advanced Services</td>
<td>3</td>
</tr>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
</tbody>
</table>

Restricted Electives *
Please choose one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTC 111</td>
<td>Service Technician</td>
<td>4</td>
</tr>
<tr>
<td>CTC 165</td>
<td>Advanced Technician</td>
<td>4</td>
</tr>
<tr>
<td>CTC 120</td>
<td>Understanding Voice and Data Networks</td>
<td>3</td>
</tr>
</tbody>
</table>

Total ........................................................................ 26-27 credit hours

Looking for something fun to do? Check out ACC’s student activities!

Visit Room M2820 OR Call 303.797.5667
### Broadband Telephony Technology

#### 151201

**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, VoIP 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.

**NOTE:** Broadband degrees and certificates are available ONLY to Jones/NCTI participants

**Major Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTC 107</td>
<td>Installer</td>
<td>3</td>
</tr>
<tr>
<td><em>(or choose one from restricted electives)</em></td>
<td></td>
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<tr>
<td>CTC 109</td>
<td>Installer Technician</td>
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<td>CTC 117</td>
<td>Computers and Broadband Modems</td>
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<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>CTC 111</td>
<td>Service Technician</td>
<td>4</td>
</tr>
<tr>
<td>CTC 127</td>
<td>Fiber installation and Activation</td>
<td>2</td>
</tr>
<tr>
<td>CTC 128</td>
<td>Testing and Maintenance for Fiber Technicians</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total** 26-27 credit hours

### Broadband Technical Management

#### 151201

**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.

**NOTE:** Broadband degrees and certificates are available ONLY to Jones/NCTI participants

**Major Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
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<td>CTC 113</td>
<td>System Technician</td>
<td>4</td>
</tr>
<tr>
<td>CTC 127</td>
<td>Fiber Installation and Activation</td>
<td>2</td>
</tr>
<tr>
<td>CTC 128</td>
<td>Fiber Testing and Maintenance</td>
<td>2</td>
</tr>
<tr>
<td>CTC 165</td>
<td>Advanced Technician</td>
<td>4</td>
</tr>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MAN 226</td>
<td>Principles of Management</td>
<td>3</td>
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**Restricted Electives**

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<td>Installer</td>
<td>3</td>
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<td>CTC 109</td>
<td>Installer Technician</td>
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<td>CTC 111</td>
<td>Service Technician</td>
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<tr>
<td>CTC 113</td>
<td>System Technician</td>
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<tr>
<td>CTC 165</td>
<td>Advanced Technician</td>
<td>4</td>
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<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MAN 226</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 29 credit hours

### Convergent Technologies

#### 151201

**Associate of Applied Science**

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.

**General Education Courses** *(22 credit hours)*

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 115</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English Composition I OR</td>
<td></td>
</tr>
<tr>
<td>ENG 131</td>
<td>Technical Writing I</td>
<td>3</td>
</tr>
</tbody>
</table>
MAT 121: College Algebra ............................................. 4
COM 115: Public Speaking OR ........................................... 3
COM 125: Interpersonal Communication ...................... 3
PSY 116: Stress Management OR ................................... 3
PHI 113: Logic ................................................................. 3

Restricted Electives
Please choose three credit hours from the following:
BTE 102: Keyboarding Applications I ......................... 2
BUS 116: Personal Finance .......................................... 3
ECO 202: Principles of Microeconomics .................. 3
MAR 106: Marketing Your Image ................................. 3
MAR 216: Small Business Management .................... 3
MAN 226: Principles of Management ...................... 3

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 112: Advanced DC-AC Arts .................................. 3
MAN 224: Leadership OR .............................................. 3
MAN 116: Principles of Supervision ............................. 3

Students must choose one of the following Degree Concentrations.
Only Major Courses above, or classes common to another Concentration will transfer between Concentrations.

Communication Technology Concentration (20 credit hours)
CTC 160: Cable Communications .................................. 3
CTC 163: Video Technology ......................................... 3
CTC 166: Emerging Technologies .................................. 2
CTC 275: Special Topics .............................................. 3

Electives 9
Please choose 9 credits from the following:
CIS 155: PC Spreadsheet Concepts: Excel .................. 3
CTC 224: Microsoft Windows Wireless Network ........... 3
CTC 131: Network Security Fundamentals .................. 3
CTC 280: Internship: Telecom Engineering and Planning* ............................................. 3
CTC 255: Field Studies: Engineering Planning ............. 3
ECO 202: Principles of Microeconomics .................. 3

Electives 6
Please choose 6 credits from the following:
CIS 155: PC Spreadsheet Concepts: Excel .................. 3
CTC 224: Microsoft Windows Wireless Network ........... 3
CTC 131: Network Security Fundamentals .................. 3
CTC 280: Internship: Telecom Engineering and Planning* ............................................. 3
CTC 255: Field Studies: Engineering Planning ............. 3
ECO 202: Principles of Microeconomics .................. 3

Total A.A.S. with Communication Technology Concentration .............. 66 credit hours

Network Technician Concentration (19 credit hours)
CNG 129: Network Cabling .......................................... 2
CTC 160: Cable Communications .................................. 3
CTC 162: Telecommunications ..................................... 3
CTC 166: Emerging Technologies .................................. 3
CTC 267: Telecommunications Installation, Splicing and Repair ............................................. 3

Electives 6
Please choose 6 credits from the following:
CIS 155: PC Spreadsheet Concepts: Excel .................. 3
CNG 224: Microsoft Windows Wireless Network ........... 3

Total A.A.S. with Network Technician Concentration .............. 65 credit hours

Telecommunications Engineering Concentration (21 credit hours)
CAD 101: Computer Aided Drafting .............................. 3
CTC 160: Cable Communications .................................. 3
CTC 240: Telecommunications Engineering and Outside Plant ............................................. 3
CTC 255: Field Studies: Engineering Planning ............. 3
ECO 202: Principles of Microeconomics .................. 3

Electives 6
Please choose 6 credits from the following:
CIS 155: PC Spreadsheet Concepts: Excel .................. 3
CNG 224: Microsoft Windows Wireless Network ........... 3
CTC 131: Network Security Fundamentals .................. 3
CTC 280: Internship: Telecom Engineering and Planning* ............................................. 3
CTC 255: Field Studies: Engineering Planning ............. 3
ECO 202: Principles of Microeconomics .................. 3

Total A.A.S. with Telecommunications Engineering Concentration .............. 67 credit hours

Central Office Technician Concentration (18 credit hours)
CNG 129: Network Cabling .......................................... 2
CTC 160: Cable Communications .................................. 3
ELT 147: Digital Devices I ............................................ 3

Electives 10
Please choose 6 credits from the following:
CIS 155: PC Spreadsheet Concepts: Excel .................. 3
CNG 224: Microsoft Windows Wireless Network ........... 3
CTC 131: Network Security Fundamentals .................. 3
CTC 280: Internship: Telecom Engineering and Planning* ............................................. 3
ELT 147: Digital Devices I ............................................ 3

Total A.A.S. with Central Office Technician Concentration .............. 64 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 School Dean.

Convergent Technologies: Communication Technology

151201 Certificate

Major Courses (24 credit hours)
CIS 115: Introduction to Computer Information Systems ........ 3
CTC 150: Data Communications .................................. 3

Please visit www.arapahoe.edu for the most current, updated catalog information
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CTC 161</td>
<td>Voice Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 215</td>
<td>Optical Networks</td>
<td>3</td>
</tr>
<tr>
<td>CTC 220</td>
<td>Regulations and Standards</td>
<td>3</td>
</tr>
<tr>
<td>ELT 106</td>
<td>Fundamentals of DC-AC</td>
<td>3</td>
</tr>
<tr>
<td>ELT 112</td>
<td>Advanced DC-AC</td>
<td>3</td>
</tr>
<tr>
<td>MAN 224</td>
<td>Leadership OR</td>
<td>3</td>
</tr>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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<td><strong>44</strong></td>
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**Communication Technology Concentration** (20 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>CTC 160</td>
<td>Cable Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 163</td>
<td>Video Technology</td>
<td>3</td>
</tr>
<tr>
<td>CTC 166</td>
<td>Emerging Technologies</td>
<td>2</td>
</tr>
<tr>
<td>CTC 275</td>
<td>Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>CTC 280</td>
<td>Internship: Telecom Engineering and Planning</td>
<td>3</td>
</tr>
</tbody>
</table>
| CTC Convergent Technologies course not previously taken or a course from another technical discipline. (Department Chair approval required.)

**Total** ........................................... 44 credit hours

**Convergent Technologies: Network Technician**

151201 Certificate

**Major Courses** (24 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 115</td>
<td>Introduction to Computer</td>
<td>3</td>
</tr>
<tr>
<td>CIS 150</td>
<td>Data Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 161</td>
<td>Voice Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 215</td>
<td>Optical Networks</td>
<td>3</td>
</tr>
<tr>
<td>CTC 220</td>
<td>Regulations and Standards</td>
<td>3</td>
</tr>
<tr>
<td>ELT 106</td>
<td>Fundamentals of DC-AC</td>
<td>3</td>
</tr>
<tr>
<td>ELT 112</td>
<td>Advanced DC-AC</td>
<td>3</td>
</tr>
<tr>
<td>MAN 224</td>
<td>Leadership OR</td>
<td>3</td>
</tr>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
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<tr>
<td><strong>Total</strong></td>
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**Network Technician Concentration** (19 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNG 129</td>
<td>Network Cabling</td>
<td>2</td>
</tr>
<tr>
<td>CTC 160</td>
<td>Cable Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 162</td>
<td>. . . . . . . . . . . . . . . . . . . . . . . . . .</td>
<td>3</td>
</tr>
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</table>

**Restricted Electives:** 11

Please choose 11 credits from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CIS 155</td>
<td>PC Spreadsheet Concepts: Excel</td>
<td>3</td>
</tr>
<tr>
<td>CNG 224</td>
<td>Microsoft Windows Wireless Network</td>
<td>3</td>
</tr>
<tr>
<td>CNG 131</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CTC 280</td>
<td>Internship: Telecom Engineering and Planning</td>
<td>3</td>
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</tbody>
</table>
| CTC Convergent Technologies course not previously taken or a course from another technical discipline. (Department Chair approval required.)

**Total** ........................................... 43 credit hours

**Convergent Technologies: Telecommunications Engineering**

151201 Certificate

**Major Courses** (24 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 115</td>
<td>Introduction to Computer</td>
<td>3</td>
</tr>
<tr>
<td>CIS 150</td>
<td>Data Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 161</td>
<td>Voice Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 215</td>
<td>Optical Networks</td>
<td>3</td>
</tr>
<tr>
<td>CTC 220</td>
<td>Regulations and Standards</td>
<td>3</td>
</tr>
<tr>
<td>ELT 106</td>
<td>Fundamentals of DC-AC</td>
<td>3</td>
</tr>
<tr>
<td>ELT 112</td>
<td>Advanced DC-AC</td>
<td>3</td>
</tr>
<tr>
<td>MAN 224</td>
<td>Leadership OR</td>
<td>3</td>
</tr>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</table>

**Telecommunications Engineering Concentration** (21 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>CAD 101</td>
<td>Computer Aided Drafting I</td>
<td>3</td>
</tr>
<tr>
<td>CTC 160</td>
<td>Cable Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 240</td>
<td>Telecommunications Engineering and Outside Plant</td>
<td>3</td>
</tr>
<tr>
<td>CTC 255</td>
<td>Field Studies: Engineering Planning</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microelectronics</td>
<td>3</td>
</tr>
</tbody>
</table>
| CTC Convergent Technologies course not previously taken or a course from another technical discipline. (Department Chair approval required.)

**Restricted Electives** 6

Please choose from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 155</td>
<td>PC Spreadsheet Concepts: Excel</td>
<td>3</td>
</tr>
<tr>
<td>CNG 224</td>
<td>Microsoft Windows Wireless Network</td>
<td>3</td>
</tr>
<tr>
<td>CNG 131</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CTC 280</td>
<td>Internship: Telecom Engineering and Planning</td>
<td>3</td>
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</tbody>
</table>

**Total** ........................................... 45 credit hours

**Convergent Technologies: Central Office Technician**

151201 Certificate

**Major Courses** (24 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 115</td>
<td>Introduction to Computer</td>
<td>3</td>
</tr>
<tr>
<td>CIS 150</td>
<td>Data Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 161</td>
<td>Voice Communications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 215</td>
<td>Optical Networks</td>
<td>3</td>
</tr>
<tr>
<td>CTC 220</td>
<td>Regulations and Standards</td>
<td>3</td>
</tr>
<tr>
<td>ELT 106</td>
<td>Fundamentals of DC-AC</td>
<td>3</td>
</tr>
<tr>
<td>ELT 112</td>
<td>Advanced DC-AC</td>
<td>3</td>
</tr>
<tr>
<td>MAN 224</td>
<td>Leadership OR</td>
<td>3</td>
</tr>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
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</table>

**Central Office Technician Concentration** (18 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNG 129</td>
<td>Network Cabling</td>
<td>2</td>
</tr>
<tr>
<td>CTC 160</td>
<td>Cable Communications</td>
<td>3</td>
</tr>
<tr>
<td>ELT 147</td>
<td>Digital Devices I</td>
<td>3</td>
</tr>
</tbody>
</table>

46 Please visit www.arapahoe.edu for the most current, updated catalog information
Restricted Electives: 10

Please choose from the following:

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

CTC Convergent Technologies course not previously taken or a course from another technical discipline. (Department Chair approval required.)

Total 42 credit hours

General Education Requirements For Associate of Applied Science 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 also 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 Introduction 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 I 3
ART 122 Drawing II 3
ART 123 Watercolor I 3
ART 131 2-D Design 3
ART 138 Photography I 3
ART 141 Jewelry and Metalwork I 3
ART 161 Ceramics I 3
*ART 207 Art History 1900 to present 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
*BIO 208 General College Microbiology 5
BTE 102 Keyboarding Applications 2
BUS 115 Introduction to Business 3
BUS 116 Personal Finance 3
BUS 216 Legal Environment of Business 3

*CHE 101 Introduction to Chemistry I 5
*CHE 102 Introduction to Chemistry II 5
*CHE 111 General College Chemistry I/Lab 5
*CHE 112 General College Chemistry II/Lab 5
CIS 115 Introduction to Computer Information Systems 3
CIS 118 Introduction to PC Applications 3
COM 115 Public Speaking 3
COM 125 Interpersonal Communication 3
COM 225 Organizational Communication 3
CSC 150 Visual Basic Programming 3
CSC 160 Computer Science I (Java) 4
CSC 161 Computer Science II (Java) 4
ECO 105 Introduction to Economics 3
*ECO 201 Principles of Macroeconomics 3
*ECO 202 Principles of Microeconomics 3
ECO 205 Contemporary Economic Issues 3
*ECO 245 Environmental Economics 3
*ENG 121 English Composition I 3
*ENG 122 English Composition II 3
ENG 131 Technical Writing I 3
FRE 211 French Language III 3
FRE 212 French Language IV 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 112 American Sign Language II 5
ASL 116 American Sign Language III 5
*GEO 105 World Regional Geography 3
*GEO 106 Human Geography 3
GEO 107 Physical Geography 3
GEO 165 Human Ecology 3
*GEO 111 Physical Geology 4
*GEO 121 Historical Geology 4
*HIS 101 Western Civilization I 3
*HIS 102 Western Civilization II 3
*HIS 111 World Civilization I 3
*HIS 112 World 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
JPN 211 Japanese Language III 3
JPN 212 Japanese Language IV 3
*LIT 115 Introduction 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 225 Introduction to Shakespeare 3
LIT 255 Children’s Literature 3

Please visit www.arapahoe.edu for the most current, updated catalog information.
### DEGREE REQUIREMENTS

#### Accounting

**520302**

**Associate of Applied Science**

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 accounts payable, accounts receivable and payroll, as well as positions with a more total involvement in accounting.

<table>
<thead>
<tr>
<th>Major Courses (32 credit hours)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ACC 121 Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACC 122 Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>ACC 115 Payroll Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC 131 Income Tax I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 135 Spreadsheet Applications for Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC 226 Cost Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC 229 Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ACC 287 Cooperative Education OR</td>
<td>3</td>
</tr>
<tr>
<td>ACC 289 Capstone</td>
<td>3</td>
</tr>
<tr>
<td>BUS 217 Business Communications and Report Writing</td>
<td>3</td>
</tr>
</tbody>
</table>

#### General Education Courses (16 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 216</td>
<td>The Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics OR</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENGL</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 108</td>
<td>Technical Mathematics OR higher</td>
<td>4</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking OR</td>
<td>3</td>
</tr>
<tr>
<td>COM 225</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Restricted Electives (13 credit hours)**

Select six credit hours from Business Electives and six credit hours from ACC/CIS Electives. The remaining hour may be selected from either area. Please consult with an Advisor to select the best electives to suit your needs.

---

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

510899 Certificate

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 fields of activity and aging. After successful completion of the activity professional training program the graduate 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.

Activity Professional Training 110 (MEPAP I), and APT 188 are corequisites that meet for eight-hour sessions three times a month for four months. Practicum experience includes 90 hours of working in an activity department under the direction of a certified activity professional. Activity Professional Training 210 (MEPAP II) comprises preparation in volunteer management, advanced documentation and regulatory compliance, community relations and advanced administrative practices. APT 288 is the advanced practicum. The curriculum for this certificate is aligned with the requirements established by the National Certification Council of Activity Professionals and the National Association of Activity Professionals. APT 110, 188, 210 and 288 are required.

This certificate is eligible for financial aid.

All courses required for this certificate must be completed with a “C” or better.

Activity Professionals’ Training Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>APT 110</td>
<td>Activity Training Prof I</td>
<td>8</td>
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<tr>
<td>APT 188</td>
<td>Basic Practicum</td>
<td>2</td>
</tr>
<tr>
<td>APT 210</td>
<td>Activity Training Prof II</td>
<td>8</td>
</tr>
<tr>
<td>APT 288</td>
<td>Advanced Management Practicum</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

Applied Technology

419999

Associate of Applied Science

Students desiring to complete the Associate of Applied Science (A.A.S.) Degree in Applied Technology will complete the technical coursework 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:

- 60 semester credits of coursework.
- Arapahoe Community College will accept up to 42 credit hours of coursework from an approved certificate at an AVTS.
- Cumulative GPA of 2.0 or higher.
- General education course credits of 15-18 semester credits.
- Minimum of 18 semester credits earned at Arapahoe Community College to include:

<table>
<thead>
<tr>
<th>Education Requirements:</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>English</td>
<td>3</td>
</tr>
<tr>
<td>ENG 121 or ENG 131</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>3</td>
</tr>
<tr>
<td>COM 115 or COM 125</td>
<td></td>
</tr>
<tr>
<td>Humanities</td>
<td>3</td>
</tr>
<tr>
<td>Selected from general education lists</td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>MAT 121 or higher</td>
<td></td>
</tr>
</tbody>
</table>
### Architectural Technology

#### 150101

**Associate of Applied Science**

The Architectural Technology program provides students with the development of skills necessary to become a competent draftsman. 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.

#### General Education Courses (16 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 110</td>
<td>Art Appreciation OR</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Art History I OR</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>Art History II</td>
<td>3</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English Composition I OR</td>
<td>4</td>
</tr>
<tr>
<td>ENG 131</td>
<td>English Composition II</td>
<td>4</td>
</tr>
<tr>
<td>MAT 108</td>
<td>Technical Mathematics OR higher</td>
<td>4</td>
</tr>
<tr>
<td>COM 115</td>
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<td>3</td>
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<tr>
<td>COM 125</td>
<td>Interpersonal Communication OR</td>
<td>3</td>
</tr>
<tr>
<td>COM 225</td>
<td>Organizational Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Restricted Electives

Choose one course from the following:

CIS 118, PED 100, ECO 201, 202, POS 105, 111, GEO 105, 106, HIS 101, 102, 201, 202, or 247, ANT 101, 111, PSY 101, 102, 235, SOC 101, 102, MAT 121, 122, 201, or 202.

### Architectural Technology: Architectural Drafting

#### 150101

**Certificate**

The Architectural Drafting certificate provides the educational 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)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 101</td>
<td>Introduction to Architectural Drawing</td>
<td>5</td>
</tr>
<tr>
<td>ARC 102</td>
<td>Residential Architecture</td>
<td>5</td>
</tr>
<tr>
<td>ARC 107</td>
<td>Blueprint Reading (Residential/Commercial)</td>
<td>3</td>
</tr>
<tr>
<td>ARC 116</td>
<td>Building Materials</td>
<td>3</td>
</tr>
<tr>
<td>ARC 121</td>
<td>Building Structure Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ARC 125</td>
<td>History of Architecture</td>
<td>3</td>
</tr>
<tr>
<td>ARC 205</td>
<td>Commercial Drawing Practice I</td>
<td>4</td>
</tr>
<tr>
<td>ARC 215</td>
<td>Architectural Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ARC 216</td>
<td>Estimating I</td>
<td>3</td>
</tr>
<tr>
<td>ARC 218</td>
<td>Surveying</td>
<td>3</td>
</tr>
<tr>
<td>ARC 226</td>
<td>Construction Scheduling</td>
<td>3</td>
</tr>
<tr>
<td>ARC 231</td>
<td>Building Service Systems</td>
<td>3</td>
</tr>
<tr>
<td>ARC 236</td>
<td>Codes/Zoning/Specifications</td>
<td>3</td>
</tr>
<tr>
<td>ARC 278</td>
<td>Seminar</td>
<td>1</td>
</tr>
<tr>
<td>ARC 280</td>
<td>Internship</td>
<td>1</td>
</tr>
<tr>
<td>CAD 101</td>
<td>Computer Aided Drafting I</td>
<td>3</td>
</tr>
<tr>
<td>CAD 102</td>
<td>Computer Aided Drafting II</td>
<td>3</td>
</tr>
</tbody>
</table>

*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.

This program is currently under revision. Upon approval the program will be listed as an addendum to the Catalog on the ACC Web site at www.arapahoe.edu.
Architectural Technology: Architectural Contracts and Materials

150101
Certificate
The Architectural Contracts and Materials certificate provides the educational 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
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 and Insurance 3
ARC 231 Building Service Systems 3
ARC 236 Codes/Zoning/Specifications 3
ENG 131 Technical Writing 3
Total 27 credit hours
This program is currently under revision. Upon approval the program will be listed as an addendum to the Catalog on the ACC Web site at www.arapahoe.edu.

Architectural Technology: Computer Aided Drafting 2D

150101
Certificate
Major Courses
CAD 101 Computer Aided Drafting I 3
CAD 102 Computer Aided Drafting II 3
Total 6 credit hours

Architectural Technology: Computer Aided Drafting 3D

150101
Certificate
Major Courses
CAD 201 Computer Aided Drafting/Custom 3
CAD 249 AUTOLISP Programming 3
Total 6 credit hours

Architectural Technology: Custom

150101
Certificate
Major Courses
CAD 201 Computer Aided Drafting/Custom 3
CAD 249 AUTOLISP Programming 3
Total 6 credit hours

Architectural Technology: Residential Drafting

150101
Certificate
Major Courses
ARC 101 Introduction 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
This program is currently under revision. Upon approval the program will be listed as an addendum to the Catalog on the ACC Web site at www.arapahoe.edu.
Automotive Service Technology

470604

Associate of Applied Science

The Associate of Applied Science Degree in Automotive Service Technology and related certificate programs are NATEF certified and taught by ASE certified Instructors.

The two-year Automotive A.A.S. and certificate programs are designed to train and prepare students for employment in the automotive service industry as professional technicians and to prepare students for the ASE (Automotive Service Excellence) certification examinations. This program includes ASE certification or manufacturer-specific training. Each class in the program requires 5-45 additional hours of hands-on and/or web based training (under supervision of the Instructor) in addition to scheduled class hours.

The automotive training program at ACC is organized into four outstanding “Tracks:”

• ASEP – General Motors-specific program called GM Automotive Service Educational Program
• CAP – Chrysler-specific program called the Chrysler College Apprenticeship Program
• Nissan – Nissan-specific Nissan Denver Technician Apprenticeship Program
• ATEC – The general apprenticeship program for professional automotive technicians

The corporate sponsored dealership apprenticeship programs (CAP, ASEP, and Nissan) are manufacturer-specific and are degree programs only. In-coming freshmen will begin only in the fall semester. These tracks require the student to obtain and maintain an apprenticeship position at a GM, Nissan, or Chrysler dealership for the duration of the program. Program faculty will assist the student in finding suitable placement.

Additionally, these students will take web-based manufacturer technician training courses; their sponsoring dealership will receive training credit for that student upon his or her graduation with the A.A.S. degree.

The ATEC program allows students to obtain an apprenticeship with any manufacturer dealership (other than GM Chrysler, or Nissan) or any independent automotive repair facility. In-coming freshmen can begin in the fall or spring semester. This track also requires students to maintain an apprenticeship position in the automotive repair field for the duration of the program, and is a degree program only.

All tracks have limited seats available and are filled on a first-come first-served basis, dependent upon satisfactory MVR, criminal background checks and drug screening.

Students wishing to pursue the two-year degree must be signed into the respective courses by the Program Director at the beginning of each semester to ensure that the student is currently on track academically to graduate in the prescribed two-year period. Classes for the corporate tracks will be filled with dealer sponsored students first; general program students may be allowed to fill any available remaining seats. All students, regardless of their chosen track, should be aware of automotive repair industry expectations, specifically: Technicians must drive their customers’ vehicles as part of the repair process; thus the technician and the student must have a clean motor vehicle record and valid driver’s license. The hiring process at reputable repair shops and dealerships will include a drug screen and a thorough background investigation. As a result of these industry policies, to be eligible for acceptance into the program, students must pass an industry standard MVR, criminal, background, and urinalysis, and take a department administered mechanical assessment test. Please access the American Data Bank Web site at http://accautomotivescreening.com.

The National Automotive Technician Education Foundation, Inc. accredits the Automotive Service Technology Programs and can be reached at 101 Blue Seal Drive, Leesburg VA, 20175, Telephone (703) 669.6850.

Arapahoe Community College provides accommodations to qualified students with disabilities. To request accommodations, contact Disability Services located in The Center for Academic Resources, M2710, 303.797.5937 vitty.

General Education Courses (17 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG</td>
<td>131 Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAT</td>
<td>108 Technical Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>PHY</td>
<td>105 Conceptual Physics</td>
<td>4</td>
</tr>
<tr>
<td>COM</td>
<td>125 Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>ELT</td>
<td>146 Digital Devices in Computers</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Courses (66 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASE</td>
<td>102 Introduction to the Automotive Shop</td>
<td>4</td>
</tr>
<tr>
<td>ASE</td>
<td>110 Brakes I</td>
<td>3</td>
</tr>
<tr>
<td>ASE</td>
<td>210 Brakes II</td>
<td>3</td>
</tr>
<tr>
<td>ASE</td>
<td>120 Basic Automotive Electricity</td>
<td>2</td>
</tr>
<tr>
<td>ASE</td>
<td>123 Battery, Starting and Charging Systems</td>
<td>2</td>
</tr>
<tr>
<td>ASE</td>
<td>220 Specialized Electronics Training</td>
<td>2</td>
</tr>
<tr>
<td>ASE</td>
<td>221 Body Electrical</td>
<td>4</td>
</tr>
<tr>
<td>ASE</td>
<td>130 General Engine Diagnosis</td>
<td>2</td>
</tr>
<tr>
<td>ASE</td>
<td>132 Ignition System Diagnosis and Repair</td>
<td>2</td>
</tr>
<tr>
<td>ASE</td>
<td>134 Automotive Emissions</td>
<td>2</td>
</tr>
<tr>
<td>ASE</td>
<td>231 Automotive Computers</td>
<td>2</td>
</tr>
<tr>
<td>ASE</td>
<td>233 Fuel Injection and Exhaust Systems</td>
<td>4</td>
</tr>
<tr>
<td>ASE</td>
<td>235 Drivability Diagnosis</td>
<td>1</td>
</tr>
<tr>
<td>ASE</td>
<td>140 Suspension and Steering</td>
<td>3</td>
</tr>
<tr>
<td>ASE</td>
<td>240 Suspension and Steering II</td>
<td>3</td>
</tr>
<tr>
<td>ASE</td>
<td>250 Automatic Trans/Transaxle Service</td>
<td>1</td>
</tr>
<tr>
<td>ASE</td>
<td>251 Automatic Trans/Transaxle Diagnosis</td>
<td>5</td>
</tr>
<tr>
<td>ASE</td>
<td>160 Automotive Engine Removal and Install</td>
<td>1</td>
</tr>
<tr>
<td>ASE</td>
<td>161 Engine Diagnosis &amp; Assembly</td>
<td>5</td>
</tr>
<tr>
<td>ASE</td>
<td>265 Heating and Air Conditioning</td>
<td>5</td>
</tr>
<tr>
<td>ASE</td>
<td>150 U-Joint and Axle Shaft Service</td>
<td>2</td>
</tr>
<tr>
<td>ASE</td>
<td>151 Manual Transmission/Trans and Clutches</td>
<td>2</td>
</tr>
<tr>
<td>ASE</td>
<td>152 Differentials and 4WD/AWD Service</td>
<td>2</td>
</tr>
<tr>
<td>ASE</td>
<td>287 Co-op</td>
<td>4</td>
</tr>
</tbody>
</table>

Total .............................. 83 credit hours
## Automotive Service Technology: Automotive Services Management

### 470604

**Certificate**
This program is designed as a work co-op program for those interested in a job as an automotive service writer/consultant. The academic courses may be taken prior to or in conjunction with the automotive courses. Dealerships are particularly interested in female service writers as women are under-represented in the automotive service field. All entrance eligibility requirements for the certificate program are the same as the degree programs.

<table>
<thead>
<tr>
<th>General Education Courses</th>
<th>(9 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 131</td>
<td>Technical Writing</td>
</tr>
<tr>
<td>COM 125</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>ELT 146</td>
<td>Digital Devices in Computers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Automotive Courses</th>
<th>(36 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASE 102</td>
<td>Introduction to Auto Shop</td>
</tr>
<tr>
<td>ASE 130</td>
<td>General Engine Diagnosis</td>
</tr>
<tr>
<td>ASE 110</td>
<td>Brakes I</td>
</tr>
<tr>
<td>ASE 140</td>
<td>Suspension and Steering I</td>
</tr>
<tr>
<td>ASE 265</td>
<td>Heating and Air Conditioning</td>
</tr>
<tr>
<td>ASE 120</td>
<td>Basic Automotive Electricity</td>
</tr>
<tr>
<td>ASE 123</td>
<td>Battery, Starting and Charging Systems</td>
</tr>
<tr>
<td>ASE 132</td>
<td>Ignition System Diagnosis and Repair</td>
</tr>
<tr>
<td>ASE 233</td>
<td>Fuel Injection and Exhaust Systems</td>
</tr>
<tr>
<td>ASE 250</td>
<td>Automatic Transmission/Transaxle Service</td>
</tr>
<tr>
<td>ASE 134</td>
<td>Automotive Emissions</td>
</tr>
<tr>
<td>ASE 210</td>
<td>Brakes II</td>
</tr>
<tr>
<td>ASE 150</td>
<td>U-Joint and Axle Shaft Service</td>
</tr>
<tr>
<td>MAN 226</td>
<td>Principles of Management</td>
</tr>
</tbody>
</table>

**Total** ........................................ 45 credit hours

## Automotive Service Technology: Advanced Automotive Electrical/Electronics

### 470604

**Certificate**
This program is designed as a work co-op program for those interested in a job as an advanced drivability specialist or would like to further their knowledge and training in advanced engine performance. Dealerships are particularly interested in this specialty due to advances in technology on current model vehicles with increasing electrical/electronic devices. All entrance eligibility requirements for the certificate program are the same as the degree programs.

<table>
<thead>
<tr>
<th>General Education Courses</th>
<th>(10 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 131</td>
<td>Technical Writing or higher English</td>
</tr>
<tr>
<td>MAT 108</td>
<td>Technical Math</td>
</tr>
<tr>
<td>ELT 146</td>
<td>Digital Devices in Computers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Automotive Courses</th>
<th>(31 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASE 102</td>
<td>Introduction to Automotive Shop</td>
</tr>
<tr>
<td>ASE 120</td>
<td>Basic Automotive Electricity</td>
</tr>
<tr>
<td>ASE 123</td>
<td>Battery, Starting and Charging</td>
</tr>
<tr>
<td>ASE 220</td>
<td>Specialized Electronics Training</td>
</tr>
<tr>
<td>ASE 221</td>
<td>Automotive Body Electrical</td>
</tr>
<tr>
<td>ASE 130</td>
<td>General Engine Diagnosis</td>
</tr>
<tr>
<td>ASE 132</td>
<td>Ignition System Diagnosis and Repair</td>
</tr>
<tr>
<td>ASE 134</td>
<td>Automotive Emissions</td>
</tr>
<tr>
<td>ASE 231</td>
<td>Automotive Computers</td>
</tr>
<tr>
<td>ASE 233</td>
<td>Fuel Injection and Exhaust Systems</td>
</tr>
<tr>
<td>ASE 235</td>
<td>Drivability Diagnosis</td>
</tr>
<tr>
<td>ELT 106</td>
<td>Fundamentals of DC/AC</td>
</tr>
<tr>
<td>ELT 147</td>
<td>Digital Devices I</td>
</tr>
</tbody>
</table>

**Total** ........................................ 41 credit hours

## Business Administration

### 520201

**Associate of Applied Science**
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 Advising Office or a Faculty Advisor in Business Administration for details.

<table>
<thead>
<tr>
<th>General Education Courses</th>
<th>(16 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 226</td>
<td>Business Statistics</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Intro to PC Applications or higher</td>
</tr>
<tr>
<td>CIS 161</td>
<td>Presentation Graphics</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics OR</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(34 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>BUS 115</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>BUS 216</td>
<td>Legal Environment of Business</td>
</tr>
<tr>
<td>BUS 217</td>
<td>Business Communications/Report Writing</td>
</tr>
<tr>
<td>FIN 101</td>
<td>Introduction to Finance</td>
</tr>
<tr>
<td>MAN 128</td>
<td>Human Relations OR</td>
</tr>
<tr>
<td>MAN 215</td>
<td>Organizational Behavior</td>
</tr>
<tr>
<td>MAN 224</td>
<td>Leadership</td>
</tr>
<tr>
<td>MAN 226</td>
<td>Principles of Management</td>
</tr>
<tr>
<td>MAR 106</td>
<td>Marketing Your Image</td>
</tr>
<tr>
<td>MAR 160</td>
<td>Customer Service</td>
</tr>
<tr>
<td>MAR 216</td>
<td>Principles of Marketing</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coop Education/Internship</th>
<th>(1 credit hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 287</td>
<td>Coop Education/Internship</td>
</tr>
</tbody>
</table>

Please visit [www.arapahoe.edu](http://www.arapahoe.edu) for the most current, updated catalog information
Discipline Concentration (9 - 12 credit hours)
Student must choose one of the following areas of concentration:

General Business Concentration (9 credit hours)
The General Business Concentration 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 following:
Any course(s) with the prefixes: ACC, BTE, BUS, CIS, FIN, MAN, MAR, REE, or other, with Department Chair approval

Total A.A.S. with General Business Concentration ............ 60 credit hours

Management Concentration (9 credit hours)
The Management Concentration prepares students for entry-level positions in business, government and nonprofit organizations. For those who are already managers, the Concentration 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 choose 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 Coop Education/Internship ..................... 3
CIS 202 Automated Project Management: MS Project ........ 3

Total A.A.S. with Management Concentration .............. 60 credit hours

Marketing Concentration (9 credit hours)
The Marketing Concentration 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 choose 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 Coop Education/Internship .......................... 3

Total A.A.S. with Marketing Concentration ................ 60 credit hours

Small Business Management Concentration (9 credit hours)
The Small Business Management Concentration 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

Required Electives: (6 credit hours)
Student must choose 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 Coop Education/Internship ..................... 3

Total A.A.S. with Small Business Management Concentration ............ 60 credit hours

Real Estate Appraisal Concentration (9 credit hours)
Successful completion of REE 118 and REE 119 in this concentration will satisfy the educational requirement of the Colorado Real Estate Commission to sit for the Real Estate Appraisal Examination.

Required Courses (9 credit hours)
REE 115 Intro to Real Estate .................................. 3
REE 118 Real Estate Appraisal .............................. 4
REE 119 Uniform Standards of Professional Appraisal Practice (USPAP) ........ 1
BUS 287 Cooperative Education Internship ............. 1

Total A.A.S. with Real Estate Appraisal Concentration .............. 60 credit hours

Real Estate Broker Licensing Concentration (12 credit hours)
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.

Required Courses
REE 201 Real Estate Broker I ................................. 6
REE 202 Real Estate Broker II .................................. 6

Total A.A.S. with Chosen Concentration .......... 63 credit hours

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.
Business Administration: Consumer Behavior

521801 Certificate
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
MAR 160 Customer Service .................................. 3
MAR 216 Principles of Marketing ............................. 3
MAR 235 Consumer Behavior ................................. 3
Total .................................................... 9 credit hours

Business Administration: Contemporary Business

520201 Certificate
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
BUS 115 Introduction to Business ......................... 3
BUS 216 Legal Environment of Business .................. 3
MAN 230 Corporate Responsibility ......................... 3
Total .................................................... 9 credit hours

Business Administration: Customer Service

521801 Certificate
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
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

Business Administration: Human Resource Management

521001 Certificate
This certificate is designed to enhance the skills of those 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
MAN 200 Human Resource Management I .............. 3
MAN 201 Human Resource Management II ............... 3
MAN 215 Organizational Behavior ............................ 3
Total .................................................... 9 credit hours

Business Administration: Human Resource Specialist

521001 Certificate
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
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

Business Administration: Leadership

520204 Certificate
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
MAN 215 Organizational Behavior  ............... 3
MAN 224 Leadership  ......................... 3
MAN 230 Corporate Responsibility  ............ 3
Total ........................................... 9 credit hours

Business Administration: Management For Professional and Technical Employees

52024
Certificate
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:

Have a minimum of an Associate of Applied Science degree in a technical area or three years of documented work experience in technical area, and complete the required coursework 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

Business Administration: Organizational Behavior

520201
Certificate
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
MAN 128 Human Relations ...................... 3
MAN 215 Organizational Behavior .............. 3
MAN 226 Principles of Management ............ 3
Total ........................................... 9 credit hours

Business Administration: Project Management

520204
Certificate
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
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

Business Administration: Real Estate Appraisal

521501
Certificate
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.

Required Courses
REE 115 Intro to Real Estate ..................... 3
REE 118 Real Estate Appraisal ................. 4
REE 119 Uniform Standards of Professional Appraisal Practice (USPAP) ........... 1

Total ........................................... 8 credit hours

Business Administration: Real Estate Broker

521501
Certificate
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.

Required Courses
REE 201 Real Estate Broker I .................. 6
REE 202 Real Estate Broker II .................. 6

Total ........................................... 12 credit hours
### Business Administration: Sales Management

**521801 Certificate**

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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAR 111</td>
<td>Principles of Sales</td>
<td>3</td>
</tr>
<tr>
<td>MAR 160</td>
<td>Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>MAR 216</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9 credit hours</td>
</tr>
</tbody>
</table>

### Business Administration: Small Business Management

**520701 Certificate**

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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 235</td>
<td>Computerized Accounting for Small Businesses</td>
<td>3</td>
</tr>
<tr>
<td>BUS 216</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 217</td>
<td>Business Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications or higher</td>
<td>3</td>
</tr>
<tr>
<td>MAN 216</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN 230</td>
<td>Corporate Responsibility</td>
<td>3</td>
</tr>
<tr>
<td>MAR 111</td>
<td>Principles of Sales</td>
<td>3</td>
</tr>
<tr>
<td>MAR 160</td>
<td>Customer Service</td>
<td>3</td>
</tr>
<tr>
<td>MAR 216</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>27 credit hours</td>
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</tbody>
</table>

**Restricted Electives**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MAR 117</td>
<td>Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MAR 220</td>
<td>Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>3 credit hours</td>
</tr>
</tbody>
</table>

**Total**

<table>
<thead>
<tr>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 credit hours</td>
</tr>
</tbody>
</table>

### Business Administration: Web-Based Design/Marketing

**090903 Certificate**

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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAR 117</td>
<td>Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MAR 217</td>
<td>E-Commerce Marketing</td>
<td>3</td>
</tr>
<tr>
<td>CIS 130</td>
<td>Introduction to the Internet</td>
<td>1</td>
</tr>
<tr>
<td>MGD 141</td>
<td>Web Design I</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>10 credit hours</td>
</tr>
</tbody>
</table>

Please visit [www.arapahoe.edu](http://www.arapahoe.edu) for the most current, updated catalog information.
**Carpentry**

**460201**

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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR 101</td>
<td>Construction Safety*</td>
<td>1</td>
</tr>
<tr>
<td>CAR 102</td>
<td>Hand and Power Tools*</td>
<td>1</td>
</tr>
<tr>
<td>CAR 105</td>
<td>Job Site Layout and Blueprint Reading</td>
<td>1</td>
</tr>
<tr>
<td>CAR 115</td>
<td>Form and Foundation Systems</td>
<td>1</td>
</tr>
<tr>
<td>CAR 121</td>
<td>Floor Framing</td>
<td>1</td>
</tr>
<tr>
<td>CAR 122</td>
<td>Wall Framing</td>
<td>1</td>
</tr>
<tr>
<td>CAR 123</td>
<td>Roof Framing</td>
<td>1</td>
</tr>
<tr>
<td>CAR 125</td>
<td>Roofing Materials and Methods</td>
<td>1</td>
</tr>
<tr>
<td>CAR 130</td>
<td>Windows and Exterior Doors</td>
<td>1</td>
</tr>
<tr>
<td>CAR 131</td>
<td>Exterior Trim</td>
<td>1</td>
</tr>
<tr>
<td>CAR 135</td>
<td>Thermal and Moisture Methods and Materials</td>
<td>1</td>
</tr>
<tr>
<td>CAR 145</td>
<td>Interior Finishes-General</td>
<td>1</td>
</tr>
<tr>
<td>CAR 146</td>
<td>Interior Finishes-Drywall Construction</td>
<td>1</td>
</tr>
<tr>
<td>CAR 151</td>
<td>Interior Trim-Doors and Trim</td>
<td>1</td>
</tr>
<tr>
<td>CAR 153</td>
<td>Interior Trim-Cabinets and Countertops</td>
<td>1</td>
</tr>
<tr>
<td>CAR 160</td>
<td>Floor Finishes</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total** ........................................ 16 credit hours

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

**Carpentry II**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR 215</td>
<td>Form and Foundation Systems II</td>
<td>1</td>
</tr>
<tr>
<td>CAR 221</td>
<td>Advanced Floor Systems</td>
<td>2</td>
</tr>
<tr>
<td>CAR 222</td>
<td>Advanced Wall Systems</td>
<td>2</td>
</tr>
<tr>
<td>CAR 223</td>
<td>Advanced Roofing Systems</td>
<td>2</td>
</tr>
<tr>
<td>CAR 250</td>
<td>Advanced Interior Trim-General</td>
<td>2</td>
</tr>
<tr>
<td>CAR 251</td>
<td>Advanced Interior Trim-Doors</td>
<td>2</td>
</tr>
<tr>
<td>CAR 254</td>
<td>Advanced Interior Trim-Special</td>
<td>2</td>
</tr>
<tr>
<td>CAR 275</td>
<td>Special Topics</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** ........................................ 16 credit hours

The Carpentry Program is currently under revision. When approved, the revision will be listed as an addendum to the Catalog on the ACC Web site, www.arapahoe.edu.

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**Computer Information Systems**

**110101**

**Associate of Applied Science**

The Computer Information System (CIS) degree is a two-year, 60 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** (22 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 121</td>
<td>English Composition I OR</td>
<td>3</td>
</tr>
<tr>
<td>ENG 131</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAN 230</td>
<td>Corporate Responsibility</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra OR</td>
<td>3</td>
</tr>
<tr>
<td>MAT 123</td>
<td>Finite Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking OR</td>
<td>3</td>
</tr>
<tr>
<td>COM 125</td>
<td>Interpersonal Communications</td>
<td>3</td>
</tr>
<tr>
<td>HIS 201</td>
<td>U.S. History I OR</td>
<td>3</td>
</tr>
<tr>
<td>PHI 111</td>
<td>Introduction to Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology I OR</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>POS 105</td>
<td>Introduction to Political Science OR</td>
<td>3</td>
</tr>
<tr>
<td>POS 111</td>
<td>American Government</td>
<td>3</td>
</tr>
</tbody>
</table>

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

**Business Concentration** (38 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>ACC 122</td>
<td>Principles of Accounting II</td>
<td>4</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 240</td>
<td>Database Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 268</td>
<td>Systems Analysis and Design I</td>
<td>3</td>
</tr>
<tr>
<td>MAN 226</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 216</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 125</td>
<td>Survey of Calculus I</td>
<td>4</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>OTHER Advisor Approved CIS Electives</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

**Total A.A.S. degree with Business Concentration** ........................................ 60 credit hours

**Computer Information Systems**

**Systems Concentration** (38 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 202</td>
<td>Automated Project Management</td>
<td>3</td>
</tr>
<tr>
<td>CIS 240</td>
<td>Database Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 268</td>
<td>Systems Analysis and Design I</td>
<td>3</td>
</tr>
<tr>
<td>CNG 124</td>
<td>Networking I: Net+</td>
<td>3</td>
</tr>
<tr>
<td>CNG 131</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CNG 211</td>
<td>Windows XP Configuration</td>
<td>3</td>
</tr>
<tr>
<td>CSC 116</td>
<td>Logic and Program Design OR</td>
<td>3</td>
</tr>
<tr>
<td>CSC 119</td>
<td>Introduction to Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC 154</td>
<td>Introduction to MS Visual Basic .NET</td>
<td>3</td>
</tr>
<tr>
<td>OTHER Advisor Approved CIS Electives</td>
<td>7</td>
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</tr>
</tbody>
</table>

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Please visit www.arapahoe.edu for the most current, updated catalog information.
Total A.A.S. degree with Computer Information Systems Concentration . . . . . . 60 credit hours

Database Analysis Concentration (38 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 116</td>
<td>Logic and Program Design OR</td>
<td>3</td>
</tr>
<tr>
<td>CSC 119</td>
<td>Introduction to Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC 154</td>
<td>Introduction to MS Visual Basic .NET</td>
<td>3</td>
</tr>
<tr>
<td>CSC 160</td>
<td>Computer Science I (JAVA)</td>
<td>4</td>
</tr>
<tr>
<td>CSC 233</td>
<td>Object Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>CSC 253</td>
<td>MS ASP.NET Web Application Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 220</td>
<td>Fundamentals of UNIX (Linux)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 232</td>
<td>UNIX Shell Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 240</td>
<td>Database Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 246</td>
<td>Oracle Database Administration I</td>
<td>4</td>
</tr>
<tr>
<td>CIS 253</td>
<td>Programming a Microsoft SQL Server 2000 Database</td>
<td>3</td>
</tr>
<tr>
<td>CIS 268</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
<tr>
<td>OTHER</td>
<td>Advisor Approved CIS Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

Total A.A.S. degree with Business Applications Specialist Concentration . . . . . . 60 credit hours

Business Applications Specialist Concentration (38 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 115</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 128</td>
<td>Windows Complete OR</td>
<td>3</td>
</tr>
<tr>
<td>CNG 211</td>
<td>Windows XP Configuration</td>
<td>3</td>
</tr>
<tr>
<td>CIS 130</td>
<td>Introduction to the Internet</td>
<td>1</td>
</tr>
<tr>
<td>CIS 135</td>
<td>Complete PC Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>CIS 140</td>
<td>Microsoft Outlook</td>
<td>1</td>
</tr>
<tr>
<td>CIS 145</td>
<td>Complete PC Database</td>
<td>3</td>
</tr>
<tr>
<td>CIS 155</td>
<td>PC Spreadsheet Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CIS 161</td>
<td>Presentation Graphics</td>
<td>1</td>
</tr>
<tr>
<td>CIS 167</td>
<td>Desktop Publishing (Publisher)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 202</td>
<td>Automated Project Management (MS Project)</td>
<td>3</td>
</tr>
<tr>
<td>OTHER</td>
<td>Advisor Approved CIS Electives</td>
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</tr>
</tbody>
</table>

Total A.A.S. degree with Business Applications Specialist Concentration . . . . . . 60 credit hours

Computer Information Systems: Applications Specialist

110101

Certificate

The CIS – Applications Specialist Certificate is designed to provide students with up-to-date information and education in the latest software packages utilized in current business environments. Both operating systems, the Internet and office software are covered.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 128</td>
<td>Windows Complete OR</td>
<td>3</td>
</tr>
<tr>
<td>CNG 211</td>
<td>Windows XP Configuration</td>
<td>3</td>
</tr>
<tr>
<td>CIS 130</td>
<td>Introduction to the Internet</td>
<td>1</td>
</tr>
<tr>
<td>CIS 135</td>
<td>Complete PC Word Processing</td>
<td>3</td>
</tr>
<tr>
<td>CIS 140</td>
<td>Microsoft Outlook</td>
<td>1</td>
</tr>
<tr>
<td>CIS 145</td>
<td>Complete PC Database</td>
<td>3</td>
</tr>
<tr>
<td>CIS 155</td>
<td>PC Spreadsheet Concepts</td>
<td>3</td>
</tr>
<tr>
<td>CIS 161</td>
<td>Presentation Graphics</td>
<td>1</td>
</tr>
<tr>
<td>CIS 167</td>
<td>Desktop Publishing (Publisher)</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 18 credit hours

Computer Information Systems: Database Analysis

110101

Certificate

The CIS Database Analysis Certificate focuses on the design, development, administration and maintenance of database systems. This certificate prepares students for entry-level positions within many different industries.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 145</td>
<td>Complete PC Database (Access 2003)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 220</td>
<td>Fundamentals of UNIX (Linux)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 232</td>
<td>UNIX Shell Programming (Linux)</td>
<td>3</td>
</tr>
<tr>
<td>CIS 240</td>
<td>Database Design and Development</td>
<td>3</td>
</tr>
<tr>
<td>CIS 246</td>
<td>Oracle Database Administration I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 268</td>
<td>Systems Analysis and Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Total 18 credit hours
Computer Network Technology

111002

Associate of Applied Science

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 and Cisco CCNA or the National Association of Communications System Engineers (NACSE) NANS certification; these are the competency standards for network specialists in the computer industry.

General Education Courses (16 credit hours)
- MAT 121 College Algebra .................. 4
- COM 115 Public Speaking OR
- COM 125 Interpersonal Communication ........ 3
- ENG 121 English Composition II OR
- ENG 131 Technical Writing I ................ 3
- BUS 115 Intro to Business .................. 3
- CIS 118 Intro to PC Applications .......... 3

Major Courses (25 credit hours)
- CIS 124 Intro to Operating Systems ........ 3
- CIS 202 Automated Project Mgmt: MS Project ........ 3
- CIS 287 Coop Education Career Training ....... 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

Computer Network Technology Concentrations:

Students must choose from one of the following concentrations:

MCSA (Microsoft Certified System Administrator) (18 credit hours)
- CNG 211 Windows Configuration: (OS) .......... 3
- CNG 212 Manage a MS Windows Server Environment ................ 4
- CNG 213 Implement a MS Windows Network Infrastructure .......... 3
- CNG 226 Implementing and Managing MS Exchange .......... 3
- CNG 216 Plan a MS Windows Server ............ 4

Electives (3 credit hours)
Students will select 3 credit hours from the CIS, CNG, CWB or CSC program areas. Please see faculty advisor for information.

Total A.A.S. with Security Concentration .................. 60 credit hours

MCSE (Microsoft Certified System Engineer) (24 credit hours)
- CNG 211 Windows Configuration: (OS) .......... 3
- CNG 212 Manage a MS Windows 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 ............ 4
- CNG 226 Implementing and Managing Microsoft Exchange Server 2003 .......... 3
- CNG 222 Designing a Windows Secure Network ........... 3

Total A.A.S. with MCSE Concentration .................. 65 credit hours

CCNA (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

Total A.A.S. with CCNA Concentration .................. 61 credit hours

UNIX Network Administration (15 credit hours)
- CIS 220 Fundamentals of Unix (Linux) ........... 3
- CIS 222 UNIX System Administration .......... 3
- CIS 232 Unix Shell Programming ............... 3
- CSC 160 Computer Science I (Language) .......... 4
- CSC 288 Programming in Perl ............... 2

Electives (4 credit hours)
Students will select 4 credit hours from the CIS, CNG, CWB or CSC program areas. Please see faculty advisor for information.

Total A.A.S. with UNIX Concentration .................. 60 credit hours

Computer and Networking Security (19 credit hours)
- CIS 220 Fundamentals of UNIX (Linux) ........... 3
- CIS 232 Unix Shell Programming ............... 3
- CNG 136 Guide to Disaster Recovery .......... 3
- CNG 253 Firewalls and How They Work .......... 3
- CNG 257 Network Defense and Counter Measures .......... 3
- CNG 258 Computer Forensics ............... 4

Total A.A.S. with Security Concentration .................. 60 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.

MCSA (Microsoft Certified System Administrator) 111002

Certificate

MCSA (Microsoft Certified System Administrator) (18 credit hours)
- CNG 211 Windows Configuration: (OS) .......... 3
- CNG 212 Manage a MS Windows Server Environment ................ 4
- CNG 213 Implement a MS Windows Network Infrastructure ........ 4

Please visit www.arapahoe.edu for the most current, updated catalog information
CSC 268 Programming in Perl ............... 4
CIS 220 Fundamentals of UNIX (Linux) .......... 3
CIS 232 Unix Shell Programming .......... 3
CNG 253 Firewalls and How They Work .......... 3
CNG 257 Network Defense and Counter Measures .......... 3
CNG 258 Computer Forensics ............... 3
Total .................................. 19 credit hours

Computer and Networking Security

111002 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.

CIS 220 Fundamentals of UNIX (Linux) .......... 3
CIS 232 Unix Shell Programming .......... 3
CNG 136 Guide to Disaster Recovery .......... 3
CNG 253 Firewalls and How They Work .......... 3
CNG 257 Network Defense and Counter Measures .......... 3
CNG 258 Computer Forensics ............... 3
Total .................................. 19 credit hours

Game Design and Development
(see page 72)

Computer Science

110701 Associate of Applied Science
The Computer Science degree is a two-year, 60 credit hour vocational program which includes programming, data and file structures, database, networking, architecture and software engineering. Emphasis is on learning to use the computer as a tool in a business and scientific environment.

The CSC graduate will have a solid foundation in computer programming skills. Job opportunities exist in traditional entry-level computer programming and database programming environments.

General Education Courses (28 credit hours)
ENG 121 English Composition I .......... 3
ENG 122 English Composition II .......... 3
MAT 201 Calculus I .......... 5
MAT 202 Calculus II .......... 5
COM 115 Public Speaking .......... 3
HIS 201 U.S. History I OR
PHI 111 Introduction to Philosophy .......... 3
PSY 101 General Psychology I OR
SOC 101 Introduction to Sociology .......... 3
POS 105 Introduction to Political Science OR
POS 111 American Government .......... 3

Major Courses (32 credit hours)
CSC 116 Logic and Program Design .......... 3
CSC 160 Computer Science I (C++ or Java) .......... 4
CSC 161 Computer Science II (C++ or Java) .......... 4
CSC 234 C++ Programming (Data Structures) .......... 4
CSC 225 Computer Architecture/Assembly Language Programming .......... 4

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

**119999**

**Associate of Applied Science**

The Computer Support Professional program prepares individuals for positions in the computer support field. The student will have a background in computer hardware, software and operating systems. Students in this program gain theoretical and hands-on experience with computer hardware, applications and networking technologies that are primarily vendor neutral. Upon successful completion of the program, the student is prepared to take the exams for A+, Network+, and Security+, as well as Microsoft MCP.

**General Education Courses** (16 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 121</td>
<td>English Composition I OR</td>
<td>3</td>
</tr>
<tr>
<td>ENG 131</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>College Algebra</td>
<td>3</td>
</tr>
<tr>
<td>MAN 224</td>
<td>Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MAN 230</td>
<td>Corporate Responsibility</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking OR</td>
<td>3</td>
</tr>
<tr>
<td>COM 125</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

**Major Courses** (38 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 124</td>
<td>Introduction to Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 120</td>
<td>Fundamentals of UNIX (Linux)</td>
<td>3</td>
</tr>
<tr>
<td>CSC 116</td>
<td>Program Logic and Design OR</td>
<td>3</td>
</tr>
<tr>
<td>CSC 119</td>
<td>Introduction to Programming</td>
<td>3</td>
</tr>
<tr>
<td>CNG 121</td>
<td>Computer Technician I: A+</td>
<td>4</td>
</tr>
<tr>
<td>CNG 122</td>
<td>Computer Technician II: A+</td>
<td>4</td>
</tr>
<tr>
<td>CNG 124</td>
<td>Network I: A+</td>
<td>3</td>
</tr>
<tr>
<td>CNG 125</td>
<td>Network I: Network+</td>
<td>3</td>
</tr>
<tr>
<td>CNG 224</td>
<td>Networking II: Network+</td>
<td>3</td>
</tr>
<tr>
<td>CNG 255</td>
<td>Industry Certification</td>
<td>3</td>
</tr>
</tbody>
</table>

**Restricted Electives:** (6 credit hours)

Choose 6 credit hours from the list of courses below. (Must include at least one programming language)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSC 160</td>
<td>Computer Science I</td>
<td>4</td>
</tr>
<tr>
<td>CSC 161</td>
<td>Computer Science II</td>
<td>4</td>
</tr>
<tr>
<td>CSC 233</td>
<td>Object Oriented Programming in C++</td>
<td>3</td>
</tr>
<tr>
<td>CSC 234</td>
<td>C++ Programming</td>
<td>3</td>
</tr>
<tr>
<td>CSC 236</td>
<td>C# Programming</td>
<td>4</td>
</tr>
<tr>
<td>CSC 237</td>
<td>Advanced C# Programming</td>
<td>4</td>
</tr>
<tr>
<td>CIS 202</td>
<td>Automated Project Management</td>
<td>3</td>
</tr>
<tr>
<td>CIS 232</td>
<td>UNIX Shell Programming</td>
<td>3</td>
</tr>
<tr>
<td>MAR 216</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>COM 225</td>
<td>Organizational Communications</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** .................................. 60 credit hours

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**Computer Technician 110201**

**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, students are prepared to take the CompTIA A+ certification exam, the competency standard for service technicians in the computer industry.

**Major Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 124</td>
<td>Introduction to Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>CIS 128</td>
<td>Complete Windows</td>
<td>3</td>
</tr>
<tr>
<td>CNG 121</td>
<td>Computer Technology I: A+</td>
<td>4</td>
</tr>
<tr>
<td>CNG 122</td>
<td>Computer Technology II: A+</td>
<td>4</td>
</tr>
<tr>
<td>CNG 124</td>
<td>Networking I: Network+</td>
<td>3</td>
</tr>
<tr>
<td>CNG 125</td>
<td>Networking II: Network+</td>
<td>3</td>
</tr>
<tr>
<td>CNG 255</td>
<td>Industry Certification</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** .................................. 26 credit hours

Students may substitute any of the following courses for CIS 118: CNG 135, CIS 161, CIS 145 and CIS 155.

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**Construction Supervision: Business Concentration**

**460412**

**Associate of Applied Science**

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

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MAT 122</td>
<td>College Trigonometry</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>ART 110, 111; FRE, JPN or LAT 111,112, 211; SPA 101, 115; MUS 100,120; PHI 111,112; THE 105, 212.</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Choose one course from the following:

Choose one course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 100,120; PHI 111,112; THE 105, 212.</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**Total** .................................. 60 credit hours
### Major Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>ARC 101</td>
<td>Introduction to Architectural Drawing</td>
</tr>
<tr>
<td>ARC 107</td>
<td>Blueprint Reading for Building Trades</td>
</tr>
<tr>
<td>ARC 116</td>
<td>Building Materials</td>
</tr>
<tr>
<td>ARC 121</td>
<td>Building Structure Analysis</td>
</tr>
<tr>
<td>ARC 216</td>
<td>Estimating I</td>
</tr>
<tr>
<td>ARC 218</td>
<td>Surveying</td>
</tr>
<tr>
<td>ARC 226</td>
<td>Construction Scheduling</td>
</tr>
<tr>
<td>ARC 228</td>
<td>Contracts, Bonds and Insurance</td>
</tr>
<tr>
<td>ARC 231</td>
<td>Building Service Systems</td>
</tr>
<tr>
<td>ARC 236</td>
<td>Codes/Zoning/Specifications</td>
</tr>
<tr>
<td>CAD 101</td>
<td>Computer Aided Drafting I</td>
</tr>
<tr>
<td>ARC 280</td>
<td>Internship</td>
</tr>
</tbody>
</table>

### Physical Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PED activity course*</td>
<td></td>
</tr>
</tbody>
</table>

*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.

### Business Concentration Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 216</td>
<td>Legal Environment of Business</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
</tr>
<tr>
<td>MAN 224</td>
<td>Leadership</td>
</tr>
<tr>
<td>MAT 125</td>
<td>Survey of Calculus</td>
</tr>
</tbody>
</table>

### Construction Supervision: Business Concentration

<table>
<thead>
<tr>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>69 credit hours</td>
</tr>
</tbody>
</table>

This program is currently under revision. Upon approval the program will be listed as an addendum to the Catalog on the ACC Web site at www.arapahoe.edu.

### Construction Supervision: Carpentry Concentration

#### 460412 Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
</tr>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
</tr>
<tr>
<td>MAT 122</td>
<td>College Trigonometry</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking</td>
</tr>
<tr>
<td>General Education Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Choose one course from one of the following:

- ART 110, 111; FRE, JPN or LAT 111,112, 211; SPA 101, 115; MUS 100,120; PHI 111,112; THE 105, 212.

### Major Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>ARC 101</td>
<td>Introduction to Architectural Drawing</td>
</tr>
<tr>
<td>ARC 107</td>
<td>Blueprint Reading for Building Trades</td>
</tr>
<tr>
<td>ARC 116</td>
<td>Building Materials</td>
</tr>
<tr>
<td>ARC 121</td>
<td>Building Structure Analysis</td>
</tr>
<tr>
<td>ARC 216</td>
<td>Estimating I</td>
</tr>
<tr>
<td>ARC 218</td>
<td>Surveying</td>
</tr>
<tr>
<td>ARC 226</td>
<td>Construction Scheduling</td>
</tr>
<tr>
<td>ARC 228</td>
<td>Contracts, Bonds and Insurance</td>
</tr>
<tr>
<td>ARC 231</td>
<td>Building Service Systems</td>
</tr>
<tr>
<td>ARC 236</td>
<td>Codes/Zoning/Specifications</td>
</tr>
<tr>
<td>CAD 101</td>
<td>Computer Aided Drafting I</td>
</tr>
<tr>
<td>ARC 280</td>
<td>Internship</td>
</tr>
</tbody>
</table>

### Physical Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>PED activity course*</td>
<td></td>
</tr>
</tbody>
</table>

*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.

### Carpentry Concentration

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAR 101</td>
<td>Basic Safety</td>
</tr>
<tr>
<td>CAR 102</td>
<td>Hand and Power Tools</td>
</tr>
<tr>
<td>CAR 105</td>
<td>Job Site Layout and Blueprint Reading</td>
</tr>
<tr>
<td>CAR 115</td>
<td>Form and Foundation Systems</td>
</tr>
<tr>
<td>CAR 121</td>
<td>Floor Framing</td>
</tr>
<tr>
<td>CAR 122</td>
<td>Wall Framing</td>
</tr>
<tr>
<td>CAR 123</td>
<td>Roof Framing</td>
</tr>
<tr>
<td>CAR 125</td>
<td>Roofing Materials and Methods</td>
</tr>
<tr>
<td>CAR 130</td>
<td>Windows and Exterior Doors</td>
</tr>
<tr>
<td>CAR 131</td>
<td>Exterior Trim</td>
</tr>
<tr>
<td>CAR 145</td>
<td>Interior Finishes-General</td>
</tr>
<tr>
<td>CAR 146</td>
<td>Interior Finishes-Drywall Construction</td>
</tr>
<tr>
<td>CAR 151</td>
<td>Interior Trim-Doors and Trim</td>
</tr>
<tr>
<td>CAR 153</td>
<td>Interior Trim- Cabinets and Countertops</td>
</tr>
<tr>
<td>CAR 160</td>
<td>Floor Finishes</td>
</tr>
</tbody>
</table>

### Construction Supervision: Construction Estimating

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 107</td>
<td>Blueprint Reading (Residential/Commercial)</td>
</tr>
<tr>
<td>ARC 216</td>
<td>Estimating I</td>
</tr>
</tbody>
</table>

Financial Aid is only available for the coursework in these 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.

This program is currently under revision. Upon approval the program will be listed as an addendum to the Catalog on the ACC Web site at www.arapahoe.edu.
Criminal Justice

430103

Associate of Applied Science

The Criminal Justice A.A.S. Degree is designed for students seeking a career in Criminal Justice. Whether you want to become an emergency dispatcher, a victim/witness assistant, lawyer, probation/parole officer or a law enforcement officer, this program is a great place to start. The curriculum is strong, diverse and provides an excellent opportunity to see the criminal justice system as it actually functions, not how televisions portrays it.

Semester hours obtained by students who attended the Law Enforcement Academy can be applied toward the Restricted Courses requirements for this degree program. Students must present a copy of their P.O.S.T. certification to Admissions and Records to receive credit.

Students transferring to a four-year college or university should select their elective courses only after consulting with the program advisor to facilitate the transferability of coursework. Please contact Christine Swenson at 303.797.5980 or christine.swenson@arapahoe.edu to make an appointment.

Students should have the ability to produce work above the developmental level to be successful in this program. This means students must have ACCUPLACER reading scores of 80+ and writing scores of 95+ or ACT/SAT scores that are equivalent.

General Education Courses (15 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 101</td>
<td>General Psychology I OR</td>
</tr>
<tr>
<td>PSY 102</td>
<td>General Psychology II</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
</tr>
<tr>
<td>ENG 122</td>
<td>English Composition II</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking OR</td>
</tr>
<tr>
<td>COM 125</td>
<td>Interpersonal Communication OR</td>
</tr>
<tr>
<td>COM 225</td>
<td>Organizational Communication OR</td>
</tr>
<tr>
<td>PSY 111</td>
<td>General Psychology Elective</td>
</tr>
<tr>
<td>ENG 111</td>
<td>English Composition I</td>
</tr>
<tr>
<td>ENG 112</td>
<td>English Composition II</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Sociology</td>
</tr>
<tr>
<td>SOC 102</td>
<td>Social Problems and Services</td>
</tr>
<tr>
<td>SPA 111</td>
<td>Foreign Language I</td>
</tr>
<tr>
<td>SPA 112</td>
<td>Foreign Language II</td>
</tr>
<tr>
<td>SCI 111</td>
<td>Physical Education*</td>
</tr>
<tr>
<td>SCI 112</td>
<td>Physical Education*</td>
</tr>
<tr>
<td>SCI 211</td>
<td>Physical Education*</td>
</tr>
<tr>
<td>SCI 212</td>
<td>Physical Education*</td>
</tr>
</tbody>
</table>

Total: ............................................................... 38 credit hours

Major Courses (27 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ 110</td>
<td>Introduction to Criminal Justice</td>
</tr>
<tr>
<td>CRJ 125</td>
<td>Law Enforcement Operations</td>
</tr>
<tr>
<td>CRJ 135</td>
<td>Judicial Function</td>
</tr>
<tr>
<td>CRJ 145</td>
<td>Correctional Process</td>
</tr>
<tr>
<td>CRJ 205</td>
<td>Principles in Criminal Law</td>
</tr>
<tr>
<td>CRJ 210</td>
<td>Constitutional Law</td>
</tr>
<tr>
<td>CRJ 220</td>
<td>Human Relations/Social Conflict</td>
</tr>
<tr>
<td>CRJ 230</td>
<td>Criminology</td>
</tr>
<tr>
<td>CRJ 236</td>
<td>CRJ Research Methods</td>
</tr>
<tr>
<td>CRJ 241</td>
<td>Police Science</td>
</tr>
<tr>
<td>CRJ 242</td>
<td>Police Science</td>
</tr>
<tr>
<td>CRJ 243</td>
<td>Police Science</td>
</tr>
<tr>
<td>CRJ 244</td>
<td>Police Science</td>
</tr>
<tr>
<td>CRJ 245</td>
<td>Police Science</td>
</tr>
<tr>
<td>CRJ 246</td>
<td>Police Science</td>
</tr>
</tbody>
</table>

Total: ............................................................... 9 credit hours

Restricted Courses (18 credit hours)

All students must select electives from courses with the prefixes of: ACC, CIS, CRJ, CSC, EMS, PAR, SPA or any other General Education (gtPATHWAYS) course.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRJ 250</td>
<td>Crime Analysis V: Computer Applications</td>
</tr>
<tr>
<td>CRJ 254</td>
<td>Crime Analysis IV: Computer Applications</td>
</tr>
<tr>
<td>CRJ 256</td>
<td>Crime Analysis V: Problem Solving</td>
</tr>
<tr>
<td>CRJ 261</td>
<td>Cooperative Education: Crime Analysis I</td>
</tr>
<tr>
<td>CRJ 266</td>
<td>Cooperative Education: Crime Analysis II</td>
</tr>
</tbody>
</table>

Total: ............................................................... 27 credit hours

Physical Education* (1 credit hour)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCI 1</td>
<td>Physical Education</td>
</tr>
</tbody>
</table>

Total: ............................................................... 1 credit hour

Total: ............................................................... 61 credit hours

*C 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.

Criminal Justice: Crime Analysis

430103

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 Analysis certificate enables professionals to obtain the sometimes overlooked yet necessary skills to work successfully in this field. These courses are offered online only, and in an accelerated format. For more information please contact Christine Swenson at 303.797.5980 or christine.swenson@arapahoe.edu to make an appointment.

Students should have the ability to produce work above the developmental level to be successful in this program. This means students must have ACCUPLACER reading scores of 80+ and writing scores of 95+ or ACT/SAT scores that are equivalent.

| CRJ 110 | Introduction to the Criminal Justice System |
| CRJ 125 | Law Enforcement Operations                 |
| CRJ 140 | Crime Analysis I: Fundamentals of Crime Analysis |
| CRJ 200 | Crime Analysis II: Tactical Crime Analysis  |
| CRJ 228 | Crime Analysis III: Mapping                |
| CRJ 254 | Crime Analysis IV: Computer Applications   |
| CRJ 265 | Crime Analysis V: Problem Solving          |
| CRJ 266 | Cooperative Education: Crime Analysis VI   |

Total: ............................................................... 27 credit hours

For those students currently employed as crime analysts, please contact the department for course substitutions: 303.797.5980.

Criminal Justice: Emergency Dispatch

430103

Certificate

In an emergency, the first people to answer a 911 call for help are Emergency Dispatchers. Seconds after receiving an emergency call, these well-trained, highly professional individuals react to send the appropriate type and number of emergency services units in response to calls for assistance. They also monitor the activity of emergency services personnel at the scene. Emergency Dispatchers work in a variety of settings, ranging from police and fire stations to hospitals or centralized communication centers. Communication skills and the ability to work under pressure are important personal qualities for dispatchers. At the end of this program, students will be prepared to take the national certification test.
Students are strongly encouraged to complete this program in one semester. The majority of the coursework is delivered online. Students will spend time in the classroom practicing their skills in the state-of-the-art emergency dispatch simulation lab. For more information please contact Christine Swenson at 303.797.5980 or christine.swenson@arapahoe.edu to make an appointment.

Students should have the ability to produce work above the developmental level to be successful in the program. This means students must have ACCUPLACER reading scores of 80+ and writing scores of 95+ or equivalent ACT/SAT scores.

| CRJ 110 Introduction to the Criminal Justice System | 3 |
| CRJ 125 Law Enforcement Operations | 3 |
| CRJ 150 Victims of Crime and Trauma | 3 |
| CRJ 201 Emergency Dispatching | 5 |
| PSY 116 Stress Management | 3 |

### Culinary Arts

#### 120500 Certificate

This one-year certificate program is designed for individuals seeking a career in or currently working in the food preparation industry. The program concentrates specifically on all aspects of food preparation, menu planning and dining room management necessary for success in a culinary occupation. Students acquire the knowledge necessary to work in food production, pastry/baking, guest services, food safety and sanitation, and management.

This program is taught in a hands-on kitchen/restaurant environment located in Englewood High School in Englewood, Colorado, and includes work in an online environment. This certificate program is filled on a first-come, first-served basis, and is open to up to 10 students per year.

Written permission from the academic dean is required to register. Students must enroll in all 10 Culinary credits in the fall and in all 7 Culinary credits in the Spring.

Additional Costs: Uniform and textbooks at students’ expense

<table>
<thead>
<tr>
<th>Fall Courses</th>
<th>(10 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUA 121 Introduction to Food Production Principles and Practices</td>
<td>1</td>
</tr>
<tr>
<td>CUA 122 Introduction to Stocks, Soups and Sauces</td>
<td>1</td>
</tr>
<tr>
<td>CUA 123 Introduction to Garde Manager</td>
<td>1</td>
</tr>
<tr>
<td>CUA 157 Menu Planning</td>
<td>3</td>
</tr>
<tr>
<td>CUA 190 Dining Room Management</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring Courses</th>
<th>(7 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CUA 131 Starches, Pastas, Casseroles and Grain Products</td>
<td>1</td>
</tr>
<tr>
<td>CUA 132 Center of the Plate: Meat</td>
<td>1</td>
</tr>
<tr>
<td>CUA 133 Center of the Plate: Poultry, Fish and Seafood</td>
<td>1</td>
</tr>
<tr>
<td>CUA 141 Baking: Principles and Ingredients</td>
<td>1</td>
</tr>
<tr>
<td>CUA 142 Basic Yeast-Raised Products and Quick Breads</td>
<td>1</td>
</tr>
<tr>
<td>CUA 143 Baking: Cakes, Pies, Pastries and Cookies</td>
<td>1</td>
</tr>
<tr>
<td>CUA 275 Special Topics</td>
<td>1</td>
</tr>
</tbody>
</table>

### Early Childhood Education

#### 190706 Certificate

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 and/or directors and may go on to earn an A.G.S. degree.

Please note that the Colorado Department of Human Services requires experience with young children in early childhood programs. Arapahoe Community College does have articulation agreements for both early childhood and elementary education teacher preparation. As the requirements in this field are changing, please refer to the ACC Web site for updates.

Contact Linda Forrest for specific information, 303.797.5784.

Students must take the ACCUPLACER Placement Test before enrolling in ECE/EDU courses. ACCUPLACER scores of 80 in reading and 95 in writing are strongly recommended.

### Early Childhood Group Leader

#### 190706 Certificate

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(15 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 101 Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 102 Introduction to Early Childhood Lab Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ECE 103 Guidance Strategies for Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 220 Curriculum Methods and Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PSY 238 Child Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** ........................................ 15 credit hours

### Early Childhood Director

#### 190706 Certificate

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(15 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 101 Introduction to Early Childhood Education</td>
<td>3</td>
</tr>
<tr>
<td>ECE 102 Introduction to EC Lab Techniques</td>
<td>3</td>
</tr>
<tr>
<td>ECE 103 Guidance Strategies for Children</td>
<td>3</td>
</tr>
<tr>
<td>ECE 220 Curriculum Development Methods and Techniques</td>
<td>3</td>
</tr>
<tr>
<td>PSY 238 Child Development</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** ........................................ 15 credit hours

Please visit [www.arapahoe.edu](http://www.arapahoe.edu) for the most current, updated catalog information.
Administrative Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 205</td>
<td>Nutrition, Health and Safety</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ECE 240</td>
<td>Administration of Early Childhood</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ECE 241</td>
<td>Administration: Human Relations for Early Childhood Education</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

AND

Select six credit hours from the following: (6 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECE 111</td>
<td>ECE 112, 125, 126, 127, 175, 178, 179, 185, 187, 225, 226, 228, 260, 275</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDU 221</td>
<td>EDU 233, 234, 242, 242, 261</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>MAT 101</td>
<td>MAT 102, 247, SOC 101, 102, 205, ASL 121, 122</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total ............................................. 30 credit hours

Electronics and Computer Technology

150303

Associated of Applied Science

Students completing the coursework 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.

The study of Computer-Based Electronics Technology leads to employment in research and 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.

General Education Courses (15 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 108</td>
<td>Technical Mathematics</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English Composition I OR</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ENG 131</td>
<td>Technical Writing I</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Electives General Education Approved</td>
<td></td>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Major Courses (42 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELT 106</td>
<td>Fundamentals of DC/AC</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELT 112</td>
<td>Advanced DC/AC</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELT 146</td>
<td>Digital Devices in Computers</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELT 163</td>
<td>Soldering</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELT 168</td>
<td>Transistors and Op Amps</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELT 261</td>
<td>Microprocessors</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CIS 124</td>
<td>Introduction to Operating Systems</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CSC 116</td>
<td>Programming and Logic Design OR</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CSC 119</td>
<td>Introduction to Programming</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CNG 121</td>
<td>Computer Tech I: A+</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CNG 122</td>
<td>Computer Tech II: A+</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>CNG 255</td>
<td>Industry Certification A+</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CNG 124</td>
<td>Networking I: Network +</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>CNG 224</td>
<td>MS Windows Wireless Network</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>ELT 289</td>
<td>Capstone Project</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Restricted Electives (3 credit hours)

Select 3 credits hours of CIS, CSC, or CNG

Total ............................................. 60 credit hours

Emergency Medical Services: Paramedicine

510904

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:

- One year of documented EMT Basic or Intermediate field experience
- Basic ECG Interpretation class
- IV Certification
- Current CPR Card
- HEP B vaccination*
- MMR vaccination (2)*
- Tetanus vaccination
- TB Skin Test
- *or Titer
- CBI criminal background check
- One year of college-level Anatomy and Physiology (8 credit hours). BIO 201 and 202 will meet this requirement.
- Must receive an acceptable grade on the HOBIT EKG and EMT – Basic entrance exams

NOTE: All Students in EMS programs must have the HEP B vaccination and MMR Vaccinations (2) or Titer

The applicant must apply directly to HealthONE EMS (for the paramedic certificate) and to the College (to apply for the degree). Please call HealthONE EMS at 303.7886303 for more information or the School of Health Science and Engineering at 303.797.5991.

The Paramedicine Program has four components: Lecture, Lab, Clinical and Field internships. This is approximately 1200 hours. The student must complete all coursework, lecture, lab, clinical and field internship, as well as pass all academic and practical components before sitting for the National Registry Certification Examination.

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 Associate 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.

This program assists students in advancing their careers in the EMS systems.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 131</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>COM 125</td>
<td>Interpersonal Communication OR</td>
<td>4</td>
</tr>
<tr>
<td>COM 126</td>
<td>Communication in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>MAT 108</td>
<td>Technical Mathematics or higher</td>
<td>4</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 202</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Introduction to Psychology</td>
<td>3</td>
</tr>
<tr>
<td>EMS 125</td>
<td>Emergency Medical Technician-Basic</td>
<td>9</td>
</tr>
<tr>
<td>EMS 170</td>
<td>Emergency Medical</td>
<td></td>
</tr>
<tr>
<td>EMS 130</td>
<td>EMT Intravenous Therapy</td>
<td>2</td>
</tr>
<tr>
<td>CCN 230</td>
<td>Basic EKG Interpretation</td>
<td>2</td>
</tr>
<tr>
<td>EMS 225</td>
<td>Fundamentals of Paramedic Practice</td>
<td>3</td>
</tr>
<tr>
<td>EMS 226</td>
<td>Fundamentals of Paramedic Practice Lab</td>
<td>2</td>
</tr>
<tr>
<td>EMS 227</td>
<td>Paramedic Special Considerations</td>
<td>3</td>
</tr>
<tr>
<td>EMS 228</td>
<td>Paramedic Special Considerations Lab</td>
<td>2</td>
</tr>
<tr>
<td>EMS 229</td>
<td>Paramedic Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>EMS 230</td>
<td>Paramedic Pharmacology Lab</td>
<td>2</td>
</tr>
<tr>
<td>EMS 231</td>
<td>Paramedic Cardiology</td>
<td>5</td>
</tr>
<tr>
<td>EMS 232</td>
<td>Paramedic Cardiology Lab</td>
<td>1</td>
</tr>
<tr>
<td>EMS 233</td>
<td>Paramedic Medical Emergencies</td>
<td>4</td>
</tr>
<tr>
<td>EMS 234</td>
<td>Paramedic Medical Emergencies Lab</td>
<td>1</td>
</tr>
<tr>
<td>EMS 235</td>
<td>Paramedic Trauma Emergencies</td>
<td>4</td>
</tr>
<tr>
<td>EMS 236</td>
<td>Paramedic Trauma Emergencies Lab</td>
<td>1</td>
</tr>
<tr>
<td>EMS 237</td>
<td>Paramedic Internship Preparatory</td>
<td>2</td>
</tr>
<tr>
<td>EMS 280</td>
<td>Paramedic Internship I</td>
<td>6</td>
</tr>
<tr>
<td>EMS 281</td>
<td>Paramedic Internship II</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>80</td>
</tr>
</tbody>
</table>

## Emergency Medical Services: EMT Basic Enhanced

### 510904 Certificate

This 27-hour EMT-B enhanced certificate provides additional training to improve the EMT’s employability, prepare the student for paramedic school and other healthcare careers. Many of the enhanced certificate classes are prerequisites for entrance into the EMT – Paramedic Program. Consult an advisor for appropriate electives.

**Contact the Financial Aid Office for information regarding Financial Aid eligibility for this program.**

Major Courses (23 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 125</td>
<td>EMT-Basic</td>
<td>9</td>
</tr>
<tr>
<td>EMS 170</td>
<td>EMT-Basic Clinical</td>
<td>1</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 202</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English Composition</td>
<td>3</td>
</tr>
<tr>
<td>CCN 230</td>
<td>Basic EKG Interpretation</td>
<td>2</td>
</tr>
</tbody>
</table>

Electives (4 credit hours)

Students must take at least 4 credit hours from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 130</td>
<td>IV Training</td>
<td>2</td>
</tr>
<tr>
<td>EMS 134</td>
<td>The Geriatric Patient</td>
<td>1</td>
</tr>
<tr>
<td>EMS 136</td>
<td>EMT/Paramedic Safety Issues in the Field</td>
<td>1</td>
</tr>
<tr>
<td>EMS 138</td>
<td>Basic Trauma Life Support</td>
<td>1</td>
</tr>
<tr>
<td>EMS 150</td>
<td>Pediatric Education</td>
<td></td>
</tr>
<tr>
<td>EMS 213</td>
<td>Pre-hospital Trauma Life Support</td>
<td>1</td>
</tr>
<tr>
<td>HPR 178</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 27 credit hours
Emergency Medical Services: EMT Paramedic

510904
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:

- One year of documented EMT Basic or Intermediate field experience
- Basic ECG Interpretation class
- IV Certification
- Current CPR Card
- HEP B vaccinations*
- MMR vaccinations (2)*
- Tetanus vaccination
- TB Skin Test
- *Or Titer
- CBI criminal background check
- One year of college-level Anatomy and Physiology (8 credit hours). BIO 201 and 202 will meet this requirement.
- 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 303.788.6303 for more information, or the School of Health Science and Engineering at 303.797.5888.

The Paramedic Program has four components: Lecture, Lab, Clinical and Field internships. This is approximately 1200 hours. The student must complete all coursework, lecture, lab, clinical 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, path physiology, 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.

Contact the Financial Aid Office for information regarding Financial Aid eligibility for this program.

**Major Courses (45 credit hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 225</td>
<td>Fundamentals of Paramedic Practice</td>
<td>3</td>
</tr>
<tr>
<td>EMS 226</td>
<td>Fundamentals of Paramedic Practice Lab</td>
<td>2</td>
</tr>
<tr>
<td>EMS 227</td>
<td>Paramedic Special Considerations</td>
<td>3</td>
</tr>
<tr>
<td>EMS 228</td>
<td>Paramedic Special Considerations Lab</td>
<td>2</td>
</tr>
<tr>
<td>EMS 229</td>
<td>Paramedic Pharmacology</td>
<td>3</td>
</tr>
<tr>
<td>EMS 230</td>
<td>Paramedic Pharmacology Lab</td>
<td>2</td>
</tr>
<tr>
<td>EMS 231</td>
<td>Paramedic Cardiology</td>
<td>5</td>
</tr>
<tr>
<td>EMS 232</td>
<td>Paramedic Cardiology Lab</td>
<td>1</td>
</tr>
<tr>
<td>EMS 233</td>
<td>Paramedic Medical Emergencies</td>
<td>4</td>
</tr>
<tr>
<td>EMS 234</td>
<td>Paramedic Medical Emergencies Lab</td>
<td>1</td>
</tr>
<tr>
<td>EMS 235</td>
<td>Paramedic Trauma Emergencies</td>
<td>4</td>
</tr>
<tr>
<td>EMS 236</td>
<td>Paramedic Trauma Emergencies Lab</td>
<td>1</td>
</tr>
<tr>
<td>EMS 237</td>
<td>Paramedic Internship Preparatory</td>
<td>2</td>
</tr>
<tr>
<td>EMS 280</td>
<td>Paramedic Internship I</td>
<td>6</td>
</tr>
<tr>
<td>EMS 281</td>
<td>Paramedic Internship II</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total** 45 credit hours

**Engineering Technologies: Architecture Concentration**

150000

**Associate of Applied Science**

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)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
<td>3</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English Composition I OR</td>
<td>3</td>
</tr>
<tr>
<td>ENG 131</td>
<td>Technical Writing I</td>
<td>3</td>
</tr>
<tr>
<td>MAT 108</td>
<td>Technical Mathematics or higher</td>
<td>4</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

**Restricted Electives** 3

Choose one of the following:

- CIS 118, PED 100, ECO 201, 202, POS 105, 111, GEO 105, 106, HIS 101, 102, 201, 202, or 247, ANT 101, 111, PSY 101, 102, 235, SOC 101, 102, MAT 121, 122, 201, or 202.

**Computer Courses (19 credit hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 101</td>
<td>Computer Aided Drafting</td>
<td>3</td>
</tr>
<tr>
<td>CAD 102</td>
<td>Computer Aided Drafting 2D</td>
<td>3</td>
</tr>
<tr>
<td>CAD 201</td>
<td>Computer Aided Drafting Custom</td>
<td>3</td>
</tr>
<tr>
<td>CAD 202</td>
<td>Computer Aided Drafting 3D</td>
<td>3</td>
</tr>
<tr>
<td>CAD 217</td>
<td>Viz</td>
<td>3</td>
</tr>
<tr>
<td>CAD 249</td>
<td>Auto LISP Programming</td>
<td>3</td>
</tr>
<tr>
<td>CIS 130</td>
<td>Introduction to the Internet</td>
<td>1</td>
</tr>
</tbody>
</table>

**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 admissions to the College. Appropriate credit must be taken to substitute for the hour waived.

**Architecture Courses (28 credit hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC 101</td>
<td>Introduction to Architectural Drawing</td>
<td>5</td>
</tr>
<tr>
<td>ARC 102</td>
<td>Residential Architecture</td>
<td>5</td>
</tr>
<tr>
<td>ARC 107</td>
<td>Blueprint Reading Residential/Commercial</td>
<td>3</td>
</tr>
<tr>
<td>ARC 116</td>
<td>Building Materials</td>
<td>3</td>
</tr>
<tr>
<td>ARC 121</td>
<td>Building Structure Analysis</td>
<td>3</td>
</tr>
<tr>
<td>ARC 215</td>
<td>Architectural Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ARC 231</td>
<td>Building Service System</td>
<td>3</td>
</tr>
<tr>
<td>CAD 225</td>
<td>Architectural Desktop/Autodesk</td>
<td>3</td>
</tr>
</tbody>
</table>
Total A.A.S., Architectural Concentration  64 credit hours
This program is currently under revision. Upon approval
the program will be listed as an addendum to the Catalog

Engineering Technologies:  
Mechanical Concentration

150000
Associate of Applied Science
An Associate Degree in this program will provide the edu-
cational background and basic technical training necessary
for the graduate to seek employment with one of the area’s
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
ENG 121  English Composition I OR               3
ENG 131  Technical Writing I                   3
MAT 108  Technical Mathematics or higher       4
COM 115  Public Speaking                      3

Restricted Electives  3
Choose one of the following:
CIS 118, PED 100, ECO 201, 202, POS 105, 111, GEO 105,
106, HIS 101, 102, 201, 202, or 247, ANT 101, 111, PSY 101,
102, 235, SOC 101, 102, MAT 121, 122, 201, or 202.

Computer Courses  (19 credit hours)
CAD 101  Computer Aided Drafting              3
CAD 102  Computer Aided Drafting 2D          3
CAD 201  Computer Aided Drafting Custom      3
CAD 202  Computer Aided Drafting 3D          3
CAD 217  Visualiz Pro, Professional          3
CAD 249  AutoLISP Programming               3
CIS 130  Introduction to the Internet         1

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 admissions to
the College. Appropriate credit must be taken to substitute for
the hour waived.

Mechanical Courses  24 credit hours
EGT 101  Technical Drafting I                 3
EGT 102  Technical Drafting II                3
EGT 105  Blueprint Reading                    3
EGT 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 A.A.S., Mechanical Concentration  . . 60 credit hours

Engineering Technologies:  
Mechanical Drafting

150000
Certificate
The Mechanical Drafting certificate program will provide
the educational background and basic technical training
necessary for the graduate to seek employment with one of
the area’s 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
EGT 101  Technical Drafting I                 3
EGT 102  Technical Drafting II                3
EGT 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

Financial Services:  
Finance Concentration

520803
Associate of Applied Science
This degree provides individuals opportunities in an array
of financial services industries such as banking, mortgage
banking and brokerage companies.
Students who wish to complete this degree must take all
General Education courses, Major courses and also complete
an area of emphasis as listed below.

General Education Courses  (27 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 state
guaranteed transfer (GT) Science course 4

Arts and Humanities:
One state guaranteed transfer (GT)
Arts and Humanities course 3

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<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(23 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Principles of Accounting I</td>
</tr>
<tr>
<td>ACC 122</td>
<td>Principles of Accounting II</td>
</tr>
<tr>
<td>BUS 216</td>
<td>Business Law and the Legal Environment</td>
</tr>
<tr>
<td>BUS 217</td>
<td>Business Communication and Report Writing</td>
</tr>
<tr>
<td>BUS 226</td>
<td>Business Statistics</td>
</tr>
<tr>
<td>FIN 101</td>
<td>Introduction to Finance</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking</td>
</tr>
</tbody>
</table>

**Physical Education** (1 credit hour)

PED activity course * | 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 Concentration Courses** (9 credit hours)

The Finance Concentration prepares students for entry-level positions in a broad range of financial occupations.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 118</td>
<td>3</td>
</tr>
<tr>
<td>BTE 108</td>
<td>1</td>
</tr>
<tr>
<td>FIN 210</td>
<td>3</td>
</tr>
<tr>
<td>FIN 226</td>
<td>3</td>
</tr>
<tr>
<td>FIN 260</td>
<td>3</td>
</tr>
<tr>
<td>INS 230</td>
<td>3</td>
</tr>
<tr>
<td>INV 215</td>
<td>3</td>
</tr>
<tr>
<td>INS 269</td>
<td>3</td>
</tr>
<tr>
<td>MAN 230</td>
<td>3</td>
</tr>
<tr>
<td>REE 115</td>
<td>3</td>
</tr>
<tr>
<td>FIN 287</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total A.A.S. degree with Finance Concentration** | 60 credit hours

**Financial Services: Banking Concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>4</td>
</tr>
<tr>
<td>ACC 122</td>
<td>4</td>
</tr>
<tr>
<td>BUS 216</td>
<td>4</td>
</tr>
<tr>
<td>BUS 217</td>
<td>4</td>
</tr>
<tr>
<td>BUS 226</td>
<td>3</td>
</tr>
<tr>
<td>FIN 101</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>3</td>
</tr>
</tbody>
</table>

**Physical Education** (1 credit hour)

PED activity course * | 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.

**Banking Concentration Courses** (9 credit hours)

The Banking Concentration prepares students for entry-level positions at commercial banks. Many of the courses are offered at The Center for Financial Training Western States.

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 118</td>
<td>3</td>
</tr>
<tr>
<td>FIN 105</td>
<td>3</td>
</tr>
<tr>
<td>FIN 131</td>
<td>3</td>
</tr>
<tr>
<td>FIN 205</td>
<td>2</td>
</tr>
<tr>
<td>FIN 211</td>
<td>3</td>
</tr>
<tr>
<td>FIN 226</td>
<td>3</td>
</tr>
<tr>
<td>FIN 240</td>
<td>2</td>
</tr>
<tr>
<td>FIN 245</td>
<td>2</td>
</tr>
<tr>
<td>FIN 250</td>
<td>2</td>
</tr>
<tr>
<td>MAN 230</td>
<td>3</td>
</tr>
<tr>
<td>INV 215</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total A.A.S. degree with Banking Concentration** | 60 credit hours

**Financial Services: Mortgage Banking Concentration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>4</td>
</tr>
<tr>
<td>ACC 122</td>
<td>4</td>
</tr>
<tr>
<td>BUS 216</td>
<td>4</td>
</tr>
<tr>
<td>BUS 217</td>
<td>3</td>
</tr>
<tr>
<td>BUS 226</td>
<td>3</td>
</tr>
<tr>
<td>FIN 101</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>3</td>
</tr>
</tbody>
</table>

**Physical Education** (1 credit hour)

PED activity course * | 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.

**Mortgage Banking Concentration Courses** (9 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 201</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202</td>
<td>3</td>
</tr>
<tr>
<td>ENG 121</td>
<td>3</td>
</tr>
<tr>
<td>INV 115</td>
<td>3</td>
</tr>
<tr>
<td>MAT 121</td>
<td>4</td>
</tr>
<tr>
<td>MAT 125</td>
<td>4</td>
</tr>
</tbody>
</table>

**Science:**

One lab-based state guaranteed transfer (GT) Science course | 4

**Arts and Humanities:**

One state guaranteed transfer (GT) Arts and Humanities course | 3

Please visit [www.arapahoe.edu](http://www.arapahoe.edu) for the most current, updated catalog information.
### Degree Requirements

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(23 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
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</tr>
<tr>
<td>ACC 122</td>
<td>Principles of Accounting II</td>
</tr>
<tr>
<td>BUS 216</td>
<td>Business Law and the Legal Environment</td>
</tr>
<tr>
<td>BUS 217</td>
<td>Business Communication and Report Writing</td>
</tr>
<tr>
<td>BUS 226</td>
<td>Business Statistics</td>
</tr>
<tr>
<td>FIN 101</td>
<td>Introduction to Finance</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking</td>
</tr>
</tbody>
</table>

**Physical Education** | (1 credit hour)

PED activity course *

*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.

### Mortgage Banking Concentration | (9 credit hours)

This concentration prepares students for entry-level positions at mortgage banking firms. Many of the courses are offered at The Mortgage Training Institute.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 118</td>
<td>Analyzing Financial Statements</td>
<td>3</td>
</tr>
<tr>
<td>FIN 131</td>
<td>Introduction to Mortgage Banking</td>
<td>3</td>
</tr>
<tr>
<td>FIN 132</td>
<td>Residential Mortgage Loan Origination</td>
<td>1</td>
</tr>
<tr>
<td>FIN 133</td>
<td>Residential Mortgage Loan Processing</td>
<td>1</td>
</tr>
<tr>
<td>FIN 137</td>
<td>FHA for Loan Officers</td>
<td>1</td>
</tr>
<tr>
<td>FIN 138</td>
<td>FHA for Loan Processors</td>
<td>1</td>
</tr>
<tr>
<td>FIN 226</td>
<td>Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>FIN 237</td>
<td>Advance Loan Processing</td>
<td>1</td>
</tr>
<tr>
<td>FIN 287</td>
<td>Cooperative Education Career Training</td>
<td>3</td>
</tr>
<tr>
<td>INV 215</td>
<td>Advanced Investments</td>
<td>3</td>
</tr>
<tr>
<td>MAN 230</td>
<td>Corporate Responsibility</td>
<td>3</td>
</tr>
<tr>
<td>REE 115</td>
<td>Introduction to Real Estate</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total A.A.S. degree with Mortgage Banking Concentration** | 60 credit hours

### Financial Services Certificates

These certificate programs offer opportunities for individuals changing careers or starting a career and needing updates on skills in financial fields. The certificates will provide career and job opportunities and advancements at many financial organizations: banks, savings institutions, brokerages, mortgage companies, and financing companies.

### Financial Services: Finance Concentration

#### 520803 Certificate

The Finance certificate prepares students for entry-level positions in a broad range of financial occupations.

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(21 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
</tr>
<tr>
<td>FIN 101</td>
<td>Introduction to Finance</td>
</tr>
<tr>
<td>MAR 160</td>
<td>Customer Service</td>
</tr>
<tr>
<td>BUS 217</td>
<td>Business Communication and Report Writing</td>
</tr>
</tbody>
</table>

**Restricted Electives** | (9 credit hours)

Please choose 9 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Principles of Accounting I</td>
<td>4</td>
</tr>
<tr>
<td>BUS 226</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MAN 128</td>
<td>Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>MAN 226</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 111</td>
<td>Principles of Sales</td>
<td>3</td>
</tr>
<tr>
<td>MAR 216</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>INV 115</td>
<td>Investments Stocks and Bonds</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** | 30 credit hours

### Financial Services: Banking Concentration

**520803 Certificate**

The Banking certificate prepares students for entry-level positions at commercial banks. Many of the courses are offered at the Center for Financial Training.

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(21 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
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<tr>
<td>FIN 101</td>
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</tr>
<tr>
<td>BUS 217</td>
<td>Business Communication and Report Writing</td>
</tr>
</tbody>
</table>

**Restricted Electives** | (9 credit hours)

Please choose 9 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
<td>BUS 226</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>MAN 128</td>
<td>Human Relations</td>
<td>3</td>
</tr>
<tr>
<td>MAN 226</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 111</td>
<td>Principles of Sales</td>
<td>3</td>
</tr>
<tr>
<td>MAR 216</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>INV 115</td>
<td>Investments Stocks and Bonds</td>
<td>3</td>
</tr>
</tbody>
</table>

Please visit [www.arapahoe.edu](http://www.arapahoe.edu) for the most current, updated catalog information.
Banking Concentration courses: (9 credit hours)
Select 9 credits from the following:
FIN 105 Principles of Banking .................. 3
FIN 226 Money and Banking .................. 3
ACC 118 Analyzing Financial Statements ........ 3
FIN 250 Financial Marketing for Bankers ........ 2
FIN 240 Law and Banking Principles ........... 2
FIN 245 Law and Banking Applications ......... 2
FIN 205 Consumer Lending (Series) ........... 2
FIN 255 Understanding and Selling Bank Products .... 2
FIN 131 Introduction 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
Total ............................................. 30 credit hours

Financial Services: Mortgage Banking Concentration

520803
Certificate
This concentration prepares the student for entry-level positions at mortgage banking firms. Many of the courses are offered at the Mortgage Training Institute.

Major Courses (21 credit hours)

Required courses:
CIS 118 Introduction to PC Applications ........ 3
FIN 101 Introduction to Finance ................ 3
MAR 160 Customer Service ........................ 3
BUS 217 Business Communication and Report Writing ........................... 3

Restricted Electives (9 credit hours)
Please choose 9 credits hours from the following:
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

Mortgage Banking Concentration courses:
Please choose 9 credit hours from the following:
REE 115 Introduction to Real Estate .............. 3
ACC 118 Analyzing Financial Statements ........ 3
FIN 131 Introduction to Mortgage Banking ..... 3
FIN 132 Resident Mortgage Loan Origination 1
FIN 133 Resident Mortgage Loan Processing 1
FIN 137 FHA for Loan Officers 1
FIN 138 FHA for Loan Processors 1
FIN 237 Advanced Loan Processing ............ 1
FIN 287 Cooperative Education Training ....... 1
FIN 226 Money and Banking .................. 3
INV 115 Investments ........................... 3
INV 215 Advanced Investments .................. 3

Total ............................................. 31 credit hours

Game Design And Development

360113
Associate of Applied Science
The Game Design and Development A.A.S. Degree prepares students for a broad range of careers in the Gaming industry, as an independent game developer, computer programming or multimedia graphics. Students will develop 2D and 3D digital modeling, digital animation, and programming skills using an industry standard gaming engine. Course electives allow students to gain experience with digital sound editing, 2D game development and additional 3D modeling.

Graduates of the Game Design and Development program may also elect to work in programming, multimedia, or graphic design capacities.

Note: Because gaming technology changes more rapidly than that in other fields, GDD students may be required to upgrade their PCs during the course of their program. Also, as U.S. game studios tend to be concentrated in specific cities, GDD graduates may need to relocate to pursue a career in this field.

Information on game studio locations is available via the International Game Developers association Web Site www.igda.org

General Education Courses (16 credit hours)
MAT 121 College Algebra ......................... 4
ENG 131 Technical Writing I ................... 3
COM 115 Public Speaking OR ................. 3
COM 125 Interpersonal Skills .................. 3
Health Information Technology

510707

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 Web site: www.ahima.org.

The following are the basic requirements for admission to the Health Information Technology (HIT) program:

- High school graduation or GED equivalence
- Interview with Chairperson
- Criminal background check
- ACCUPLACER 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.

General Education Courses (15 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking*** OR</td>
<td>3</td>
</tr>
<tr>
<td>COM 125</td>
<td>Interpersonal Communications***</td>
<td>3</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Introduction to Computer Applications</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>General Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>General Education Elective</td>
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<td>3</td>
</tr>
</tbody>
</table>

Total: 15 credit hours

Major Courses (50 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIT 101</td>
<td>Health Information Management Science</td>
<td>6</td>
</tr>
<tr>
<td>HIT 105</td>
<td>Physician Practice Coding and Reimbursement</td>
<td>3</td>
</tr>
<tr>
<td>HIT 111</td>
<td>Health Data Management</td>
<td>3</td>
</tr>
<tr>
<td>HIT 112</td>
<td>Legal Aspects</td>
<td>2</td>
</tr>
<tr>
<td>HIT 188</td>
<td>Health Information Practicum</td>
<td>2</td>
</tr>
<tr>
<td>HIT 221</td>
<td>ICD-9-CM Coding I</td>
<td>5</td>
</tr>
<tr>
<td>HIT 222</td>
<td>Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>HIT 225</td>
<td>Health Information Management</td>
<td>3</td>
</tr>
<tr>
<td>HIT 231</td>
<td>ICD-9-CM Coding II</td>
<td>5</td>
</tr>
<tr>
<td>HIT 241</td>
<td>CPT Coding Basic Principles</td>
<td>2</td>
</tr>
<tr>
<td>HIT 251</td>
<td>Healthcare Vocabularies and Terminologies</td>
<td>2</td>
</tr>
<tr>
<td>HIT 288</td>
<td>Health Information Practicum II</td>
<td>2</td>
</tr>
<tr>
<td>HPR 178</td>
<td>Medical Terminology</td>
<td>3</td>
</tr>
<tr>
<td>MOT 125</td>
<td>Basic Medical Science I**</td>
<td>3</td>
</tr>
<tr>
<td>MOT 133</td>
<td>Basic Medical Science II***</td>
<td>3</td>
</tr>
<tr>
<td>MOT 135</td>
<td>Basic Medical Science III***</td>
<td>3</td>
</tr>
</tbody>
</table>

Total: 57 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 and Physiology I and II) and BIO 216 (Pathophysiology) instead of the Basic Medical Science courses.

***Students planning to transfer their speech credit to another institution should complete COM 115.
Health Information Technology: ICD-9-CM/CPT Coding

510707
Certificate

Major Courses
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

310501
Associate of Applied Science
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 Program Coordinator: Sophie Mabry at 303.797.5856 or e-mail at: sophie.mabry@arapahoe.edu.

These classes transfer to several four-year schools including 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.

General Education Courses (18 credit hours)
COM 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

Major courses: (38 credit hours)
HWE 111 Health and Fitness .......................... 3
HWE 136 Skills and Methods of Teaching Weight Training *** .......................... 3
PER 232 Care and Prevention of Athletic Injuries*** .......... 3
HWE 245 Physiology of Exercise *** .................. 3
HWE 288 Internal Practicum * .......................... 3
HWE 237 Exercise, Nutrition and Body Composition *** ................. 3
HWE 248 Guidelines for Exercise Testing and Prescription *** ....... 3
PED (100-275) Activity based courses** ................. 1
HWE 100 Human Nutrition .................. 3
HWE 122 Responding to Emergencies ................. 2
BIO 201 Human Anatomy and Physiology I (includes lab)* .................. 4
BIO 202 Human Anatomy and Physiology II (includes lab)* ................. 4
HWE 230 Exercise and Sports Psychology ................. 3

Restricted/Elective Courses (4 credit hours)
Students must choose 4 credit hours from the following:
HWE 125 Introduction to Human Performance ......... 3
PER 151 Lifeguard Training * .......................... 2
HWE 255 Certified Personal Trainer Preparation *** .......... 3
HPR 117 Anatomical Kinesiology * .................. 3
HPR 176 Anatomical Kinesiology * Lab ................. 2
PED (100-275) Activity based courses** ................. 1
For other general education classes, see advisor or program coordinator for approval.

* PREREQUISITE required.
** One Aquatic class required.
***Students must score an 80 on the reading ACCUPLACER, 95 on the sentence skills ACCUPLACER, 85 on the mathematical ACCUPLACER.

Total .................. 60 credit hours

Physical Fitness Specialist

310505
Certificate
This certificate program is designed for students who already have a bachelor’s degree and are preparing for a National Certification test or those in need of continuing education credits.

Students must score an 80 on the reading ACCUPLACER, 95 on the sentence skills ACCUPLACER, 85 on the mathematical ACCUPLACER.

BIO 201 Human Anatomy and Physiology I Plus Lab* .......................... 4
HWE 111 Health and Fitness .................. 3
HWE 245 Physiology of Exercise .................. 3
HWE 248 Guidelines For Exercise Testing and Prescriptions ................. 3
HWE 122 Responding to Emergencies .................. 2
HWE 136 Skills and Methods of Teaching Weight Training .................. 3
BIO 202 Human Anatomy and Physiology II Plus Lab* .................. 4
HWE 230 Exercise and Sports Psychology .................. 3

Please visit www.arapahoe.edu for the most current, updated catalog information
HWE 237 Exercise, Nutrition and Body Composition . . . 3
HWE 288 Internal Practicum* ............................ 3
Total ....................................................... 31 credit hours

* PREREQUISITE required

### Interior Design

#### 500408

### Associate of Applied Science

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:

Attend an Interior Design Program Orientation prior to first registration. Call the Interior Design Office at 303.797.5922 for an appointment.

Complete ACCUPLACER assessment with the following minimum scores: 80 on Reading Comprehension, 95 on Sentence Skills and 57 on Arithmetic.

Exceptions to the required ACCUPLACER assessment will be made for students who:

- Achieved equivalent ACT or SAT scores (within the last two years) or
- Have earned a college degree (Associate or higher); or
- Have completed a college-level mathematics and college-level writing course with a grade of “C” or higher; or
- Have completed any necessary remedial course(s), if required, with a grade of “C” or higher before taking Interior Design courses.

Call the ACC Testing Center at 303.797.5993 to determine procedures, location and/or hours of operation.

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 office at 303.797.5621 for further information about this process.

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 303.797.5922 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.

### General Education Courses (15 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
<td>3</td>
</tr>
<tr>
<td>ENG 131</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>General Electives</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

### Major Courses (60 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 100</td>
<td>Interior Design Fundamentals</td>
<td>4</td>
</tr>
<tr>
<td>IND 107</td>
<td>History of Interior Design</td>
<td>3</td>
</tr>
<tr>
<td>IND 108</td>
<td>Profession Survey</td>
<td>1</td>
</tr>
<tr>
<td>IND 111</td>
<td>Drafting for Interiors</td>
<td>4</td>
</tr>
<tr>
<td>IND 112</td>
<td>Graphic Communication</td>
<td>4</td>
</tr>
<tr>
<td>IND 114</td>
<td>Space Planning</td>
<td>3</td>
</tr>
<tr>
<td>IND 117</td>
<td>Interior Textiles</td>
<td>2</td>
</tr>
<tr>
<td>IND 118</td>
<td>Interior Finishes</td>
<td>2</td>
</tr>
<tr>
<td>IND 151</td>
<td>Residential Design</td>
<td>4</td>
</tr>
<tr>
<td>IND 152</td>
<td>Commercial Design I</td>
<td>2</td>
</tr>
<tr>
<td>IND 178</td>
<td>Seminar: Local Market Tour</td>
<td>1</td>
</tr>
<tr>
<td>IND 178</td>
<td>Seminar: Design Resume</td>
<td>1</td>
</tr>
<tr>
<td>IND 200</td>
<td>Kitchen and Bath Design</td>
<td>4</td>
</tr>
<tr>
<td>IND 201</td>
<td>Commercial Design II</td>
<td>4</td>
</tr>
<tr>
<td>IND 205</td>
<td>Professional Practice for Interior Designers</td>
<td>2</td>
</tr>
<tr>
<td>IND 211</td>
<td>Interior Construction</td>
<td>4</td>
</tr>
<tr>
<td>IND 225</td>
<td>Lighting Design</td>
<td>2</td>
</tr>
<tr>
<td>IND 278</td>
<td>Workshop: Design Research</td>
<td>1</td>
</tr>
<tr>
<td>IND 278</td>
<td>Workshop: Design Portfolio</td>
<td>1</td>
</tr>
<tr>
<td>IND 280</td>
<td>Internship</td>
<td>.4</td>
</tr>
<tr>
<td>IND 289</td>
<td>Capstone: Advanced Design</td>
<td>3</td>
</tr>
<tr>
<td>*CAD 105</td>
<td>AutoCAD for Interiors</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total ....................................................... 75 credit hours**

*NOTE: This will be the last year this class will be available. All future students must enroll in CAD 101 and CAD 102 (6 credits).

To challenge CIS 118, contact IdaLynn Gedde (CIS Dept.) at 303.797.5886.

ENG 131 can be waived under certain circumstances. Call 303.797.5825 for information.

A list of approved Elective courses can be found in this ACC Catalog under “General Education Requirements for A.A.S. Degrees.”

The Interior Design Program is currently under revision. When approved, the revision will be listed as an addendum to the Catalog on the ACC Web site, www.arapahoe.edu.

### Law Enforcement Academy

#### 430107

### Certificate

The Law Enforcement Academy is a P.O.S.T. (Peace Officer Standards and Training) certified program accredited through the Colorado P.O.S.T. Board. The Law Enforcement Academy is basic training for law enforcement officers and enables graduates to become P.O.S.T. certified as peace officers in Colorado. The Academy program consists of 40 semester credit hours.

Please visit [www.arapahoe.edu](http://www.arapahoe.edu) for the most current, updated catalog information.
PREREQUISITE(S): In addition to your application for admission to the College, the Law Enforcement Academy requires an additional application, including but not limited to, a personal advising interview with a member of the Academy staff and a background check prior to acceptance and enrollment. High School Diploma or G.E.D. and ENG 121 or higher or equivalent ACCUPLACER score. For more information, please contact the Law Enforcement Academy Program in Room N1170 or at 303.797.5793.

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

*The PED courses may be substituted with the Academy Director’s approval.

Medical Laboratory Technology

511004

Associate of Applied Science

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 or 312.714.8880.

Admission Requirements:
- High school graduation or GED equivalence
- Complete MLT program application packet
- College application
- Recommend algebra and one year of high school biology or chemistry (or one college semester of either)
- ACCUPLACER is required for all MLT students
- Personal interview with the program director is required before assignment to MLT courses
- 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 ACCUPLACER placement scores. Exemptions to the ACCUPLACER Exam for students possessing ACT/SAT scores, prior college degree and prior college coursework are provided. You can call the Health, Sciences, and Engineering School Office at 303.797.5991 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 8:30 p.m. to 10:30 p.m. and on Saturdays 9:30 a.m. to 4:30 p.m.

General Education Courses ....................................................... (25 credit hours)
BIO 201 Human Anatomy and Physiology I ............................... 4
BIO 202 Human Anatomy and Physiology II .............................. 4
CHE 101 Introduction to Chemistry OR
CHE 111 General College Chemistry ........................................ 5
CIS 118 Introduction to PC Applications or higher level CIS course .................................................................................. 3
ENG 121 English Composition OR
ENG 131 Technical Writing I .................................................... 3
COM 115 Public Speaking OR
COM 125 Interpersonal Communication .................................... 3
HPR 178 Medical Terminology ................................................ 3

Major Courses .......................................................... (41 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 Parasitological/Mycology .......................................... 2
MLT 241 Introduction to Clinical Chemistry .............................. 2
MLT 242 Clinical Chemistry II ............................................... 4
MLT 253 Seminar/Comprehensive Exams ................................ 1
MLT 280 Internship III, Chemistry .......................................... 5
MLT 282 Internship IV, Microbiology ..................................... 5

Total .......................................................... 66 credit hours

Please visit www.arapahoe.edu for the most current, updated catalog information
Medical Laboratory Technology: 
Phlebotomy

511004
Certificate
Phlebotomy is the acquired professional skill of performing vein punctures (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 six credits of lecture/didactic information and two 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
HPR 112 Phlebotomy .................................. 4
HPR 113 Advanced Phlebotomy...................... 4
Total ................................................. 8 credit hours

Medical Office Technology

510705
The Medical Office Technology programs are designed to place students in outpatient (ambulatory) care facilities. All health program students must obtain a criminal background check through ACC. 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
- All courses require acceptance into the Program or written approval of the Academic Coordinator except HIT students.
- Complete Program Application Packet.
- Download application on the Web site or call 303.797.5898.
- Interview with Academic Coordinator.
- Complete ACCUPLACER examination with minimum scores of: Reading 80, Arithmetic 36 Sentence Skills 95 (or Academic Coordinator approval). Applicants who hold a degree are exempt from ACCUPLACER exam.
- 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

510705
Certificate

Major Courses
HPR 178 Medical Terminology ....................... 3
HPR 106 Law & Ethics for Healthcare Professions . 2
MOT 110 Medical Office Administration .......... 4
MOT 130 Insurance Billing and Coding* .......... 3
MOT 136 Introduction to Clinical Skills .......... 2
MOT 181 Administrative Internship* ............. 2
Total .............................................. 16 credit hours

*Students must receive Academic Coordinator approval prior to enrolling in their Internship.

** COREQUISITE: MOT 110 or Instructor permission

Medical Office Technology:
Billing And Reimbursement

510705
The Billing and Reimbursement Certificate prepares students to perform the process of coding, billing and reconciling the payment process as related to an ambulatory care facility.

Certificate
HPR 106 Law & Ethics for Healthcare Professions . 2
HPR 178 Medical Terminology ....................... 3
MOT 110 Medical Office Administration .......... 4
MOT 130 Insurance Billing and Coding .......... 3
MOT 131 Advanced Insurance Billing and Coding .. 3
MOT 125 Basic Medical Sciences I* .......... 3
MOT 133 Basic Medical Sciences II ............. 3
MOT 135 Basic Medical Sciences III ........... 3
MOT 184 Billing Specialist Internship .......... 3
Total .............................................. 27 credit hours

NOTE: Students must complete MOT 125 Basic Medical Sciences I with a grade of “C” or better prior to enrolling in other Basic Medical Science courses.

* PREREQUISITE to MOT 125 is HPR 178

Mortuary Science

120301
 Associate of Applied Science

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.

Please visit www.arapahoe.edu for the most current, updated catalog information 77
Admissions Requirements:
- Complete a Mortuary Science application
- 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:
- Members of a human services profession.
- Members of the community in which they serve.
- Participants in the relationship between bereaved families and those engaged in the funeral service profession.
- Professionals knowledgeable of and compliant with federal, state and local regulatory guidelines.
- Professionals sensitive to the responsibility for public health, safety and welfare in caring.
- In addition, the program objectives are:
  - To enlarge the background and knowledge of students about the funeral service profession.
  - To educate students in every phase of funeral service and to help enable them to develop the proficiency and skills necessary of the profession.
  - To educate students concerning the responsibilities of the funeral service profession to the community at large.
  - To emphasize high standards of ethical conduct.
  - To provide a curriculum at the postsecondary level of instruction.
  - 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).

All MOR prefixes must be completed within 4 years of starting the Major Core Courses.

General Education Courses  (27 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Department</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 121</td>
<td>Accounting</td>
<td>Accounting Principles I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 201</td>
<td>Biology</td>
<td>Human Anatomy and Physiology I*</td>
<td>4</td>
</tr>
<tr>
<td>BIO 202</td>
<td>Biology</td>
<td>Human Anatomy and Physiology II*</td>
<td>4</td>
</tr>
<tr>
<td>BUS 216</td>
<td>Business</td>
<td>Business Law and the Legal Environment</td>
<td>3</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Computing</td>
<td>Introduction to PC Applications</td>
<td>1</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Psychology</td>
<td>General Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>COM 125</td>
<td>Communication</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Courses  (38 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPR 240</td>
<td>Role of Death and Bereavement in Society</td>
<td>3</td>
</tr>
<tr>
<td>MOR 100</td>
<td>Introduction to Funeral Service</td>
<td>3</td>
</tr>
<tr>
<td>MOR 210</td>
<td>Embalming Theory I and Lab</td>
<td>4</td>
</tr>
<tr>
<td>MOR 215</td>
<td>Funeral Merchandising</td>
<td>3</td>
</tr>
<tr>
<td>MOR 220</td>
<td>Mortuary Law and Compliance</td>
<td>3</td>
</tr>
<tr>
<td>MOR 224</td>
<td>Thanatomicrobiology/Pathology</td>
<td>4</td>
</tr>
<tr>
<td>MOR 225</td>
<td>Embalming Theory II and Lab</td>
<td>4</td>
</tr>
<tr>
<td>MOR 230</td>
<td>Restorative Art and Lab</td>
<td>4</td>
</tr>
<tr>
<td>MOR 235</td>
<td>Funeral Directing and Counseling</td>
<td>3</td>
</tr>
<tr>
<td>MOR 243</td>
<td>Thanatochemistry*</td>
<td>3</td>
</tr>
<tr>
<td>MOR 280</td>
<td>Funeral Service Internship</td>
<td>4</td>
</tr>
</tbody>
</table>

Total  ........................................... 65 credit hours

*All science courses cannot have been completed more than seven years prior to enrolling in MOR 210. Similar courses taken at accredited institutions will be reviewed on a case-by-case basis.

Multimedia/Graphic Design

500409

Associate of Applied Science

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. This course can be used to fulfill three credit hours of restricted electives. Typing and basic math skills are highly recommended.

General Education Courses  (15 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Department</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 121</td>
<td>English</td>
<td>English Composition I OR</td>
<td>3</td>
</tr>
<tr>
<td>ENG 131</td>
<td>English</td>
<td>Technical Writing I</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>Communication</td>
<td>Public Speaking OR</td>
<td>3</td>
</tr>
<tr>
<td>COM 125</td>
<td>Communication</td>
<td>Interpersonal Communication OR</td>
<td>3</td>
</tr>
<tr>
<td>COM 225</td>
<td>Communication</td>
<td>Organizational Communication OR</td>
<td>3</td>
</tr>
<tr>
<td>PSY 101</td>
<td>Psychology</td>
<td>General Psychology I</td>
<td>3</td>
</tr>
<tr>
<td>SOC 101</td>
<td>Sociology</td>
<td>Introduction to Sociology</td>
<td>3</td>
</tr>
<tr>
<td>ART 101</td>
<td>Art</td>
<td>Art Appreciation OR</td>
<td>3</td>
</tr>
<tr>
<td>ART 111</td>
<td>Art</td>
<td>Art History I OR</td>
<td>3</td>
</tr>
<tr>
<td>ART 112</td>
<td>Art</td>
<td>Art History II OR</td>
<td>3</td>
</tr>
<tr>
<td>ART 207</td>
<td>Art</td>
<td>Art History III</td>
<td>3</td>
</tr>
</tbody>
</table>

One additional class from the list above

(not already taken) ........................................... 3
<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(39 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Semester 1</strong></td>
<td></td>
</tr>
<tr>
<td>MGD 105  Typography and Layout</td>
<td>3</td>
</tr>
<tr>
<td>ART 121  Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>MGD 133  Graphic Design I OR</td>
<td>3</td>
</tr>
<tr>
<td>ART 131  Design I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Semester 2</strong></td>
<td></td>
</tr>
<tr>
<td>MGD 103  Introduction to Production Design</td>
<td>3</td>
</tr>
<tr>
<td>MGD 112  Adobe Illustrator I</td>
<td>3</td>
</tr>
<tr>
<td>MGD 114  Adobe InDesign</td>
<td>3</td>
</tr>
<tr>
<td>MGD 117  Introduction to Visual Communications</td>
<td>3</td>
</tr>
<tr>
<td>MGD 256  Graphic Design Production</td>
<td>3</td>
</tr>
<tr>
<td><strong>Semester 3</strong></td>
<td></td>
</tr>
<tr>
<td>MGD 111  Adobe Photoshop I</td>
<td>3</td>
</tr>
<tr>
<td>MGD 207  Illustration I OR</td>
<td>3</td>
</tr>
<tr>
<td>ART 122  Drawing II OR</td>
<td>3</td>
</tr>
<tr>
<td>MGD 141  Web Design I</td>
<td>3</td>
</tr>
<tr>
<td>MGD 260  Graphic Design Production II</td>
<td>3</td>
</tr>
<tr>
<td><strong>Semester 4</strong></td>
<td></td>
</tr>
<tr>
<td>MGD 143  Motion Graphic Design I (FLASH) OR</td>
<td>3</td>
</tr>
<tr>
<td>MGD 208  Illustration II</td>
<td>3</td>
</tr>
<tr>
<td>MGD 289  Capstone</td>
<td>3</td>
</tr>
<tr>
<td><strong>Restricted Electives</strong></td>
<td>(6 credit hours)</td>
</tr>
<tr>
<td>Students must select 6 credits from the following:</td>
<td></td>
</tr>
<tr>
<td>MGD 101  Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>MGD 102  Introduction to Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>MGD 113  QuarkXpress</td>
<td>3</td>
</tr>
<tr>
<td>MGD 141  Web Design I</td>
<td>3</td>
</tr>
<tr>
<td>MGD 153  3D Animation</td>
<td>3</td>
</tr>
<tr>
<td>MGD 164  Digital Video Editing</td>
<td>3</td>
</tr>
<tr>
<td>MGD 209  Illustration III</td>
<td>3</td>
</tr>
<tr>
<td>MGD 210  Illustration IV</td>
<td>3</td>
</tr>
<tr>
<td>MGD 211  Photoshop II</td>
<td>3</td>
</tr>
<tr>
<td>MGD 212  Adobe Illustrator II</td>
<td>3</td>
</tr>
<tr>
<td>MGD 213  Electronic Prepress</td>
<td>3</td>
</tr>
<tr>
<td>MGD 214  Macintosh Troubleshooting for Designers</td>
<td>3</td>
</tr>
<tr>
<td>MGD 250  Emerging Multimedia Technologies</td>
<td>3</td>
</tr>
<tr>
<td>MGD 262  Graphic Design Production III</td>
<td>3</td>
</tr>
<tr>
<td>MGD 264  Digital Video Editing II</td>
<td>3</td>
</tr>
<tr>
<td>MGD 275  Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>MGD 280  Internship</td>
<td>3</td>
</tr>
<tr>
<td>MGD 287  Cooperative Education</td>
<td>3</td>
</tr>
<tr>
<td>CWB 110  Complete Web Authoring</td>
<td>3</td>
</tr>
<tr>
<td>JOU 215  Publication Production and Design</td>
<td>3</td>
</tr>
<tr>
<td>MAR 220  Principles of Advertising</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>60 credit hours</td>
</tr>
</tbody>
</table>

### Multimedia/Graphic Design: Computer Graphics

#### 500409

**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. Students whose placement examinations indicate they do not have these skills must enroll in MGD 101 as a prerequisite prior to entering the program. This course can be used to fulfill three credit hours of restricted electives. 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.

<table>
<thead>
<tr>
<th>Major Courses</th>
<th>(24 credit hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGD 105  Typography and Layout</td>
<td>3</td>
</tr>
<tr>
<td>MGD 141  Web Design I OR</td>
<td>3</td>
</tr>
<tr>
<td>ART 131  Design I</td>
<td>3</td>
</tr>
<tr>
<td>MGD 103  Production Design</td>
<td>3</td>
</tr>
<tr>
<td>MGD 112  Adobe Illustrator I</td>
<td>3</td>
</tr>
<tr>
<td>MGD 114  Adobe InDesign</td>
<td>3</td>
</tr>
<tr>
<td>MGD 111  Adobe Photoshop I</td>
<td>3</td>
</tr>
<tr>
<td><strong>Restricted Electives</strong></td>
<td>(6 credit hours)</td>
</tr>
<tr>
<td>Students must select 6 credits from the following:</td>
<td></td>
</tr>
<tr>
<td>MGD 101  Introduction to Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>MGD 102  Introduction to Multimedia</td>
<td>3</td>
</tr>
<tr>
<td>MGD 113  QuarkXpress</td>
<td>3</td>
</tr>
<tr>
<td>MGD 117  Introduction to Visual Communications</td>
<td>3</td>
</tr>
<tr>
<td>MGD 141  Web Design I</td>
<td>3</td>
</tr>
<tr>
<td>MGD 143  Motion Graphic Design I: Flash</td>
<td>3</td>
</tr>
<tr>
<td>MGD 153  3D Animation</td>
<td>3</td>
</tr>
<tr>
<td>MGD 164  Digital Video Editing</td>
<td>3</td>
</tr>
<tr>
<td>MGD 211  Photoshop II</td>
<td>3</td>
</tr>
<tr>
<td>MGD 212  Illustrator II</td>
<td>3</td>
</tr>
<tr>
<td>MGD 275  Special Topics</td>
<td>3</td>
</tr>
<tr>
<td>MGD 280  Internship</td>
<td>3</td>
</tr>
<tr>
<td>MGD 287  Cooperative Education</td>
<td>3</td>
</tr>
<tr>
<td>MGD 289  Capstone</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30 credit hours</td>
</tr>
</tbody>
</table>
Nurse Aide

511614
Certificate
This program will prepare the student for employment as a nurse aide in hospital, skilled care and hospice facilities. The entry level skills of a nurse aide are 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 facilities. Clinical assignments 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 1370, Denver, Colorado 80202-5146, telephone 303.894.2430.

A clear background check through ACC is required for clinical courses. CPR (Basic Life Support for Healthcare Providers) through the American Heart Association, professional liability insurance coverage through Arapahoe Community College, documentation of immunizations (2 MMRs, at least 2 Hepatitis B, chickenpox, and current TB test) are required for clinical courses. Upon successful completion of the program, students will be eligible to take the Colorado National Nurse Aide Assessment Program (NNAAP) for certification through the Board of Nursing.

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)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUA 101</td>
<td>Certified Nurse Aide Health Care Skills</td>
<td>4</td>
</tr>
<tr>
<td>NUA 170</td>
<td>Nurse Aide Clinical</td>
<td>1</td>
</tr>
<tr>
<td>NUA 171</td>
<td>Advanced Nurse Aide Clinical</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>6 credit hours</td>
</tr>
</tbody>
</table>

Nursing

511601
Associate of Applied Science in Nursing (ADN)
This program is designed to prepare ACC graduates for employment as registered nurses. The beginning professional nurse will have developed entry-level skills for work in hospitals and other settings. For information about the nursing program application process, call 303.797.5939 or e-mail nursing@arapahoe.edu.

Clinical nursing courses include supervised patient care experiences at a variety of health care agencies. Upon successful completion of program requirements, the graduate is eligible to take the NCLEX-RN (National Council of Licensure Examination-Registered Nursing). The Web site for information on the exam is http://www.ncsbn.org.

CPR for health care providers, professional liability insurance, current immunization documentation, lifetime criminal background checks, and periodic drug screens are required for clinical practice throughout the program.

The Nursing Program is approved by the Colorado Board of Nursing located at 1560 Broadway, Suite 1350, Denver, CO 80202. The Board of Nursing’s phone number is 303.894.2430. The nursing program is also approved by the State Board of Colorado Community College Occupational and Education Programs. Arapahoe Community College is accredited by The Higher Learning Commission and a member of the North Central Association of Colleges and Schools.

The ACC Nursing Program is housed in the School of Health, Science and Engineering Division; that office’s phone number is 303.797.5991. The Nursing Assistant’s phone number is 303.797.5939.

General Education
(Prerequisites to Program) (18 credit hours)
The following five courses must be taken prior to Nursing Program application submittal. They must be completed with a cumulative GPA of 3.0 with no grade less than a “C”

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 201</td>
<td>Human Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>BIO 202</td>
<td>Human Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>BIO 204</td>
<td>Microbiology (with lab) OR</td>
<td>4</td>
</tr>
<tr>
<td>BIO 208</td>
<td>General College Microbiology</td>
<td>4</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>PSY 235</td>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Courses - First Semester (14 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 109</td>
<td>Fundamentals of Nursing</td>
<td>8</td>
</tr>
<tr>
<td>NUR 112</td>
<td>Basics of Pharmacology</td>
<td>2</td>
</tr>
<tr>
<td>HPR 108</td>
<td>Nutrition</td>
<td>1</td>
</tr>
<tr>
<td>MAT 103</td>
<td>Math for Clinical Calculations</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Courses - Second Semester (20 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 216</td>
<td>Pathophysiology*</td>
<td>4</td>
</tr>
<tr>
<td>NUR 106</td>
<td>Medical Surgical Nursing Concepts</td>
<td>9</td>
</tr>
<tr>
<td>NUR 150</td>
<td>Nursing Care Obstetric/Pediatric Clients</td>
<td>7</td>
</tr>
</tbody>
</table>

*Note: BIO 216 must be successfully completed prior to entrance into Third semester

Major Courses - Third Semester (14 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 206</td>
<td>Advanced Medical Surgical Nursing I</td>
<td>8</td>
</tr>
<tr>
<td>NUR 211</td>
<td>Nursing Care of Psychiatric Clients</td>
<td>4</td>
</tr>
<tr>
<td>NUR 212</td>
<td>Pharmacology II</td>
<td>2</td>
</tr>
</tbody>
</table>

Major Courses - Fourth Semester (14 credit hours)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUR 216</td>
<td>Advanced Medical Surgical Nursing II</td>
<td>6</td>
</tr>
<tr>
<td>NUR 230</td>
<td>Leadership, Management, Trends</td>
<td>5</td>
</tr>
</tbody>
</table>

Elective: GT Humanities or Social Behavioral Science course                               | 3       |

Total ......................................................................................... 80 credit hours
Paralegal

220302

Associate of Applied Science

The goals for this American Bar Association-approved program are to train students to become paralegals in order to permit them to assist attorneys in effectively delivering legal services and to educate students in a way that will permit them to advance the paralegal profession and to maintain high ethical standards.

ABA Approval

While paralegals may not practice law, they work under the supervision of attorneys in private law firms or businesses, as well as many government agencies. Tasks performed by paralegals include interviewing, investigation, research, preparing legal forms, assisting attorneys in court and other activities.

The Paralegal Program has been approved by the American Bar Association for over 30 years. The approval process ensures that the program complies with the high academic standards of the American Bar Association. If you have questions about the approval process, the American Bar Association may be reached at 321 N. Clark St., Chicago, IL 60610, 312.988.5000.

Academic Requirements

Students in the A.A.S. degree program should have an ACCUPLACER sentence skills score of 95+ and an ACCUPLACER reading score of 80+ to successfully complete PAR courses. Department approval is required in order to transfer in paralegal class credit from other institutions; course may be transferred to the program ONLY if they were taken from an ABA-approved program at an accredited institution, and out-of-state courses may only be transferred in if the law content is not state specific. At least twenty seven (27) hours of paralegal (PAR) courses must be taken at Arapahoe Community College.

All major, general education and other courses required for this degree must be completed with a grade of ‘C’ or better. The paralegal department expects all students in the paralegal program to abide by the code of ethics promulgated by the National Association of Legal Assistants (NALA). The code of ethics may be viewed at www.nala.org.

To graduate, students must complete an exit interview and apply for graduation. Paralegal (PAR) courses must be taken within 6 years of a student’s graduation. General education courses are not subject to this 6 year requirement. Please see the Paralegal Program Coordinator if you have any questions about these academic requirements.

Students should take PAR 110 and PAR 115 in their first semester of study, and should take fundamental classes (PAR 110, 114, 115, 116, 118 and 125) prior to taking advanced courses (PAR 201, 206, 211 and 289).

General Education Courses (24 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 122</td>
<td>English Composition II</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking OR</td>
<td></td>
</tr>
<tr>
<td>COM 125</td>
<td>Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>Electives: Guaranteed Transfer courses*</td>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

*Students must select additional general education classes from the Guaranteed Transfer (GT) Courses as provided in the ACC 2009/2010 catalog; courses must be taken from at least 3 different categories.

Major Courses (30 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAR 110</td>
<td>Legal Analysis</td>
<td>3</td>
</tr>
<tr>
<td>PAR 114</td>
<td>Computers and the Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 115</td>
<td>Introduction to Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 116</td>
<td>Torts</td>
<td>3</td>
</tr>
<tr>
<td>PAR 118</td>
<td>Contracts</td>
<td>3</td>
</tr>
<tr>
<td>PAR 125</td>
<td>Property Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 201</td>
<td>Civil Litigation**</td>
<td>3</td>
</tr>
<tr>
<td>PAR 206</td>
<td>Business Organizations**</td>
<td>3</td>
</tr>
<tr>
<td>PAR 211</td>
<td>Legal Research**</td>
<td>3</td>
</tr>
<tr>
<td>PAR 289</td>
<td>Capstone*</td>
<td>3</td>
</tr>
</tbody>
</table>

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

#### 220302 Certificate

**Admission Requirement:**
A two-year Associate of Arts, Associate of Science or Associate of General Studies degree or a four-year degree from an accredited college or university, OR five years of law-related work experience. An official transcript must be on file in Admissions and Records prior to the release of the paralegal certificate for students who have a degree. If seeking admission based on five 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.

The goals for this American Bar Association-approved program are:

- To train students to become paralegals, in order to permit them to assist attorneys in effectively delivering legal services.
- 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 provide legal services directly to the public except as permitted by 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 797.5878.

**Major Courses (30 credit hours)**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAR 110</td>
<td>Legal Analysis</td>
<td>3</td>
</tr>
<tr>
<td>PAR 114</td>
<td>Computers and the Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 115</td>
<td>Introduction to Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 116</td>
<td>Torts</td>
<td>3</td>
</tr>
<tr>
<td>PAR 118</td>
<td>Contracts</td>
<td>3</td>
</tr>
<tr>
<td>PAR 125</td>
<td>Property Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 201</td>
<td>Civil Litigation</td>
<td>3</td>
</tr>
<tr>
<td>PAR 206</td>
<td>Business Organizations</td>
<td>3</td>
</tr>
<tr>
<td>PAR 211</td>
<td>Legal Research</td>
<td>3</td>
</tr>
<tr>
<td>PAR 289</td>
<td>Capstone</td>
<td>3</td>
</tr>
</tbody>
</table>

**Restricted Electives (6 credit hours)**

Choose any two of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAR 117</td>
<td>Family Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 126</td>
<td>Administrative Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 202</td>
<td>Evidence</td>
<td>3</td>
</tr>
<tr>
<td>PAR 205</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 208</td>
<td>Probate and Estates</td>
<td>3</td>
</tr>
<tr>
<td>PAR 215</td>
<td>Alternative Dispute Resolution</td>
<td>3</td>
</tr>
<tr>
<td>PAR 216</td>
<td>Employment Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 217</td>
<td>Environmental Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 218</td>
<td>Bankruptcy Law</td>
<td>3</td>
</tr>
<tr>
<td>PAR 228</td>
<td>Intellectual Property</td>
<td>3</td>
</tr>
<tr>
<td>PAR 287</td>
<td>Cooperative Education</td>
<td>3</td>
</tr>
<tr>
<td>PAR Any PAR</td>
<td>Elective course</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total** 60 credit hours

*This course is strongly recommended for students without prior legal experience.

**Course has one or more prerequisites**

### Pharmacy Technician

#### 510805 Certificate

The Pharmacy Technician Program (PHT) will prepare students to assist a pharmacist with the technical tasks in a pharmacy. 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 classroom and laboratory training followed by 8 weeks of internship in both Community (4 weeks) and Institutional (4 weeks) pharmacies. All classes require acceptance into the program or have the written approval of the Academic Coordinator.

A clear background check and documentation of immunizations (2 MMRs, chickenpox, at least 2 Hepatitis B and a current TB test) are required for the Pharmacy Internships. Individuals already employed as pharmacy technicians can upgrade their skills and meet continuing education re-certification requirements of the Pharmacy Technician Certification Board (PTCB) or receive USP 797 training by enrolling in specific courses.
This program is accredited by the American Society of Health-System Pharmacists (ASHP). Further information about ASHP can be obtained at 7272 Wisconsin Ave., Bethesda, MD 20814, by phone at 301.657.3000, x1251, or online at www.ashp.org.

Download an application on the Web site, or contact the Academic Coordinator at 303.797.5944, or e-mail us at pharmacy@arapahoe.edu.

Admission Requirements:
- High school diploma or GED
- Completed PHT program application
- ACCUPLACER test
- Typing-Speed test
- Criminal Background Check
- Documentation of immunizations
- Interview with Academic Coordinator

All courses required for this certificate must be completed with a “C” or better to meet the Pharmacy Practice and graduation requirements.

All courses for this certificate are offered in an online/hybrid format.

Major Courses

| PHT 111 | Orientation to Pharmacy | 3 |
| PHT 112 | Pharmacy Law | 2 |
| PHT 113 | Pharmacy Calculations and Terminology | 1 |
| 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 120 | Pharmacy Practice II (Institutional Internship) | 4 |
| PHT 121 | Pharmacy Practice III (Community Internship) | 4 |

Total: 27 credit hours

Physical Therapist Assistant

510806

Associate of Applied Science

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 Commission on Accreditation of Physical Therapy Education (CAPTE) of the American Physical Therapy Association has granted full accreditation to the PTA program at Arapahoe Community College. CAPTE can be contacted at 1111 N. Fairfax Street, Alexandria, VA 22314-1488, 1.800.999.2782 or via e-mail at accreditation@apta.org.

The program is five semesters in length with a summer term following the first year. Upon successful completion, the graduate is awarded an Associate of Applied Science degree.

Admissions Requirements:

Contact the School of Health, Science and Engineering School Office, Room A2000, 303.797.5991. Applications are accepted beginning February 1 each year. Please refer to the PTA Program Information for application and ACCUPLACER placement scores. You can contact the School Office by phone 303.797.5991 for a copy of the PTA Program Information.

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.

General Education Courses (16 credit hours)

| BIO 201 | Human Anatomy and Physiology | 4 |
| ENG 121 | English Composition I | 3 |
| PSY 101 | General Psychology I | 3 |
| COM 115 | Public Speaking OR | 3 |
| COM 125 | Interpersonal Communication | 3 |
| PSY 235 | Human Growth and Development | 3 |

Major Courses (59 credit hours)

| PTA 110 | Basic Patient Care in Physical Therapy | 5 |
| PTA 115 | Principles and Practices in Physical Therapy | 2 |
| HPR 117 | Anatomical Kinesiology | 3 |
| PTA 176 | Anatomical Kinesiology Lab | 2 |
| PTA 120 | Modalities in Physical Therapy | 5 |
| PTA 124 | Rehab Principles of Medical Mgmt I | 2 |
| PTA 131 | Professional Communications I | 1 |
| PTA 134 | Rehab Principles of Medical Management II | 2 |
| 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 Issues in Health Care | 5 |
| PTA 240 | Neurological Assessment and Management | 5 |
| PTA 278 | PTA Seminar | 2 |
| PTA 280 | PTA Internship I | 4 |
| PTA 281 | PTA Internship II | 5 |
| PTA 282 | PTA Internship III | 5 |
| PTA 175 | Special Topics: Language of Physical Therapy | 1 |

Please visit www.arapahoe.edu for the most current, updated catalog information.
Total ........................................ 75 credit hours

Students planning to transfer their speech credit to another institution should complete COM 115.

Retail Management

521803

Associate of Applied Science Degree

This program is designed to provide students with the necessary skills to advance into management positions in the retail industry or to improve their current retail managerial skills. The program provides students with the business background needed to interact with vendors, handle marketing and strategic planning as well as manage staff.

General Education Courses (15 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 226</td>
<td>Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
<td>3</td>
</tr>
<tr>
<td>ECO 201</td>
<td>Principles of Macroeconomics OR</td>
<td></td>
</tr>
<tr>
<td>ECO 202</td>
<td>Principles of Microeconomics</td>
<td>3</td>
</tr>
<tr>
<td>ENG 121</td>
<td>English Composition I</td>
<td>3</td>
</tr>
<tr>
<td>COM 115</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Courses (30 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 115</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 217</td>
<td>Business Communication and Report Writing</td>
<td>3</td>
</tr>
<tr>
<td>BUS 241</td>
<td>Cultural Diversity in Business</td>
<td>3</td>
</tr>
<tr>
<td>MAN 116</td>
<td>Principles of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>MAN 128</td>
<td>Human Relations in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MAN 224</td>
<td>Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MAN 226</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 111</td>
<td>Principles of Sales</td>
<td>3</td>
</tr>
<tr>
<td>MAR 117</td>
<td>Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MAR 160</td>
<td>Customer Service</td>
<td>3</td>
</tr>
</tbody>
</table>

Restricted Electives (15 credit hours)

Students must choose 15 credit hours from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 101</td>
<td>Fundamentals of Accounting</td>
<td>4</td>
</tr>
<tr>
<td>BUS 216</td>
<td>Legal Environment of Business</td>
<td>3</td>
</tr>
<tr>
<td>MAN 212</td>
<td>Negotiation and Conflict Management</td>
<td>3</td>
</tr>
<tr>
<td>MAN 215</td>
<td>Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MAN 230</td>
<td>Corporate Responsibility</td>
<td>3</td>
</tr>
<tr>
<td>MAN 240</td>
<td>Strategic Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 216</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td>MAR 235</td>
<td>Consumer Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MAR 245</td>
<td>Sales Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 280</td>
<td>Cooperative Education/ Internship</td>
<td>3</td>
</tr>
</tbody>
</table>

Total ........................................ 60 credit hours

Retail Management: Retail Management

521803

Certificate

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 115</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 217</td>
<td>Business Communication and Report Writing</td>
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<td>MAN 128</td>
<td>Human Relations in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MAN 224</td>
<td>Leadership</td>
<td>3</td>
</tr>
<tr>
<td>MAN 226</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>MAR 111</td>
<td>Principles of Sales</td>
<td>3</td>
</tr>
<tr>
<td>MAR 117</td>
<td>Principles of Retailing</td>
<td>3</td>
</tr>
<tr>
<td>MAR 160</td>
<td>Customer Service</td>
<td>3</td>
</tr>
</tbody>
</table>

Total ........................................ 30 credit hours

Telecommunications Technology

109999

Associate of Applied Science Degree

This Associate of Applied Science degree program is designed for individuals seeking a career or currently working in the telecommunications and broadband industries. The complexity of the telecommunications industry continues to increase exponentially as technology advances and as digital, voice and video technologies merge.

The state-of-the-industry curriculum includes VOIP, in-depth AC/DC, wired and wireless technology, industry standards and substantial training on video, voice and data technologies, problem solving and network security. Students completing the degree program will be prepared to work and manage in the competitive, rapidly changing telecommunications and broadband industries.

This program is taught online, and is open to ACC students as well as Jones/NCTI participants.

General Education Courses (16 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 131</td>
<td>Technical Writing</td>
<td>3</td>
</tr>
<tr>
<td>MAT 108</td>
<td>Technical Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>COM 125</td>
<td>Interpersonal Communications</td>
<td>3</td>
</tr>
<tr>
<td>CIS 118</td>
<td>Introduction to PC Applications</td>
<td>3</td>
</tr>
<tr>
<td>BUS 115</td>
<td>Intro to Business</td>
<td>3</td>
</tr>
</tbody>
</table>

Major Courses (45 credit hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BTE 100</td>
<td>Keyboarding</td>
<td>3</td>
</tr>
<tr>
<td>CNG 124</td>
<td>Net+I</td>
<td>3</td>
</tr>
<tr>
<td>CNG 125</td>
<td>Net+II</td>
<td>3</td>
</tr>
<tr>
<td>CNG 131</td>
<td>Network Security Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>CNG 264</td>
<td>Home Technology Integration</td>
<td>5</td>
</tr>
<tr>
<td>CTC 105</td>
<td>Overview of Telecommunications</td>
<td>3</td>
</tr>
<tr>
<td>CTC 128</td>
<td>Fiber Installation and Activation</td>
<td>2</td>
</tr>
<tr>
<td>CTC 162</td>
<td>Telecommunications Construction and OSHA Safety</td>
<td>3</td>
</tr>
<tr>
<td>CTC 220</td>
<td>Regulations and Standards</td>
<td>3</td>
</tr>
<tr>
<td>ELT 106</td>
<td>Fundamentals of DC-AC</td>
<td>3</td>
</tr>
<tr>
<td>ELT 168</td>
<td>Transistors and Op-Amps</td>
<td>3</td>
</tr>
<tr>
<td>TLT 131</td>
<td>Cabling</td>
<td>3</td>
</tr>
<tr>
<td>TLT 141</td>
<td>VOIP</td>
<td>3</td>
</tr>
<tr>
<td>TLT 142</td>
<td>Cabling for Video, Voice and Data</td>
<td>3</td>
</tr>
<tr>
<td>TLT 143</td>
<td>Transmission, Wired and Wireless</td>
<td>3</td>
</tr>
<tr>
<td>TLT 260</td>
<td>Emerging Technologies</td>
<td>3</td>
</tr>
</tbody>
</table>

Total ........................................ 60 credit hours
**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 099/106, 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. PREREQUISITE: ACC 101 or ACC 131.

**ACC 131 INCOME TAX 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. PREREQUISITE: ACC 122.

**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. PREREQUISITE: ACC 211.
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 procedures. Key elements of system analysis, business systems design, accounting software selection, and the acquisition and implementation of systems are studied. Techniques and systems for electronic control systems, electronic data interchange, electronic funds transfer and Web commerce are explored.

ACC 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. PREREQUISITE: ACC 122

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 BUSINESS  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. PREREQUISITE: ACC 121 or 101.

ACC 275  SPECIAL TOPICS  1-6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest. PREREQUISITE: Instructor’s permission.

ACC 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.

ACC 287  COOPERATIVE 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.

Architectural Engineering and Construction

*A Prefix AEC is new to Arapahoe Community College and will replace the ARC Prefix. The new AEC courses have not been approved and cannot be listed. Upon approval, an addendum to the course descriptions, as well as the prefix and number they will replace, will be listed on the ACC web site.

AEC 100  INTRODUCTION TO DESIGN THEORY  3 CREDITS
Evaluates design environments both physical and theoretical. Students will be encouraged to consider how social and individual behavior is reflected in and influenced by these designed environments. Through exploration of assigned readings and movies the student will critically assess how design influences our perception of the built environment that surrounds us and the design theory behind it.

AEC 206  APPLIED STRUCTURAL ANALYSIS  3 CREDITS
Studies fundamental structural elements and building structures. Building forces, transfer of forces, and structural members and systems are investigated through computation and project work. Fundamental engineering theory related to steel, wood, reinforced concrete and masonry are introduced.

AEC 280  INTERNSHIP  3 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 business location and with the direct guidance of the instructor.

Activity Professional Training

APT 110  ACTIVITY PROFESSIONAL TRAINING I  8 CREDITS
Introduces students to the profession and its framework. This course will discuss behavioral sciences and its relationship to the late adult years, methods of service delivery and assessment and care planning practices. Successful completion of this course, APT 188, APT 210 and APT 288 satisfies the requirement of completion of a state approved activity program by Federal Regulation F249 for Medicare, Medicaid certified long-care facilities and the requirement for the completion of the Modular Education Program for Activity Professionals (MEPAP) approved by the National Certification Council of Activity Professional (NCCAP). PREREQUISITE: High School diploma or GED. COREQUISITE: APT 188.
For additional information concerning ROTC, please call APT 210.

**American Sign Language**

**ASL 121** INTRODUCTION TO AMERICAN SIGN LANGUAGE I 5 CREDITS

Exposes the student to American Sign Language. Readiness activities are conducted focusing on visual/receptive skills and basic communication. Utilizes the direct experience method. Students must complete this course with a “B” or higher or pass the ASL proficiency test with a score of at least 80% or better prior to registering for ASL 122 if planning to enroll in the Interpreter Preparation Program. This course is a prerequisite for ASL 122.

**ASL 122** AMERICAN SIGN LANGUAGE II 5 CREDITS

Develops a basic syntactic knowledge of American Sign Language (ASL), basic vocabulary and basic conversational skills. Incorporates vital aspects of deaf culture and community. The direct experience method is used to enhance the learning process. Students must complete this course with a “B” or higher or pass the ASL 121 proficiency test with a score of 80% or better prior to acceptance into the Interpreting and Transliterating Preparation program. (NOT OFFERED AT ACC). PREREQUISITE: ASL 121.

**Air Force ROTC**

For additional information concerning ROTC, please call 303.492.8351.
**Anthropology**

**ANT 101 CULTURAL ANTHROPOLOGY: GT-SS3 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 (GT-SS3).

**ANT 107 INTRODUCTION TO ARCHAEOLOGY: GT-SS3 3 CREDITS**
Introduces the science of recovering the human prehistoric and historic past through excavation, analysis, and interpretation of material remains. Includes a survey of the archaeology of different areas of the Old and New Worlds. Also includes the works of selected archaeologists and discussions of major archaeological theories. This course is one of the Statewide Guaranteed Transfer courses (GT-SS3).

**ANT 111 PHYSICAL ANTHROPOLOGY: GT-SS3 3 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 (GT-SS3).

**ANT 121 CULTURES OF THE SOUTHWEST 3 CREDITS**
Includes the major prehistoric cultures (Paleoindian, Desert Culture, Anasazi, Hohokam, Mogollon) and ethnographic views of the historic cultures (Pueblos, Navajo, Apache, Pima, Papago, Spanish-American, and Anglo-American). The purpose of the study is to trace the stages through which these cultures have passed in order to evaluate environmental influences on human activities and to perceive human influences on the environment. Recommended preliminary coursework: ANT 101 or ANT 107. Recommended subsequent coursework: ANT 215, Anthropology Field Studies and Special Topics in Anthropology.

**ANT 215 INDIANS OF NORTH AMERICA: GT-SS3 3 CREDITS**
Studies Indians of North America from the origins of native peoples in the New World, through the development of geographic culture areas, to European contact and subsequent contemporary Native American issues. This course is one of the Statewide Guaranteed Transfer courses (GT-SS3).

**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 SOUTHWEST FIELD EXPLORATION 2 CREDITS**
Introduces the social, religious, economic, and cultural development of selected American Indian societies and Hispanic settlements of the American Southwest. Major ruins, archaeological sites, museums, reservations, and/or pre-statehood communities are explored by field trip. PREREQUISITE: Instructor’s permission.

**ANT 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS**
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.

**Arabic**

**ARA 111 ARABIC LANGUAGE I 5 CREDITS**
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**
Continues Arabic I in the development of functional proficiency in 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. PREREQUISITE: 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. Note: The order of the topics and the methodology will vary according to the individual texts and Instructors. PREREQUISITES: ARA 111, 112 or Instructor permission.

**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. PREREQUISITES: ARA 111, 112, 211 or Instructor permission.

**ARA 275 SPECIAL TOPICS 3 CREDITS**
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

**Architectural Technology**

*The Prefix AEC is new to Arapahoe Community College and will replace the ARC Prefix. The new AEC courses have not been approved and cannot be listed. Upon approval, an addendum to the course descriptions, as well as the prefix and number they will replace, will be listed on the ACC web site.*

**ARC 101 INTRODUCTION TO ARCHITECTURAL 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, freehand sketching, building code requirements, detailing and structural framing. PREREQUISITES: ARC 101 and CAD 102.

ARC 107 RESIDENTIAL/COMMERCIAL  3 CREDITS
Covers 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
Covers 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
Introduces 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
Provides an 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
Covers major periods of architectural development. Social and cultural values influencing architecture will be highlighted as well as the interaction of art, engineering and architecture as forms of expression.

ARC 205 COMMERCIAL DRAWING PRACTICE I  4 CREDITS
Studies small commercial and multiple family dwellings. Construction techniques are discussed. Working drawings are prepared through extensive use of references and manufacturers’ catalogs. PREREQUISITE: ARC 102.

ARC 215 ARCHITECTURAL GRAPHICS  3 CREDITS
Assists the architectural student in developing techniques of graphic design and rendering using pencil, ink, and color media. Both freehand and mechanical methods are stressed. Student will be able to produce architectural presentations.

ARC 216 ESTIMATING I  3 CREDITS
Covers basic construction estimating. The student will develop skills in estimating the amount and cost of various constructions. He/she will demonstrate these skills by making estimates of material and labor quantities and cost for representative types of construction. PREREQUISITE: ARC 101 or ARC 107 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 projects are generally covered in coordinated and fieldwork segments each 4-hour class period. PREREQUISITE: MAT 108.

ARC 226 CONSTRUCTION SCHEDULING  3 CREDITS
Discusses various methods of project scheduling. Emphasis will be placed on critical path method techniques and strategies. PREREQUISITE: ARC 107 or Instructor’s permission.

ARC 228 CONTRACTS, BONDS AND INSURANCE  3 CREDITS
Discusses 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
Introduces 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
Reviews 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 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

ARC 278 SEMINAR  1 CREDIT
Provides the students with experiential learning opportunities. PREREQUISITE: ARC 205.

ARC 280 INTERNSHIP  1 CREDIT
Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the Instructor. PREREQUISITE: ARC 205.

ARC 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.
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. Physical training 3 hrs/week. Fall. Lab fee.

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. PREREQUISITE: ARM 111 or Instructor’s permission. Physical training 3 hrs/week. Spring Lab fee.

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. PREREQUISITE: ARM 112 or Instructor’s permission. Physical training 3 hrs/week. Fall. Lab fee.

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. PREREQUISITE: ARM 211 or Instructor’s permission. Physical training 3 hrs/week. Spring. Lab fee.

Art

ART 110 ART APPRECIATION: GT-AH1 3 CREDITS
Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. PREREQUISITE: ACCUPLACER sentence skills of 80 and 95 in writing strongly recommended. This course is one of the Statewide Guaranteed Transfer courses (GT-AH1).

ART 111 ART HISTORY I: GT-AH1 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. PREREQUISITE: ACCUPLACER sentence skills of 80 and 95 in writing strongly recommended. This course is one of the Statewide Guaranteed Transfer courses (GT-AH1).

ART 112 ART HISTORY II: GT-AH1 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. PREREQUISITE: ACCUPLACER sentence skills of 80 and 95 in writing strongly recommended. This course is one of the Statewide Guaranteed Transfer courses (GT-AH1).

ART 113 HISTORY OF PHOTOGRAPHY 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
Investigates the various approaches and media that students need to develop drawing skills and visual perception.

ART 122 DRAWING II 3 CREDITS
Explores expressive drawing techniques with an emphasis on formal composition, color media and content or thematic development. 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.

ART 124 WATERCOLOR II 3 CREDITS
Continues the study of watercolor techniques, emphasizing original compositions and experimentation with materials. Color theory is included. PREREQUISITE: ART 123 or its equivalency.

ART 131 VISUAL CONCEPTS 2-D DESIGN 3 CREDITS
Examines the basic elements of design, visual perception, and artistic form and composition as they relate to two dimensional media.

ART 132 VISUAL CONCEPTS 3-D DESIGN 3 CREDITS
Focuses on learning to apply the elements and principles of design to three dimensional problems.

ART 138 FILM PHOTOGRAPHY I 3 CREDITS
Introduces black-and-white photography as a fine art medium and develops skills necessary for basic camera and lab operations.

ART 139 PHOTOGRAPHY II 3 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 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
Introduces the construction of jewelry designs in metals and small casting techniques.

ART 142 JEWELRY AND METALWORK II 3 CREDITS
Emphasizes conceptual design development, using casting and specialized techniques. PREREQUISITE: ART 141

ART 143 DIGITAL PHOTOGRAPHY I 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 learn how to operate image manipulation software using a variety of scanning equipment, software tools and output devices by executing new assignments and applying these technologies to their photographic process.

ART 144 NON-SILVER PROCESSES 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. PREREQUISITE: ART 138 or Instructor’s permission.

ART 156 FIGURE DRAWING I 3 CREDITS
Introduces the basic techniques of drawing the human figure.

ART 161 CERAMICS I 3 CREDITS
Introduces traditional and contemporary ceramic forms and processes including hand building 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.

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, 111, 112 or 207.

ART 207 ART HISTORY-1900 TO PRESENT: GT-AH1 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. PREREQUISITE: ACCU-PLACER 80 in sentence skills and 95 in writing strongly recommended. This course is one of the Statewide Guaranteed Transfer courses (GT-AH1).

ART 210 LANDSCAPE PAINTING 3 CREDITS
Focuses on specific landscape concerns in the painting media of your choice.

ART 211 PAINTING I 3 CREDITS
Explores basic techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting to depict form and space on a two-dimensional surface

ART 212 PAINTING II 3 CREDITS
This course further explores techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting, with emphasis on composition and content development. PREREQUISITE: ART 211 or Instructor’s Permission.

ART 213 PAINTING III 3 CREDITS
Provides continued exploration of techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting, with emphasis on composition and content development. PREREQUISITE: ART 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. PREREQUISITE: ART 211 OR ART 212 OR ART 213 or Instructor’s Permission

ART 225 PRINTMAKING I 3 CREDITS
Introduces the basic techniques and skills of printmaking as a fine art media. Instruction includes an understanding of visual concepts as they relate to prints. May include introduction to relief, intaglio, lithography and screen printing techniques.

ART 238 FILM PHOTOGRAPHY II 3 CREDITS
Further explores photography technique and film camera and lab operations. Includes the development of a comprehensive portfolio. PREREQUISITE: ART 138 or 139 or demonstrated competency.

ART 239 COLOR PHOTOGRAPHY II 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 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 AND METALWORK III 3 CREDITS
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  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  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. PREREQUISITE: ART 138 or Instructor’s permission.

ART 248 DIGITAL DARKROOM  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. PREREQUISITE: ART 138 or Instructor’s permission.

ART 251 PORTRAIT PHOTOGRAPHY  3 CREDITS
Teaches the technical and aesthetic aspects of studio and location portrait photography. This course explores the personal style of portraiture, history of the field and as a visual language and creative expression. This topic also includes lighting composition, posing and equipment selection. PREREQUISITE: ART 138.

ART 252 LANDSCAPE PHOTOGRAPHY  2 CREDITS
Focuses on traditional and contemporary approaches to landscape photography. Examines technical and aesthetic aspects of landscape photography through group discussions, a field study, lectures and print and slide critiques. PREREQUISITE: ART 138.

ART 253 STUDIO PHOTOGRAPHY  3 CREDITS
Explores the creative uses of studio lighting from the perspective of fine art photography with an emphasis on portraiture, three dimensional object photography and two dimensional collage photography. PREREQUISITE: ART 138.

ART 254 SCULPTING THE FIGURE  1 CREDIT
Focuses on sculpting the human figure using modeling techniques in clay.

ART 256 ADVANCED FIGURE DRAWING  3 CREDITS
Provides continuing study of the various methods of drawing the human figure, with emphasis on the description of form and individual type. PREREQUISITE: ART 156.

ART 261 CERAMICS III  3 CREDITS
Encourages students to develop an individual style of wheel thrown and hand-built ceramic forms with continuing involvement in surface treatment.

ART 262 CERAMICS IV  3 CREDITS
Continues advanced work with emphasis on various clay bodies, unique glazes and engobes, and combining different textures and shapes, and development of personal forms.

ART 264 MARKETING FOR THE VISUAL ARTISTS  3 CREDITS
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  1–6 VARIABLE CREDITS
Provides the student with a vehicle to pursue in-depth exploration 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.

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 visual arts, including, but not limited to, gallery or museum administration, 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. PREREQUISITE: Instructor’s permission.

Astronomy

AST 101 ASTRONOMY I: GT-SC1  4 CREDITS
Focuses on the history of astronomy, the tools of the astronomer and the contents of the solar system including the planets, moons, asteroids, comets and meteoroids. Incorporates laboratory experience. This course is one of the Statewide Guaranteed Transfer courses (GT-SC1).

AST 102 ASTRONOMY II: GT-SC1  4 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 (GT-SC1).

AST 275 TOPICS IN ASTRONOMY  1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

AST 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.

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.
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASE 110  BRAKES I</td>
<td>3</td>
<td>Covers basic operation of automotive braking systems. Includes operation, diagnosis and basic repair of disc brakes, drum brakes and basic hydraulic systems.</td>
</tr>
<tr>
<td>ASE 120  BASIC AUTOMOTIVE</td>
<td>2</td>
<td>Introduces automotive electricity and includes basic electrical theory, circuit designs and wiring methods. Focuses on multi-meter usage and wiring diagrams.</td>
</tr>
<tr>
<td>ASE 123  BATTERY, STARTING</td>
<td>2</td>
<td>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.</td>
</tr>
<tr>
<td>ASE 130  GENERAL ENGINE</td>
<td>2</td>
<td>Focuses on lecture and related laboratory experiences in the diagnosis and necessary corrective actions of automotive engine performance factors.</td>
</tr>
<tr>
<td>ASE 132  IGNITION SYSTEM</td>
<td>2</td>
<td>Focuses on lecture and related laboratory experiences in the diagnosis, service, adjustments and repair of various automotive ignition systems. PREREQUISITE: ASE 130.</td>
</tr>
<tr>
<td>ASE 134  AUTOMOTIVE EMISSIONS</td>
<td>2</td>
<td>Focuses on lecture and laboratory experiences in the diagnosis and repair of automotive emission control systems. PREREQUISITE: ASE 132.</td>
</tr>
<tr>
<td>ASE 140  SUSPENSION AND</td>
<td>3</td>
<td>Focuses on lecture and related experiences in the diagnosis and service of suspensions and steering systems and their components. PREREQUISITE: ASE 132.</td>
</tr>
<tr>
<td>ASE 141  STEERING I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASE 150  U-JOINT AND</td>
<td>2</td>
<td>Studies the operating principles and repair procedures relating to axle-shaft and universal joints.</td>
</tr>
<tr>
<td>ASE 151  MAN TRANS/TRANSAXLES</td>
<td>2</td>
<td>Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive manual transmissions, transaxes and clutches and related components.</td>
</tr>
<tr>
<td>ASE 152  DIFFERENTIALS AND</td>
<td>2</td>
<td>Focuses on lecture and related laboratory experiences in the diagnosis and repair of automotive differentials, four-wheel and all-wheel drive units.</td>
</tr>
<tr>
<td>ASE 153  4WD/AWD REPAIR</td>
<td></td>
<td></td>
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<tr>
<td>ASE 160  ENGINE REMOVAL AND</td>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>ASE 161  ENGINE REPAIR AND</td>
<td>5</td>
<td>Focuses on lecture and laboratory experiences in the disassembly, diagnosis and reassembly of the automotive engine. Topics include the diagnostic repair procedures for the engine block and head assemblies.</td>
</tr>
<tr>
<td>ASE 162  HEATING AND COOLING</td>
<td></td>
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<tr>
<td>ASE 210  BRAKES II</td>
<td>3</td>
<td>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.</td>
</tr>
<tr>
<td>ASE 220  SPECIALIZED ELECTRONICS TRAINING</td>
<td>2</td>
<td>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.</td>
</tr>
<tr>
<td>ASE 221  AUTOMOTIVE BODY</td>
<td>4</td>
<td>Provides a comprehensive study of the theory, operation, diagnosis and repair of vehicle accessories. PREREQUISITE: ASE 120.</td>
</tr>
<tr>
<td>ASE 222  ELECTRICAL</td>
<td></td>
<td></td>
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<tr>
<td>ASE 230  AUTOMOTIVE COMPUTERS</td>
<td>2</td>
<td>Focuses on lecture and laboratory experiences in the inspection and testing of typical computerized engine control systems. PREREQUISITES: ASE 120, ASE 134, ASE 220.</td>
</tr>
<tr>
<td>ASE 231  AUTOMOTIVE COMPUTERS</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>ASE 232  AUTOMOTIVE ELECTRONICS</td>
<td>4</td>
<td>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.</td>
</tr>
<tr>
<td>ASE 233  FUEL INJECTION AND</td>
<td>4</td>
<td>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.</td>
</tr>
<tr>
<td>ASE 234  EXHAUST</td>
<td></td>
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<tr>
<td>ASE 235  DRIVEABILITY DIAGNOSIS</td>
<td>1</td>
<td>Emphasizes lecture and related laboratory experience in diagnostic techniques and the use of diagnostic scan tools, oscilloscopes, lab scopes, multi-meters and gas analyzers. Students diagnose live vehicle drivability problems. PREREQUISITE: ASE 233.</td>
</tr>
<tr>
<td>ASE 240  SUSPENSION AND</td>
<td>3</td>
<td>Emphasizes lecture and related experiences in the diagnosis and service of electronic suspensions and steering systems and their components.</td>
</tr>
<tr>
<td>ASE 241  STEERING II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASE 250  AUTO TRANSMISSION/</td>
<td>1</td>
<td>Focuses on practical methods of maintaining, servicing and performing minor adjustments on an automatic transmission and transaxle.</td>
</tr>
<tr>
<td>THROTTLE BODY ELECTRICAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASE 251  AUTO TRANSMISSION/</td>
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</tbody>
</table>

Please visit [www.arapahoe.edu](http://www.arapahoe.edu) for the most current, updated catalog information.
ASE 251 AUTOMATIC TRANS/TRANSAXLE REPAIR 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. 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 SPECIAL TOPICS 1–9 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

ASE 277 INDEPENDENT STUDY 1–9 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

ASE 280 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 (Chrysler) or others as required by the program track.

ASE 281 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 (Chrysler) or others as required by the program track.

ASE 282 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 (Chrysler) or others as required by the program track.

ASE 283 INTERNSHIP: ADVANCED ELECTRICAL AND 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 (Chrysler) or others as required by the program track. The student registers for and takes the (ASE) Automotive Service Excellence-based test for brake systems and suspension and steering.

ASE 284 INTERNSHIP: ADVANCED 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 (Chrysler) or others as required by the program track. 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 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.

ASE 287 COOPERATIVE EDUCATION 1 CREDIT
Develops practical objectives assigned by an automotive employer providing an on-the-job learning experience at an approved automotive repair facility.

Biology

BIO 090 BASIC BIOLOGY CONCEPTS 4 CREDITS
Examines the molecular, cellular, genetic, and laboratory concepts necessary to succeed in a 200-level Biology course. This course includes a study of chemistry, cell structure and function, cellular metabolism, and basic concepts of molecular biology. This course includes laboratory experience.

BIO 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: GT-SC1 4 CREDITS
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. GT-SC1.

BIO 111 GENERAL COLLEGE BIOLOGY WITH LAB: GT-SC1 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. PREREQUISITE: High school biology and chemistry, mathematics and physics strongly recommended. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.
BIO 112 GENERAL COLLEGE BIOLOGY II WITH LAB: GT-SC1 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. GT-SC1

BIO 115 HUMAN GENETICS 3 CREDITS
Focuses on the inheritance of human traits. It is a non-mathematical study for the non-science major. Topics include Mendelian, non-Mendelian, and sex-linked inheritance; role of mutations in the evolutionary process; as well as inherited diseases and the ethics of genetic technologies.

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: GT-SC1 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 integument skeletal, articulations, muscular, nervous and endocrine systems. Includes a mandatory hands-on laboratory experience covering experimentation, cadaver workshops, microscopy, observations and dissection. This is the first semester of a two-semester sequence. PREREQUISITE: BIO 090, 111, 104 or equivalent, or Department Chair permission. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.

BIO 202 HUMAN ANATOMY AND PHYSIOLOGY II: GT-SC1 4 CREDITS
Focuses on the integrated study of the human body and the histology, anatomy and physiology of the following systems and topics: cardiovascular, hematolgy, lymphatic and immune, urinary, fluid and electrolyte control, digestive, nutrition, respiratory, reproductive and development. Includes a mandatory hands-on laboratory experience involving experimentation, cadaver workshops, microscopy, observations and dissection. This is the second semester of a two-semester sequence. PREREQUISITE: BIO 201 or equivalent, or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.

BIO 204 MICROBIOLOGY: GT-SC1 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. PREREQUISITE: BIO 201 or equivalent, or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.

BIO 208 GENERAL COLLEGE MICROBIOLOGY: GT-SC1 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. PREREQUISITE: BIO 201 or equivalent, or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.

BIO 216 HUMAN PATHOPHYSIOLOGY 4 CREDITS
Focuses on the alterations in the physiological, cellular and biochemical processes of the human body, and the associated homeostatic responses and the manifestations of disease. Prior knowledge of cellular biology and anatomy and physiology are essential. PREREQUISITES: BIO 201 AND 202 with a “C” or better.

BIO 220 GENERAL ZOOLOGY: GT-SC1 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. PREREQUISITE: BIO 111 or equivalent, or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.

BIO 221 BOTANY: GT-SC1 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. PREREQUISITE: BIO 111 or equivalent, or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.

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 concept, molecular genetics, and the Hardy-Weinberg law. Includes a laboratory experience. PREREQUISITE: BIO 111 or equivalent or Instructor’s permission.

BIO 275 TOPICS IN BIOLOGY 1–6 VARIABLE CREDITS
Covers a Specific topic within Biology, as determined by the Instructor. Reflects the special expertise of the faculty and/or the special needs of the students.
BIO 285 INDEPENDENT STUDY 1–6 VARIABLE CREDITS

Allows students to pursue a specific project within Biology. The student and Instructor determine the topic, outline of work, and method of evaluation. PREREQUISITE: Instructor’s permission.

BIO 287 COOPERATIVE EDUCATION 1–6 VARIABLE 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 110 WORKING FOR YOURSELF 2 CREDITS

Introduces small business start-up and offers practical training designed to provide students with a fundamental understanding of the special concerns of self-employment. The course also provides an overview of the subjects needed to become an entrepreneur, including financing, law, insurance, government regulations, record keeping, and taxes. Guest speakers with expertise in the various topics add to the weekly discussion.

BUS 115 INTRODUCTION TO BUSINESS 3 CREDITS

Focuses on the operation of the American business system. Covers fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business and social responsibilities.

BUS 116 PERSONAL FINANCE 3 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 120 INTRODUCTION TO E-COMMERCE 3 CREDITS

Provides an introduction to electronic commerce – the business trend of the future. Covers definition of e-commerce, technology and software requirements, security issues, electronic payment and marketing strategies. Focuses on what to expect when creating a dot com as well as the business-to-business use of e-commerce.

BUS 203 INTRODUCTION TO INTERNATIONAL BUSINESS 3 CREDITS

Provides student with an understanding of the interdisciplinary nature of international business. Course will cover the development of international business; theories and methods of international trade; financing mechanisms and terms used in export documentation and export finance; the effects of economics, political and cultural environment on international business and trade; impact of geography in business transactions; legal aspects of international business; and developing an effective international marketing strategy.

BUS 216 LEGAL ENVIRONMENT OF BUSINESS 3 CREDITS

Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is devoted to economic regulation, social regulation, regulation and laws impacting labor-management issues, and environmental concerns. Students develop an understanding of the role of law in social, political, and economic change.

BUS 217 BUSINESS COMMUNICATION AND REPORT WRITING 3 CREDITS

Emphasizes effective business writing and covers letters, memoranda, reports, application letters, and resumes. Includes the fundamentals of business communication and an introduction to international communication.

BUS 226 BUSINESS STATISTICS 3 CREDITS

Focuses on statistical study, descriptive statistics, probability, and the binomial distribution, index numbers, time series, decision theory, confidence intervals, linear regression, and correlation. Intended for the business major.

BUS 241 CULTURAL DIVERSITY IN BUSINESS 3 CREDITS

Covers the business person’s guide to cultural, travel and information resource needs in the international arena. Specifics in negotiation, communications (verbal and nonverbal), networking, and understanding what individual countries’ needs are as far as business culture.

BUS 275 SPECIAL TOPICS IN BUSINESS 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.

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 COOPERATIVE EDUCATION/INTERNSHIP* 1-6 VARIABLE CREDITS

Provides students with the opportunity to supplement coursework with practical work experience related to their educational program and occupational objectives. Students are placed at approved work stations related to their program of study. They work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the Instructor/coordinator.

*This course is only offered during the Fall and Spring semesters.

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. PREREQUISITE: Ability to keyboard 20 wpm or Instructor's permission.

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
Introduces touch control of the ten-key pad. 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. PREREQUISITE: Ability to keyboard by touch or Instructor's permission.

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 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.

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 experience in using in-basket exercises typical of those occurring in an office operation. It focuses on procedures and computer skills needed for successful performance in the workplace. PREREQUISITES: Experience with advanced word processing, spreadsheets, or Instructor’s permission.

BTE 225 OFFICE MANAGEMENT  3 CREDITS
Emphasis is placed on functions of the office. Includes office organization, work in the office, office layout, equipment and supplies, procurement and control, work flow, forms design, record storage and retrieval systems, personnel administration and problems, and government control.

BTE 275 SPECIAL TOPICS  1-6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

BTE 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.

BTE 287 COOPERATIVE EDUCATION INTERNSHIP  1-6 VARIABLE CREDITS
Provides students with the opportunity to supplement coursework 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.

BTE 287 COOPERATIVE EDUCATION INTERNSHIP  1-6 VARIABLE CREDITS
Provides students with the opportunity to supplement coursework 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.

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 AND 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 contains instructions for laying out rafters for gable roofs, hip roofs and valley intersections. Coverage includes both stick-built and truss-built roofs.
CAR 125 ROOFING MATERIALS AND 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
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—DRIWWALL 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 AND 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 designs 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. PREREQUISITE: CAR 115.

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. PREREQUISITE: 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. PREREQUISITE: CAR 122 or Instructor’s permission.

CAR 223 ADVANCED ROOFING SYSTEMS 2 CREDITS
Builds on those skills learned in CAR 123. Offers an opportunity for students to hone skills and apply knowledge to more complex systems of roof framing. PREREQUISITE: 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. PREREQUISITE: 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 molding. PREREQUISITE: CAR 154 or Instructor’s permission.

CAR 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

Chemistry

CHE 101 INTRODUCTION TO CHEMISTRY I: GT-SC1 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. GT-SC1
CHE 102 INTRODUCTION TO CHEMISTRY II: GT-SC1 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. GTSC1.

CHE 111 GENERAL COLLEGE CHEMISTRY I: GT-SC1 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. COREQUISITE: MAT 121 or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GTSC1.

CHE 112 GENERAL COLLEGE CHEMISTRY II: GT-SC1 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. GTSC1.

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.

Chinese

CHI 111 CHINESE LANGUAGE I 5 CREDITS
Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the Chinese language. Note: The order of the topics and methodology varies according to individual texts and instructors.

CHI 112 CHINESE LANGUAGE II 5 CREDITS
Continues Chinese Language I in the development of functional proficiency in listening, speaking, reading and writing the Chinese language. Note: The order of the topics and methodology will vary according to individual texts and Instructors. PREREQUISITE: CHI 111.

Communication

(All COM classes were previously listed under the SPE prefix)

COM 115 PUBLIC SPEAKING 3 CREDITS
Combines the basic theory of speech communication with public speech performance skills. Emphasis is on speech delivery, preparation, organization, support, and audience analysis.

COM 125 INTERPERSONAL COMMUNICATION 3 CREDITS
Examines the communication involved in interpersonal relationships occurring in family, social and career situations. Relevant concepts include self-concept, perception, listening, nonverbal communication, and conflict.

COM 126 COMMUNICATION IN HEALTHCARE 3 CREDITS
Familiarizes the student with interactive concerns in settings related to patient-client care. Course includes discussions of diverse cultures, client interaction and family/caregiver issues. The student will also address the concerns of attitude, office politics, teamwork, self-initiative and conflict management as specifically experienced in the patient as client setting.

COM 216 PRINCIPLES OF SPEECH COMMUNICATION II 3 CREDITS
Emphasizes the intensification of ideas and styles with a focus on persuasive speaking. The course includes additional studies in rhetorical analysis and oral delivery methods. PREREQUISITE: COM 115.

COM 217 GROUP COMMUNICATION 3 CREDITS
Examines group communication theories with an emphasis on leadership and group behaviors. The course provides opportunities for group participation.
COM 220 INTERCULTURAL COMMUNICATION 3 CREDITS
Explores the link between culture and communication and will develop and/or enhance communication skills and the abilities appropriate to a multicultural society. Emphasis will be on understanding diversity within and across cultures. Relevant concepts include perception, worldview, context, ethics, language, and nonverbal communication.

COM 225 ORGANIZATIONAL COMMUNICATION 3 CREDITS
Studies human communication systems and patterns in business and organizational settings. Topics include exploration of leadership strategies; effective managerial communication skills with peers, superiors and subordinates; and organizational communication environments, networks, and goal. PREREQUISITE: COM 115.

COM 226 ORAL INTERPRETATION 3 CREDITS
Excites and exposes the student to the potential offered in the reading and performing of great literature such as is found in prose, poetry, and drama.

COM 275 SPECIAL TOPICS 1-6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

COM 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.

Computer Aided 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. PREREQUISITE: 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 153 INTRODUCTION TO PRO ENGINEER/BASICS 3 CREDITS
Introduces basic Pro/Engineer software operation including part creation, drawing creation, and assembly creation. Pro/Engineer is a 3D solid modeling software from parametric technology’s.

CAD 155 PRO ENGINEER/ADVANCED 3 CREDITS
Emphasizes advanced part creation, drawing manipulation, and assembly techniques using Pro/Engineer by parametric technology’s.

CAD 201 COMPUTER AIDED DRAFTING/CUSTOM 3 CREDITS
Focuses on program customization using the latest release of CAD software. Includes customizing menus, customizing toolbars, attribute extraction, basic CAD programming, advanced dimensioning, path options, script files, and slide shows. PREREQUISITE: CAD 102 or Instructor’s permission.

CAD 202 COMPUTER AIDED DRAFTING/3D 3 CREDITS
Focuses on construction of three-dimensional objects using the latest release of CAD software. Includes wireframe construction, surface modeling, solid modeling, extrusions, Boolean operations, 3D editing, 3D views, rendering, and 3D to 2D construction. PREREQUISITE: CAD 102 or Instructor’s permission.

CAD 203 PRO/E BASIC PT AND ASSEMBLY DESIGN 6 CREDITS
Introduces the basic part and assembly design principles of solid modeling, parametric design, and associatively along with basic detailing using PRO-ENGINEER as a design tool. Upon completion of this course the student will understand the basic functions needed to generate parts, assemblies and drawings along with the proper basic technique. PREREQUISITE: SITE: CAD 103, CAD 128 or Instructor’s permission.

CAD 204 PRO/E DRAWING/DETAILING FUNDAMENTALS 6 CREDITS
Introduces the fundamentals of production drawings and how to fully manipulate the associability of PRO/E between parts or assemblies while in drawing, along with general drawing configuration administration related to drawings. PREREQUISITE: CAD 203.

CAD 206 PRO/E ADVANCED APPLICATIONS 6 CREDITS
Introduces various advanced applications of the design principles used in parametric design software, ranging from sheet metal design, advanced Surfacing, Animation, Basic Mechanisms and Basic Manufacturing. PREREQUISITE: CAD 204.

CAD 217 3-D/VIZ 3 CREDITS
Focuses on introductory level basic features of the software using the latest version of 3D 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 key framing.

CAD 218 3D/VIZ/ADVANCED 3 CREDITS
Builds on the basic 3D Studio VIZ skills learned in CAD 218. Includes importing and editing solid models, external processes (special effects), incorporating scanned images, advanced materials editing, creating materials libraries, rendering, animating, and project management.
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<tr>
<th>Course Code</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 219</td>
<td>3D/MAX 3 CREDITS Introduces 3D rendering and animation using AUTODESK 3D Studio software. Emphasizes 3D geometry, texture mapping, lighting, camera placement, shading, photo-realistic rendering, animation techniques, and walk through animations.</td>
</tr>
<tr>
<td>CAD 220</td>
<td>3D/MAX ADVANCED 3 CREDITS Focuses on advanced rendering and animation techniques using AUTODESK 3D studio software. Emphasizes 3D-geometry manipulation, external processing, and video postproduction of 3D studio animations.</td>
</tr>
<tr>
<td>CAD 224</td>
<td>REVIT 3 CREDITS Provides students with the software application training in AutoDesk Revit necessary to produce 3D Architectural models and 2D drawings utilizing AIA standards. PREREQUISITE: CAD 102, AEC 202 or Instructor’s permission.</td>
</tr>
<tr>
<td>CAD 225</td>
<td>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 and ARC 102 or Instructor’s permission.</td>
</tr>
<tr>
<td>CAD 231</td>
<td>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 coursework is completed on a CAD system. PREREQUISITE: CAD 102 or Instructor’s permission.</td>
</tr>
<tr>
<td>CAD 249</td>
<td>AUTOLISP PROGRAMMING 3 CREDITS Introduces the student to the development of Auto LISP programming language. Covers techniques and concepts needed to design the AutoCAD environment to suit the drafter’s specific needs. PREREQUISITE: CAD 102.</td>
</tr>
<tr>
<td>CAD 254</td>
<td>MECHANICAL DESKTOP/AUTODESK 3 CREDITS Examines 3D Parametric Solid modeling techniques. Students construct solid models and generate 2D mechanical drawings utilizing these models. PREREQUISITE: CAD 102 or Instructor’s permission.</td>
</tr>
<tr>
<td>CAD 275</td>
<td>SPECIAL TOPICS 1-6 VARIABLE CREDITS Provides students with a vehicle to pursue in-depth exploration of special topics of interest.</td>
</tr>
<tr>
<td>CAD 285</td>
<td>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.</td>
</tr>
<tr>
<td>CIS 103</td>
<td>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 students who wish to advance at a slower pace.</td>
</tr>
<tr>
<td>CIS 111</td>
<td>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.</td>
</tr>
<tr>
<td>CIS 115</td>
<td>INTRODUCTION TO COMPUTER INFORMATION SYSTEMS 3 CREDITS Focuses on an overview of the needs for and roles of computer information systems. Emphasizes computer requirements in organizations, history, hardware functions, programming, systems development, and computer operations. Introduces computer applications.</td>
</tr>
<tr>
<td>CIS 118</td>
<td>INTRODUCTION TO PC APPLICATIONS 3 CREDITS Introduces computer concepts and components, as well as application-suite software and the Internet. Includes descriptions of and hands-on experiences with word processing, spreadsheets, databases, operating environments and other common PC application packages. PREREQUISITES: CIS 103 or familiarity with MS Windows.</td>
</tr>
<tr>
<td>CIS 124</td>
<td>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.</td>
</tr>
<tr>
<td>CIS 128</td>
<td>WINDOWS COMPLETE 3 CREDITS Introduces the functions and capabilities of Microsoft Windows. Includes configuring and modifying the operating system environment.</td>
</tr>
<tr>
<td>CIS 130</td>
<td>INTRODUCTION 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.</td>
</tr>
<tr>
<td>CIS 135</td>
<td>COMPLETE PC WORD PROCESSING (SOFTWARE PACKAGE) 3 CREDITS Explores a complete array of word processing skills. The skills needed to create, edit, format, and printing documents are covered. Other topics include character, paragraph, and page formats, the use of spelling checkers and thesaurus, hyphenation, tables, mail merge, document design, and graphics.</td>
</tr>
<tr>
<td>CIS 136</td>
<td>MICROSOFT OFFICE SPECIALIST CERTIFICATION: WORD 1 CREDIT Prepares students for the Microsoft Office Specialist certification examination for Word. Students use software to determine strengths and weaknesses and elect to review and prepare for either the Core or Expert level exam. PREREQUISITE: CIS 135 or Instructor permission based on prior experience.</td>
</tr>
<tr>
<td>CIS 140</td>
<td>MICROSOFT OUTLOOK 1 CREDIT Introduces the functions used in Microsoft Outlook including e-mail messages, calendar, contacts, tasks, journals, and notes.</td>
</tr>
</tbody>
</table>
CIS 145  COMPLETE PC DATABASE  3 CREDITS
Explains 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.

CIS 155  PC SPREADSHEET
CONCEPTS: EXCEL
(SOFTWARE PACKAGE)  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 for either the Core or Expert level Certification exam. The MOUS test is not included in this course. PREREQUISITE: CIS 155 or Instructor permission.

CIS 161  PRESENTATION
GRAPHICS I: (SOFTWARE)  1 CREDIT
Introduces the development of presentation graphics materials including graphs, charts, illustrations, and diagrams. Emphasizes effective communication. PREREQUISITE: CIS 103 or familiarly with MS Windows.

CIS 167  DESKTOP PUBLISHING:
(SOFTWARE)  3 CREDITS
Introduces the concepts and applications for desktop publishing using work processing software. Emphasizes page layout and design with techniques for incorporating text and graphics and final production of printed documents.

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.

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. Students will learn to use GANTT charts, milestones, Critical Path Methodology, PERT, project tracking and reporting.

CIS 218  ADVANCED PC
APPLICATIONS  3 CREDITS
Covers the advanced capabilities of a PC software applications suite. Emphasizes solving business problems by integrating data from all of the software applications that facilitate the production of useful information. Printed documents, reports, slides, and forms are produced to communicate information.

CIS 220  FUNDAMENTALS OF UNIX  3 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 222  UNIX SYSTEM
ADMINISTRATION  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 232  UNIX SHELL PROGRAMMING  3 CREDITS
Covers simple scripts to automate frequently executed commands followed by an explanation of adding conditional logic, user interaction, loops, menus, traps, and functions to enhance the productivity and effectiveness of the user. In addition, students explore in detail Bourne and Korn shell scripting languages. PREREQUISITE: CIS 220 or Instructor’s permission.

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 243  INTRODUCTION TO PL/SQL  3
Introduces students to creating database structures and storing, retrieving, and manipulating data in a relational database. SQL is the set of statements that all users and programs must use to access data in the Oracle database. Also focuses on SQL*Plus to manipulate SQL statements.

CIS 244  SQL PL/SQL  3
Provides a detailed introduction to the Structured Query Language (SQL) as used in modern relational database systems. Students will develop skills in storing, retrieving and manipulating data using SQL as well as in defining database objects using the portion of SQL known as the Data Definition Language (DDL). The course will also provide a detailed
introduction to the PL/SQL programming language that is integral to some widely-used relational database systems, such as Oracle. Students will learn to create and maintain blocks of PL/SQL code that are used and shared by multiple forms, reports and program libraries. Users will learn to implement database triggers and other coded structures applicable to client/server databases.

**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. Includes the systems approach, fact gathering techniques, forms design, input/output, file design, file organization, various charting techniques, system audits on controls, project management, implementation, and evaluation.

**CIS 287 COOPERATIVE EDUCATION** 3 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 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.

**Computer Networking**

**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
Teaches students to upgrade, install, configure, maintain and troubleshoot current and legacy MS Windows operating systems. In addition, students learn to install, configure and troubleshoot device drivers. Students will also learn to identify the network capabilities of the operating system and configure the operating system to connect to the network. This course will prepare you for the CompTIA A+ OS Technologies Exam. PREREQUISITE: CNG 121 or Instructor’s permission

**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.

**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 TCP/IP. This course also prepares students for the Networking II: Network+ course.

**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. PREREQUISITE: CNG 124 or Instructor’s permission.

**CNG 131 NETWORK SECURITY FUNDAMENTALS** 3 CREDITS
Delivers a comprehensive overview of network security, including general security concepts. Communication security is studied, including remote access, e-mail, the Web, directory and file transfer, and wireless data. Common network attacks are introduced. Cryptography basics are incorporated, and operational/organizational security is discussed as it relates to physical security, disaster recovery, and business continuity. Computer forensics is introduced.

**CNG 136 GUIDE TO DISASTER RECOVERY** 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 a disaster recovery plan.

**CNG 211 WINDOWS XP CONFIGURATION (OS)** 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 Client OS in a variety of network operating system environments.

**CNG 212 MANAGE A MS WINDOWS SERVER ENVIRONMENT** 4 CREDITS
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. PREREQUISITE: CNG 211 or Instructor’s permission.
CNG 213 IMPLEMENTING AN MS WINDOWS NETWORK INFRASTRUCTURE 4 CREDITS
Provides students with the knowledge and skills to implement and manage a Microsoft Windows Server network infrastructure. Students will learn to implement routing, implement and manage Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS), and Windows Internet Name Service (WINS); secure Internet Protocol (IP) traffic with Internet Protocol security (IPSec) and certificates; configure a network access infrastructure, manage and monitor network access. PREREQUISITE: 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. PREREQUISITE: CNG 212 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® 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. PREREQUISITE: CNG 212 or Instructor’s permission.

CNG 216 PLAN A MS WINDOWS SERVER ACTIVE DIRECTORY INFRASTRUCTURE 4 CREDITS
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. PREREQUISITE: CNG 212 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. PREREQUISITE: CNG 212 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 (CWNA) Certification Exam. PREREQUISITE: CNG 124 or Instructor’s permission.

CNG 226 IMPLEMENTING AND MANAGING MS EXCHANGE 3 CREDITS
Provides the knowledge and skills necessary to install, configure, and administer Microsoft Exchange. Students learn to use Exchange in medium to very large computing environments that typically have multiple physical locations, mixed client connection protocols, and Internet messaging connectivity. PREREQUISITE: CNG 212 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. PREREQUISITE: 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. PREREQUISITE: CNG 131.

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. PREREQUISITE: CNG 124 or Instructor’s permission.
CSC 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.

CSC 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.

CSC 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. PREREQUISITE: CNG 262.

CSC 264 HOME TECHNOLOGY INTEGRATION 5 CREDITS
Introduces the elements of ‘Smart’ home technology in preparation for the HTI+ industry certification examination. There are six broad areas of the home technology environment that HTI systems generally control: Internet and home network connectivity, video and audio, telecommunications, home security, utility management, and appliance automation and control. HTI is evolving towards central control of all these systems.

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 INTRODUCTION 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 126 GAME DESIGN AND DEVELOPMENT 3 CREDITS
Combines problem-solving techniques with computer game design and implementation to introduce the student to basic gaming and computer science concepts. Students design, implement, and test computer games using software that allows for basic game creation through a wide variety of game creation tools; no prior programming experience is required.

CSC 150 VISUAL BASIC PROGRAMMING 3 CREDITS
Introduces programming and applications development for the Microsoft Windows Programming environment using Visual Basic for Windows. PREREQUISITE CSC 116 or equivalent experience or Instructor’s permission.

CSC 151 ADVANCED VISUAL BASIC PROGRAMMING 3 CREDITS
Builds on the skills learned in CSC 150. Focuses on more involved applications, work with advanced controls, and deals with additional advanced topics. PREREQUISITE: 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 applications in Microsoft Visual Basic.NET for the Microsoft.NET platform. Focuses on user interfaces, program structure, language syntax, and implementation details. This is the first course in the Visual Basic.NET curriculum and serves as the entry point for other .NET courses. PREREQUISITE: CSC 116 or equivalent experience.

CSC 157 ADVANCED VISUAL BASIC .NET PROGRAMMING 4 CREDITS
Continues the structured algorithm development and problem solving techniques begun in CSC 154. Students are introduced to more advanced features of the Visual Basic.NET programming language. This course will explore the relationships between Visual Basic.NET and the .NET Framework and introduces some important .NET services. We will introduce the student to 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 Visual Basic.NET and object oriented methodology. PREREQUISITE: CSC 156.

CSC 160 COMPUTER SCIENCE I (LANGUAGE) 4 CREDITS
Introduces students to the discipline of computer science. Covers algorithm development, data representation, logical expressions, sub-programs and input/output operations using a structured programming language. Requires intensive lab work outside of class time. PREREQUISITES: CSC 116 and MAT 099

CSC 161 COMPUTER SCIENCE II (LANGUAGE) 4 CREDITS
Continues the structured algorithm development and problem solving techniques begun in Computer Science I. Enables students to gain experience in the use of data structures and design of larger software projects. Requires intensive computer laboratory experience. PREREQUISITE: CSC 160.

CSC 200 GAME PROGRAMMING I 3 CREDITS
Introduces the student to game programming techniques and using a game library. Skills developed include programming input devices, 2D game theory and design, bit map handling, sprite programming and threads. PREREQUISITES: CSC 126, CSC 160 (JAVA/C++) OR EQUIVALENT EXPERIENCE.
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 227 3D GAME PROGRAMMING 3 CREDITS
Permits student involvement with the creation of Terrains, Structures and Environments. Students will also learn about Game Missions, Clients, and the basics of testing. PREREQUISITE: CSC 200 OR EQUIVALENT EXPERIENCE

CSC 228 GAME SCRIPTING 3 CREDITS
Allows the student to engage in advanced game engine scripting. Topics include: problem solving, objects, string, Artificial Intelligence (AI) and group behaviors. PREREQUISITE: CSC 200 OR EQUIVALENT EXPERIENCE, CSC 227 STRONGLY RECOMMENDED.

CSC 230 C PROGRAMMING: WINDOWS 3 CREDITS
Introduces C programming language - a 'mid-level' language whose economy of expression and data manipulation features allow a programmer to deal with the computer at a 'low level.' PREREQUISITES: MAT 121 and any programming language course.

CSC 233 OBJECT-ORIENTED PROGRAMMING IN C++ 3 CREDITS
Covers all syntactical components of the C++ language including arrays, structures, pointers, functions and classes. Emphasizes inheritance, overloading, and polymorphism. Focuses on writing clear, properly structured, and well documented programs using the C++ Language and Object- Oriented methodology. It is the advanced course in C++ Programming. PREREQUISITES: CSC 116 and MAT 106 or Instructor’s permission

CSC 234 C++ PROGRAMMING 4 CREDITS
Continues CSC 233 Object-Oriented Programming in C++. This is an advanced level computer programming course. Although it teaches C++ as a computer language, it presumes knowledge of at least similar language of C or Pascal. It covers advanced object-oriented features such as standard string class, operator overloading, friends, references, namespaces, pointers and dynamic arrays, streams and file I/O, recursion, inheritance, polymorphism and linked data structures. PREREQUISITE: CSC 233 or Instructor’s permission

CSC 236 C# PROGRAMMING 4 CREDITS
Introduces the C# programming language. Covers all syntactical components of the language including arrays, structures, functions, and classes. Content will focus on writing clear properly structured, and well-documented programs using C# and object oriented methodology. PREREQUISITE: Familiarity with the C++ programming language or permission of the Instructor.

CSC 237 ADVANCED C# PROGRAMMING 4 CREDITS
Continues the structured algorithm development and problem solving techniques begun in CSC 236. Introduces more advanced features of the C# programming language. Explores the relationships between C# and the .NET Framework and introduces important .NET services. Emphasizes collections, copying and comparing objects, and how the .NET framework interfaces to XML. Focuses on writing clear, properly structured, and well-documented programs using C# and object oriented methodology. PREREQUISITE: 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. PREREQUISITE: MAT 106 or equivalent experience, or Instructor’s permission.

CSC 241 ADVANCED JAVA PROGRAMMING 3 CREDITS
Continues the study of the Java programming language. Covers advanced programming topics including multithreading, network/Internet programming, database programming, and JavaBeans. Enables the student to write advanced, large, and complex programs. PREREQUISITE: CSC 240 or Instructor’s permission.

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. PREREQUISITE: CSC 154 or equivalent knowledge and experience.

CSC 268 PROGRAMMING IN PERL 2 CREDITS
Introduces the knowledge and skills necessary to be able to write programs in the Perl programming language. This course will offer a brief introduction of writing CGI programs using Perl. PREREQUISITE: Previous programming experience.

CSC 269 ADVANCED PROGRAMMING IN PERL 2 CREDITS
Introduces advanced programming using the Perl language for database and Web-based applications. This is a continuation course to CSC 268 which offers a brief introduction to writing CGI programs using Perl.
Computer – Web Based

CWB 106 MASTERING THE WEB: (TOOL) 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. PREREQUISITE: XML.

CWB 110 COMPLETE WEB AUTHORING (SCRIPTING LANGUAGE) 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 WEB EDITING TOOLS 3 CREDITS
Provides tools used for designing and building Web pages that are easy to use and have a pleasing look. The student will develop Web pages using a web page development program. Use of images, forms, frames, tables, templates and layers will be covered.

CWB 164 XML 3 CREDITS
Provides students with an introduction to the XML language’s structure and syntax. Examines supporting tools such as XSL and CSS. This course is not designed to focus on a particular implementation of XML, but to examine the possibilities of using XML with popular technologies such as Java SAX, SOAP, RDF, and the DOM. PREREQUISITE: CWB 110 or Instructor’s permission.

CWB 205 COMPLETE WEB SCRIPTING LANGUAGE 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

CWB 205 COMPLETE WEB SCRIPTING LANGUAGE 3 CREDITS
Provides the student with the background and history of the telecommunications field. Includes transmission systems, LAN data communication, cable communication, telephone communication and video technology.

CWB 107 INSTALLER 3 CREDITS
Teaches the proper procedures for performing aerial, underground and interior CATV 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.

CWB 164 XML 3 CREDITS
Provides students with an introduction to the XML language’s structure and syntax. Examines supporting tools such as XSL and CSS. This course is not designed to focus on a particular implementation of XML, but to examine the possibilities of using XML with popular technologies such as Java SAX, SOAP, RDF, and the DOM. PREREQUISITE: CWB 110 or Instructor’s permission.

CWB 205 COMPLETE WEB SCRIPTING LANGUAGE 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.

CTC 108 BROADBAND CABLE OVERVIEW 1 CREDIT
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 CREDITS
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. 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 112 SYSTEM TECHNICIAN 4 CREDITS
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 113 FIBER OPTICS TECHNICIAN 3 CREDITS
Provides information on fiber optic system overview, applications, rack mount 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 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 122 BASIC TROUBLESHOOTING OF BROADBAND TECHNOLOGY 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 123 TROUBLESHOOTING ADVANCED SERVICES 3 CREDITS
Focuses on making the transition from analog to digital services troubleshooting. The 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 124 HIGH SPEED DATA CUSTOMER SERVICE 2 CREDITS
Focuses on high-speed data services, equipment, operations and troubleshooting. Covers cable modems, and personal computer hardware 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 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 TESTING AND MAINTENANCE FOR FIBER TECHNICIANS 2 CREDITS
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 regimens in an HFC network. COREQUISITE: Employment in the Broadband industry. This course is only available for students who are in a degree 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 FIBER INSTALLATION AND ACTIVATION 2 CREDITS
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 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
Provides the student with an overview of network systems. Focuses on the architecture of each network, transmission modes, functions, uses, protocols and advantages of each. Addresses synchronous as well as asynchronous data systems.

CTC 160 CABLE COMMUNICATIONS 3 CREDITS
Provides the student with an overview of cable communication systems and their attributes. Includes architecture, satellite applications, coaxial cable attributes, typical systems from tap to TV, and common construction practices. Includes applicable math skills. 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. Covers the operation and application of pagers. PREREQUISITES: ELT 106, ELT 110 or Instructor’s permission.

CTC 162 TELECOMMUNICATION CONSTRUCTION AND 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
Provides an overview of video technology including the principles, color as well as black and white signal construction, fundamentals of color and color mixing, and color signal construction. Covers waveform analysis and interlaced and non-interlaced scanning schemes. Includes distortion, signal processing, measurements and video data compression. PREREQUISITES: ELT 106, ELT 110 or Instructor’s permission.

CTC 165 ADVANCED TECHNICIAN 4 CREDITS
Trains a technician how to set up, operate and maintain the CATV headend. Focuses on communication electronics theory and provides a foundation for understanding broadcast television, microwave, satellite and data communication systems. 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
Provides the student with an opportunity to research concepts and applications of related technologies that are being reviewed and experimented with today. Focuses on presentations and discussions with industry experts. Enables students to develop presentations on areas of interest in emerging technologies. Covers applications and implications of new discoveries.

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CTC 215 OPTICAL NETWORKS 3 CREDITS
Introduces optical networks - the next great bandwidth provider. Addresses optical networking from a practical point-of-view and examines other evolving transport challenges. Focuses on alternatives such as ISDN, xDSL, cable modems, wireless local loop offerings such as LMDS, MMDS, and satellite and copper-based transport schemes including T1, T3, SONET, and SDH. PREREQUISITE: CTC 161.

CTC 220 REGULATIONS AND STANDARDS 3 CREDITS
Provides the students with an overview of the regulations and standards that pertain to technicians in the communication industries. Covers regulated as well as unregulated business operations. Addresses the function and control of local regulatory agencies. PREREQUISITES: CTC 150, 161 or 215.

CTC 240 TELECOMMUNICATIONS ENGINEERING OUTSIDE PLANT 3 CREDITS
Covers the components of engineering the telephone outside plant. Includes 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: TELECOM ENGINEERING PLANNING 3 CREDITS
Gives 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 AND REPAIR 3 CREDITS
Provides students with an understanding in the basic phone installation from pedestal to customer premise equipment (CPE). Includes troubleshooting and testing skills to maintain the integrity of the phone service. Covers 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. A syllabus specifies the content of each course at the time it is offered. Contact the CTC Department Chair for additional details.

CTC 280 INTERNSHIP: TELECOM ENGINEERING PLANNING 3 CREDITS
Provides students with 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, establishing learning objectives and to coordinate learning activities with employer or work site supervisor. Attendance at seminars/update status orientations and periodic interaction with the Instructor is required.

Criminal Justice

The following PREREQUISITES apply to ALL Criminal Justice courses: ENG 090, REA 090 or equivalent ACCUPLACER scores. Additional prerequisites may apply; see course descriptions.

CRJ 101 BASIC POLICE ACADEMY I 6 CREDITS
Conforms 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 peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning. PREREQUISITE: Permission of Academy Director.

CRJ 102 BASIC POLICE ACADEMY II 12 CREDITS
Conforms 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 peace officer. Emphasis will be on simulating actual situations utilizing a lecture and laboratory mode of learning. PREREQUISITE: Permission of Academy Director.

CRJ 103 BASIC POLICE ACADEMY III 2 CREDITS
Enhances the standards established by the P.O.S.T. Board and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a Police Officer. Emphasis will be on expanding the P.O.S.T. curriculum to create a unique learning experience. PREREQUISITE: Permission of Academy Director.

CRJ 104 BASIC POLICE ACADEMY IV 1 CREDIT
Enhances the standards established by the P.O.S.T. Board and state certification requirements as well as the basic skills and knowledge necessary to perform the entry-level duties of a Police Officer. Emphasis will be on expanding the P.O.S.T. curriculum to create a unique learning experience. PREREQUISITE: Permission of Academy Director.

CRJ 105 BASIC LAW 8 CREDITS
Conforms 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 peace officer. Emphasis will be on United States Constitution, arrest, search and seizure, interrogation and confessions, rules of evidence, Colorado Criminal Code, Colorado Traffic Code, Colorado Children’s Code, Liquor Code and controlled substances. PREREQUISITE: Permission of Academy Director.

CRJ 106 ARREST CONTROL TECHNIQUES 3 CREDITS
Covers the skills, knowledge and abilities necessary to effectively maintain control of a suspect when making an arrest. Emphasizes the continuum of force and de-escalation of force.

CRJ 107 LAW ENFORCEMENT DRIVING 3 CREDITS
Covers the skills, knowledge and abilities required for operation of a law enforcement vehicle. Emphasizes defensive driving. Enables students to demonstrate skills by driving a vehicle under simulated conditions.
**CRJ 108 FIREARMS 3 CREDITS**
Discusses the skills, knowledge and abilities necessary to safely use police firearms. Students will demonstrate skills by firing weapons on a firing range. The student will demonstrate basic safety techniques and will explain the firearms role within the continuum of force.

**CRJ 110 INTRO TO CRIMINAL JUSTICE 3 CREDITS**
Introduces a study of the agencies and processes involved in the criminal justice system: the legislature, the police, the prosecutor, the public defender, the courts, and corrections. Includes an analysis of the roles and problems of the criminal justice system in a democratic society, with an emphasis upon inter-component relations and checks and balances. PREREQUISITES: CRJ 140 or equivalent ACCUPLACER test scores.

**CRJ 125 LAW ENFORCEMENT OPERATIONS 3 CREDITS**
Examines the complexity and multi-dimensional aspects of the law enforcement role and career; law enforcement discretion; law enforcement values and culture in modern America. Covers the role and functions of law enforcement in occupational, social, political and organizational context. PREREQUISITES: ENG 090 and REA 090 or equivalent ACCUPLACER test scores.

**CRJ 135 JUDICIAL FUNCTION 3 CREDITS**
Examines the criminal process with an analysis of the major judicial decision-makers, i.e., prosecutors, of adjudication. PREREQUISITES: ENG 090 and REA 090 or equivalent ACCUPLACER test scores.

**CRJ 140 CRIME ANALYSIS I 3 CREDITS**
Offers 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. PREREQUISITES: ENG 090 and REA 090 or equivalent ACCUPLACER test scores.

**CRJ 145 CORRECTIONAL PROCESS 3 CREDITS**
Focuses on the post-conviction corrections process, the development of a correctional philosophy, theory, and practice, a description of institutional operation, programming and management, and community-based corrections, probation, and parole. PREREQUISITES: ENG 090 and REA 090 or equivalent ACCUPLACER test scores.

**CRJ 150 VICTIMS OF CRIME AND TRAUMA 3 CREDITS**
Introduces the student to the role the crime victim plays in the Criminal Justice System. The traditional response that a crime victim receives from the system will be studied and the psychological, emotional and financial impact these responses have on victimization will be analyzed. PREREQUISITES: ENG 090 and REA 090 or equivalent ACCUPLACER test scores.

**CRJ 200 CRIME ANALYSIS II 3 CREDITS**
Offers 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 201 EMERGENCY DISPATCHING 5 CREDITS**
Focuses on the unique knowledge, skills and abilities required for working in the Emergency Telecommunications industry. The course will focus on the basics of the emergency communication center, emergency telecommunication technology, caller management, call classification, legal aspects and stress management. PREREQUISITES: ENG 090 and REA 090 or equivalent ACCUPLACER test scores.

**CRJ 205 PRINCIPLES OF CRIMINAL LAW 3 CREDITS**
Focuses on common law and statutory law crimes, the Model Penal Code, elements defining crimes and penalties, defenses to criminal accusations, and definitions and distinctions between criminal and civil law. PREREQUISITE: CRJ 110.

**CRJ 210 CONSTITUTIONAL LAW 3 CREDITS**
Focuses on the powers of government as they are allocated and defined by the United States Constitution. Includes intensive analysis of United States Supreme Court decisions. PREREQUISITES: ENG 090 and REA 090 or equivalent ACCUPLACER test scores.

**CRJ 220 HUMAN RELATIONS AND 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 the social structure. PREREQUISITES: ENG 090 and REA 090 or equivalent ACCUPLACER test scores.

**CRJ 228 CRIME ANALYSIS III 3 CREDITS**
Focuses on using temporal and spatial analysis by utilizing crime mapping software (GIS) to identify patterns, demographic and trend analysis, and redistricting. PREREQUISITE: CRJ 140.

**CRJ 230 CRIMINOLOGY 3 CREDITS**
Examines the question of crime causation from legal, social, political, psychological and theoretical perspectives. Covers the history and development of criminology. PREREQUISITES: ENG 090 and REA 090 or equivalent ACCUPLACER test scores.

**CRJ 236 CRJ RESEARCH METHODS 3 CREDITS**
Introduces and applies methods for criminal justice and criminology with an emphasis on the scientific method and the role of empirical inquiry into criminal justice and criminology. This course will include the study of methodologies of data collection and analysis, the logic of research, the role of theory, measurement, sampling and research designs. Field research and the professional norms and ethics of criminal justice and criminology research will also be covered. PREREQUISITE: CRJ 110.

**CRJ 254 CRIME ANALYSIS IV 3 CREDITS**
Focuses on using readily available computer software (especially Microsoft Office) to assist in different facets of crime analysis. PREREQUISITE: CRJ 140.
CRJ 265 CRIME ANALYSIS V 3 CREDITS 
Offers 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. PREREQUISITE: CRJ 140.

CRJ 266 CRIME ANALYSIS VI 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: Department Chair permission.

CRJ 275 SPECIAL TOPICS 1-6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of a special topic of interest.

CRJ 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: Department Chair permission.

CRJ 287 CO-OPERATIVE EDUCATION 6 CREDITS
Provides work experience for students to gain practical work experience related to their educational program.

Culinary Arts

CUA 121 INTRODUCTION TO FOOD PRODUCTION PRINCIPLES AND PRACTICES 1 CREDIT
Provides students with the fundamental principles of commercial kitchen operations including safety and sanitation applications, use and care of equipment, tools, utensils and knives, recipe use and conversion, organization of work, and basic cooking methods. The class meets a minimum of 22.5 hours.

CUA 122 INTRODUCTION TO STOCKS, SOUPS AND SAUCES 1 CREDIT
Focuses on the fundamental principles of stocks, soups, sauces, gravies and thickening agents. Enables students to produce a variety of these products in the commercial kitchen incorporating practice in the use of tools, utensils, equipment and application of safety and sanitation practices. Students apply pre-preparation skills and efficient organization of work techniques. Meets a minimum of 22.5 hours.

CUA 123 INTRODUCTION TO GARDE MANGER 1 CREDIT
Provides fundamental principles of cold food and non-alcoholic beverage preparation and production in a commercial kitchen. Enables students to produce a variety of cold food and non-alcoholic beverage products incorporating practice in the use of tools, utensils, equipment and application of safety and sanitation methods. Introduces basic cold food decorative work such as fruit and vegetable garnishes and carvings, terrines, and hors d’oeuvres. Focuses on pre-preparation procedures and efficient organization of work techniques. Meets for a minimum of 22.5 hours.

CUA 131 STARCHES, PASTAS, CASSEROLES AND GRAIN PRODUCTS 1 CREDIT
Provides the basics of preparing and/or cooking potatoes, starches, legumes and grains. Enables students to prepare and cook a variety of casseroles and grain products using a commercial kitchen for their preparation area. Allows students to apply pre-preparation skills and efficient organization of work techniques. Class meets a minimum of 22.5 hours.

CUA 132 CENTER OF THE PLATE: MEAT 1 CREDIT
Provides the student with the basics of meat handling, including principles used for selecting meat products, their basic cuts and cooking methods. Focuses on a variety of meat products in a commercial kitchen. Meets for a minimum of 22.5 hours.

CUA 133 CENTER OF THE PLATE: POULTRY, FISH AND SEAFOOD 1 CREDIT
Provides the basics of handling poultry, fish and seafood including principles used for selection and the basic forms these products have and the methods of cooking them. Focuses on preparation of poultry, fish and seafood products in a commercial kitchen and incorporates practice in the use of these principles and methods. Covers pre-preparation skills and efficient organization of work techniques. Meets for a minimum of 22.5 hours.

CUA 141 BAKING: PRINCIPLES AND INGREDIENTS 1 CREDIT
Provides the student with the fundamentals of baking terminology, principles of baking, and the characteristics and functions of the main ingredients used in bakery production. Orient student to commercial equipment, tools, and utensils used in baking. Meets for a minimum of 22.5 hours.

CUA 142 BASIC YEAST-RAISED PRODUCTS AND QUICK BREADS 1 CREDIT
Provides the student with the fundamentals of basic yeast- raised production and quick breads. Enables the student to produce white bread, rolls, variety grain breads, specialty breads, sweet yeast-raised products, and quickbreads in a commercial kitchen. Meets for a minimum of 22.5 hours.

CUA 143 BAKING: CAKES, PIES, PASTRIES AND COOKIES 1 CREDIT
Provides the student with the fundamentals of basic cake, pie, pastry, and cookie production. Enables the student to produce a variety of cakes, pies, pastries, cookies and assorted dessert items in a commercial kitchen. Meets for a minimum of 22.5 hours.

CUA 157 MENU PLANNING 3 CREDITS
Introduces the student to planning menus and integrating them into foodservice operations. Equips the student with a working knowledge of the function, mechanics, and results achieved by the menu. Provides an overview of the existing and growing foodservice industry as seen through the menu.
CUA 190 DINING ROOM MANAGEMENT  4 CREDITS
Focuses on service related skills and knowledge used in the foodservice industry. Enables the student, through a laboratory setting, to practice skills and acquire the knowledge of "front of the house" operations common to dining rooms in the industry. Includes table setting, side work, serving customers, operating a Point-of-Sale system, hosting and supervising dining room personnel. At the completion of the class, students are able to supervise the operation of a sit-down dining operation. Meets a minimum of 90 hours.

CUA 275 SPECIAL TOPICS  1 CREDIT
Explores topics, issues and activities related to one or more aspects of culinary arts and safe food handling.

ECE 101 INTRODUCTION TO EARLY CHILDHOOD EDUCATION  3 CREDITS
Provides an introduction to Early Childhood Education. Includes the eight key areas of professional knowledge: Child Growth and Development; Health, Nutrition and Safety; Developmentally Appropriate Practices; Guidance; Family and Community Relationships; Diversity; Professionalism; Administration and Supervision. Focuses on ages birth through age eight. GT-SC1.

ECE 102 INTRODUCTION TO EARLY CHILDHOOD LAB TECHNIQUES  3 CREDITS
Focuses on a classroom seminar and placement in a child care setting. The supervised placement provides the student with the opportunity to observe children, to practice appropriate interactions, and to develop effective guidance and management techniques. Addresses ages birth through age eight. PREREQUISITE: 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 pro-social skills. Addresses ages birth through age eight.

ECE 111 INFANT AND TODDLER THEORY AND PRACTICE  3 CREDITS
Presents an overview of theories, applications (including observations) and issues pertinent to infant and toddler development in group and/or family settings. Includes state requirements for licensing, health, safety and nutrition issues.

ECE 112 INTRO TO INFANT/ TODDLER LAB TECHNIQUES  3 CREDITS
Includes a classroom seminar and placement in an infant and/or toddler setting. The supervised placement provides the student with the opportunity to observe, to practice appropriate interactions and to develop effective guidance and nurturing techniques with infants and/or toddlers. Addresses ages prenatal through age two. 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
Prepares students to plan and implement a comprehensive and developmentally appropriate art program for young children. Investigates 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: ECE 179.

ECE 179 SEMINAR  1–6 CREDITS
Provides students with an opportunity to examine aspects of early childhood education in detail. COREQUISITE: 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.

ECE 187 COOPERATIVE EDUCATION  1–12 CREDITS
Focuses on 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
Focuses on nutrition, health and safety as a key factor for optimal growth and development of young children. Includes nutrient knowledge, menu planning, food program participation, health practices, management and safety, appropriate activities and communication with families. Addresses ages from prenatal through age eight.

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ECE 220 CURRICULUM DEVELOPMENT: METHODS AND TECHNIQUES  3 CREDITS
Provides an overview of early childhood curriculum development. Includes processes for planning and implementing developmentally appropriate environments, materials and experiences, and quality in early childhood programs.

ECE 225 LANGUAGE AND COGNITION FOR THE YOUNG CHILD  3 CREDITS
Examines theories of cognitive and language development as a framework for conceptualizing the way children acquire thinking skills. Includes observing, planning, facilitating, creative representation, and evaluating strategies within the context of play. Focuses on language, science, math, problem solving and logical thinking. Addresses ages birth through age eight.

ECE 226 CREATIVITY AND THE YOUNG CHILD  3 CREDITS
Provides an emphasis on encouraging and supporting creative self expression and problem solving skills in children. Explores creative learning theories and research. Focuses on developmentally appropriate curriculum strategies in all developmental domains. Addresses ages birth through age eight.

ECE 228 LANGUAGE AND LITERACY  3 CREDITS
Presents strategies for optimum language development, literacy, social and emotional development. Supports children’s language and literacy in home, classroom, and community settings. Provides appropriate teacher/child verbal interactions, classroom environments, and activities. Addresses ages birth through age eight.

ECE 240 ADMINISTRATION OF EARLY CHILDHOOD CARE AND EDUCATION PROGRAMS  3 CREDITS
Examines Colorado’s minimal licensing requirements, as well as optimal standards pertaining to the operation of programs for young children. Focuses on the director’s administrative skills and role as a community advocate for young children. Addresses ages birth through age twelve.

ECE 241 ADMINISTRATION: HUMAN RELATIONS FOR THE EARLY CHILDHOOD PROFESSIONS  3 CREDITS
Focuses on the human relations component of an early childhood professional’s responsibilities. Includes director-staff relationships, staff development, leadership strategies, parent-professional partnerships, and community interaction.

ECE 260 EXCEPTIONAL CHILD  3 CREDITS
Presents an overview of typical and atypical developmental progression. Includes planning techniques, learning strategies, legal requirements and accommodations and adaptations that are necessary in order to create an integrated classroom environment for a child with a wide range of exceptionalities. Focuses on ages birth through age eight. PREREQUISITE: ECE 226 or PSY 238.

ECE 275 SPECIAL TOPICS I  1–6 VARIABLE CREDITS
Explores current topics, issues and activities related to one or more aspects of the early childhood care and education profession.

ECE 278 WORKSHOP  1–6 VARIABLE CREDITS
Provides students with an experiential learning opportunity. COREQUISITE: ECE 279.

ECE 279 SEMINAR  1–6 VARIABLE CREDITS
Provides students with an opportunity to examine aspects of early childhood education in detail.

ECE 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.

ECE 287 COOPERATIVE EDUCATION  1–12 CREDITS
Focuses on 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: GT-SS1  3 CREDITS
Examines the major socio-economic issues of the past century. Covers poverty and growth, education, health care, pollution and discrimination. This course is one of the Statewide Guaranteed Transfer courses. GT-SS1.

ECO 105 INTRODUCTION 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 118 LABOR ECONOMICS  3 CREDITS
Introduces national labor trends and analyzes labor trends using contemporary labor market theory. Explores the economics of collective bargaining, labor law, and the role of government, as well as additional union topics affecting businesses.

ECO 201 PRINCIPLES OF MACROECONOMICS: GT-SS1  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. GT-SS1.

ECO 202 PRINCIPLES OF MICROECONOMICS: GT-SS1  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. GT-SS1.
ECO 245 ENVIRONMENTAL ECONOMICS: GT-SS1  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. GT-SS1

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. PREREQUISITE: Instructor’s permission.

Education

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 adult learning programs and will offer information on additional resources and associations in the field of Adult Education.

EDU 132 PLANNING, ORGANIZING AND DELIVERING ADULT EDUCATION INSTRUCTION  3 CREDITS
Covers the basics of planning an adult education program, organizing instruction within the various content areas and delivering the material in a variety of ways, both in groups and individualized instruction. A wide variety of learning principles and theories will be addressed in ways that show their applicability to the adult learner and his/her education. This course was designed to meet Colorado Literacy Instruction Authorization requirements.

EDU 133 ADULT BASIC EDUCATION (ABE)/ADULT SECONDARY EDUCATION (ASE)  3 CREDITS
Specifically addresses the different levels within an Adult Education program. Each level will be addressed in terms of appropriate assessment tools and instructional techniques. Emphasis will be placed on teaching ways that the adult education Instructor can encourage the development of cognitive skills at each level, as a springboard to the next higher level. This course was designed to meet Colorado Literacy Instruction Authorization requirements.

EDU 134 TEACHING ENGLISH AS A SECOND LANGUAGE TO ADULT LEARNERS  3 CREDITS
Introduces the development and implementation of a program to teach English to adults whose first language is not English. Topics will range widely from assessment and placement to the theories behind language acquisition. Students will also cover a wide variety of methodologies, both group and individualized, that are aimed at teaching the non-English speaker the written and verbal skills, necessary to successfully function in the United States.

EDU 135 FAMILY LITERACY IN ADULT EDUCATION  3 CREDITS
Introduces the students to the philosophy and theory behind family literacy, as well as give practical advice on the development and implementation of a family literacy program. The four-component model of adult education, early childhood education, parent and child together time (PACT), and parenting, will be covered both in theory and practical application.

EDU 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 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
Provides students an opportunity to gain practical experience in applying their educational skills and/or to develop specific skills in an educational 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.

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 INTRODUCTION 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. Special interest will be paid to the topic of diversity in the K-12 school system.

EDU 233 ENGLISH LANGUAGE LEARNING (K–6)  3 CREDITS
Prepares teachers who work with limited English proficient students to learn strategies to develop English language learners’ social and academic English and supports their transition to U.S. culture and schools. This course is appropriate in a variety of program models: mainstream classrooms, self-contained ESL classrooms, and bilingual programs and may be adapted for use with pre-service teachers. PREREQUISITE: A Child Development Course or permission of the Instructor.

Please visit www.arapahoe.edu for the most current, updated catalog information.
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 250 CTE IN COLORADO 1 CREDIT
Explores common elements of American community college philosophy and current practices. It details the philosophy of Career and Technical Education (CTE), the federal Carl D. Perkins legislation and related guidelines for CTE, national and state regulatory agencies, the CCCS program approval process, enrollment management and advising strategies, relevant local and national issues, and quality assurance principles.

EDU 260 ADULT LEARNING AND TEACHING 3 CREDITS
Examines the philosophy of community colleges and the roles and responsibilities of the faculty member within the college community. Introduces basic instructional theories and applications, with particular emphasis on adult learners. Includes syllabus development, learning goals and outcomes, and lesson plans. Emphasizes teaching to a diverse student body, classroom management, assessment and instructional technology.

EDU 261 TEACHING, LEARNING AND TECHNOLOGY 3 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. PREREQUISITE: 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 in 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. PREREQUISITE: EDU 221 or EDU 260.

EDU 263 TEACHING AND LEARNING ONLINE 3 CREDITS
Provides faculty with the knowledge and skills necessary to design, develop, and deliver courses in a distance format. Focuses on assessment and evaluation methods and methods to incorporate interactive, collaborative and expanded learning activities.

EDU 264 FACULTY MENTORING 3 CREDITS
Provides the student with an understanding of and skills in mentoring new teachers/faculty in an academic institution. Explores the six dimensions of effective mentoring, mentoring phases, how to establish and build the mentor/mentee relationship, and constructive feedback techniques. Students designate a potential mentee for practical experience throughout this course. PREREQUISITE: EDU 221 or EDU 260 or Instructor’s permission.

EDU 265 INSTRUCTIONAL DESIGN 3 CREDITS
Introduces the student to a systematic approach to Instructional Design and the design of instruction with multimedia. Incorporates learning and instructional theory into course/training design to ensure the quality of instruction. Covers the process of goal analysis and learning needs coupled with the development of a delivery system to meet those needs. Includes the development of instructional materials and activities and the evaluation of all instruction and learner activities. PREREQUISITE: EDU 221 or EDU 260 or Instructor’s permission.

EDU 266 ADVANCED COLLEGE TEACHING METHODS 1 CREDIT
Explores current adult learning theory, and relates this theory to the practice of teaching. It also covers a variety of factors that influence teaching and learning, including social and individual psychological aspects of adult learning, patterns of participation and motivation, the role of instructional technology, handling challenging classroom behaviors, and assessment and evaluation strategies. The main point raised and discussed throughout the course is that effective teaching requires that instructors utilize a range of teaching and assessment approaches and methods in order to enhance learning.

EDU 275 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
Provides students an opportunity to gain practical experience in applying their occupational skills and/or to develop specific skills in a practical work setting. The Instructor works with the student to select an appropriate work site, establish learning objectives and to coordinate learning activities with the employer or work site supervisor. 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.

Electricity Industrial/Commercial

EIC 230 IND INSTRUMENTATION & CONTROLS I 4 CREDITS
Introduces the basic concepts, principles, equipment and components of instrumentation and control systems found in the process and energy supply industries. The fundamental process variables of pressure, temperature, level, flow and physical properties will be presented. Control loop structure and function will be introduced. The function and operation of a proportional-integral-derivative (PID) controller will be introduced. Students will assemble and operate basic control loops in a laboratory setting.

Electronics

ELT 101 SURVEY OF ELECTRONICS 3 CREDITS
Introduces electronics for consumers, individuals working in related fields, and those exploring Electronics Engineering Technology as a career option. Covers fundamental concepts, circuit diagrams, construction of circuits, test instruments, basic troubleshooting, and the operation of common electronic systems and circuits.

ELT 106 FUNDAMENTALS OF DC/AC 3 CREDITS
Introduces the basic skills needed for many careers in electronics and related fields. Covers the operations and applications of basic DC and AC circuits consisting of resistors, capacitors, inductors, transformers and diodes. Emphasizes the use of common test instruments in troubleshooting. PREREQUISITE: Minimum ACCUPLACER Algebra score of 45.

ELT 109 QUALITY BUSINESS PRACTICES 1 CREDIT
Covers current business practices designed to improve productivity and quality in the workplace. Addresses practices affecting materials and process control, as well as personnel-related issues of performance and work teams.

ELT 112 ADVANCED DC-AC 3 CREDITS
Continues to build on ELT 106 and covers advanced concepts of DC-AC circuits. Includes an expanded treatment of power supplies, dual-supply rectifier circuits, and Zener diode voltage regulators. Emphasizes troubleshooting.

ELT 139 OPTOELECTRONIC DEVICES 2 CREDITS
Focuses on a study of the Specifications and operation of the LED, IRED, photoconductive cell, photodiode, phototransistor, opt coupler and vacuum-fluorescent display. Addresses fiber optics and lasers. Enables students to construct and test circuits with optoelectronic devices. Troubleshooting is emphasized.

ELT 146 DIGITAL DEVICES IN COMPUTERS 3 CREDITS
Students will learn the basic logic concepts of computer circuits. The concepts of digital circuits used in computer circuitry will be covered. This includes dates, flip-flops, counters and encoders-decoders. Students will also learn the binary, hex and octal number systems used in computers and how to convert between these number systems and decimal numbers. Troubleshooting of digital circuits will be included.

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. PREREQUISITE: Instructor’s permission.

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
Focuses on troubleshooting to the component level after a detailed circuit analysis of a digital system that is not microprocessor based is performed. PREREQUISITE: ELT 148.

ELT 160 ELECTROMECHANICAL TROUBLESHOOTING 1 CREDIT
Focuses on troubleshooting electromechanical systems consisting of switches, relays and motors. Emphasizes teamwork.

ELT 161 ELECTROMECHANICAL TROUBLESHOOTING 1 CREDIT
Focuses on troubleshooting electromechanical systems consisting of switches, relays and motors. Emphasizes teamwork.

ELT 162 ELECTRICITY & CONTROLS I 4 CREDITS
Covers fundamental concepts, principles, equipment and components of instrumentation and control systems found in the process and energy supply industries. The fundamental process variables of pressure, temperature, level, flow and physical properties will be presented. Control loop structure and function will be introduced. The function and operation of a proportional-integral-derivative (PID) controller will be introduced. Students will assemble and operate basic control loops in a laboratory setting.

ELT 163 SOLDERING 1 CREDIT
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.

ELT 168 TRANSISTORS AND OP AMPS 3 CREDITS
Introduces the basic operation of bipolar, JFET and MOSFET transistors. Applications in computer circuits will be discussed. Includes the study of the basic operation of operational amplifiers. Troubleshooting of transistor and op amp circuits will be covered.

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.

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.

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<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMS 125</td>
<td>EMT Basic</td>
<td></td>
<td>Enables the student after successful completion of this course to take the National Registry of EMTs Certification Examination to enable the student to become Colorado State certified. Includes written and practical examinations. Student must be at least 18 years of age. COREQUISITE: EMS 170.</td>
</tr>
<tr>
<td>EMS 130</td>
<td>EMT Intravenous Therapy</td>
<td>2</td>
<td>Focuses on cognitive and skill practice as required by Colorado Pre-hospital Care program for EMT Basic level IV approval. Examines criteria, procedures and techniques for IVC therapy, discusses fluid and electrolyte balance and principles and treatment for shock. PREREQUISITES: Current State EMT B Certification, all Hepatitis B vaccinations and current CPR card.</td>
</tr>
<tr>
<td>EMS 134</td>
<td>The Geriatric Patient</td>
<td>1</td>
<td>Focuses on working with the elderly population and is designed for healthcare providers (EMTs, paramedics, nurses). Utilizes various readings, assignments, papers, experiences and meetings with elderly people and patients to discover new ways of viewing the elderly and communicating and working with the geriatric patient. Covers the process of assessment of the elderly patient.</td>
</tr>
<tr>
<td>EMS 136</td>
<td>EMT/Paramedic Safety Issues in the Field</td>
<td>1</td>
<td>Provides EMTs and paramedics with the skills needed to quickly assess the scene for potential hazards to themselves. Introduces topics on scene safety, evaluation of potential problem patients, verbal communication control techniques, physical control techniques for the problem patient, and scene control techniques.</td>
</tr>
<tr>
<td>EMS 150</td>
<td>Pediatric Education for Pre-hospital Professionals</td>
<td>1</td>
<td>Provides the student with core knowledge and skills necessary to provide emergency care to the pediatric patient. PREREQUISITE: EMT-Basic or approval from Program Coordinator.</td>
</tr>
<tr>
<td>EMS 170</td>
<td>EMT Basic Clinical</td>
<td>1</td>
<td>Provides the EMT student with the clinical experience required of initial and some renewal processes. COREQUISITE: EMS 125 or EMS 126.</td>
</tr>
<tr>
<td>EMS 213</td>
<td>Pre-Hospital Trauma Life Support</td>
<td>1</td>
<td>Provides basic and/or advanced trauma life support information and skill practice. PREREQUISITE: EMT Basic or higher.</td>
</tr>
<tr>
<td>EMS 225</td>
<td>Fundamentals of Paramedic Practice</td>
<td>3</td>
<td>Serves as the first course of the National Standard Paramedic Curriculum as approved by the Colorado State Department of Health and Environment. PREREQUISITE: EMT Basic.</td>
</tr>
<tr>
<td>EMS 226</td>
<td>Fundamentals of Paramedic Practice–Lab</td>
<td>2</td>
<td>Serves as the lab experience to coincide with EMS 225 topics. PREREQUISITE: Acceptance in paramedic program-site specific. COREQUISITE: EMS 225.</td>
</tr>
<tr>
<td>EMS 227</td>
<td>Paramedic Special Considerations</td>
<td>3</td>
<td>Focuses on a comprehensive study of Advanced Life Support Practice. PREREQUISITE: Acceptance into paramedic program-site specific.</td>
</tr>
</tbody>
</table>
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. PREREQUISITE: 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 EMERGENCIES 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 275 SPECIAL TOPICS 1–10 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 280, preceptor program for paramedic students. PREREQUISITE: Acceptance to paramedic program site specific.

EMS 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.

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, programs 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 design problems. Topics include: Orthographic, axonometric, and isometric projections, sections and auxiliary views, the geometry of lines, planes, and curved surfaces. This course is an introduction to PC-based, menu driven, 3D Computer Aided Design Systems, Spreadsheets, and Freehand Drawing. PREREQUISITES: MAT 121 or 122 or equivalent.

EGG 105 LOGIC DESIGN 4 CREDITS
Covers the design of combinatorial and sequential switching circuits. Topics 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 and Synthesis. Use of computer-aided design tools facilitating design, simulation and implementation of digital system using field programmable logic devices is an integral part of the entire course. Laboratory experiments included. PREREQUISITES: MAT 121 or 122 or equivalent.

EGG 211 ENGINEERING MECHANICS I-STATICS 3 CREDITS
EGG 221 CIRCUIT ANALYSIS I  4 CREDITS
Covers the basic theorems of circuit analysis. Transient solution of circuits by classical techniques. Steady-state sinusoidal 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.

Engineering Graphics Technology

EGT 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.

EGT 102 TECHNICAL DRAFTING II  3 CREDITS
Introduces students to auxiliary views, pictorials, sections, threads, fasteners, springs, intersections and developments. PREREQUISITES: EGT 101, CAD 102, or Instructor’s permission.

EGT 105 BLUEPRINT READING  3 CREDITS
Focuses on interpretation of shop and working drawings. Examines drawing formats, view selection, hardware, dimensioning and tolerance systems using the ANSI standards and symbols. Addresses interpretation, calculation and placement of tolerances.

EGT 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. PREREQUISITE: EGT 102 or Instructor’s permission.

EGT 267 PIPING DRAWINGS  3 CREDITS
Examines layout and design of industrial piping systems. Focuses on fittings, flanges, valves and piping. Enables the student to interpret their symbols, draw as flow and instrumentation diagrams, and plan elevation assemblies through assigned projects. Introduces associated dimensioning systems.

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. 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 030, ENG 060 and/or ENG 090, REA 030, 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 and HUMANITIES courses (listed separately) provide opportunities for refinement of reading, writing and critical-thinking skills. See also JOURNALISM.

ENG 030 BASIC WRITING SKILLS  2 CREDITS
Focuses on sentence and basic paragraph structure and development. Enables the student to review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations. PREREQUISITE: ACCUPLACER sentence skills score of 25-49.

ENG 060 LANGUAGE FUNDAMENTALS  3 CREDITS
Focuses on paragraph structure and development and introduces the formal essay. Enables the student to review and improve grammar, usage, and punctuation skills while employing critical thinking strategies and the writing process to respond to a wide variety of writing situations. PREREQUISITE: ACCUPLACER sentence skills score 50–69. COREQUISITE: concurrent enrollment in REA 060/090 strongly recommended.

ENG 090 BASIC COMPOSITION  3 CREDITS
Emphasizes critical thinking as students explore writing for specific purposes and audiences. Enables the student to develop skills required for college-level writing while reviewing paragraph structure and focusing on essay development. PREREQUISITE: ENG 060 or ACCUPLACER sentence skills score 70-94. COREQUISITE: concurrent enrollment in REA 090 strongly recommended.

See also JOURNALISM.
ENG 121  ENGLISH
COMPOSITION I: GT CO1  3 CREDITS
Emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative, and persuasive/argumentative writing. This course is one of the Statewide Guaranteed Transfer courses. GT-CO1.

ENG 122  ENGLISH
COMPOSITION II: GT CO2  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. PREREQUISITES: ENG 121. This course is one of the Statewide Guaranteed Transfer courses. GT-CO2.

ENG 131  TECHNICAL WRITING I  3 CREDITS
Develops skills one can apply to a variety of technical documents. Focuses on principles for organizing, writing, and revising clear, readable documents for industry, business, and government. PREREQUISITES: ENG 090 with a grade of “C” or better or ACCUPLACER sentence skills score of 95+ and reading score of 80+.

ENG 215  PLAYWRITING I  3 CREDITS
Enables the student to learn and practice scriptwriting techniques for plays and screenplays, thereby improving creative writing skills. Emphasizes elements of dramatic structure, dialogue, and styles.

ENG 221  CREATIVE WRITING I  3 CREDITS
Teaches techniques for creative writing. Explores imaginative uses of language through creative genres (fiction, poetry, literary nonfiction) with emphasis on the student’s own unique style, subject matter and needs. PREREQUISITE: ENG 121 with a “C” or better or Instructor’s permission.

ENG 222  CREATIVE WRITING II  3 CREDITS
Provides continued development of written expression in such forms as poetry, fiction, and/or nonfiction writing. PREREQUISITE: ENG 221 or Instructor’s permission.

ENG 226  FICTION WRITING  3 CREDITS
Teaches techniques for creating fiction, including the study and appreciation of the language and forms of the short story. PREREQUISITE: 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
Teaches the student the editorial process involved in preparing a literary magazine for publication. Covers the process of selection of material (fiction, nonfiction, poetry, and visual art) to be published, as well as design, layout, and production to prepare a manuscript for publication. Enables the student to produce a literary magazine.

ENG 235  RHETORIC AND PROPAGANDA  3 CREDITS
Examines classical and modern theories of rhetoric, understood as effective, ethical means of persuasion, and the ways in which propaganda departs from these means. Enables the student to apply theories of rhetoric and propaganda to examples of presidential rhetoric, Nazi and Soviet propaganda, and other examples of persuasive writing. Includes the study of visual rhetoric with students constructing criteria for identifying visual propaganda, and studying the complex relationship, historically and in the present, between propaganda, democracy, advertising, and mass media.

ENG 264  PUBLISHING YOUR WRITING  3 CREDITS
Familiarizes students with the publishing industry and helps them get published. Students target audiences, prepare manuscripts for publication and contests, and submit their writing. They write a cover letter, a query letter, a personal biography, and a book proposal. They design and assess a book or a collection, perform a competitive title analysis, and prepare a marketing plan. The course covers submission guidelines, copyright, author’s rights, and trends in the industry.

ENG 275  SPECIAL TOPICS: RHETORIC  1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

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.

ENG 289  CAPSTONE  1–6 VARIABLE CREDITS
Provides a demonstrated culmination of learning within a given program of study.

Environmental Science

ENV 101  ENVIRONMENTAL SCIENCE  4 CREDITS
Provides an introduction to the basic concepts of ecology and the relationship between environmental problems and biological systems. Includes interdisciplinary discussions on biology, chemistry, geology, energy, natural resources, pollution, and environmental protection. Using a holistic approach, students will study how the foundations of natural sciences interconnect with the environment. This course includes laboratory experience.

Please visit www.arapahoe.edu for the most current, updated catalog information.
FIN 113 CREDIT UNION ACCOUNTING PROBLEMS 2 CREDITS
Focuses on terms and procedures basic to accounting and unique to credit unions. Covers 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 131 INTRO TO MORTGAGE BANKING 3 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 and government loans. Enables the student to determine the acceptability of a loan for underwriting and evaluate the market conditions that effect the loan process.

FIN 133 RESIDENTIAL MORTGAGE PROCESSING 1 CREDIT
Introduces the basic guidelines 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.

FIN 137 FHA FOR LOAN OFFICERS 1 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 1 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 principals 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
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 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 1 CREDIT
Provides a practical understanding of financial statement analysis for a business borrower in order to assess repayment capacity. This course may be taught as an accelerated course. PREREQUISITES: ACC 121, 122.

FIN 237 ADVANCED LOAN PROCESSING 1 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 2 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 MARKETING FOR BANKERS 2 CREDITS
Focuses on the motivation of customers to purchase financial services and how to develop a successful marketing plan. Enables the student to recognize consumer motivation and buying behavior. Examines how to integrate public relations, advertising, sales promotion, selling and service distribution functions in the bank’s overall marketing plan. Incorporates situational analysis to develop a master market strategy and monitor and evaluate marketing performance versus objectives.

FIN 255 UNDERSTANDING AND SELLING BANK PRODUCTS 2 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 proCOMnts 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
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

FIN 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.

FIN 287 COOPERATIVE EDUCATION 3 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

FRE 101 CONVERSATIONAL FRENCH I 3 CREDITS
Introduces beginning students to conversational French and focuses on understanding and speaking French. Covers basic vocabulary, grammar, and expressions that are used in daily situations and in travel.

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FRE 102 CONVERSATIONAL FRENCH II 3 CREDITS
Continues the sequence for beginning students who wish to understand and speak French. Covers basic conversational patterns, expressions, and grammar. PREREQUISITE: FRE 101 or Instructor’s permission.

FRE 111 FRENCH LANGUAGE I 5 CREDITS
Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading and writing the French language. Note: The order of the topics and the methodology will vary according to individual texts and Instructors.

FRE 112 FRENCH LANGUAGE II 5 CREDITS
Continues French I in the development of functional proficiency in listening, speaking, reading and writing the French language. Note: The order of the topics and the methodology will vary according to individual texts and Instructors. PREREQUISITE: FRE 111 or Instructor’s permission.

FRE 201 CONVERSATIONAL FRENCH III 3 CREDITS
Continues the sequence for students who wish to continue their study of understanding and speaking French. Covers intermediate level vocabulary, grammar, and expressions. Note: The order of the topics and the methodology will vary according to individual texts and Instructors. PREREQUISITE: FRE 102 or Instructor’s permission.

FRE 202 CONVERSATIONAL FRENCH IV 3 CREDITS
Continues the sequence for students who wish to advance their study of understanding and speaking French. Covers intermediate level conversational patterns, expressions, and grammar. PREREQUISITE: FRE 201 or Instructor’s permission.

FRE 211 FRENCH LANGUAGE III: GT-AH4 3 CREDITS
Continues French I and II in the development of increased functional proficiency in listening, speaking, reading and writing the French language. Note: The order of the topics and the methodology will vary according to individual texts and Instructors. PREREQUISITE: FRE 112 or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses (GT-AH4).

FRE 212 FRENCH LANGUAGE IV: GT-AH4 3 CREDITS
Continues French I, II and III in the development of increased functional proficiency in listening, speaking, reading and writing the French language. Note: The order of the topics and the methodology will vary according to individual texts and Instructors. PREREQUISITE: FRE 211 or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses (GT-AH4).

FRE 235 FRENCH READING AND WRITING 3 CREDITS
This course enables student to build vocabulary and develop reading and writing strategies in French to be able to analyze fictional and non-fictional texts and gain further cultural insight of the Francophone world.

FRE 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest. PREREQUISITE: to be determined by the Instructor.

FRE 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.

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
Builds upon the spatial analysis principles and concepts of GIS 120. Students work with more advanced analytical tools and develop skills in spatial problem solving. PREREQUISITE: GIS 101 or Instructor’s permission.

Geography

GEO 105 WORLD REGIONAL GEOGRAPHY: GT-SS2 3 CREDITS
Facilitates an understanding of spatial relationships between and among the geographic regions of the world. Includes demographic and cultural (political, economic, and historic) forces related to the physical environments of selected regions. Focuses on analysis of interrelationships between developed and developing regions, and the interactions between human societies and natural environments. This course is one of the Statewide Guaranteed Transfer courses. GT-SS2.

GEO 106 HUMAN GEOGRAPHY: GT-SS2 3 CREDITS
Introduces geographic perspectives and methods with applications to the study of human activities. Emphasizes the distribution of humans, adjustments to the natural environment, and land use practices. This course is one of the Statewide Guaranteed Transfer courses. GT-SS2.

GEO 107 PHYSICAL GEOGRAPHY 3 CREDITS
Focuses on the study of the spatial relationship between humans and the natural environment. Covers five main themes: the atmosphere (weather and climate); the hydrosphere (water bodies and rivers); the lithosphere (Earth’s crust and landforms); the biosphere (soil, plant, and animal relationships); and the impact of the human population on these environmental factors. Recommended for students interested in environmental studies, earth science, and geography.

GEO 111 PHYSICAL GEOGRAPHY – LANDFORMS 4 CREDITS
Introduces the principles of landforms as a major aspect of our natural environment. Incorporates an integrated process of lecture, discussion, and laboratory assignments.
GEO 112 PHYSICAL GEOLOGY – WEATHER AND CLIMATE  4 CREDITS
Introduces the principles of meteorology, climatology, world vegetation patterns, and world regional climate classification. Incorporates an integrated process of lecture, discussion, and laboratory assignments and may be transferred to colleges and universities as a science credit.

GEO 165 HUMAN ECOLOGY  3 CREDITS
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
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified Instructor. PREREQUISITE: Instructor’s permission.

Geology

GEY 111 PHYSICAL GEOLOGY: GT-SC1  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. GT-SC1.

GEY 121 HISTORICAL GEOLOGY: GT-SC1  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. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.

GEY 135 ENVIRONMENTAL GEOLOGY  3 CREDITS
Introduces geology and its relationship to mans’ environment. Covers geologic hazards such as floods, landslides, avalanches, earthquakes and volcanoes. Focuses on surface and groundwater resources in terms of exploitation and mans’ responsibility to protect these resources from contamination. The geologic aspects of land use practices, as well as mineral and energy resource exploitation are reviewed and related to legislation regarding environmental law.

GEY 205 THE GEOLOGY OF COLORADO  3 CREDITS
Covers the geologic history of Colorado, with emphasis on formation of mountain ranges, igneous, sedimentary and metamorphic rock types, ore deposits and landforms. Incorporates field experience and/or class room lectures. PREREQUISITE: Instructor’s permission

GEY 275 SPECIAL TOPICS  1–6 VARIABLE 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.

Greek

GRK 105 BEGINNING ANCIENT GREEK I  3 CREDITS
Provides students with the opportunity to begin their study in Ancient Greek. This is the first course in the sequence (101 – 102) designed to help students develop proficiency in listening, speaking, writing and especially reading Ancient Greek (Classical Greek) – the language spoken by the Athenians in the fifth and fourth centuries B.C. Learning Classical Greek will also provide students with the ability to read the Koine Greek of the New Testament.

GRK 106 BEGINNING ANCIENT GREEK II  3 CREDITS
Provides students with the opportunity to continue their study in Ancient Greek. This is the second course in the sequence (101 – 102) designed to help students develop proficiency in listening, speaking, writing and especially reading Ancient Greek (Classical Greek) – the language spoken by the Athenians in the fifth and fourth centuries B.C. Learning Classical Greek will also provide students with the ability to read the Koine Greek of the New Testament.

Health Professions

HPR 106 LAW AND ETHICS FOR HEALTH PROFESSIONS  2 CREDITS
Introduces student to the study and application medico-legal concepts in medical careers. This course seeks to establish a foundation for ethical behavior and decision making in health professions. PREREQUISITES: Determined by individual program guides. COREQUISITES: Determined by individual program guides.

HPR 108 DIETARY NUTRITION  1 CREDIT
Studies the basic principles in clinical practice involved in the assistance of health care. The course will cover factors which influence the nutritional status of individuals, methods of nutritional assessment and support, and diet modification for specific disease states.

HPR 112 PHLEBOTOMY  4 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 theoretic content and clinical opportunities for student to master learned skills. COREQUISITE: HPR 112.

HPR 117 ANATOMICAL KINESIOLOGY 3 CREDITS
Studies the anatomical bases of human movement.

HPR 178 MEDICAL TERMINOLOGY 3 CREDITS
Introduces the student to the structure of medical terms with emphasis on using and combining the most common prefixes, roots and suffixes. Includes terms related to major body systems, oncology, psychiatry, as well as clinical laboratory and diagnostic procedures and imaging. Class structure provides accepted pronunciation of terms and relative use in the healthcare setting.

HPR 205 MICROBIOLOGY OF INFECTIOUS DISEASES 3 CREDITS
Acquaints the student with microbes and their roles in infectious disease. It includes descriptions of bacteria, viruses, fungi, and protozoa, as well as techniques for growing, controlling and treating diseases caused by these organisms. Within the scope of this course are units which discuss how the diseases are diagnosed, and finally, epidemiology and communicability of individual diseases grouped by portals of entry. Prevention and infection control issues as well as current issues surrounding infectious disease may also be discussed.

HPR 206 MICROBIOLOGY OF INFECTIOUS DISEASES-LAB 1 CREDIT
Provides a laboratory experience to acquaint the pre-nursing students with culture technique, staining methods, identification systems and methods on control of infectious disease microorganisms. It will include specimens, use of the light microscope, the technique of isolation streaking, antimicrobial sensitivity testing. This laboratory should be taken concurrently with HPR 205 lecture but HPR 205 lecture may be taken without this lab.

HPR 240 ROLE OF DEATH AND 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 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

HPR 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.

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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 healthcare 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 online sessions that will focus on personal habits including diet that lead to weight gain and exercise session appropriate for the student.

HWE 111 HEALTH AND FITNESS 3 CREDITS
Studies health and fitness in the U.S. today. The course will look at personal health issues, managing stress, nutrition and healthy life styles.

HWE 122 RESPONDING TO EMERGENCIES 2 CREDITS
Provides standard first aid and CPR, with a more in-depth look at sudden illness, specific disease, and emergencies.

HWE 124 FITNESS AND WELLNESS 2 CREDITS
Provides information on fitness and wellness and to serve 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. This includes lifestyle modification, nutrition, weight management, stress management, cardiovascular and cancer risk reduction, exercise and aging, exercise related injury, exercise and the environment, prevention of sexually transmitted diseases, substance abuse (including tobacco, alcohol and other psychoactive drugs), and analysis and interpretation of research publications and Web sites in health and wellness.

HWE 125 INTRO TO HUMAN PERFORMANCE 3 CREDITS
This class is a survey of the discipline of kinesiology, including knowledge derived from performing physical activity, studying about physical activity, and professional practice centered in physical activity. It includes an analysis of the importance of physical activity in daily life, the relationship between physical activity and the discipline of kinesiology, the general effects of physical activity experiences. The course surveys the general knowledge base of the discipline as reflected in the major sub-disciplines and reviews selected concepts in each, showing how they contribute to our understanding of the nature and importance of physical activity. In addition, the course introduces students to the general characteristics of the professions to Specific types of physical activity professions typically pursued by those graduating from a program of kinesiology, and assists them in making some early career decisions.
HWE 136 SKILLS & METHODS OF TEACHING WEIGHT TRAINING  3 CREDITS
This course is intended for HUP majors. It is designed to acquaint the student with the basic skills, methods and techniques necessary to be a competent exercise leader in the area of resistance training. Emphasis will be placed on understanding selection of appropriate teaching progressions that relate to the weight room and fitness facility as well as the science of human motion and muscle/joint structure and function as it relates to fitness.

HWE 230 EXERCISE AND SPORTS PSYCHOLOGY  3 CREDITS
Teaches students how to apply behavioral principles and techniques that may help people increase their motivation to exercise and change health-imparing behaviors. The course is based on research, theory, and practical application in the field of physical activity. Examination of theories and current research related to sport and exercise behavior will be covered. The student will be introduced to the field of kinesiology by providing a broad overview of the major topics in the area.

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
Introduces the student to the physiological responses and adaptations of individuals to exercise as well as the application to sports medicine, rehabilitation and general fitness. The laboratory provides experiences that demonstrate the underlying theoretical constructs that govern physiological responses and adaptations to exercise. PREREQUISITE: BIO 201, “C” or better.

HWE 248 EXERCISE TESTING AND PRESCRIPTION  3 CREDITS
Provides 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.

HWE 255 CERTIFIED PERSONAL TRAINER PREPARATORY COURSE  3 CREDITS
Provides the student with theoretical knowledge and practical skills in preparation for a nationally recognized personal training certification approved by the Colorado Community College System. These Certifications are limited to the following: ACSM, ACE, NSCA, NCSF, AFAA, and AEA. Upon certification, the student will have the ability to develop and implement exercise programs for healthy populations and/or those individuals with medical clearance to exercise.

HWE 288 INTERNAL PRACTICUM  3 CREDITS
Designed for all majors in the Human Performance Program 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/Aquatic Center, Physical Education department and the Employee Wellness Program will be required. Students should receive entry-level proficiency at the completion of the course. Graded as Satisfactory/Unsatisfactory. Prerequisites: HWE 248, HWE 237 and HWE 122 or current CPR-PR/AED and First Aid Certification.

Health Information Technology

HIT 101 HEALTH INFORMATION MANAGEMENT SCIENCE  6 CREDITS
Introduces the student to the health record, from inception to completion. Emphasis is on form, content and regulations impacting the health record in the various health care settings. Other areas to be discussed include the computerized aspects of the health record as well as the functions and responsibilities of the health information department. This course also examines various health care delivery systems and health care practitioners. The dilemmas of health care with attention directed to current events and how these events impact our profession are discussed.

HIT 105 PHYSICIAN CODING REIMBURSEMENT  3 CREDITS
Provides 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, reimbursement guidelines for different payer classes, and fraud abuse issues.

HIT 111 HEALTH DATA MANAGEMENT  3 CREDITS
Focuses on the effective collection, presentation and verification of health care data necessary for the preparation of administrative and clinical reports. The role of data in clinical research, vital statistics and epidemiology will be discussed. Laboratory activities will focus on manual and automated data presentation techniques and on the interpretation and analysis of health care data. The role of the health information professional in transforming data into meaningful information for use in clinical and financial decision making will be stressed. Data reliability and validity will be emphasized.

HIT 112 LEGAL ASPECTS FOR HEALTH RECORDS  2 CREDITS
Introduces the student to the legal system and identifies the role of the HIM professional in this system. Specific Federal and State laws are identified and discussed as they relate to release of medical information. Proposed Federal and State legislation that affects the health care industry is examined and discussed.

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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.

HIT 221 CLINICAL CLASSIFICATION SYSTEMS I 5 CREDITS
Studies nomenclatures and classification systems with emphasis on the most recent revision of ICD-9-CM. Students study the coding conventions and principles for this system. These skills are then applied to the coding of actual medical records from area facilities.

HIT 222 QUALITY MANAGEMENT 3 CREDITS
Introduces the student to the basic concepts of quality management in the health care environment. Requirements by regulatory agencies regarding quality, utilization and risk management are discussed. Data collection, verification, analysis and presentation techniques will be studied. The course emphasizes the ongoing use of objective data and feedback to improve processes, systems and patient outcomes.

HIT 225 HEALTH INFORMATION MANAGEMENT 3 CREDITS
Concentrates on the principles of management as they relate to the administration of the health information management department as part of a health care organization.

HIT 231 CLINICAL CLASSIFICATIONS SYSTEMS II 5 CREDITS
Provides an intermediate study of ICD-9-CM coding conventions and principles. DRG and case mix logic along with regulations regarding their use in conjunction with optimization and compliance issues will be discussed. CPT/ HCPCS in both the hospital-based outpatient and physician office settings will be studied. Students apply these skills in assigning codes for actual medical records from area facilities.

HIT 241 CPT CODING BASIC PRINCIPLES 2 CREDITS
Provides the student with skill sets to apply the current procedural terminology, CPT and HCPCS code set principles and guidelines for application in reporting/communicating information and data about clinical services provided to patients by healthcare providers. Includes understanding what the CPT nomenclature is, how and why it is used, and guidelines for each code category and how it is applied to represent services within each code category.

HIT 251 INTRO TO HEALTHCARE VOCABULARIES AND TERMINOLOGIES 2 CREDITS
This course is designed to provide the student with a concrete understanding and foundation of healthcare terminologies, code sets and classification schemes and associated standards. The student will gain an understanding of inoperability and the role it plays in the application of each system as it pertains to the adoption of the HER. The student will learn the principles of each system; the role of each in reporting clinical information and services in the healthcare delivery enterprise.

Topics include understanding vocabularies, terminology and classification systems, data set standards, data interchange standards, and the Unified Medical Language System (UMLS) database.

HIT 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

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.

HIS 101 HISTORY OF WESTERN CIVILIZATION I: GT-HI1 3 CREDITS
Explores a number of events, peoples, groups, ideas, institutions, and trends that shaped Western Civilization from the prehistoric era to 1650. Reflects the multiple perspectives of gender, class, religion, and ethnic groups. Focuses on developing, practicing, and strengthening the skills historians use while constructing knowledge in this discipline. This course is one of the Statewide Guaranteed Transfer courses. GT-HI1.

HIS 102 HISTORY OF WESTERN CIVILIZATION II: GT-HI1 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. GT-HI1.

HIS 111 WORLD CIVILIZATION I: GT-HI1 3 CREDITS
Enables the student to view history up to 1500 CE in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders, to provide a better appreciation for different cultures. This course is one of the Statewide Guaranteed Transfer courses. GT-HI1.

HIS 112 WORLD CIVILIZATION II: GT-HI1 3 CREDITS
Enables students to view history post 1500 CE in a broad global sense. Focuses on the common denominators among all people. This approach goes beyond political borders to provide a better appreciation for different cultures. This course is one of the Statewide Guaranteed Transfer courses. GT-HI1.
HIS 201 (US) HISTORY I: GT-HI1  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. GT-HI1.

HIS 202 (US) HISTORY II: GT-HI1  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. GT-HI1.

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 20TH CENTURY WORLD HISTORY: GT-HI1  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. GT-HI1.

HIS 260 US FOREIGN RELATIONS HISTORY  3 CREDITS
This course provides an overview of the history of the United States foreign relations from the colonial era to the present and will include the pertinent political, military, economic, diplomatic, social, religious, ideological and cultural topics. At various points, issues such as race, class, gender, immigration, expansion and the environment will be covered. This course also focuses on developing, practicing and strengthening the skills historians use while conducting knowledge in the discipline.

HIS 275 SPECIAL TOPICS  1–6 VARIABLE CREDITS
Focuses on the exploration of current topics, issues and activities related to one or more aspects of history.

HIS 285 INDEPENDENT STUDY  1–6 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.

Humanities

HUM 103 INTRODUCTION TO FILM ART  3 CREDITS
Studies the relationships among film’s stylistic systems, narrative systems and audience reception. Students view, discuss and critically analyze a variety of films which represent key historical and aesthetic periods as well as a variety of genres and themes. The course incorporates the vocabulary of stylistic systems (for instance, cinematography, editing and art direction) and narrative systems (for instance, story structure and character motivation) as both relate to the kinds of meanings a film conveys.

HUM 115 WORLD MYTHOLOGY  3 CREDITS
Introduces students to the mythologies of various cultures through reading, discussion, and writing. The students critically examine important themes of Egyptian, Judeo-Christian, Greek, Roman, Norse, North American and Oriental myths as they are represented in literature and art. Students learn to analyze, synthesize, draw inferences, propose new ideas, support theses, and reach logical conclusions concerning the cultures the mythologies represent.

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 HUMANITIES: EARLY CIV: GT-AH2  3 CREDITS
Introduces students to the history of ideas that have defined cultures through a study of the visual arts, literature, drama, music, and philosophy. It emphasizes connections among the arts, values, and diverse cultures, including European and non-European, from the Ancient world to 1000 C.E. This course is one of the Statewide Guaranteed Transfer courses. GT-AH2.

HUM 122 HUMANITIES: FROM MEDIEVAL TO MODERN: GT-AH2  3 CREDITS
Examines written texts, visual arts and musical compositions to analyze and reflect the evolution and confluence of cultures in Europe, Asia and the Americas from 800 C.E. to 1750 C.E. Any two of the three Survey of Humanities courses equal a sequence. This course is one of the Statewide Guaranteed Transfer courses. GT-AH2.

HUM 123 HUMANITIES: THE MODERN WORLD: GT-AH2  3 CREDITS
Examines the cultures of the 17th through the 20th centuries by focusing on the interrelationships of the arts, ideas, and history. Considers the influences of industrialism, scientific development and non-European peoples. This course is one of the Statewide Guaranteed Transfer courses. GT-AH2.
HUM 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, aesthetically, and culturally to re-enforce 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
Teaches students to read about, write about, and discuss the social history of that very broad term, “rock and roll.” We explore important themes in American (and British) social and cultural history through the study of popular music, as well as to examine how popular and critical tastes are reflections of artistic, cultural, sexual, economic and ideological sensibilities at the time of its production. In order to fully understand what the culture of “rock” is all about, we critically analyze the influence of technology, ideology, class, gender, and race on various genres of music – jazz, country, rhythm and blues, techno, heavy metal, and hip hop. We also examine how rock and roll influenced (and is influenced by) other arts, particularly literature and film. Emphasis is placed on understanding the social and cultural contexts of the various music forms rather than on a rigorous understanding of the musical forms themselves.

HUM 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest. Special topics courses have included The Beat Generation, the Art of Propaganda, and Religion in Popular Culture.

HUM 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

Interior Design

IND 100 INTERIOR DESIGN FUNDAMENTALS 4 CREDITS
Introduces 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 ACCUPLACER 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
Provides guest speakers who share experiences and insights concerning job types, opportunities, and the educational requirements for them, 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 ACCUPLACER 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
Introduces the basic drafting tools and techniques, graphic references and symbols, use of pencil and technical pen. Student learns to draft floor plans and interior elevations. Course also covers basic interior dimensioning and lettering as well as isometric drawing construction for interior components. PREREQUISITES: Attend an Interior Design Orientation; Minimum ACCUPLACER 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
Teaches methods of communicating interior design plans, elements and ideas in 3-D, through perspective drawing construction and quick sketch techniques, and practice rendering and illustration skills. PREREQUISITES: IND 100, 111.

IND 114 SPACE PLANNING 3 CREDITS
Teaches 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 ACCUPLACER 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 ACCUPLACER scores: 80 for Reading Comprehension; 95 for Sentence Skills and 57 for Arithmetic or equivalent (see Interior Design degree program).

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IND 151 RESIDENTIAL DESIGN  4 CREDITS
Teaches 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
Introduces 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, 151; IND 205 recommended; COREQUISITES: IND 151 (strong drafting and space planning skills recommended if 151 taken with 152).

IND 160 ACCESSORIZING  2 CREDITS
Teaches how to assist clients in selection of art, antiques and accessories to aid in defining the character of the space. Styles and the eclectic mix of styles are covered, as well as placement and effective use of items.

IND 175 SPECIAL TOPICS  1–6 VARIABLE CREDITS
These special topics courses are separately designed for specific educational purposes: to offer more indepth 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 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
Introduces the student to interior building systems and assemblies, construction documents and details, and codes applicable to interior architecture. Student will apply this knowledge to various graphic projects and is encouraged to produce projects using the computer and CAD software. PREREQUISITES: IND 100, 111, 112, 114, 118; CAD 105; CIS 118.

IND 201 COMMERCIAL DESIGN II  4 CREDITS
Emphasizes commercial design. Students 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. Students are 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
Introduces the student to interior building systems and assemblies, construction documents and details, and codes applicable to interior architecture. Student will apply this knowledge to various graphic projects and is encouraged to produce projects using the computer and CAD software. PREREQUISITES: IND 100, 111, 112, 114, 118; CAD 105; CIS 118.

IND 225 LIGHTING DESIGN  2 CREDITS
Teaches and applies basic knowledge of interior lighting technology and design. Content includes lamp classifications, color rendition, how lighting sources effect our perception of space, how to compute and control proper lighting levels, and how to communicate design information by means of a reflected ceiling plan and luminaries schedule. Students will be encouraged to produce projects using a variety of computer software applications. PREREQUISITES: IND 100, 111, 112, 114, 118; CIS 118.

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, 201, 205, 211, 225; ENG 131; COREQUISITES: IND 200, 201.

IND 280 INTERNSHIP  1–6 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 289 CAPSTONE: ADVANCED DESIGN CREDITS
Provides a demonstrated culmination of learning within a given program of study. PREREQUISITES: IND 200, 201, 278 (DESIGN RESEARCH); ENG 131.

Insurance

INS 112 INTRO TO RISK MANAGEMENT  1 CREDIT
Offers an introductory course for students new to the insurance industry. Students will explore the basic functions of risk management. The course has six topical lessons which include: losses and loss exposures, the risk management process, risk financing, risk control techniques, risk manager’s role, risk management in an organization, pre and post loss goals, disaster planning, and personnel exposure.

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COURSES DESCRIPTIONS

Please visit covers the investment process using brokers, discount

concepts and information necessary to make a rational
estate

The student will receive the basic general business

opportunities

The curriculum includes information about common

Provides the student with a broad range of investment op-

areas of investment planning, income tax planning, planning

of individuals and organizations; examines alternative risk

tools, leadership, teamwork and organizational structures and

ways to check on progress.

Provides an understanding of the nature, purpose and steps of

management; identifies and analyzes the loss exposures

of individuals and organizations; examines alternative risk

management techniques; and develops rules for choosing risk

management techniques.

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.

Presents a 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 indi-

viduals and families and the type of insurance that is available
to treat those loss exposures.

Presents a one-semester course designed for individu-

als 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.

Students will gain knowledge of the Continuous Improvement

Movement by studying the nature of the insurance business,
customer identification, what customers want, methods for
determining customer needs, key processes and benchmark-
ing, the process improvement model, process improvement

tools, leadership, teamwork and organizational structures and

JPN 211 JAPANESE LANGUAGE I 5 CREDITS
Begins a sequence dealing with the development of functional

proficiency in listening, speaking, reading and writing the

Japanese language. Note: The order of the topics and method-
ology will vary according to individual texts and Instructors.

JPN 212 JAPANESE LANGUAGE III:

JPN 212 JAPANESE LANGUAGE III: GT-AH4 3 CREDITS
Continues Japanese Language I and II in the development of

increased functional proficiency in listening, speaking, reading

and writing the Japanese language. Note: The order of the
topics and the methodology will vary according to individual
texts and Instructors. PREREQUISITE: JPN 211 or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-AH4.

JPN 212 JAPANESE LANGUAGE IV: GT-AH4 3 CREDITS
Continues Japanese Language I, II and III in the development of

increased functional proficiency in listening, Speaking, reading

and writing the Japanese language. Note: The order of the
topics and the methodology will vary according to individual
texts and Instructors. PREREQUISITE: JPN 211 or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-AH4.

Japanese

JPN 111 JAPANESE LANGUAGE I 5 CREDITS
Begins a sequence dealing with the development of functional

proficiency in listening, speaking, reading and writing the

Japanese language. Note: The order of the topics and method-
ology will vary according to individual texts and Instructors.

JPN 112 JAPANESE LANGUAGE II 5 CREDITS
Continues Japanese Language I in the development of func-
tional proficiency in listening, speaking, reading and writing

the Japanese language. Note: The order of the topics and the
methodology will vary according to individual texts and Instruc-
tors. PREREQUISITE: JPN 111 or Instructor’s permission

Students will learn how to price stocks and bonds and

understand the concept of time value of money and transac-
tion costs. The student will also understand derivative secu-
dities and mutual funds and long versus short term transac-
tions. 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, on-line trading or investment bankers. Also,
students will learn how to price stocks and bonds and under-
stand 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. PREREQUISITE: 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

Inspections

INS 200 PROPERTY AND LIABILITY INSURANCE PRINCIPLES, INS 21 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, INS 21 3 CREDITS
Presents a 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 indi-

viduals and families and the type of insurance that is available
to treat those loss exposures.

INS 202 COMMERCIAL INSURANCE, INS 21 3 CREDITS
Presents a one-semester course designed for individu-

als 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
Students will gain knowledge of the Continuous Improvement

Movement by studying the nature of the insurance business,
customer identification, what customers want, methods for
determining customer needs, key processes and benchmark-
ing, the process improvement model, process improvement

tools, leadership, teamwork and organizational structures and

ways to check on progress.

INS 230 ESSENTIALS OF RISK MANAGEMENT, ARM 54 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, CPCU 556 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 AND BONDS 3 CREDITS
Provides the student with a broad range of investment op-

portunities. 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, on-line 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, on-line trading or investment bankers. Also,
students will learn how to price stocks and bonds and under-
stand 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. PREREQUISITE: 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 LANGUAGE I 5 CREDITS
Begins a sequence dealing with the development of functional

proficiency in listening, speaking, reading and writing the

Japanese language. Note: The order of the topics and method-
ology will vary according to individual texts and Instructors.

JPN 112 JAPANESE LANGUAGE II 5 CREDITS
Continues Japanese Language I in the development of func-
tional proficiency in listening, speaking, reading and writing

the Japanese language. Note: The order of the topics and the
methodology will vary according to individual texts and Instruc-
tors. PREREQUISITE: JPN 111 or Instructor’s permission

JPN 211 JAPANESE LANGUAGE III:

JPN 211 JAPANESE LANGUAGE III: GT-AH4 3 CREDITS
Continues Japanese Language I and II in the development of

increased functional proficiency in listening, speaking, reading

and writing the Japanese language. Note: The order of the
topics and the methodology will vary according to individual
texts and Instructors. PREREQUISITE: JPN 112 or instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-AH4.

JPN 212 JAPANESE LANGUAGE IV: GT-AH4 3 CREDITS
Continues Japanese Language I, II and III in the development of

increased functional proficiency in listening, Speaking, reading

and writing the Japanese language. Note: The order of the
topics and the methodology will vary according to individual
texts and Instructors. PREREQUISITE: JPN 211 or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-AH4.
JPN 275 SPECIAL TOPICS  1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of Special topics of interest. PREREQUISITE: to be determined by instructor.

JPN 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.

Journalism

JOU 105 INTRODUCTION TO MASS MEDIA: GT-SS3  3 CREDITS
Places the mass media in an historical and cultural perspective, considering the validity, integrity and influence of the media in a democracy. This course is one of the Statewide Guaranteed Transfer Courses. GT-SS3

JOU 106 FUNDAMENTALS OF REPORTING  3 CREDITS
Introduces news writing, reporting and interviewing with an emphasis on clarity, accuracy, completeness, timeliness and fairness. PREREQUISITE: ENG 121.

JOU 215 PUBLICATIONS PRODUCTION AND DESIGN  3 CREDITS
Provides for students participation in the planning, writing, design and production processes of a non-newspaper publication.

JOU 275 SPECIAL TOPICS  1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

JOU 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.

Latin

LAT 111 LATIN I  5 CREDITS
Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, translating and writing Latin. Note: The order of the topics and methodology will vary according to individual texts and Instructors.

LAT 112 LATIN II  5 CREDITS
Continues Latin I in the development of functional proficiency in listening, speaking, reading, translating and writing Latin. Note: The order of the topics and methodology will vary according to individual texts and Instructors. PREREQUISITE: LAT 111.

LAT 211 LATIN III  3 CREDITS
Continues Latin I and II in the development of increased functional proficiency in listening, speaking, reading, translating and writing Latin. 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. Note: The order of the topics and methodology will vary according to individual texts and Instructors. PREREQUISITE: LAT 112.

LAT 212 LATIN IV  3 CREDITS
Continues Latin I, II and III in the development of increased functional proficiency in listening, speaking, reading, translating and writing Latin. This course provides the students with a continuing opportunity to examine, compare and contrast language systems and understand the culture and values of the classical world. Note: The order of the topics and methodology will vary according to individual texts and Instructors. PREREQUISITE: LAT 211.

LAT 275 SPECIAL TOPICS  1–6 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest. PREREQUISITE: will be determined by the instructor.

Literature

LIT 115 INTRODUCTION TO LITERATURE: GT-AH2  3 CREDITS
Introduces students to fiction, poetry, and drama. Emphasizes active and responsive reading. This course is one of the Statewide Guaranteed Transfer courses. GT-AH2.

LIT 201 MASTERPIECES OF LITERATURE I: GT-AH2  3 CREDITS
Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful readings and understanding of the works and their cultural backgrounds. This course is one of the Statewide Guaranteed Transfer courses. GT-AH2.

LIT 202 MASTERPIECES OF LITERATURE II: GT-AH2  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. LIT 201 is NOT a prerequisite for LIT 202. This course is one of the Statewide Guaranteed Transfer courses. GT-AH2.

LIT 205 ETHNIC LITERATURE: GT-AH2  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. GT-AH2.

LIT 211 SURVEY OF AMERICAN LITERATURE I: GT-AH2  3 CREDITS
Provides an overview of American literature from the Native Americans through the nineteenth century Romantics. It explores ideas, historical and social contexts, themes and literary characteristics of works of various genres by major writers. This course is one of the Statewide Guaranteed Transfer courses. GT-AH2.

LIT 212 SURVEY OF AMERICAN LITERATURE II: GT-AH2  3 CREDITS
Provides an overview of American literature from the mid-nineteenth century to the present. It explores ideas, historical and social contexts, themes and literary characteristics of works in various genres by major writers. LIT 211 is NOT a prerequisite for LIT 212. This course is one of the Statewide Guaranteed Transfer courses. GT-AH2.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>LIT 220</td>
<td>JEWISH–AMERICAN LITERATURE</td>
<td>3</td>
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<tr>
<td></td>
<td>Provides an overview of the major achievements in literature and film by American Jews in late nineteenth through the early 21st century. We proceed chronologically, focusing on the fiction of the immigrant experience.</td>
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<tr>
<td>LIT 221</td>
<td>SURVEY OF BRITISH LITERATURE I: GT-AH2</td>
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<tr>
<td></td>
<td>Provides an overview of British literature from the Anglo-Saxon period through the seventeenth century. It explores ideas, historical, and social contexts, themes and literary characteristics of works in various genres by major writers. This course is one of the Statewide Guaranteed Transfer courses.</td>
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<tr>
<td>LIT 222</td>
<td>SURVEY OF BRITISH LITERATURE II: GT-AH2</td>
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<td></td>
<td>Provides 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 NOT a prerequisite for LIT 222. This course is one of the Statewide Guaranteed Transfer courses.</td>
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<tr>
<td>LIT 225</td>
<td>INTRODUCTION TO SHAKESPEARE: GT-AH2</td>
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<td></td>
<td>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. This course is one of the Statewide Guaranteed Transfer courses.</td>
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<tr>
<td>LIT 232</td>
<td>GOTHIC LITERATURE</td>
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<td></td>
<td>Provides an overview of Gothic and horror 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.</td>
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<tr>
<td>LIT 235</td>
<td>SCIENCE FICTION</td>
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<td></td>
<td>Examines the techniques and issues of science fiction through a close reading of a variety of writers in the genre. We will investigate classic science fiction themes, such as intelligent machines, alien contact, post-apocalyptic futures, urbanization, and the city, as well as look at how science fiction reflects and debates society's actions and fears of the future concerning science and technology.</td>
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<tr>
<td>LIT 245</td>
<td>LITERATURE OF THE AMERICAN WEST</td>
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<td></td>
<td>Examines works in various genres by writers of the American West. It investigates the dominant themes and social and historical backgrounds.</td>
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<tr>
<td>LIT 255</td>
<td>CHILDREN'S LITERATURE</td>
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<td></td>
<td>Evaluates the criteria for selecting appropriate literature for children through exploration of genres, age levels, values taught through literature, and the literary and artistic quality of various texts.</td>
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<tr>
<td>LIT 257</td>
<td>LITERATURE AND FILM</td>
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<td>Examines the relationship between literature and motion pictures, emphasizing the technique and interpretive function of filmmakers.</td>
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<tr>
<td>LIT 259</td>
<td>SURVEY OF AFRICAN AMERICAN LITERATURE</td>
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<td></td>
<td>Examines African American literature from 1750 to the present, exploring ideas, historical and social contexts, themes, and literary characteristics of works in various genres by major writers.</td>
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<tr>
<td>LIT 267</td>
<td>THE BIBLE AS LITERATURE</td>
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<td>Introduces 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.</td>
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<tr>
<td>LIT 269</td>
<td>POPULAR LITERATURE AND CULTURE</td>
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<td></td>
<td>Explores special interests in literature, such as Detective Fiction and Science Fiction.</td>
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<tr>
<td>LIT 275</td>
<td>THE NOVEL APPROACH TO LANGUAGE ARTS</td>
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<td>Offers methods and techniques of developing a language arts unit based on an age/grade appropriate novel. Novels provide a means for exploration that involves critical and creative thinking and enrich the reading experiences of children. This instructional method revolves around student discussion groups that enable children to learn to listen and to share points of view, ideas, and feelings. Student activities are developed utilizing Bloom's Taxonomy of Cognition and are interchangeable with additional titles (novels) or basal reading series.</td>
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<tr>
<td>LIT 285</td>
<td>INDEPENDENT STUDY</td>
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<td>Explores particular authors, topics, themes in-depth, such as Ibsen, Faulkner or Twain, or great fiction of the nineteenth century. PREREQUISITE: Instructor's permission.</td>
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<tr>
<td>MAN 116</td>
<td>PRINCIPLES OF SUPERVISION</td>
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<td></td>
<td>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.</td>
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</table>
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 I 3 CREDITS
Provides the student with a broad overview of the contemporary issues, theories and principles used to effectively manage human resources. Topics include recruiting, hiring, compensation and benefits, training and development, employee relations and legal issues.

MAN 201 HUMAN RESOURCE MANAGEMENT II 3 CREDITS
Offers further discussion of concepts of Human Resources. Topics covered include techniques and procedures in resources planning, appraising performance, selection and staffing, training and development, job enrichment, and wage and salary administration.

MAN 205 EVENT PLANNING 3 CREDITS
Presents the components of meeting planning: organization, personnel, finances, site selection, transportation, program design, promotion, arranging exhibits, and evaluation.

MAN 212 NEGOTIATION AND CONFLICT RESOLUTION 3 CREDITS
Presents proper techniques in negotiation and conflict resolution. Key practices that determine successful negotiation are explored. This course covers principles of conflict resolution including business policies, accepted business practices contracts, labor union contracts, pay raises and starting salaries.

MAN 215 ORGANIZATIONAL BEHAVIOR 3 CREDITS
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
Examines the elements necessary for the successful formation of a new small business. It is also designed to enhance the skills of those already involved in the operation of a small business. The course includes the development of a complete small business plan.

MAN 224 LEADERSHIP 3 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
Presents a survey of the principles of management. Emphasis is on the primary functions of planning, organizing, leading and controlling with a balance between the behavioral and operational approach.

MAN 230 CORPORATE RESPONSIBILITY 3 CREDITS
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, and how this applies to business and management principles.

MAN 240 STRATEGIC MANAGEMENT 3 CREDITS
Presents the development of business policy and the integration of skills learned in prior business study, including strategy formulation, implementation, and evaluation. Focus is on the coordination of marketing, production, finance, accounting, and ethics and social responsibility to achieve competitive advantage.

MAN 241 PROJECT MANAGEMENT IN ORGANIZATIONS 3 CREDITS
Introduces students to the planning, implementation, and control activities of project management, including project and performance evaluation, quality control and work flow analysis. Emphasis will be on the initiating, planning, executing, controlling and closing activities of project management.

MAN 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
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.

Manufacturing Technologies

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.

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). The course will include at least one simulated interview.

MAR 110 INTRODUCTION TO SALES 1 CREDIT
Enables the student to understand and develop a solid foundation of the Fundamentals of Selling. In addition, the course addresses three additional key areas of selling and sales techniques: Selling Against the Competition, Selling Broadband Services and Business Solutions Selling. COREQUISITE: Employment in the broadband industry.
MAR 111 PRINCIPLES OF SALES 3 CREDITS
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
Emphasizes the study of the basic principles and techniques of merchandising, operations, layout, store organization, site location, and customer service with an emphasis on retailing operations.

MAR 126 MERCHANDISING 3 CREDITS
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
Enables students to learn the relationship of self to customers, problem solve and understand the importance of communicating with customers. Specific emphasis is given to managing customer expectations by building customer rapport and creating positive outcomes.

MAR 216 PRINCIPLES OF MARKETING 3 CREDITS
Presents the analysis of theoretical marketing processes and the strategies of product development, pricing, promotion and distribution, and their applications to businesses and the individual consumer.

MAR 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 the 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 258 MARKETING RESEARCH 3 CREDITS
Introduces the principles and practices of marketing research, including creating research design, data collection and interpretation, and communicating the results.

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.

MAR 280 INTERNSHIP 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 business location and with the direct guidance of the instructor.

Mathematics

MAT 030 FUNDAMENTALS OF MATHEMATICS 2 CREDITS
Includes the vocabulary, operations and applications of whole numbers, decimals and basic fractions and mixed numbers. For students with an ACCUPLACER score of 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 ACCUPLACER, 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. PREREQUISITE: MAT 060 or ACCUPLACER, Elementary Algebra score of 45-60.

MAT 099 INTERMEDIATE ALGEBRA (FORMERLY MAT 106) 4 CREDITS
(if you have already completed MAT 106, you DO NOT need to take MAT 099). 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. PREREQUISITE: MAT 090 or ACCUPLACER, Elementary Algebra score of 61-84

MAT 103 MATH FOR CLINICAL CALCULATIONS 3 CREDITS
Provides a review of general mathematics, introductory algebra and an opportunity to learn systems of measurement and methods of solving problems related to drug dosage and intravenous fluid administration. It is designed for students in the health disciplines. Topics may include algebra, graphs, measurement and conversion between various systems of measurement. PREREQUISITE: MAT 090 or ACCUPLACER, EA score of 61-84.
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. PREREQUISITE: MAT 060 or ACCUPLACER score of 45-60.

MAT 109 GEOMETRY 3 CREDITS
Teaches basic geometric principles involving lines, triangles, circles, polygons, and three-dimensional figures. Geometric constructions and measurement in the metric and US systems are covered.

MAT 120 MATHEMATICS FOR LIBERAL ARTS: GT-MA1 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. PREREQUISITE: MAT 099/106 or ACCUPLACER score of 85+, ACT: 19 or SAT 460. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 121 COLLEGE ALGEBRA: GT-MA1 4 CREDITS
Includes a brief review of intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. PREREQUISITE: MAT 099/106 or ACCUPLACER score of 85+ In Elementary Algebra area or ACT: 23. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 122 COLLEGE TRIGONOMETRY: GT-MA1 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 ACT: 24. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 123 FINITE MATHEMATICS: GT-MA1 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. PREREQUISITE: MAT 099/106 or ACCUPLACER 85+, ACT 23. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 125 SURVEY OF CALCULUS: GT-MA1 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. PREREQUISITE: MAT 121 or 123 or ACT 25. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 135 INTRODUCTION TO STATISTICS: GT-MA1 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 099/106 or ACCUPLACER score of 85+, ACT: 21. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 155 INTEGRATED MATH I: GT-MA1 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 099/106 with a grade of "C" or better. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 156 INTEGRATED MATH II: GT-MA1 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 or ACT 19. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 166 PRE-CALCULUS: GT-MA1 5 CREDITS
Reviews college algebra and college trigonometry intended for those planning to take calculus. Topics include algebraic manipulations, properties of algebraic and trigonometric functions and their graphs, trig identities and equations, conic sections, polar coordinates and parametric equations. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 201 CALCULUS I: GT-MA1 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 ACT: 28. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 202 CALCULUS II: GT-MA1 5 CREDITS
Continuation of single variable calculus which will include techniques of integration, polar coordinates, analytic geometry, improper integrals, and infinite series. PREREQUISITE: MAT 201. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

Please visit www.arapahoe.edu for the most current, updated catalog information 137
MAT 203  CALCULUS III: GT-MA1  4 CREDITS
Completes the traditional subject matter of the Calculus. Topics include vectors, vector-valued functions, and multivariable calculus including partial derivatives, multiple integrals, line integrals and application. PREREQUISITE: MAT 202. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 255  LINEAR ALGEBRA: GT-MA1  3 CREDITS
Includes vector spaces, matrices, linear transformations, matrix representation, eigenvalues, and eigenvectors. PREREQUISITE: MAT 202. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 265  DIFFERENTIAL EQUATIONS: GT-MA1  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. PREREQUISITE: MAT 203. This course is one of the Statewide Guaranteed Transfer courses. GT-MA1.

MAT 275  SPECIAL TOPICS  1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

MAT 285  INDEPENDENT STUDY  1–6 VARIABLE CREDITS
Provides an opportunity for the highly-motivated student to engage in intensive study and research on a specified topic under direction of a faculty member. PREREQUISITE: Instructor’s permission.

Medical Laboratory Technology

MLT 100  INTRODUCTION TO MEDICAL LABORATORY TECHNOLOGY  2 CREDITS
Introduces the student to general and basic information on Clinical Laboratory Science. The 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 path physiology of disease, and students are introduced through hands-on experiences to those tests that aid in the diagnosis of disease states. PREREQUISITE: Admission to the Medical Lab Technology program.

MLT 131  INTRODUCTION TO HEMATOLOGY  2 CREDITS
Covers basic manual hematology test and basic instrumentation theory. OSHA safety and an introduction to phlebotomy is also included. MLT 131 is designed as an introduction course to hematology for MLT students. PREREQUISITE or COREQUISITE: BIO 201. COREQUISITE: MLT 132.

MLT 132  HEMATOLOGY II  4 CREDITS
Covers advanced hematology theory and disease correlations. OSHA safety, phlebotomy and instrumentation are continued; differentials, other manual hematology testing and coagulation are also included. MLT 132 is the continued section of Hematology for the Medical Laboratory Technology students. PREREQUISITE or COREQUISITE: BIO 201. COREQUISITE: MLT 131.

MLT 141  IMMUNOLOGY/IMMUNOHEMATOLOGY  4 CREDITS
Covers the basic principles of antigens, antibodies and the immune system. Serological techniques practiced and observed in the clinical laboratory such as: Flocculation, agglutination, precipitation and elisa, complement fixation and hem agglutination are discussed. Also included are basic theories of genetics, blood group systems and antibodies, compatibility testing, antibody screening and identification, transfusion reactions, hemolytic disease of the newborn, component therapy and donor selection. Proficient performance of related laboratory testing is mandatory. PREREQUISITES: BIO 201, MLT 131, 132 or Instructor’s permission; COREQUISITES: BIO 202.

MLT 142  URINALYSIS  2 CREDITS
Introduces kidney function and basic principles of urinalysis, complete urinalysis procedures including physical, chemical and microscopic examination of both normal and abnormal specimens are performed. Basic description and recognition of body fluids (i.e., CSF, Pleural, peritoneal and synovial fluids) are covered. COREQUISITES: BIO 201 or 202.

MLT 180  INTERNSHIP I/  BLOOD BANKING  1 CREDIT
Presents the clinical internship rotation in one or two blood banking facilities or labs. Student attends for 40 hours per week for two weeks. 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 AND URINALYSIS  5 CREDITS
Presents the clinical internship rotation in a hematology laboratory. Student attends for 40 hours per week for five 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
Provides a brief introduction to the field of microbiology to include the morphology, physiology and genetics of microorganisms. This will be followed by the more technical aspects of clinical microbiology. Then, infectious diseases will be discussed to include normal flora, portals of entry and pathogenicity of diverse groups of bacteria. Viruses 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 staining and tests for identification of bacteria will be performed in the student laboratory. PREREQUISITES: BIO 201 or 202 or Instructor’s permission.

Please visit www.arapahoe.edu for the most current, updated catalog information.
MLT 232 PARASITOLOGY/MYCOLOGY 2 CREDITS
Provides an introduction to protozoa, helminthes, and blood tissue parasites: epidemiology of parasites and diseases in man. Special emphasis on microscopic morphology in the detection and correct identification of parasites. An introduction to fungi yeasts and molds to include coetaneous systemic infections and common contaminants and opportunistic fungi. Subcutaneous infections will also be discussed. Laboratory will emphasize microscopic and culture methods to include specimens, staining, media and identification tests. PREREQUI- SITE: BIO 201 or Instructor’s permission.

MLT 241 INTRODUCTION TO CLINICAL CHEMISTRY 2 CREDITS
Covers basic laboratory math, basic instrumentation, safety and quality control are discussed along with basic theory and result evaluation of electrolytes, kidney function and liver function test. MLT 241 is designed as an introduction course to clinical chemistry for MLT students. PREREQUI- SITES: CHE 101 or Instructor’s permission.

MLT 242 CLINICAL CHEMISTRY II 4 CREDITS
Covers advanced Clinical Chemistry theory, organ functions and disease correlations are covered. Student lab manual chemistry testing is performed on the Gilford Spectrophotometer. MLT 242 is the continued section of Clinical Chemistry for the Medical Laboratory Technology students. PREREQUI- SITES: CHE 101, MLT 241 or Instructor’s permission.

MLT 253 SEMINAR/COMPREHENSIVE EXAMS 1 CREDIT
Includes information on current laboratory technology topics and employable skills such as resume writing or interviewing skills. The course grade also includes successful completion of 20 hours of community service and the three MLT Comprehensive Exams.

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/CLINICAL CHEMISTRY 5 CREDITS
Provides a clinical internship rotation in a chemistry laboratory. Student attends for 40 hours per week for five 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 five 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
Teaches the anatomy and physiology, pathophysiology and drug therapy of the immune, musculoskeletal, and digestive systems. A discussion of pediatric implications as they relate to clinical physiology will also be covered. This course is a prerequisite course for MOT 133 and MOT 135. Students may take MOT 133 and MOT 135 in either order after successful completion of MOT 125. PREREQUISITE: HPR 178 with a “C” or better.

MOT 130 INSURANCE BILLING AND 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, symptom, complaint or condition (ICD-9 codes), thus establishing the medical necessity required for third-party reimbursement. PREREQUISITE: HPR 178 and admission to MOT program.

MOT 131 ADVANCED INSURANCE BILLING AND CODING 3 CREDITS
Prepares the student to code correctly, and optimize reimbursements for a full range of medical services by expanding coverage of diagnostic and therapeutic procedures, official coding guidelines, APG’s, APC’s, DRG’s, Medicare fraud and abuse. PREREQUISITE: HPR 178 and MOT 130 and admission to MOT program.

MOT 133 BASIC MEDICAL SCIENCES II 3 CREDITS
Teaches the anatomy and physiology, pathophysiology and drug therapy of the cardiovascular, respiratory, and dermatology systems. PREREQUISITE: MOT 125 with a “C” or better or COREQUISITE: 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. PREREQUISITE: MOT 125 with a “C” or better or COREQUISITE: 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 in an ambulatory setting. Delivers the theory behind each skill presented as well as proper technique for performing each skill. Includes knowledge and/or performance of universal precautions/OSHA regulations, HIPAA, medical asepsis, procedural gowning and gloving, patient draping and positioning, and measurement of vital signs.

Please visit www.arapahoe.edu for the most current, updated catalog information
MOT 138 MEDICAL ASSISTING LABORATORY SKILLS 4 CREDITS
Introduces the student to basic routine laboratory skills and techniques for collection, handling, and examination of laboratory specimens often encountered in the ambulatory care setting. Emphasizes hands-on experience.

MOT 140 MEDICAL ASSISTING CLINICAL SKILLS 4 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.

MOT 181 ADMINISTRATIVE INTERNSHIP 2 CREDITS
Provides supervised placement in contracted facility for guided experience in application of knowledge and skill acquired in the classroom. Positions are non-paid due to CAAHEP requirement. Student must have permission by program coordinator to begin internship. 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 CAAHEP 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 application of knowledge and skill acquired in the classroom. The student assists with a variety of business and clinical procedures. Positions are non-paid due to CAAHEP requirement. Student must have permission by program coordinator to begin internship. PREREQUISITES: All required coursework for the MOT Medical Assistant Certificate.

MOT 184 BILLING SPECIALIST INTERNSHIP 1 CREDIT
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.

MOT 225 MEDICAL PRACTICE MANAGEMENT ISSUES 4 CREDITS
Focuses on bringing acquired knowledge to issues faced specifically by medical practice managers and is the culmination of knowledge the student has learned in the program. Includes management priorities, principles of practice management – financial, clinical, personnel, and service, financial management control, information management systems, marketing, managed care contracting and negotiations, basic business policies of medical office compliance, coding and documentation. PREREQUISITE: Academic Coordinator permission.

**Meteorology**

**MET 150 GENERAL METEOROLOGY: GT-SC1 4 CREDITS**
Provides an introduction to general meteorology and atmospheric sciences. It includes the composition and structure of the atmosphere and characteristics that affect the atmosphere, such as temperature, pressure and moisture. Additionally, the development of weather systems, such as storm systems, hurricanes, weather fronts and cloud development will also be examined. Finally, concepts of climatology will be stressed. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1.

**Mortuary Science**

**MOR 100 INTRODUCTION TO FUNERAL SERVICE 3 CREDITS**
Provides students with an overview of funeral customs and practices which have led 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**
Provides 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, post mortem physical and chemical changes in the dying process and moral and ethical considerations in preparation of human remains. The academic lab portion of this lab includes active participation by the student in five embalming. PREREQUISITES: Program Admission, All General Education courses completed.

**MOR 215 FUNERAL MERCHANDISING 3 CREDITS**
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, and the counselor’s presentation of 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. PREREQUISITES: BUS 216 and Admission to MOR program; COREQUISITE: MOR 220

**MOR 220 MORTUARY LAW AND COMPLIANCE 3 CREDITS**
Introduces the student to sources of law; the legal status of the dead human body; the duty of burial, right to control funeral arrangements and final disposition and liability for expenses; torts involving the dead human body and the funeral director; wills, estates and probate proceedings; cemeteries and issues related thereto; state and federal laws and regulations pertaining to funeral service such as ADA, OSHA, FTC, and EPA; and the legal aspects of being a licensed funeral director/embalmer. This course will also include ethics as related to principles in funeral service. PREREQUISITES: Program admission and BUS 216; COREQUISITE: MOR 215.
MOR 224 THANATO-MICROBIOLOGY/PATHOLOGY 4 CREDITS
Presents the basic principles of microbiology nature and cause of disease, and the pathogenicity associated with specific diseases. It will present a historical overview of microbiology as related to advances in medicine. The specific kinds of microorganisms: virus, rickettsiae, bacteria, fungus and protozoa are described. Metabolism, reproduction growth and control microorganisms, infectious diseases, etiology and transmission are covered. The pathology portion of this course will focus upon the functions of the human body systems and their relationship to diseases. PREREQUISITES: Program admission and BIO 201, or Instructor’s permission for Track II students.

MOR 225 EMBALMING THEORY II AND LAB 4 CREDITS
Provides 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. PREREQUISITE: MOR 210; COREQUISITE: MOR 230.

MOR 230 RESTORATIVE ART 4 CREDITS
Provides 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. COREQUISITE: MOR 225.

MOR 235 FUNERAL DIRECTING AND COUNSELING 3 CREDITS
Includes general information on: notification of death, transfer of remains, conduct of the arrangement conference, prefunded/preplanned funerals, a cross-section of religious funeral practices, fraternal and military funerals, shipping of remains, and the Funeral Service Consumer Arbitration Program (FSCAP). This course also includes the sociology of Funeral Service and studies those social phenomena that affect all elements of funeral service. This includes family structures, social structures, and the factors of change that relate to funerlization. PREREQUISITE: Program admission. COREQUISITES: MOR 225, MOR 230.

MOR 243 THANATO-CHEMISTRY 3 CREDITS
Provides 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. PREREQUISITE: Program admission.

MOR 275 SPECIAL TOPICS 1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

MOR 280 INTERNSHIP 4 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 business location and with the direct guidance of the Instructor. PREREQUISITES: Must have completed all MOR courses.

MOR 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.

Multimedia Graphic Design

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 AND 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 or Instructor’s permission.

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. PREREQUISITE: 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. PREREQUISITE: MGD 101 or Instructor’s permission.

MGD 113 QUARK XPRESS 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. PREREQUISITE: MGD 101 or Instructor’s permission.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>MGD 114</td>
<td>ADOBE INDESIGN</td>
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<td>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. PREREQUISITE: MGD 101 or Instructor’s permission.</td>
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<tr>
<td>MGD 117</td>
<td>INTRODUCTION TO VISUAL COMMUNICATIONS</td>
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<td>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.</td>
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<tr>
<td>MGD 128</td>
<td>MULTIMEDIA HARDWARE</td>
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<td>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.</td>
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<td>MGD 133</td>
<td>GRAPHIC DESIGN I</td>
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<td>Focuses upon the study of design layout and conceptual elements concerning graphic design projects such as posters, advertisements, logos, and brochures.</td>
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<td>MGD 141</td>
<td>WEB DESIGN I</td>
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<td>Introduces Web site planning, design and creation using industry-standards-based Web site development tools. Screen-based color theory, Web aesthetics, use of graphics editors and intuitive interface design are explored. PREREQUISITE: MGD 101 or Instructor’s permission.</td>
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<td>MGD 143</td>
<td>MOTION GRAPHIC DESIGN I: (SOFTWARE)</td>
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<td>Stresses creation of animation and dynamic interactive media for Web and multimedia applications. Students will learn how to animate objects, create symbols, and assemble motion tweens. PREREQUISITES: MGD 111, 141.</td>
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<tr>
<td>MGD 152</td>
<td>DIGITAL ANIMATICS</td>
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<td>Introduces the steps followed by professional animators and game designers for producing media in a digital environment. Students learn the foundational skills of planning, organizing, storyboarding and pre-visualization techniques necessary to create animated stories. Students will also study the history of animation and game design. PREREQUISITES: MGD 102 AND MGD 207 OR ART 131 or Instructor’s permission.</td>
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<tr>
<td>MGD 153</td>
<td>3-D ANIMATION I</td>
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<td>Encompasses all major aspects of creating 3D characters using animation software. Using developed characters, the student will learn how to animate for personality. PREREQUISITE: MGD 102 or Instructor’s permission.</td>
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<tr>
<td>MGD 155</td>
<td>LIGHTWAVE I</td>
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<td>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. PREREQUISITE: MGD 101 or Instructor’s permission.</td>
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<tr>
<td>MGD 163</td>
<td>SOUND DESIGN I</td>
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<td>Explores the use of sound in multimedia production and audio storytelling. Students examine the principles of recording. Classes focus on how sound can enhance interactive productions and improve computer presentations. Students learn how to use the computer as a full audio editing studio. PREREQUISITE: MGD 102 or Instructor’s permission.</td>
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<tr>
<td>MGD 164</td>
<td>DIGITAL VIDEO EDITING I</td>
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<td>Introduces to digital non-linear video editing. Students will capture, compress, edit, and manipulate video images using a personal computer. Assembly techniques including media management, editing tools, titles, and motion control; transitions and filters, and special effects are explored. PREREQUISITE: MGD 102 or Instructor’s permission.</td>
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<tr>
<td>MGD 207</td>
<td>ILLUSTRATION I</td>
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<td>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.</td>
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<td>MGD 208</td>
<td>ILLUSTRATION II</td>
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<td>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.</td>
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<td>MGD 209</td>
<td>ILLUSTRATION III</td>
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<td>Continues Illustration II with added emphasis on conceptual development and proficiency in technique. PREREQUISITE: MGD 208.</td>
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<td>MGD 210</td>
<td>ILLUSTRATION IV</td>
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<td>Covers advanced illustration techniques including manual, computer, and mixed media techniques. PREREQUISITE: MGD 209.</td>
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<td>MGD 211</td>
<td>ADOBE PHOTOSHOP II</td>
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<td>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.</td>
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<td>MGD 212</td>
<td>ADOBE ILLUSTRATOR II</td>
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<td>Enables the student to continue development of electronic drawing skills through practice and use of state of the art illustration software. PREREQUISITE: MGD 112.</td>
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<td>MGD 213</td>
<td>ELECTRONIC PREPRESS</td>
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<td>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.</td>
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<tr>
<td>MGD 214</td>
<td>MACINTOSH TROUBLESHOOTING FOR DESIGNERS</td>
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<td>Addresses terminology, hardware, graphics software applications, peripherals, and troubleshooting needs of designers who use the Macintosh computer as a production tool. PREREQUISITE: MGD 101 or Instructor’s permission.</td>
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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, 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 computer art. PREREQUISITES: MGD 101, 105, 133 or ART 131; COREQUISITES: MGD 103, 112, 113.

MGD 260 GRAPHIC DESIGN PRODUCTION II 3 CREDITS
Continues design and production techniques with further instruction 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. PREREQUISITE: MGD 256; COREQUISITE: 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 design and book formats, advertising campaigns, business reply mail, promotional items, and editorial design. PREREQUISITE: MGD 260.

MGD 264 DIGITAL VIDEO EDITING II 3 CREDITS
Looks at the more complex and advanced techniques of digital video editing. Areas of editing such as masking, filtering, blue/green screening, track mattes, and image mattes will be examined. Students will produce a movie project in this class and discuss practical ways to distribute to various audiences. PREREQUISITES: MGD 111, 164.

MGD 275 SPECIAL TOPICS 1-6 CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest. PREREQUISITES: To be determined by the Instructor.

MGD 280 INTERNSHIP 3 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 business location and with the direct guidance of the Instructor. PREREQUISITES: MGD 112, 113 and 256 with grades of "B" or better 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 qualified 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 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: To be determined by the Instructor. Student must also have a resume 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 3 CREDITS
Designed to help the beginning music student, or those students with a limited background in music theory, study the basic elements of music, including notation, rhythm, scales, key signatures, intervals and chords.

MUS 110 MUSIC THEORY I 3 CREDITS
Presents music fundamentals, diatonic four-part harmony, analysis, ear training, and keyboard harmony. For music majors transferring to a 4-year program. PREREQUISITE: MUS 100 or Instructor’s permission; COREQUISITE: MUS 112.

MUS 111 MUSIC THEORY II 3 CREDITS
Presents chromatic four-part harmony, analysis, ear training, and keyboard harmony. PREREQUISITES: MUS 110 and 112; COREQUISITE: MUS 113.

MUS 112 EAR TRAINING AND SIGHT-SINGING LAB I 1 CREDIT
Presents exercises in sight-singing with melodic and rhythmic dictation. COREQUISITE: MUS 110.

MUS 113 EAR TRAINING AND SIGHT-SINGING LAB II 1 CREDIT
Presents exercises in sight-singing with melodic and rhythmic dictation. COREQUISITE: MUS 111.

MUS 120 MUSIC APPRECIATION: GT-AH1 3 CREDITS
Covers the basic materials of music, musical forms, media, genres and musical periods. Emphasizes the development of tools for intelligent listening and appreciation. This course is one of the Statewide Guaranteed Transfer courses. GT-AH1.

MUS 121 MUSIC HISTORY I: GT-AH1 3 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. GT-AH1.

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MUS 122 MUSIC HISTORY II: GT-AH1 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 early Romantic period to the present. This course is one of the Statewide Guaranteed Transfer courses. GT-AH1.

MUS 123 SURVEY OF WORLD MUSIC: GT-AH1 3 CREDITS
Provides an overview of non-Western music from around the world; provides basic listening skills and the historical/cultural context for a variety of world music styles to enable an understanding and appreciation of non-Western musical expression. This course is one of the Statewide Guaranteed Transfer courses. GT-AH1.

MUS 125 HISTORY OF JAZZ MUSIC 3 CREDITS
Provides an overview of the history of jazz in America, and to provide basic listening skills for the understanding and appreciation of jazz music.

MUS 131 MUSIC CLASS I 2 CREDITS
Applies the fundamentals of music to the voice or specific musical instruments. This course also introduces basic techniques, repertoire, and sight-reading. First year, first term.

MUS 132 MUSIC CLASS II 2 CREDITS
Applies the fundamentals of music to the voice or specific musical instrument or area. The course also introduces basic techniques, 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 instrument or area. The course also introduces basic techniques, repertoire and sight-reading. First year, third term.

MUS 141 PRIVATE INSTRUCTION (SPECIFY) 1-2 CREDITS
One credit primarily for non-music majors. Two credits for music majors planning to transfer to 4-year school. Offers private instruction consisting of a thirty or sixty minute lesson per week. Participation in a student performance is required at least once each term for 2 credits. Regular attendance and participation is required. First year, first term.

MUS 142 PRIVATE INSTRUCTION (SPECIFY) 1-2 CREDITS
One credit primarily for non-music majors. Two credits for music majors planning to transfer to 4-year school. Offers private instruction consisting of a thirty or sixty minute lesson per week. Participation in a student performance is required at least once each term for 2 credits. Regular attendance at and participation is required. First year, second term. PREREQUISITE: MUS 141 or Instructor’s permission. An additional fee is required.

MUS 151 ENSEMBLE I 1 CREDIT
First year, first term. Rehearses and performs various types of musical literature. PREREQUISITE: Ability on an Instrument or voice or Instructor’s permission.

MUS 152 ENSEMBLE II 1 CREDIT
Rehearses and performs various types of musical literature. First year, second term. PREREQUISITE: Ability on an Instrument or voice or Instructor’s permission.

MUS 161 MUSIC TECHNOLOGY I 3 CREDITS
Considers in-depth music engraving applications through course projects designed to demonstrate engraving skills in a variety of score styles, arranging, part extraction, arranging, and scanning techniques. Project-oriented course covers current music notation/engraving software.

MUS 167 MUSIC BUSINESS I 3 CREDITS
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 (SPECIFY) 2 CREDITS
Offers private instruction consisting of a thirty or sixty minute lesson per week. Regular attendance and participation in student performances is required for two credits. Second year, first term. PREREQUISITE: MUS 142 or Instructor’s permission. An additional fee is required.

MUS 242 PRIVATE INSTRUCTION (SPECIFY) 2 CREDITS
Offers private instruction consisting of a thirty or sixty minute lesson per week. Regular attendance and participation in student performances is required for two credits. Second year, second term. PREREQUISITE: MUS 241 or Instructor’s permission. An additional fee is required.

MUS 243 PRIVATE INSTRUCTION (SPECIFY) 2 CREDITS
Offers private instruction consisting of a sixty minute lesson per week. Regular attendance and participation in student performances is required for two credits. Second year, third term. PREREQUISITE: MUS 242 or Instructor’s permission. An additional fee is required.

MUS 244 PRIVATE INSTRUCTION (SPECIFY) 2 CREDITS
Offers private instruction consisting of a sixty minute lesson per week. Regular attendance at and participation in student performances is required for two credits. Second year, fourth term. PREREQUISITE: MUS 243 or 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: Ability on an Instrument or voice or instructor’s permission.

MUS 252 ENSEMBLE II 1 CREDIT
Rehearses and performs various types of musical literature. Second year, second term. PREREQUISITE: Ability on an Instrument or voice or instructor’s permission.
MUS 261  AUDIO PRODUCTION I  3 CREDITS
Designed to give music students, as well as those with a strong interest in music and computer technology, a well-structured and basic knowledge of the various aspects of recording and production with music in a live and studio setting. This includes a working knowledge of microphones, audio mixing boards-analog and digital, recorders, analog and digital, mixing, sound, equalization and the fundamentals of acoustics in studio design.

MUS 275  SPECIAL TOPICS  1–6 VARIABLE CREDITS
Covers specific topics in music. This course is offered as needed for credit appropriate to the topic and each offering includes a description of the topic(s).

MUS 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.

Nurse Aide

NUA 101  NURSE AIDE HEALTH CARE SKILLS  4 CREDITS
Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication skills, restorative services, personal care skills, safety and emergency care issues are covered. Includes knowledge and/or principles of asepsis, OSHA and HIPAA regulations. Ethical behaviors, cultural sensitivity and principles of mental health will be addressed, as well as patient/resident rights.

NUA 170  NURSE AIDE CLINICAL EXPERIENCE  1 CREDIT
Applies knowledge and skill gained in NUA 101 to patient care. PREREQUISITES: Current CPR card (Basic Life Support for Health Care Provider through the American Heart Association. Negative TB test or chest X-ray, documentation of 2 MMRs, chickenpox, at least 2 of the three Hepatitis B vaccine, and a clear background check through ACC. COREQUISITE: NUA 101.

NUA 171  ADVANCED NURSE AIDE CLINICAL  1 CREDIT
Prepares the student to move toward more independent functioning within the nurse aide scope of practice, in applying knowledge and skills gained in NUA 101 and NUA 170. The student will learn skills that enhance communication, cultural competency, end of life care, critical thinking and organizational skills. COREQUISITE: NUA 101.

Nursing

NUR 106  MED-SURG NURSING CONCEPTS  9 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. T: 3.5 cr./52.5 contact hrs; L: .5 cr./15 contact hrs; C: 5 cr./150 contact hrs. PREREQUISITES: BIO 201, 202, 204, ENG 121, PSY 235, HPR 108, MAT 103, NUR 109, 112 COREQUISITES: NUR 150, BIO 216.

NUR 109  FUNDAMENTALS OF NURSING  8 CREDITS
Introduces theories and skills basic to the role of the nurse as provider of care, manager of care and member of the nursing profession. Emphasis is placed on introduction to critical thinking and the nursing process. Students will demonstrate a beginning level of competence in providing therapeutic nursing care for clients with common health alterations across the health continuum. T: 2 cr./30 contact hrs, L: 3 cr./90 contact hrs, C: 3 cr./90 contact hours. PREREQUISITES: BIO 201, 202, 204, ENG 121, PSY 235, and admission into the program. COREQUISITES: NUR 112, HPR 108, MAT 103.

NUR 112  BASIC CONCEPTS OF PHARMACOLOGY  2 CREDITS
Utilizes nursing process to introduce the basic concepts of pharmacology related to the actions, therapeutic and adverse effects, interactions of drugs, drug classification, and the basic pharmacology of commonly used medications. Emphasis is placed on therapeutic interventions and client education. Learners will apply knowledge gained in selected clinical settings situations in caring for a diversity of clients across the lifespan health illness continuum. T: 2 cr./30 contact hours. PREREQUISITES: BIO 201, 202, 204, ENG 121, PSY 235, and admission into the program. COREQUISITES: NUR 109, HPR 108, MAT 103.

NUR 150  OBSTETRIC AND PEDIATRIC NURSING  7 CREDITS
Provides a family centered approach to professional nursing practice of the childbearing family and children across the health continuum. Emphasis is placed on the care of the parental client and children from birth through adolescence. The impact of psychosocial and cultural values and practices are explored. Legal and ethical accountability are integrated throughout the course. T: 3 cr/45 contact hrs; L: 1 cr/30 contact hrs; C 3 cr/90 contact hrs. PREREQUISITES: BIO 201, 202, 204, ENG 121, PSY 235, HPR 108, MAT 103, NUR 109, 112. COREQUISITES: NUR 106, BIO 216.

NUR 169  TRANSITION INTO PRACTICAL NURSING  5 CREDITS
Provides the student with a transition into the practical nurse role. Emphasis is placed on professionalism in nursing, communication, entry into practice, provider and manager of care and nursing management and leadership. The student assumes the role of the practical nurse as they manage patient care. T: 2 cr/30 contact hrs; C: 3 cr/90 contact hrs. PREREQUISITES: BIO 201, 202, 204, ENG 121, PSY 235, HPR 108, MAT 103. COREQUISITES: NUR 106, 150, BIO 216.
NUR 189 TRANSITION FROM LPN TO ADN 4 CREDITS
Focuses on assisting the LPN to transition into a new role as an Associate Degree Nursing Student. Emphasis will be placed on roles and responsibilities of the ADN, nursing process, critical thinking, legal and ethical issues and nursing practice issues related to specialized skills and the care of special populations. The clinical focus will be care of the pediatric and obstetric client.

NUR 206 ADV CONCEPTS OF M-S NURSING I 8 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. T: 3 cr/45 contact hrs; L: 5 cr/15 contact hrs; C: 4.5 cr/135 contact hrs. PREREQUISITES: BIO 201, 202, 204, 216, ENG 121, PSY 235, HPR 108, MAT 103, NUR 106, 109, 112, 150. COREQUISITES: NUR 211, NUR 212.

NUR 211 NURSING PSYCH CLIENTS 4 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. T: 1 cr/15 contact hrs; L: 1 cr/30 contact hrs; C: 2 cr/60 contact hrs. PREREQUISITES: NUR 106, 111, 117, 118, 171 BIO 201, 202, 204, 216, ENG 121, PSY 235, HPR 108, MAT 103, NUR 106, 109, 112, 150 or Instructor’s permission. COREQUISITES: NUR 206, 212.

NUR 212 PHARMACOLOGY II 2 CREDITS
Builds upon the concepts introduced in NUR 112 Pharmacology I regarding the safe administration of medications to clients across the health continuum. Utilizing the nursing process the student demonstrates understanding of the role of the nurse as provider of care, manager of care, and member of the profession. Emphasis is placed upon the therapeutic use of medications in the nursing care of individuals with complex health needs. The student is introduced to the calculation of complex intravenous drip rates. PREREQUISITES: BIO 201, 202, 204, 216, ENG 121, PSY 235, HPR 108, MAT 103, NUR 106, 109, 112, 150. COREQUISITES: NUR 206, 211.

NUR 216 ADV CONCEPTS M-S NRSG II 6 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. T: 2 cr/30 contact hrs; C: 4 cr/120 contact hrs. PREREQUISITES: BIO 201, 202, 204, 216, ENG 121, PSY 235, HPR 108, MAT 103, NUR 106, 109, 112, 150, 206, 211, 212. COREQUISITES: NUR 230, GTE 3-credit hour humanities or social behavioral science.

NUR 217 LEADERSHIP FOR PROFESSIONAL NRSG 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 230 LEADERSHIP MGMT TRENDS 5 CREDITS
Introduces students to current trends in leadership and management concepts affecting the healthcare continuum and the practice of nursing. The student assumes the role of provider, manager of care and member of the discipline at the entry level into professional nursing. There is a practicum for application which may occur across the healthcare continuum, as the student manages groups of clients and health care personnel. The course will facilitate transition from student to the role of the graduate nurse. T: 1.5 cr/22.5 contact hrs; C: 3.5 cr/105 contact hrs. PREREQUISITES: BIO 201, 202, 204, 216, ENG 121, PSY 235, HPR 108, MAT 103, NUR 106, 109, 112, 150, 206, 211, 212. NUR 216, GTE 3-credit hour humanities or social behavioral science.

Paralegal

PAR 110 LEGAL ANALYSIS 3 CREDITS
A basic course in legal authority and analysis.

PAR 114 COMPUTERS AND THE LAW 3 CREDITS
Provides students with an opportunity to develop computer skills needed in the 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 workings of the legal system, and ethical questions. Legal terminology and an overview of the substantive areas of law will be discussed.

PAR 116 TORTS 3 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
Emphasizes domestic law, common property, dissolutions, adoptions, legal separation, and other family law issues.

PAR 118 CONTRACTS 3 CREDITS
Examines the basic principles of contract law.

PAR 125 PROPERTY LAW 3 CREDITS
Focuses on real estate law, ownership, sale, leasing, financing and government regulation of land.

PAR 126 ADMINISTRATIVE LAW 3 CREDITS
Introduces administrative and regulatory agencies, their jurisdiction, rule-making and decision-making processes.

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
Introduces the student to State and Federal Rules of Evidence and application to the trial process. PREREQUISITE: 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
Focuses on the study of the major types of business organizations. PREREQUISITES: PAR 115 and 118 or Instructor’s permission.

PAR 208  PROBATE AND ESTATES  3 CREDITS
Provides an understanding of the creation and administration of an estate, including wills and trusts and the probate process. PREREQUISITE: PAR 115 or Instructor’s permission.

PAR 211  LEGAL RESEARCH  3 CREDITS
Introduces the student to basic legal research tools, including statutes, digests, case law, citators, encyclopedias, dictionaries and online data bases. PREREQUISITE: PAR 110, PAR 115, PAR 116, and PAR 118 or Instructor’s permission.

PAR 215  ALTERNATIVE DISPUTE RESOLUTION  3 CREDITS
Introduces the student 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. PREREQUISITE: PAR 115 or Instructor’s permission.

PAR 217  ENVIRONMENTAL LAW  3 CREDITS
Covers state and federal laws concerning the environment, including chemical safety laws, workplace safety, and hazardous waste. PREREQUISITE: PAR 115 or Instructor’s permission.

PAR 218  BANKRUPTCY LAW  3 CREDITS
Focuses on the federal and state laws and procedures involving bankruptcy. PREREQUISITE: PAR 115 or Instructor’s permission.

PAR 228  INTELLECTUAL PROPERTY  3 CREDITS
Covers the Federal and State laws regarding intellectual property. PREREQUISITES: PAR 115 and 118 or Instructor’s permission.

PAR 275  SPECIAL TOPICS  1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

PAR 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.

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. PREREQUISITE: PAR 115 or Instructor’s permission

PAR 289  CAPSTONE  3 CREDITS
A capstone course for paralegal students. The course should be taken the student’s final semester. PREREQUISITES: PAR 110, PAR 114, PAR 115, PAR 116, PAR 118 and PAR 201 or Instructor’s permission.

Pharmacy Technician

PHT 111  ORIENTATION TO PHARMACY  3 CREDITS
Orients students to the work of pharmacy technicians and the context in which a technician’s work is performed. Students learn the concept of pharmaceutical care and the technician’s general role in its delivery. The development of new drug products is discussed as well as a variety of issues that touch on attitudes, value and beliefs of success for pharmacy technicians. Students gain an appreciation for the value of obtaining technician certification, and the benefits of technicians’ active involvement in local, state, and national pharmacy organizations.

PHT 112  PHARMACY LAW  2 CREDITS
Introduces the pharmacy technician student to the profound influence that drug laws, standards, and regulations have on practice. Students learn to abide by the laws, regulations and standards that govern the preparation and dispensing of drugs.

PHT 113  PHARMACY CALCULATIONS AND TERMINOLOGY  1 CREDIT
Provides the pharmacy technician student with a math preview necessary for pharmaceutical calculations and reviews necessary pharmaceutical terminology.

PHT 115  PHARMACOLOGY OF THE GI, RENAL, REPRODUCTIVE, IMMUNE, DERMATOLOGIC SYSTEMS  3 CREDITS
Provides the basic concepts of normal body function as well as the diseases which impact the various body systems and the drugs used to treat such diseases. Emphasizes disease state management and drug therapy.

PHT 116  INSTITUTIONAL PHARMACY  3 CREDITS
Provides a basic understanding of general and specific tasks as well as the responsibilities involved in the practice of pharmacy in an institutional pharmacy setting. Emphasizes in-patient hospital pharmacy practice and other related practice settings (such as Homecare and Nursing Home or Long-Term Care). A laboratory experiential component provides a “hands-on” experience in the preparation of intravenous admixtures, aseptic technique, unit-dose distribution, dispensing for greater than 24 hours.

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PHT 117 COMMUNICATION FOR PHARMACY TECHNICIANS 1 CREDIT
Provides the pharmacy technician student with an analysis of interpersonal communications (including principles, practices, and procedures) as well as an in-depth discussion of the practical application of communication to pharmacy practice. The analysis of interpersonal communications component includes such topics as communication perceptions and barriers, listening, responding, assertiveness and non-verbal communication. The practical application component includes such techniques as role-playing, group discussion and interviewing.

PHT 118 PHARMACOLOGY OF THE NERVOUS, ENDOCRINE, MUSCULOSKELETAL SYSTEMS 3 CREDITS
Serves as the second part of the two-part presentation of the basic concepts of normal body function. Reviews the disease states which impact the various body systems and the drugs used to treat such diseases. Emphasizes disease state management and drug therapy.

PHT 119 COMMUNITY PHARMACY 3 CREDITS
Provides a basic understanding of both general and specific tasks and responsibilities involved in the practice of pharmacy in a community setting. Emphasizes chain and independent community pharmacy practices and other related practice settings (such as consultant pharmacy, mail order pharmacy and nuclear pharmacy). Enables the student to obtain hands on experience in the important technical duties of dispensing and compounding. Utilizes a lecture/informal discussion format combined with a series of practice skills laboratory sessions.

PHT 170 PHARMACY CLINICAL: HOSPITAL 4 CREDITS
Provides students with hands-on experience in an inpatient hospital pharmacy setting within the State of Colorado. Students must complete all didactic coursework 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 completion 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 coursework theory/lab courses.

PHT 171 PHARMACY CLINICAL: COMMUNITY 4 CREDITS
Provides students with hands-on experience in a community pharmacy setting within the State of Colorado. Students must complete all didactic coursework 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 completion 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 coursework theory/lab courses.

PHT 275 SPECIAL TOPICS 1-6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

PHT 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.

Philosophy

PHI 111 INTRODUCTION TO PHILOSOPHY: GT-AH3 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. GT-AH3.

PHI 112 ETHICS: GT-AH3 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. GT-AH3.

PHI 113 LOGIC: GT-AH3 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. GT-AH3.
**PHI 114** COMPARATIVE RELIGIONS: GT-AH3 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. This course is one of the Statewide Guaranteed Transfer courses. GT-AH3.

**PHI 115** WORLD RELIGIONS – WEST 3 CREDITS
Introduces the student to the common and different concepts predominant in the major world religions. Includes sociological, political, psychological, and philosophical aspects of a variety of belief systems. Focuses on the concept of religion as a cultural system, and a way that people make sense of a complex world. Particular emphasis is placed on how myths, legends, and folk tales reveal religious concerns.

**PHI 116** WORLD RELIGIONS – EAST 3 CREDITS
Emphasizes the diversity and richness of Eastern Religions (Hinduism, Buddhism, Zen, Taoism, Jainism, Confucianism, and Russian Christianity) within a cross-cultural context. Concepts such as fate, reincarnation, enlightenment and morality are analyzed.

**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: GT-AH3 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, argument concerning God’s existence, the Problem of Evil, faith and reason, religion and human destiny, and the connection between religion and ethics. This course is one of the Statewide Guaranteed Transfer courses. GT-AH3.

**PHI 250** EASTERN WISDOM 3 CREDITS
Covers fundamental theories of Indian, Chinese, Japanese, and Muslim metaphysics, epistemology, ethics, and aesthetics, focusing on the development of Hinduism, Buddhism, Confucianism, Taoism, Shintoism, as well as Islam’s development in the East.

**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.

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**Physical Education**

**PED 100** GOLF 1 CREDIT
Introduces a basic course in golf designed for those who have had little or no formal instruction or for those with some experience who are interested in improving some aspect of their game. Includes driving range, putting green, and on-course play.

**PED 106** TENNIS 1 CREDIT
Introduces tennis and focuses on improving the skill level of the student. Emphasizes the elements of tennis including the rules of the game, ground strokes, serving, the various shots, and singles and doubles play and strategies.

**PED 108** BEGINNING SWIMMING 1 CREDIT
Teaches 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
Builds on PED 108 and enables the student to coordinate and refine the major swimming strokes. Examines the butterfly stroke, open turns and surface dives. Students develop endurance swimming using the primary swimming strokes.

**PED 110** FITNESS CENTER ACTIVITY I 1 CREDIT
Focuses on improving total fitness via an aerobic circuit training program. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Covers the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. Weight machines, stationary bicycles, and computerized cardiovascular equipment are incorporated to elicit improvements in fitness.

**PED 111** FITNESS CENTER ACTIVITY II 1 CREDIT
Serves as an advanced course for individuals interested in reaching a higher level of total fitness via an aerobic circuit training program. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. Weight machines, stationary bicycles, and computerized cardiovascular equipment are used to elicit improvements in fitness. PREREQUISITE: PED 110.

**PED 113** FITNESS CONCEPTS 1 CREDIT
Focuses on providing information and guidelines for moving toward a more healthy lifestyle. Includes online instruction, an individual fitness evaluation, and development of an exercise program utilizing the equipment and exercise options appropriate for the student.

**PED 115** BODY SCULPTING AND TONING 1 CREDIT
Introduces exercise techniques to improve overall physical fitness. Emphasizes the interaction between cardiovascular conditioning, muscular strength and endurance, flexibility and program design integrated into an aerobic format. Focuses on blending together different combinations and sequences of exercises while conditioning the entire body. Students exercise using various types of resistance equipment.
PED 116  WEIGHT TRAINING  1 CREDIT
Offers basic instruction and practice in weight training. Students utilize weight training equipment in accordance to their abilities and goals. Emphasizes weight training equipment orientation, correct lifting techniques, and basic program design for men and women.

PED 118  INDOOR STATIONARY GROUP CYCLING  1 CREDIT
Focuses on improving cardiovascular fitness, burning calories and enhancing 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. This course may utilize the competitive strokes, starts, and turns, and provide the ‘whys’ as well as the ‘hows’ of swim fitness so students can plan training programs to meet their changing needs.

PED 126  WATER AEROBICS  1 CREDIT
Offers water exercise to develop physical fitness. Includes 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
Provides basic instruction in scuba diving. Focuses on 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
Serves as a basic snowboarding course designed for those who have had little or no prior snowboarding experience. Incorporates a combination of on the snow classes at an established ski area and classroom instruction at the College. For purposes of instruction, students are assigned to small groups based on their present snowboarding ability. Snow instruction is taught by certified ski instructors.

PED 134  ADVANCED SNOWBOARDING  1 CREDIT
Introduces advanced snowboarding designed for those with prior snowboarding experience and can link skidded turns with good speed and control on green and blue terrain. Covers a combination of on the snow classes at an established ski area and classroom instruction at the College. Students are assigned to small groups based on their present snowboarding ability. Snow instruction is taught by certified ski instructors. PREREQUISITE: PED 133.

PED 135  INTERMEDIATE TENNIS  1 CREDIT
Introduces advanced instruction and practice for students who already have playing experience and skill in the basic strokes. Emphasizes 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 considerations, equipment orientation, correct lifting techniques, program design, and nutrition. PREREQUISITE: PED 116.

PED 141  BEGINNING ALPINE SKIING  1 CREDIT
Presents a basic Alpine skiing course designed for those who have had little or no prior downhill skiing 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 skiing ability. All on snow instruction will be by certified ski instructors employed by the ski area.

PED 142  ADVANCED ALPINE SKIING  1 CREDIT
Presents 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 demonstrated skiing ability. All on snow instruction will be by certified ski instructors employed by the ski area.

PED 143  TAI CHI I  1 CREDIT
Introduces Tai Chi as an expression of understanding of self-control, exercise and self-defense. The primary emphasis is to gain an understanding of the history (origins and changes) of Tai Chi, the movements and their names, application of movements and terminology.

PED 144  TAI CHI II  1 CREDIT
Emphasizes 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 are integral parts of the Tai-Chi training. In addition psychosocial skills such as meditation, relaxation and self efficacy are covered.

PED 145  PILATES MATWORK I  1 CREDIT
Focuses on Pilates mat work to increase core strength, overall muscles tone and flexibility with focused and precise floor work techniques. A physical education class built upon the philosophies and exercises of Josef Pilates.

PED 146  MARTIAL ARTS  1 CREDIT
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
Offers a guided instruction in yoga. Students practice yoga according to their individual fitness levels and abilities. Emphasizes enhancing general health and well-being through the performance of yoga strength, flexibility, balance and relaxation techniques and exercises.
Continues to build on the concepts of basic yoga. Increases awareness of yoga including physical and mental benefits. PREREQUISITE: Yoga I Instructor’s permission

PED 149 ADVANCED KARATE 1 CREDIT
Presents 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
Covers skills 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. All instruction will be by certified golf instructors. PREREQUISITE: PED 100.

PED 210 FITNESS CENTER ACTIVITY III 1 CREDIT
Serves as an advanced exercise course designed for individuals interested in attaining a high level of total fitness. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength and endurance, cardiovascular fitness, and body composition. The primary mode of training is Aerobic Circuit Training. The circuit training is supplemented with additional work on specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, versa climbers, and running track available in the Fitness Center. PREREQUISITES: PED 110, 111.

PED 211 FITNESS CENTER ACTIVITY IV 1 CREDIT
Focuses on advanced instruction designed for individuals interested in attaining a high level of total fitness. Includes an individual fitness evaluation, computerized analysis of results, and a prescribed exercise program. Focuses on the basic components of fitness including flexibility, muscular strength, muscular endurance, cardiovascular fitness, and body composition. The primary mode of training is Aerobic Circuit Training. The circuit training is supplemented with additional work on the specialized weight machines, dumbbells, treadmills, rowers, stair climbers, cross trainers, versa climbers, and running track found in the Fitness Center. PREREQUISITES: PED 110, 111 and 210.

PED 148 YOGA II 1 CREDIT
Physical Education And Recreation

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.

PER 151 LIFEGUARD TRAINING 2 CREDITS
Provides the necessary minimum knowledge and skills training for a person to qualify as a non-surf lifeguard. Prepares lifeguard candidates to recognize emergencies, respond quickly and effectively to emergencies and prevent drowning and other incidents. The course also teaches other skills in individual needs to be a professional lifeguard. PREREQUISITE: PED 109 Advanced Swimming.

PER 232 CARE AND PREVENTION OF ATHLETIC INJURIES 3 CREDITS
Focuses on techniques in prevention, care and basic rehabilitation of athletic injury.

Physical Therapist Assistant

PTA 110 BASIC PATIENT CARE IN PHYSICAL THERAPY 5 CREDITS
Examines the basic patient care skills for the healthcare practitioner. Enables the student to gain an understanding and demonstrate skills that include positioning, body mechanics, transfers, range of motion, palpation, vital signs, aseptic techniques, bandaging, intermittent venous compression, medical terminology, activities of daily living, wheelchair management, architectural barriers, and gait training. PREREQUISITES: Admission to PTA program or Instructor’s permission.

PTA 115 PRINCIPLES AND PRACTICES IN PHYSICAL THERAPY 2 CREDITS
Examines the history of the profession including definition, development and areas of practice. The role of the APTA, the physical therapist assistant and the relationship between the physical therapist, PTA and other health care professionals are investigated. Includes current issues and trends including professionalism, ethics, quality assurance, communications and reimbursement issues such as Medicare, Medicaid, Worker’s Compensation and commercial insurance.

PTA 120 MODALITIES IN PHYSICAL THERAPY 5 CREDITS
Examines the theory and principles of physical therapy modalities. Course includes therapeutic heat and cold, traction, massage and hydrotherapy. PREREQUISITE: PTA 110.

PTA 124 REHAB PRINCIPLES OF MEDICAL I 2 CREDITS
Investigates the impairments, functional limitations, and disabilities resulting from a variety of neuromusculoskeletal conditions, the medical management including pharmacology, and its impact on physical therapy rehab principles are discussed. Evidence based practice for musculoskeletal and neurological system diagnosis will be reviewed as they relate to physical therapy rehab.

PTA 131 PROFESSIONAL COMMUNICATION I 1 CREDIT
Introduces students to oral and written professional communication in their field. Develops skills in verbal and non-verbal communication, conducting self-critiques and peer reviews, research of professional literature, medical documentation, and professional presentations.
PTA 134 REHAB PRINCIPLES OF MEDICAL II 2 CREDITS
Investigates the impairments, functional limitations, disabilities and medical management, including pharmacology, of a variety of traumatic, immunological, inflammatory and degenerative processes and their impact on physical therapy rehab principles. Evidence based practice for cardiovascular, respiratory, endocrine and chronic pain diagnosis, will be reviewed as they relate to physical therapy rehab.

PTA 135 PRINCIPLES OF ELECTRICAL STIMULATION 2 CREDITS
Investigates the principles and application of electrical stimulation (ES) modalities currently used in physical therapy practice. Enables the student to understand the electrochemical and physiological effects of electrical stimulation and identify the various forms and applications of ES. PREREQUISITE: Admission to the PTA program.

PTA 140 CLINICAL KINESIOLOGY 5 CREDITS
Focuses on the science of human motion, theories of biomechanics and muscle/joint structure and function. Emphasizes basic principles of therapeutic exercise and their application to specific body regions. A laboratory experience that includes the application of kinesiology and exercise principles is integrated in the learning experience. Prerequisites: HPR 117, PTA 176

PTA 141 PROFESSIONAL COMMUNICATION II 1 CREDIT
Builds on Professional Communications I and develops skills in writing professional documents to patients and other health care professionals, participating effectively in meetings, and medical documentation skills. PREREQUISITE: PTA 131

PTA 175 THE LANGUAGE OF PHYSICAL THERAPY 1 CREDIT
This course develops a foundational knowledge of abbreviations, vocabulary and terminology of the Physical Therapy profession and its clinical concepts.

PTA 176 ANATOMICAL KINESIOLOGY LABORATORY 2 CREDITS
This course provides hands-on opportunities for practical application of the theoretical principles of Anatomical Kinesiology. COREQUISITE: HPR 117.

PTA 205 PSYCHOSOCIAL ISSUES IN HEALTH CARE 2 CREDITS
Explores the psychosocial aspects of the patient/client and health care practitioner. Investigates recognition of and adjustment for psychological, sociological, educational, cultural, economic and political concerns on the delivery of health care services. Communication skills and social and advocacy responsibilities of the health care practitioner are discussed. Enables the student to develop the skills to meet expectations and needs of members of society receiving health care services.

PTA 230 ORTHOPEDIC ASSESSMENT AND MANAGEMENT TECHNIQUES 5 CREDITS
Examines the theory and principles of practices of orthopedic conditions. Includes an understanding of assessment and management techniques pertaining to orthopedic conditions, goniometry, manual muscle testing, gait analysis, and posture analysis. PREREQUISITE: PTA 120

PTA 240 NEUROLOGICAL ASSESSMENT AND MANAGEMENT TECHNIQUES 5 CREDITS
Examines the theory and principles of physical therapy with an introduction to assessment, management techniques and advanced physical therapy procedures as they relate to neurologic, cardiac and pulmonary conditions. PREREQUISITE: PTA 230

PTA 278 PTA SEMINAR 2 CREDITS
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, 280.

PTA 280 PTA INTERNSHIP I 4 CREDITS
Focuses on an initial clinical exposure providing hands-on patient practicum skills and techniques. Includes application of basic patient care skills including transfers, range of motion, modalities, bandaging, aseptic techniques, and gait training. Students demonstrate professional behavior and communication principles appropriate in the physical therapy setting. A designated clinical Instructor in an acute care, geriatric, or outpatient setting provides supervision. PREREQUISITE: PTA 120.

PTA 281 PTA INTERNSHIP II 5 CREDITS
Focuses on an intermediate clinical experience providing hands-on patient practicum skills and techniques. Includes continued application of physical therapy procedures of Internship I with the addition of therapeutic exercise, goniometry, manual muscle testing, and motor learning techniques. Students demonstrate professional behavior and communication principles appropriate in the physical therapy setting. A designated clinical Instructor in an acute care, rehabilitation, outpatient, geriatric, or home health setting provides supervision. During the internship, the student presents an in-service on a physical therapy related topic. PREREQUISITE: Successful completion of all PTA curriculum or Instructor’s permission.

PTA 282 PTA INTERNSHIP III 5 CREDITS
Incorporates advanced clinical experience providing hands-on patient practicum skills and techniques. Students refine all physical therapy skills in preparation to enter the field as an entry-level physical therapist assistant. This final experience includes independent practice with an assigned caseload under the on-site supervision of a clinical Instructor. The student presents an in-service on a physical therapy related topic. PREREQUISITES: Successful completion of all PTA curriculums or Instructor’s permission.
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: GT-SC1  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. GT-SC1.

PHY 111 PHYSICS: ALGEBRA-BASED I: WITH LAB: GT-SC1  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 advance sciences should register for PHY 211. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1. PREREQUISITE: PHY 111.

PHY 112 PHYSICS: ALGEBRA-BASED II WITH LAB: GT-SC1  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. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1. PREREQUISITE: PHY 111.

PHY 211 PHYSICS: CALCULUS-BASED I WITH LAB: GT-SC1  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 advance sciences. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1. PREREQUISITE: MAT 201.

PHY 212 PHYSICS: CALCULUS-BASED II WITH LAB: GT-SCI  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. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1. PREREQUISITE: PHY 211

PHY 275 SPECIAL TOPICS  1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

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: GT-SS1  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. GT-SS1.

POS 111 AMERICAN GOVERNMENT: GT-SS1  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. GT-SS1.

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: GT-SS1  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. This course is one of the Statewide Guaranteed Transfer courses. GT-SS1.

POS 215  CURRENT POLITICAL ISSUES  3 CREDITS
Incorporates an in-depth analysis of critical issues in political science. Examines current topics and issues.

POS 225  COMPARATIVE GOVERNMENT: GT-SS1  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. This course is one of the Statewide Guaranteed Transfer courses. GT-SS1.

POS 275  SPECIAL TOPICS  1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

POS 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.

Psychology

PSY 101  GENERAL PSYCHOLOGY I: GT-SS3  3 CREDITS
Focuses on the scientific study of behavior including motivation, emotion, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning, and memory. This course is one of the Statewide Guaranteed Transfer courses. GT-SS3. PREREQUISITE: ENG 090, REA 090 or ACCUPLACER scores: Reading 80 and Sentence Skills 95.

PSY 102  GENERAL PSYCHOLOGY II: GT-SS3  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. This course is one of the Statewide Guaranteed Transfer courses. GT-SS3. PREREQUISITE: ENG 090, REA 090 or ACCUPLACER scores: Reading 80 and Sentence Skills 95.

PSY 116  STRESS MANAGEMENT  3 CREDITS
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 for transfer. PREREQUISITE: ENG 090, REA 090 or ACCUPLACER scores: Reading 80 and Sentence Skills 95.

PSY 205  PSYCHOLOGY OF GENDER: GT-SS3  3 CREDITS
Examines gender comparisons in work, courtship, family life, and sexual behavior throughout the life span. PREREQUISITE: 3 hours of general PSY: PSY 101 or 102, ENG 090, REA 090 or ACCUPLACER scores: Reading 80 and Sentence Skills 95 or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-SS3.

PSY 226  SOCIAL PSYCHOLOGY: GT-SS3  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: PSY 101 or 102, ENG 090, REA 090 or ACCUPLACER scores: Reading 80 and Sentence Skills 95 or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-SS3.

PSY 235  HUMAN GROWTH AND DEVELOPMENT: GT-SS3  3 CREDITS
Examines human development from conception through death, emphasizing physical, cognitive, emotional, and psychosocial factors. This course is one of the Statewide Guaranteed Transfer courses. GT-SS3. PREREQUISITES: 3 hours of general PSY: PSY 101 or 102, ENG 090, REA 090 or ACCUPLACER scores: Reading 80 and Sentence Skills 95 or Instructor’s permission.

PSY 238  CHILD DEVELOPMENT: GT-SS3  3 CREDITS
Focuses on the growth and development of the individual, from conception through childhood, emphasizing physical, cognitive, emotional, and psychosocial factors. PREREQUISITES: ENG 090, REA 090 or ACCUPLACER scores: Reading 80 and Sentence Skills 95. This course is one of the Statewide Guaranteed Transfer courses. GT-SS3.

PSY 247  CHILD ABUSE AND NEGLECT  3 CREDITS
Examines the causes and effects of physical, sexual, and psychological abuse and neglect. Intervention and prevention strategies are emphasized.

PSY 249  ABNORMAL PSYCHOLOGY GT-SS3  3 CREDITS
Examines abnormal behavior and its classification, causes, treatment, and prevention. PREREQUISITES: 3 hours of general PSY: PSY 101 or 102, ENG 090, REA 090 or ACCUPLACER scores: Reading 80 and Sentence Skills 95 or Instructor’s permission. This course is one of the Statewide Guaranteed Transfer courses. GT-SS3.

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 ACCUPLACER placement test, given when a student enrolls, helps to determine the level at which the student is currently reading and matches the student to the appropriate curriculum for learning. (The ACCUPLACER test may be reinforced by a secondary assessment 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 ACCUPLACER recommendation is strongly suggested.

REA 030 BASIC READING SKILLS 2 CREDITS
Focuses on strategies for word attack, vocabulary development, stages of reading and basic reading comprehension. PREREQUISITE: ACCUPLACER reading score 20 - 39; COREQUISITES: ENG 030/060 are recommended.

REA 060 FOUNDATIONS OF READING 3 CREDITS
Focuses on strategies for vocabulary development, improved reading comprehension, and enrichment. PREREQUISITE: ACCUPLACER reading score 40-61; COREQUISITES: ENG 060/090 are recommended.

REA 090 COLLEGE PREPARATORY READING 3 CREDITS
Enables the student to apply strategies for improving comprehension, developing vocabulary, and increasing rate for reading college textbooks. PREREQUISITE: ACCUPLACER reading score 62-79; COREQUISITES: ENG 060/090 are recommended.

REA 112 SPEED READING 2 CREDITS
Improves reading comprehension and speed of reading for students who want to enhance skills for success in college or career environments. PREREQUISITE: ACCUPLACER reading score 80-120.

REA 275 SPECIAL TOPICS 1-6 VARIABLE CREDIT
Provides students with a vehicle to pursue in-depth exploration of special topics of interest.

REA 285 INDEPENDENT STUDY 3 CREDITS
Meets the individual needs of students. Students engage in intensive study or research under the direction of a qualified Instructor.

Real Estate

REE 115 INTRODUCTION TO REAL ESTATE 3 CREDITS
Focuses on the function of the real estate broker, sales techniques, real estate ethics. Course is intended for students that want 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 correlation. Includes standard and ethics section. Course qualifies for application to State Registered License.

REE 119 15-HOUR NATIONAL USPAP COURSE 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-PHYSICS AND CHEMISTRY: GT-SC1 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. These concepts will be explored in hands-on laboratory experiments. This course integrates the fundamental concepts and ideas about the nature of physics and chemistry with the natural world. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1

SCI 156 INTEGRATED SCIENCE II-EARTH AND LIFE SCIENCE: GT-SC1 4 CREDITS
Examines earth and biological systems, living and non-living environments, through the application of fundamental energy and matter concepts. These systems and concepts will be explored in hands-on laboratory experiments. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1

Sociology

SOC 101 INTRODUCTION TO SOCIOLOGY I: GT-SS3 3 CREDITS
Examines the basic concepts, theories, and principles of sociology as well as human culture, social groups, and the social issues of age, gender, class, and race. This course is one of the Statewide Guaranteed Transfer courses. GT-SS3.

SOC 102 INTRODUCTION TO SOCIOLOGY II: GT-SS3 3 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. GT-SS3.
SOC 205 SOCIOMETRY AND FAMILY
DYNAMICS: GT-SS3  3 CREDITS
Develops an understanding of marriage, family and kinship. It
examines the family as an institution and how social, cultural
and personal factors influence family relations. The stability
and diversity of the family will be explored, along with current
trends and some alternative life styles. This course is one of
the Statewide Guaranteed Transfer courses. GT-SS3.

SOC 218 SOCIETY OF DIVERSITY  3 CREDITS
Explores the variety of inter-group relations regarding race,
nationality, ethnicity, gender, sexual orientation, and other
diversity issues. Patterns of prejudice, discrimination and
possible solutions to these issues will be addressed.

SOC 220 SOCIETY OF
RELIGION: GT-SS3  3 CREDITS
Provides an introduction to the sociology of religion, including
a comparative and critical examination of world religions, by
focusing on sociological interpretation and explanation of the
role of religion in human culture. The interaction between
society and religion is thus examined as are a wide variety
of religious beliefs and practices. This course is one of the
Statewide Guaranteed Transfer courses. GT-SS3.

SOC 275 SPECIAL TOPICS  1–6 VARIABLE CREDITS
Provides students with a vehicle to pursue in-depth exploration
of special topics of interest.

SOC 285 INDEPENDENT
STUDY  1-6 VARIABLE CREDIT
Meets the individual needs of students. Students engage
in intensive study or research under the direction of a
qualified Instructor.

Spanish

SPA 101 CONVERSATIONAL SPANISH I  3 CREDITS
Provides basic conversational skills to beginning students who
wish to understand and speak Spanish. The material includes
basic vocabulary, grammar, and expressions that are used in
daily situations and in travel.

SPA 102 CONVERSATIONAL SPANISH II  3 CREDITS
Provides continuing students of conversational Spanish
with additional skills to understand and speak Spanish. The
material continues to cover basic conversations patterns,
expressions, and grammar. PREREQUISITE: SPA 101 or
Instructor’s permission.

SPA 111 SPANISH LANGUAGE I  5 CREDITS
Deals with the development of functional proficiency in
listening, speaking, reading and writing the Spanish language.
Note: The order of the topics and methodology will vary
according to individual texts and Instructors.

SPA 112 SPANISH LANGUAGE II  5 CREDITS
Continues Spanish Language I in the development of func-
tional proficiency in listening, speaking, reading and writing
the Spanish language. Note: The order of the topics and the
methodology will vary according to individual texts and Instruc-
tors. PREREQUISITE: SPA 111 or Instructor’s permission.

SPA 114 FAST-TRACK SPANISH I AND II  5 CREDITS
Designed to bridge beginning SPA courses with intermediate
SPA courses. It is designed for students who have studied
two years of the target language in high school and possess
linguistic and cultural knowledge that true beginners do not,
but are not ready yet to move to the intermediate level because
they need an in-depth review of essential structures. PREREQ-
UISITE: 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,
foreign language, business, and others. PREREQUISITE:
SPA 101.

SPA 201 CONVERSATIONAL
SPANISH III  3 CREDITS
Provides students with the necessary intermediate skills for un-
derstanding and speaking Spanish as they continue their study
of conversational Spanish. The material includes intermediate
level vocabulary, grammar, and expressions. PREREQUISITE:
SPA 102 or Instructor’s permission.

SPA 202 CONVERSATIONAL
SPANISH IV  3 CREDITS
Continues Conversational Spanish IV in providing students
with the additional intermediate skills necessary for understand-
ing and speaking Spanish. The material will continue to cover
intermediate level conversational patterns, expressions, and
grammar. PREREQUISITE: SPA 201 or Instructor’s permission.

SPA 211 SPANISH LANGUAGE III:
GT-AH4  3 CREDITS
Continues Spanish Language I and II in the development of
increased functional proficiency in listening, speaking, reading,
and writing the Spanish language. Note: The order of the topics
and the methodology will vary according to individual texts and
Instructors. PREREQUISITE: SPA 112 or Instructor’s permis-
sion. This course is one of the Statewide Guaranteed Transfer
courses. GT-AH4.

SPA 212 SPANISH LANGUAGE IV:
GT-AH4  3 CREDITS
Continues Spanish Language I, II and III in the development of
increased functional proficiency in listening, speaking, reading,
and writing the Spanish language. Note: The order of the topics
and the methodology will vary according to individual texts and
Instructors. PREREQUISITE: SPA 211 or Instructor’s permis-
sion. This course is one of the Statewide Guaranteed Transfer
courses. GT-AH4.

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 enforce-
ment, bilingual education, business, and others. PREREQUI-
SITE: SPA 115.
cable selection theory and testing

as applicable to the telecom industry

Provides the student with knowledge of different cable media

manufacturing and quality control.

working drawing is a team effort between design, drafting,

Students learn the generation of a

run out and location.

covers math formulas, tolerancing systems, modifiers,

tolerancing (GDT) in machining or drafting.

The course

Enables students to interpret geometric dimensioning and
tolerancing (GDT) in machining or drafting. The course covers math formulas, tolerancing systems, modifiers, symbols, datums, and tolerances of form, profile, orientation, run out and location. Students learn the generation of a working drawing is a team effort between design, drafting, manufacturing and quality control.

Telecommunications Technology

TLT 131 CABLING 3 CREDITS

Provides the student with knowledge of different cable media as applicable to the telecom industry. Termination, routing, cable selection theory and testing.

TLT 141 VOICE OVER INTERNET PROTOCOL 1 CREDIT

Students will learn the basic concepts of Voice Over Internet Protocol as opposed to public Switched Telephone Network (PTSN). The purpose of this course will be to teach testing measurement, evaluate quality of signal, differences in commercial applications of Tier One, Tier Two and Tier Three providers in comparison to individual applications. Students will master VoIP, enterprise level VoIP standards, security and analyze the VoIP packet. Topics also covered will include vocabulary, history and the future of VoIP, Enterprise level VoIP, define codec, media gateways, media controllers, IP based PBX’s, ATA, analog telephone adapter, basic block diagram of a typical PSTN, VoIP calls and finally QoS issues related to VoIP.

TLT 142 CABLING FOR VIDEO, VOICE, & DATA 3 CREDITS

Students will learn the Mechanical, Electric and Optical properties of various cables used in video, data and voice networks. Proper applications of various cabling solutions will be the primary focus while also covering terminations, relative data/bandwidth, handling requirements, appropriate fire code ratings, etc. Discussions will cover coax, CAT 3,5,6,7(etc.) shielded and unshielded, balanced and unbalanced as well as optical cables, connectors, splices and terminations.

TLT 143 TRANSMISSION: WIRED & WIRELESS 3 CREDITS

Transmission of voice, video and data signals can occur via both wired and wireless media. This course will discuss the advantages and disadvantages of wired and wireless transmission, taking into consideration factors such as required bandwidth, security, interference, distance, reliability and more. Students will investigate terminal equipment for both transmission and reception of multiple signal types transmitted via wired and wireless methodologies. Multiple types of wireless technologies will be discussed including point to point, point to multipoint, broadcast and more. RF, microwave and wireless optical transmission will be discussed.

TLT 260 EMERGING TECHNOLOGIES 3 CREDITS

Gives the student the tools to find out what the latest trends in technology are in relation to emerging technologies. The student will research new technology as applicable to telecommunications in today's high tech environment. Presentations and papers will be submitted as discovery of special topics of interest. PREREQUISITE will be determined by instructor.

Speech

ALL SPEECH classes are now listed with a COM prefix. Please see COMMUNICATIONS for the listing of all Speech classes.

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

Enables students to interpret geometric dimensioning and tolerancing (GDT) in machining or drafting. The course covers math formulas, tolerancing systems, modifiers, symbols, datums, and tolerances of form, profile, orientation, run out and location. Students learn the generation of a working drawing is a team effort between design, drafting, manufacturing and quality control.

SPA 235 SPANISH READING/Writing 3 CREDITS

Builds vocabulary and develops reading and writing strategies in Spanish to be able to analyze fictional and non-fictional texts and gain further cultural insight of the Hispanic world.

SPA 261 GRAMMAR FOR THE HERITAGE LANGUAGE SPEAKER 3 CREDITS

Provides formal grammatical instruction to Foreign Language students whether native or bilingual who want to develop their existing proficiency in the target language. PREREQUISITES: SPA 212 or Instructor’s permission.

SPA 275 SPECIAL TOPICS 1–6 CREDITS

Provides students with a vehicle to pursue in-depth exploration of special topics of interest. PREREQUISITE will be determined by instructor.

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.
THE 110 THEATRE IN DENVER  3 CREDITS
Acquaints 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 milieu.

THE 111 ACTING I  3 CREDITS
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
Continues to explore basic acting techniques and approaches including scene study, improvisation, and intermediate 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. Emphasis is placed on “Second City” style of improvisation.

THE 143 BASIC ACTING TECHNIQUE  3 CREDITS
Offers scene work and acting exercises for people with little or no training or experience in the theatre. The Stanislavski System of character analysis and development is stressed.

THE 181-183 INTERNSHIP  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 business location and with the direct guidance of the Instructor.

THE 211 DEVELOPMENT OF THEATRE I: GT-AH1  3 CREDITS
Surveys the history and evolution of drama from Ancient Greece to the Renaissance, emphasizing all aspects of the art from period values to analysis of dramatic literature and performance. This course is one of the Statewide Guaranteed Transfer courses. GT-AH1.

THE 212 DEVELOPMENT OF THEATRE II: GT-AH1  3 CREDITS
Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art from period values to the analysis of dramatic literature and performance. This course is one of the Statewide Guaranteed Transfer courses. GT-AH1.

THE 275 SPECIAL TOPICS: THEATRE  1-6 VARIABLE CREDITS
Explores current topics, issues and activities related to one or more aspects of the named discipline.

THE 285 INDEPENDENT STUDY  1–6 VARIABLE CREDITS
Emphasizes structured and guided, individualized study that is organized and tailored around the interests and needs of the individual student.

CORPORATE LEARNING DIVISION
CUSTOMIZED TRAINING FOR BUSINESS GROWTH AND EMPLOYEE DEVELOPMENT

The Corporate Learning Division is the workforce training and development division of Arapahoe Community College. We are experts in customized non-credit corporate training; computer applications training; interpersonal skills development; and technical training to upgrade proficiency, improve performance and increase organizational efficiency.

We serve individuals and companies throughout the Denver metro area and Colorado, utilizing a variety of delivery methods including:

1) Consultation with company personnel
2) On-site assessment by experienced facilitators
3) Seminars and workshops

We’re flexible enough to deliver training to accommodate your schedule, at your location or ours. You receive cost-effective training programs to help stretch training dollars. You can also stretch training dollars through state grant-funded training dollars. Our consultants will help you navigate through the grant process.

Current specialized programs include Solar Energy Training (Photovoltaic and Solar Thermal), RN Refresher, Event Management and Online Medical Transcription.

For details call 303.734.3701 or visit www.coloradotraining.com

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3) Seminars and workshops

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Current specialized programs include Solar Energy Training (Photovoltaic and Solar Thermal), RN Refresher, Event Management and Online Medical Transcription.

For details call 303.734.3701 or visit www.coloradotraining.com
NON-CREDIT COURSES COMMUNITY EDUCATION
NEW FRIENDS! NEW YOU! NEW DISCOVERIES!

Looking for something fun to do? Meet new friends? Change careers? The Non-Credit Community Education Program at Arapahoe Community College is a self-supporting program. Each year, approximately 8,000 students enroll in these ACC courses and programs. Hundreds of classes are offered each season (four terms per year). Many new courses are offered to meet the changing needs of the community.

Visit our Web site at www.arapahoe.edu. Click on Non-Credit Courses. You can register for classes online with a credit card or call 303.797.5722. The Non-Credit program is located in Room 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.

Course offerings include:
- Arts and Crafts—Courses focusing on drawing, painting, photography and general crafts
- 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
- Language and Culture—Courses for travelers, business interests or for pleasure, including English as a second language
- Home, Garden, and Cuisine—Workshops for inside and outside the home for the do-it-yourselfer as well as cooking related classes.
- Health and Fitness—Courses promoting a healthy life using traditional and alternative methods
- 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
- Personal Development—A mixture of courses including writing, spirituality and other topics
- Personal Finance—Courses to improve financial security
- Recreation and Travel—Courses include sports and recreational activities, day excursions, genealogy, bridge, etc.
- Seniors—Courses specifically for people over 55, including Elderhostel
- Youth College—Courses for children in grades K-12.

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, Hudson Gardens and Events Center, Euclid Middle School, Highlands Ranch High School 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 degrees 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 Non-Credit Program office at 303.797.5722.
<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson, Christopher J.</td>
<td>High School Recruitment Specialist</td>
</tr>
<tr>
<td>Becker-Lutz, Jill</td>
<td>Budget Analyst</td>
</tr>
<tr>
<td>Binns, Jane</td>
<td>E-learning Coordinator</td>
</tr>
<tr>
<td>Boddicker, Diane</td>
<td>Human Resources Specialist</td>
</tr>
<tr>
<td>Bouley, Patricia</td>
<td>Controller</td>
</tr>
<tr>
<td>Bowman, Matt</td>
<td>Student Activities Programming Specialist</td>
</tr>
<tr>
<td>Brantz, Malcolm</td>
<td>Director of Weber Center for</td>
</tr>
<tr>
<td>Briggs-Jackson, Darcy</td>
<td>Registrar &amp; Director of Admissions, Records and Information Central</td>
</tr>
<tr>
<td>Bryant, Theresa</td>
<td>HR Representative/Employee Relations</td>
</tr>
<tr>
<td>Castro, David</td>
<td>Chief Operating Officer</td>
</tr>
<tr>
<td>Chavez, Sarah</td>
<td>Financial Aid Counselor</td>
</tr>
<tr>
<td>Chelland, Carol</td>
<td>Facilities Rental Manager</td>
</tr>
<tr>
<td>Chrislip, Donna</td>
<td>Director of Center for Instructional Effectiveness</td>
</tr>
<tr>
<td>Christopher, Lee</td>
<td>E-Learning Manager</td>
</tr>
<tr>
<td>Clark, Terry</td>
<td>Human Resources Manager</td>
</tr>
<tr>
<td>Comeaux, Linda</td>
<td>Dean, School of Health, Sciences, &amp; Engineering</td>
</tr>
<tr>
<td>Crisp, Jamie</td>
<td>Foundation Coordinator</td>
</tr>
<tr>
<td>Cunningham, Perri</td>
<td>Director of the Fitness Center/Pool and Physical Education Coordinator</td>
</tr>
<tr>
<td>Do, Janet</td>
<td>Financial Aid Counselor</td>
</tr>
<tr>
<td>Dovi, Emily</td>
<td>High School Recruitment Specialist</td>
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<tr>
<td>Englert, Karen</td>
<td>Student Affairs Coordinator</td>
</tr>
<tr>
<td>Foster, Mary</td>
<td>Director of the Child Development Center</td>
</tr>
<tr>
<td>Fukaye, Howard</td>
<td>Director of Pre-Enrollment Services</td>
</tr>
<tr>
<td>Gaasvig, Kathy</td>
<td>Director of Career and Technical Education Program Director of Arapahoe/Douglas Career &amp; Technical School</td>
</tr>
<tr>
<td>Groff, Theresa</td>
<td>Information Central Manager</td>
</tr>
<tr>
<td>Hamilton, John</td>
<td>Educational Pathways Coordinator</td>
</tr>
<tr>
<td>Hegeman, Diane</td>
<td>Vice President of Instruction</td>
</tr>
<tr>
<td>Hemenway, Jeannene</td>
<td>Staff Accountant</td>
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<tr>
<td>Herrera, Ernest</td>
<td>Custodial Services Manager</td>
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<tr>
<td>Hillgrove, Jennifer</td>
<td>Financial Aid Counselor and Work-Study Coordinator</td>
</tr>
<tr>
<td>Kinney, Dorado</td>
<td>Director of Advising and Retention</td>
</tr>
<tr>
<td>Kuhns, Claire</td>
<td>Executive Assistant to the President</td>
</tr>
<tr>
<td>Kuster, Kim</td>
<td>Dean of College Outreach</td>
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<tr>
<td>Larson-Cooney, Kim</td>
<td>Director of Community Education</td>
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<tr>
<td>Lawler, Heather</td>
<td>Director of Disability Services and Student Affairs</td>
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<tr>
<td>Lorenzo, Joseph</td>
<td>Chief Financial Officer</td>
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<td>Ludwig, Janet</td>
<td>International Student Advisor</td>
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<td>Mason, Gayle</td>
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<tr>
<td>Maypole, Joanne</td>
<td>Dean, School of Arts, Design, Social and Behavioral Science</td>
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<tr>
<td>McLees, Jan</td>
<td>Career Center Coordinator</td>
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<td>McManus, Michael</td>
<td>Academic Advisor/New Student Program</td>
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<tr>
<td>Merkl, Linda</td>
<td>Director of the Center for Professional Development</td>
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<td>Meyer, Andy</td>
<td>Media Center Manager</td>
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<td>Moschetti, Camellia</td>
<td>Educational Pathways Coordinator</td>
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<td>Mueller, Linda</td>
<td>Instructional Project Manager</td>
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<td>Myrant, Glee</td>
<td>Disability Services Operations Specialist</td>
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<td>Newman, Buz</td>
<td>Information Technology Manager</td>
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<td>Nickless, Nancy</td>
<td>Cashiers Office Coordinator</td>
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<td>Oakes, Janna</td>
<td>Dean, School of Liberal Arts and Professional Programs</td>
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<td>Olsen, Rhonda</td>
<td>Computer Operations Supervisor</td>
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<td>Oristiano, Ralph</td>
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<td>Otto, Larry</td>
<td>Director of Facilities</td>
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<td>Peoples, Mary</td>
<td>Paralegal Program Coordinator</td>
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<td>Disability Services Specialist</td>
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<td>Reid, Deborah</td>
<td>Parent Information and Resource Coordinator</td>
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<td>Disability Services Specialist</td>
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<td>Rogers, Eric</td>
<td>Graduation Coordinator &amp; Transfer Evaluator</td>
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<td>Romero, Jason</td>
<td>Interim High School Recruiter</td>
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<td>Schaar, Amelia</td>
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<td>Scheuring, Susan</td>
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<td>Sewell, Justin</td>
<td>Technical Services Librarian</td>
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<td>Shallcross, Dorothy</td>
<td>Director of Student Financial Services</td>
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<td>Shellberg, David</td>
<td>Executive Vice President</td>
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<td>Sherman, Mary</td>
<td>Institutional Research Manager</td>
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<td>Shettleworth, James</td>
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<td>Simpson, Connie</td>
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<td>Smiley, Gabrielle</td>
<td>ACTS Specialist</td>
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<td>Snowberger, Courtney</td>
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<td>Somers, Cindy</td>
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<td>Spaulding, Thad</td>
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<td>Tierney, Josh</td>
<td>Institutional Research Associate</td>
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<td>Treitz, Sue</td>
<td>Director of Health Careers Development</td>
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<td>Trevino, Leticia</td>
<td>Academic Advisor</td>
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<td>Trevino, Loren</td>
<td>Educational Talent Search Specialist</td>
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<td>Tubbesing, Julie</td>
<td>Webmaster</td>
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<td>Turner-Humphrey, Vivian</td>
<td>Student Services Coordinator</td>
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<tr>
<td>Unell, Mury</td>
<td>Director of Marketing and Public Information</td>
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<tr>
<td>Viola, Sr, Jerry</td>
<td>Director of Automotive Program</td>
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<tr>
<td>Ward, Tammy</td>
<td>Director of TRIO</td>
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<td>West, Jay</td>
<td>Purchasing Manager</td>
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<tr>
<td>Whitehouse, Linda</td>
<td>Director of University Center Chaparral</td>
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<td>Young, Gwen</td>
<td>University Center Chaparral</td>
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<tr>
<td>University Center Chaparral</td>
<td>Facility Coordinator</td>
</tr>
</tbody>
</table>
**Faculty of the Year 03**
M.B.A., University of Denver
B.A., Carleton College
Graduate School of Banking, University of Colorado

Andrew, Lane – Faculty, Mathematics
M.A., University of Denver
B.A., University of Colorado, Denver

Bamford, Cheyne – Faculty, Psychology
M.A., Ph.D., Arizona State University
B.A., Grinnell College, IA

Bauer, Nia – Faculty, Biology
Ph.D., University of Texas at Houston
B.A., University of San Diego

Beine, Jo Ann – Faculty, Physical Therapist Assistant
B.A., University of Denver
A.A.S., Arapahoe Community College

Berg, Jeffrey – Faculty, Mathematics
*Distinguished Faculty 02-03*
M.S., University of Colorado, Denver
B.S., Arizona State University

Bergemann, Carl – Faculty, Business
M.S., Colorado State University
B.S., University of Wisconsin

Bertelsen, Tamara – Faculty, Economics & Finance
M.A., University of Colorado
B.A., University of Puget Sound

Bess, Catherine – Faculty, Teacher Cadet
M.Ed., Cambridge College
B.A., Western Maryland College

Bettmann, Rudy – Faculty, Mortuary Science
M.A., Colorado Christian University
B.S., Regis University
Diploma, Dallas Institute of Mortuary Science

Bigailk, Annette M. – Faculty, Health Information Technology – Chair
*Distinguished Faculty 06-07*
B.A., University of Colorado, Boulder
B.S., Regis College

Blaske, Karin L. – Faculty, Developmental Studies
**Faculty of the Year 01, 09**
M.S., Northern Illinois University
B.S., Illinois State University

Borow-Stephens, Barbara – Faculty, Paralegal
*Distinguished Faculty 01-02, 02-03, 03-04, 05-06, 06-07*
J.D., University of Denver
M.S., Columbia University Teachers College, N.Y.
B.S., Ithaca College, N.Y.

Broome, Jeff – Faculty, Philosophy
M.A., Baylor University
M.A., Ph.D., University of Colorado
B.S., Colorado State University, Pueblo

Burns, Randy – Faculty, Jewelry/Metalwork
M.F.A., University of Oregon
B.F.A., Colorado State University
Jewelers of America Certified Bench Jeweler

Buchanon, Monica – Faculty, Nursing
M.S.N./Ed., University of Phoenix
B.S.N., University of Phoenix

Cannata, Jim – Faculty, Photography
*Distinguished Faculty 06-07*
M.F.A., Florida State University
B.A., Metropolitan State College of Denver

Cassidy, Barbara – Faculty, Nursing
M.A., John Carroll University
B.S.N., Kent State University
B.A., John Carroll University

Clarke, Deb – Faculty, ACTS, Health Sciences Tech
B.S., Nursing, Metropolitan State College
Diploma, St. Vincent's College of Nursing

Comstock-Peavy, Tam – Faculty, English
M.A., University of Northern Colorado
B.A., Western State College

Crane, Mark – Faculty, Electronics (ACTS – High Tech Academy)
B.S., Fort Hays State University
A.A., Dodge City Community College
A.A.S., Community College of Aurora

Daves, Jason – Faculty, Automotive
A.A.S., Aims Community College
A.S., Aims Community College

DeMoulin, Tom – Faculty, Multimedia/Graphic Design and Illustration
*Distinguished Faculty 06-07*
B.A., Macalester College

Diede, Leo – Faculty, Computer Information Systems
(ACTS – High Tech Academy)
B.S., Black Hills State University
Graduate Certificate, University of California, Riverside

Dragoo, Alvin – Faculty, Automotive
A.A., Southeast Community College

Forrest, Linda – Faculty, Early Childhood Education – Chair
M.Ed., Lesley College
B.S., University of Texas

Gedde, Idalynn – Faculty, Computer Information Systems
*Distinguished Faculty 05-06*
M.Ed., Lesley College
B.A., North Park College

Goggin, Susan – Faculty, Art – Chair
B.F.A., M.H., University of Colorado

Gore, Dan – Faculty, History
M.A., University of Florida
B.A., University of Florida

Gowan, Mark – Faculty, Philosophy
M.A., University of Missouri, St. Louis
B.A., University of North Texas

Graca, Lucy L. – Faculty, English
**Faculty of the Year 99**
M.A., B.A., University of Massachusetts

Grant, Deborah – Faculty, Math
M.S., University of Colorado, Denver
B.B.A., Southern Methodist University

Greenwald, Jonathan I. – Faculty, Emergency Medical Services – Chair
B.A., Hofstra University
EMT-Paramedic, Swedish Medical Center

Gronet, Neva – Faculty, Communication – Chair
M.A., University of Colorado
B.A., Adams State College

Hagood, Allison – Faculty, Psychology – Chair
M.A., University of Colorado, Denver
B.A., Harvard University

Hall, Dianne – Faculty, Accounting
M.B.A., Regis University
B.S., Regis University

Hall, John – Faculty, Multimedia/Graphic Design & Illustration – Chair
B.F.A., Colorado State University

Harris, Sara – Faculty, Accounting – Chair
*Distinguished Faculty 02-03, 08-09*
B.S., Colorado State University

Harrison, Terrence – Faculty, Biology – Chair
M.S., University of Colorado, Denver
B.S., Baylor University

Hastert, Erica – Faculty, Mathematics
*Distinguished Faculty 05-06*
Ph.D., University of Denver
M.S., University of Denver
B.A., University of Colorado, Denver

Henning, Erica – Faculty, Psychology
M.A., University of Northern Iowa
B.A., University of Northern Iowa

Please visit www.arapahoe.edu for the most current, updated catalog information
Hidalgo, Ruth – Faculty, Language
Ph.D., Florida State University
M.A., Florida State University
B.A., Florida State University
A.A., Palm Beach Community College

Holt, Kathryn – Faculty, Art
M.F.A., University of Denver
B.A., University of Denver

Johnson, Cynthia – Faculty, Information Technology
M.Ed., Pennsylvania State University
B.S., University of North Carolina, Charlotte

Johnson, Jody – Faculty, Biology
*Distinguished Faculty 03-04
M.Ed., University of Colorado
M.S., University of Colorado
B.F.A., Florida State University

Johnson, Mary – Faculty, ACTS, Culinary Arts
M.A., University of Colorado, Colorado Springs
B.S., Colorado State University

Kendall, Susan – Faculty, Business
M.B.A., University of Phoenix
B.A., Miami of Ohio University

Khaleq, Christine M. – Faculty, Foreign Language – Chair
M.A., University of Colorado at Boulder
B.F.A., Boise State University

Kroetch, Jennifer – Faculty, Medical Laboratory Technology – Chair
M.S., University of North Dakota
B.S., University of North Dakota

Lawrence, Tracy – Faculty, Mathematics – Chair
*Distinguished Faculty 03-04
M.A., University of West Florida
B.A., University of West Florida
A.A., Chipola Jr. College

Lewan, Lindsay – Faculty, English – Chair
*Distinguished Faculty 08-09
Ph.D., University of New Mexico
B.A., M.A., Colorado State University

LoDico, Anita – Faculty, Interior Design – Interim Chair
B.S., University of Central Oklahoma
NCIDQ Certified

Mabry, Sophie – Faculty, Human Performance
M.A., University of Northern Colorado
B.A., Metropolitan State College of Denver

Martin, Susan – Faculty, ACTS, Carpentry

Mantel, Mikele – Faculty, Nursing
M.S.N., University of Colorado, Denver
B.S.N., Loretto Heights College, Denver
Diploma in Nursing, Mount Sinai School of Nursing

Matsushita, Hidemi – Faculty, Music

*Distinguished Faculty 03-04
Ph.D., Brigham Young University
M.M., University of Utah
B.M., University of Colorado at Boulder

McGurrin, Robbie – Faculty, Computer Information Systems
*Distinguished Faculty 03-04, 07-08
M.S., University of North Dakota
B.S., University of North Dakota

Miller, William – Faculty, Architecture
Master of Architecture, University of Colorado
B.A., Northern Illinois University

Mills, Josie – Faculty, English
Ph.D., University of Denver
M.A., University of So. Florida
B.A., University of So. Florida

Mugge, Douglas – Faculty, Architectural Technologies, Construction Supervision, Computer Aided Design, & Engineering Technologies – Chair
A.A.S., Arapahoe Community College

Nelsen, Connie – Faculty, Medical Office Technology – Chair
M.S., Regis University
B.S., Metropolitan State College of Denver
A.G.S., Arapahoe Community College

Norman, Celia – Faculty, Biology
M.A., University of Colorado
B.S., California Polytechnic State University

Obeidi, Fida – Faculty, Chemistry
M.S., Ph.D., Brigham Young University, Utah
Postdoctoral Fellowship, Harvard University, Boston
B.S., Jordan University of Science and Technology

Owen, Holly – Faculty, Nursing
M.S.N.E. (In Progress) Regis University
A.A.S., Arapahoe Community College, R.N.

Parker, Rebecca – Faculty, Paralegal – Chair
*Distinguished Faculty 08-09
J.D., University of Oklahoma
M.S., University of Denver
B.A., Phillips University

Parmley, Robert – Faculty, ACTS, Automotive
M.ed., Colorado State University
B.S., University of Southern Colorado
A.A.S., Front Range Community College

Peoples, Mary – Faculty, Paralegal, Coordinator
B.S., California State University at Fresno
Certificate in Paralegal Studies, CSU at Hayward

Poltrone, Rosann – Faculty, Geography
*Distinguished Faculty 01-02
M.A., University of Wyoming
B.A., State University of New York, Buffalo

Provence, Paula – Faculty, Physical Therapy – Chair
M.A., University of Phoenix
B.S., University of New Mexico

Ransick, Christopher – Faculty, English
M.A., University of Montana
M.A., University of California
B.A., San Francisco State University

Ratliff, John – Faculty, Sociology & Political Science
Ph.D., University of California, San Diego
M.A., University of California, San Diego
M.A., University of California, San Diego
B.A., Reed College

Rojenko, Karen – Faculty, Nursing
M.S.N. University of Phoenix
B.A. University of Florida
A.D.N. St. Petersburg College

Rubin, Lance – Faculty, Humanities - Chair
Ph.D., University of Denver
M.A., Northwestern University
B.S., University of Illinois, Urbana

Rush, Gerilyn – Faculty, Nursing
M.A., Webster University
M.S.N. University of Wyoming
B.S.N., University of Nebraska

Sauber, Victoria – Faculty, Computer Sciences – Chair
B.A., Ohio State University

Sarin, Arun (A.K.) – Faculty, Business
M.B.A., Loyola
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Sloan, Mary – Faculty, Mathematics
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B.A., Pomona College

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B.S., Angelo State University

Stasiwicz, Kimberly – Faculty, Chemistry
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B.S., Michigan State University
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Stieneker, Deborah A. – Faculty, Speech
B.A., M.A., Southern Illinois University

Stoner, Barb – Faculty, Nursing
M.S.N., University of Northern Colorado
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A.D.N., Arapahoe Community College

Strain, Connie – Faculty, Business – Chair
M.S., University of Colorado,Denver
B.S., University of Colorado, Boulder

Swenson, Christine – Faculty, Criminal Justice
J.D., California Western School of Law
B.A., The University of Arizona

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M.A., Colorado Christian College
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M.A., University of Wyoming
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Van de Sande, Michelle – Faculty, Developmental Studies
M. Ed., University of Phoenix
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Viola, Dawn – Faculty, Interior Design
M.Arch., University of Colorado
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A.A.S., Pikes Peak Community College

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Certificate, Service Management

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B.S., Texas A&M University

Willard, Rachel – Faculty, Biology
M.S., Colorado State University
B.S., Colorado State University

Winograd, Kathryn – Faculty, English, Writers Studio

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B.A., Ohio University

Wooley, Marsha – Faculty, Art
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