## MSI Separator Sheet

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1994-1995
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## Aims Community College

 Greeley, Fort Lupton, Loveland, Colorado
## CATALOG 1994-95



Greeley


Loveland


Fort Lupton

# AIMS COMMUNITY COLLEGE 1994-95 CATALOG 

(Effective Summer Quarter, 1994)
Established 1967

# A College Serving North-Central Colorado 

MAIN CAMPUS<br>5401 W. 20th Street<br>P.O. Box 69<br>Greeley, Colorado 80632<br>(303) 330-8008<br>FAX (303)339-6664

## SOUTH CAMPUS

260 College Avenue
Fort Lupton, Colorado 80621
(303) 857-4022

Greeley 352-4664
Metro 659-2243
FAX (303)352-5443

## WEST CAMPUS

104 E. Fourth Street
Loveland, Colorado 80537
(303) 667-4611

Greeley 330-4661
Metro 447-9092
FAX (303)635-9022


## A LETTER FROM THE PRESIDENT. . .

As President of Aims Community College, l'd love to have the chance to sit down with each one of you, congratulate you on your wise decision to improve your life through eduction, and discuss what you can expect in your time with us. However, with 19,000 students attending Aims each year, it's impossible. That's why the people who put this catalog together have given me one page so I can share some thoughts about Aims Community College.

For those of you who have just finished high school, your years with us will be a time to grow, to tackle different problems on your own, and to deal with situations you may not have faced before. This catalog contains information to help you understand how our institution works, and it may even answer many of your questions before you know you have them.

For those of you going back to school after a long absence---
 and trying to juggle a job, schoolwork and family----'d like to applaud your dedication. It's not easy to undertake something which requires so much commitment.

To all of our students, regardless of age and experience, l'd like to say I understand that a "school bench" can be a somewhat frightening place. Growth isn't easy, but it sure beats the alternatives of dead-end jobs, static lives, and brain cells which no longer need to function. Our staff members and teachers will do their best to help you on your way.

The realization that it's up to you to make positive changes in your life comes with maturity. It is a powerful motivator. That's why we've seen so many people like you succeed beyond their wildest expectations. My job, and the jobs of all the employees of this College, become worthwhile when we feel we have had a small part in your personal success.

Welcome to Aims Community College and enjoy your journey!


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SUMMER QUARTER, 1994
(4-Day Week)
Friday, May 6, 1994 ..... 4....
Monday-Thursday, June 13-16, 1994
Graduation Application Deadline for Summer Quarter

$\qquad$
.Summer Work Day Schedule
Monday, June 20, 1994
Wednesday, June 22, 1994
Registration
Thursday, June 30, 1994 Last Day to Drop Classes with $100 \%$ Refund
Monday, July 4, 1994 College Closed (Independence Day)
Last Day of Classes Wednesday, August 24, 1994
Graduation ( 9 a.m.)/End of Quarter
Monday, September 5, 1994 Labor Day (College Closed)
FALL QUARTER, ..... 1994
Thursday, July 28, 1994...Graduation Application Deadline for Fall Quarter
Monday, September 12, 1994
Tuesday, September 13, 1994..General Staff MeetingWednesday-Thursday, September 14-16, 1994..Fall Early Registration for Spring and Summer Students
Tuesday, September 20, 1994Thursday, September 22, 1994Classes Begin
Monday, October 3, 1994 ..... Last Day to Drop Classes for 100\% Refund
Friday, October 14, 1994 Staff Development Day (no classes)
Friday, November 11, 1994 ..... Staff Development Day (no classes)
Wednesday-Friday, November 23-25, 1994. Thanksgiving Holiday (college closed)
Tuesday, December 6, 1994Last Day of Classes
Wednesday-Thursday, December 7-8, 1994 Evaluation Days
Friday, December 9, 1994 Graduation (9 a.m.)/End of Quarter
Monday-Friday, December 26-30, 1994 Christmas Holiday (college closed)
Monday, January 2, 1995New Year's Holiday (college closed)
WINTER QUARTER, ..... 1995
Friday, October 28, 1995
er 14-18, 1995 ......
Graduation Application Deadline for Winter Quarter
Monday, Friday, November
Tuesday, January 3, 1995 Winter Early Registration for Fall Students ..... 995
Student Advising, Registration
Thursday, January 5, 19
Friday, January 13, 1995 Classes Begin
Tuesday, March 14, 1995
Last Day to Drop Classes for 100\% Refund
Wednesday-Thursday, March 15-16, 1995
Last Day of Classes
Friday, March 17, 1995. Graduation (9 a.m.)/End of Quarter
Monday-Friday, March 20-24, 1995 Spring Break
SPRING QUARTER,1995
Friday, February 10, 1995Graduation Application Deadline for Spring QuarterMonday-Friday, February 27-March 3, 1995Monday, March 27, 1995Spring Early Registration for Winter StudentsWednesday, March 29, 1995.Student Advising, RegistrationFriday, April 7, 19951995.
Monday, May 29, 1995Last Day to Drop Classes for 100\% RefundMemorial Day (college closed)
Tuesday, June 6, 1995.Last Day of Classes
Wednesday-Thursday, 7-8, 1995 Evaluation Days
Friday, June 9, 1995 Graduation (9 a.m.)/End of Quarter


ASSOCIATE OF ARTS (A.A.) DEGREE<br>(Liberal Arts Major 2 Year)<br>Areas of Emphasis:

Biofeedback (page 48)
Business Transfer (page 56)
Colorado Alcohol \& Drug Abuse Certification (page 53)
Communications Media (page 57)
Computer Information Systems (page 63)
Counseling (page 49)
Criminal Justice (page 51)
Design (page 58)
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Literature (page 57)
Music (page 60)
Prelaw (page 51)
Political Science (page 52)
Social Science (page 52)
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ASSOCIATE OF ARTS (A.A.) DEGREE
(Liberal Arts Major 2 Year) Areas of Emphasis:
Chemical Testing Technology (page 65)
Chemistry (page 65)
Computer Programming (page 64)
Computer Science (page 64)
Life Sciences (page 67)
Mathematics (page 66)
Pre-Engineering (page 66)
Pre-Health Profession (page 67)
Pre-Nursing (page 68)

## ASSOCIATE OF GENERAL STUDIES

(A.G.S.) DEGREE (2 Year Program)

## ASSOCIATE OF APPLIED SCIENCE (A.A.S.) DEGREE PROGRAMS

Accounting (page 74) 2 YR
Agriculture Technology (page 90) 3 YR
Farm \& Ranch Business Management Option (page 90)
Automotive Collision Repair Tecinnology (page 91) 2YR
Auto Body Repair Option (page 92)
Automotive Mechanics Technology (page 93) 2YR
General Automotive Technician Option
Electronics/Computerized Diagnostics Option
Aviation (page 95) 2 YR
General Aviation Pilot Option (page 95)

Professional Pilot Program (PPP) Option (page 96)
Computer Information Systems (page 62) 2 YR
Criminal Justice (page 81) 2 YR
Early Childhood Education (page 54) 2 YR
Electronics (page 97) 2 YR
General Electronic Technician Option (page 98)
Automated Process Technician Option (page 98)
Engineering Technology (page 99) 2 YR
Architectura/Civil Option (page 99)
Computer Aided Manufacturing Option (page 100)
Dratting/Design Option (page 100)
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Fire Protection Option (page 83)
Fire Science Option (page 83)
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Press Option (page 102)
Pre-Press Option (page 102)
Marketing/Management (page 78)
2 YR
Supervisory Management Option (page 79)
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Small Business Management Option (page 78)
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Administrative Support (page 76)
Legal Office Option (page 76)
Medical Office Option (page 76)
Radiologic Technology (page 87) 2 YR
Welding Technology (page 103) 1 YR
Welding Technician Option

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Accounting (page 75) 4QT
Auto Body Refinishing (page 92) 3QT
Auto Body Repair (page 91) 3QT
Auto Mechanics (page 93) 3QT
Aviation (page 96) 4QT
Basic Peace Officer Academy (page 82) 3 QT
Drafting (page 101) 3QT
Early Childhood Education (page 54) 3QT
Emergency Medical Technician 1QT
Basic (page 85)
Emergency Medical Technician 2 QT Intermediate (page 85)
Farm \& Ranch Business Management Options (page 90)
Fire Service Training Academy (page 84) 1 QT
Geriatric Aide (page 88) 1 QT
Graphic Technology (page 102) 3 QT
Marketing/Management (page 79) 4QT
Office Technology (page 77) 4QT
Volunteer Fire Fighter Training (page 83) 4QT
Welding Technology (page 104) 3 QT
Young Farmer (page 91) 1 YR


## HISTORY

In the summer of 1966, a citizen's committee representing all of Weld County's school districts recommended the formation of a junior college district. In January of 1967, voters of the district overwhelmingly approved the establishment of Aims Community College. Two months later a governing board was elected and it, in turn, selected Dr. Ed Beaty as the college's first president.
After Dr. Beaty's death in 1975, Dr. Richard Laughlin was appointed president. He served the college in this post until 1979 when Dr. George R. Conger assumed the position.

Enrollment has expanded over the past twenty-one years from 900 students in 1967 to over 19,000 credit students annually in 1993.
Aims Community College's permanent 175 acre campus site was purchased in 1970. In 1971 the college secured a 50,000 square foot industrial building on ten acres adjacent to the main campus. This acquisition brought the Greeley campus to its present size of 185 acres.
The college's first totally new building, the Trades and Industry Building, was constructed in 1971. Next came Horizon Hall which opened in 1973. In 1975 the Emergency Services Academy was completed. The Physical Education Building was constructed in time for the opening of the winter quarter in 1976.

Ed Beaty Hall opened in the Fall of 1978. This distinctive facility provides over 60,000 square feet of laboratory and classroom space.

Planning for additional construction on the Greeley campus was initiated in 1982, culminating in the opening of the Welding Technology Building in the Fall of 1983. The Westview Classroom Building in the Fall of 1984, and the College Center in 1993.

The Aims Community College South Campus in Fort Lupton was also completed in late 1984. This facility serves the community and educational needs of our students in the Southern Weld County region.

Aims Community College has served Larimer County since 1969. The Aims Community College West Campus, located in downtown Loveland, opened in 1990 with a gift from McKee Charitable Trust, and offers degree, certificate and many other programs for students living in our service area of Larimer County. Classes are also held in the Loveland Center, opened in 1986, and Thompson School District R2-J facilities.

## PHILOSOPHY

The educational offerings and services of Aims Community College are based upon the belief that the primary obligation of the public educational system is to assist in the development of individuals for meaningful, productive lives in a democratic society. This philosophy implies a deep and abiding faith in the worth and dignity of the individual as the most important component of a democracy. This conviction recognizes that ideas are as valuable as facts in our dynamic and complex society, and it suggests that the college has an obligation to:

## 1. Create an educational environment which encourages the development of intellectual, social, and physical skills;

2. Foster a climate for students to develop rewarding personal and social patterns of life for their roles at home and in the community;
3. Assist students to achieve optimum vocational maturity; and
4. Promote an appreciation for the creativity of others and, thereby, to discover the potential for one's own creativeness.

## PURPOSES

Aims Community College was established in accordance with the laws of Colorado as a post-secondary educational institution authorized to offer instruction and training for students over the age of 16 years who are not enrolled in a regular K through 12 program in a public, independent, or parochial school. Very broadly, therefore, the purposes of Aims Community College are to provide:

1. College parallel courses preparing students to transfer to fouryear colleges or universities and occupational education courses preparing students for initial employment, further education or advancement in employment.
2. General educational offerings designed to prepare students to make intelligent choices in all aspects of life, integrating skills, knowledge, and values to promote personal and community growth;
3. Developmental education for those not prepared for college level study to achieve a higher level of educational attainment;
4. Counseling and guidance services to enable students to more clearly define their educational goals; and
5. Community services and continuing educational offerings for adults of all ages.

## APPROVAL

The operation of Aims Community College is approved by the State of Colorado. It is governed by the five member Aims Junior College District Board of Trustees elected by the voters of the Aims Junior College District. All degree programs are approved by the Colorado State Board for Community Colleges and Occupational Education and the Colorado Commission on Higher Education.

## ACCREDITATION

Aims Community College is accredited by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools.

## FAMILY EDUCATION RIGHTS AND PRIVACY ACT

Aims Community College complies with the Federal Family Education Rights and Privacy Act of 1974 , which specifies that (a.) a student's record is closed to non-college officials unless specific authorization to review those records is granted in writing by the student or is granted by provisions of the law and (b.) a student has the right to inspect and review certain specified official records, files, and data directly related to that student. Students desiring to inspect and/or review their official records should contact the Registrar, Office of Admissions and Records.

## AFFIRMATIVE ACTION

Aims Community College is committed to equal opportunity in employment and education regardless of age, race, color, religion, gender, national origin, or handicap. Publicly adopted throughout the college is an affirmative action policy which shall assure equal employment and educational opportunities to all minorities in the college, whether classified staff, faculty, students, or administrators. Any student or college employee who encounters acts of discrimination because of age, race, religion, color, gender, national origin, or handicap should contact the Affirmative Action Officer, Dean of the College, Robert Rangel, General Services Building, room 271, Ext. 480.

## SMOKING POLICY

Smoking is prohibited in all buildings owned and operated by the college except in designated areas.

DRUG FREE WORKPLACE<br>Aims Community College is a drug-free workplace.

## AN ALCOHOL AND DRUG FREE EDUCATIONAL INSTITUTION ALCOHOL AND DRUG ABUSE PREVENTION PROGRAM

## I. Background

The National Drug Control Strategy issued in September 1989, proposed that the Congress pass legislation requiring schools, colleges and universities to implement and enforce firm drug prevention and education programs as a condition of eligibility to receive Federal financial assistance. On December 12, 1989, President Bush signed the Drug-Free Schools and Communities Act Amendment of 1989 (PL 101-226) which requires institutions of higher education to implement a program to prevent the unlawful possession, use, or distribution of illicit drugs and alcohol by their students and employees on school premises or as part of any school activity.
This law, in addition to the Drug Free Workplace Act (PL 100-690, $5151-5160$ ), which requires applicants for federally funded grants and contracts to certify that they will institute affirmative steps to prohibit the unlawful manufacture, distribution, possession, and use of controlled substances in the workplace, establishes the foundation on which Aims Community College has established it's drug and alcohol policy.

## II. Standard of Conduct

Aims Community College complies with both the Drug-Free Schools and Communities Act and the Drug Free Workplace Act. In compliance with these Acts all students and employees are prohibited from the unlawful manufacturing, possession, use or distribution of illicit drugs and alcohol on any of the Aims' campuses or at any Aims sponsored activity. In addition Aims has adopted a policy of "NO ALCOHOL" for all students and employees on all campuses, and at all school sponsored activities both on and off campus.

## III. Legal Sanctions

Students and employees are reminded that local, state, and federal laws provide for a variety of legal sanctions and penatties for
the unlawful manufacturing, possession, or distribution of illicit drugs and alcohol. These sanctions include but are not limited to incarceration and monetary fines.

The Federal Controlled Substances Act specifies penalties, for a first offense individual involved in the unlawful manufacturing, distribution, or possession with intent to distribute narcotics, of not less than 10 years or more than life imprisonment and a fine up to 4 million dollars, or both. The penalty for simple possession, knowingly or intentionally possessing a controlled substance, is imprisonment up to one year and a minimum fine of $\$ 1,000$, or both. Penalties for unlawful distribution of a controlled substance to a person under twenty-one (21) years of age is imprisonment or a fine, or both, up to twice that established for distribution offenses.

The Colorado Criminal Code relating to controlled substances (Title 18, Article 18) establishes penalties for the unlawful distribution, manufacturing, dispensing, sale, or possession of a controlled substance ranging from six months imprisonment or $\$ 500$ fine, or both, to 16 years imprisonment and/or $\$ 750,000$ in fines, depending on the classification of substance. Penalties under the Colorado Beer Code (Title 12, Article 47) relating to unlawful manufacturing, distribution, and possession of alcoholic beverages range up to one year imprisonment and/or up to $\$ 5,000$ in fines, or both.

Local ordinances for the City of Greeley, relating to illicit drugs and alcohol, coincide with the State of Colorado statutes.

## IV. College Sanctions

Students and/or employees (full or part-time) who violate the standards set forth under the Aims Substance Abuse Policy will be subject to disciplinary actions. Sanctions include, but are not limited to, reprimand, probation, suspension, expulsion or termination and/or referral to the appropriate authorities for prosecution.

## V. Health Risks

Health risks associated with drug and alcohol abuse encompass physical and psychological effects, including but not limited to : malnutrition, brain damage, paranoia, psychosis, hepatitis, convolutions, coma, depression, heart disease, death, pancreatitis, cirrhosis of the liver, damage to the central nervous system elevated blood pressure, respiratory failure, low birth weight babies, babies with drug/alcohol addictions, and an increased probability of intravenous drug users contracting AIDS. It is recommended that anyone having specific questions relating to their health and drugs/ alcohol should consult their physician.

## VI. Counseling and Referral Sources

## ON CAMPUS

A. Counseling/Assessment Center - 330-8008 ext. 251
B. Human Resources Office - 330-8008 ext. 434

## OFF CAMPUS

A. Weld Information and Referral Service (WIRS) 352-9477
B. Weld Mental Health Center - 353-3686
C. Island Grove Regional Treatment Center

1. Detox - $356-6664$
2. Outpatient - $351-6678$
D. Alcoholics Anonymous - 351-0240 (Greeley) 669-9989 (Loveland)
E. Narcotics Anonymous - 353-6324

## AIMS OVERVIEW, cont.

F. New Beginning Treatment Center - 1-800-950-5150
G. Larimer County Mental Health Center - 679-4465 (after hours 667-3752)
H. Drug Rap Line - 352-3784
I. Salud Clinic - 857-2771 (Ft. Lupton)

## COLORADO

1-320-8333
Alcohol and Drug Abuse, Department of Health
NATIONAL HOTLINES
1-800-COCAINE
1-800-662-HELP
Directs callers to cocaine abuse treatment center
1-800-SAY-NO-TO
National Clearinghouse for Alcohol and Drug Information
Information on ordinances/statutes, health risks, and referral sources will be maintained in the Office of the Dean of Student Services, the Human Resources Office, and the Counseling/ Assessment Center, all located in the General Services Building.

## CAMPUS SAFETY ACT REPORT

In accordance with the Campus Safety Act, each institution of higher education is required to annually prepare a Uniform Campus Crime Report, consistent with the FBI's uniform crime reporting system. The report is to reflect the crime statistics on the property of the institution for the preceding calendar year.

Following is the statistical report for crime on the campuses of Aims Community College for 1993. The Crime Rate is derived by dividing the number of incident reports by total number of FTE (FullTime Equivalent) students and employees for the same calendar period.

| Crime | Number of <br> Incidents 1993 | Crime Rate <br> Category |
| :--- | :---: | ---: |
| Homicide | 1993 |  |
| Rape | 0 | 0 |
| Robbery | 0 | 0 |
| Aggravated |  | 0 |
| Assault | 0 | 0 |
| Burglary | 0 | 0 |
| Motor Vehicle | 0 | 0 |

## CATALOG CHANGES

Aims Community College reserves the right, whenever it judges it necessary or advisable to meet changing academic, instructional, student, or fiscal needs, to cancel or modify, without notice, any course or program described in this catalog. The College also reserves the right to change any provision or requirement of this catalog, including tuition and fees.


## MAIN CAMPUS <br> GREELEY

The main campus in west Greeley overlooks 100 miles of Rocky Mountain grandeur. Ten buildings comprise the 185 acre campus, including several general classroom buildings, a physical education center, administrative services complex and The College Center.

Of the 19,000 students that attend Aims annually, $80 \%$ of them take classes on the Greeley campus.

For a comprehensive look of the campus, refer to the map at the beginning of the catalog.


Map not to scale
5401 W. 20th Street
Greeley, Colorado 80634 (303)330-8008


## SOUTH CAMPUS FORT LUPTON

## Location:

260 College Avenue,
Fort Lupton, CO 80621
Telephone:
(303)857-4022

Greeley - 352-4664
Denver - 659-2243
Director Student Services:
Ralph Martinez
Office Manager:
Susan Hale

The Aims Community College-South Campus, located in Fort Lupton, was opened in September of 1984. This facility services the community and educational needs in the southern Weld County and Northern Adams County regions. Students can designate the South Campus as their "home campus" and thereby receive time passes and registration information at the South Campus. Situated one mile east of downtown Fort Lupton, the space age, solar design building has an array of ultra-sophisticated teaching facilities spread over 27,000 square feet.

Advising and assessment are regularly scheduled by the faculty and student services staff to facilitate on-line computerized registration for both day and evening students. Other student services available include career and job counseling, and assistance and information regarding financial aid programs and GED testing.

A learning resource lab equipped with personal computers is available to assist students with coursework. During each quarter, the lab has both day, evening, and some Saturday hours.

South Campus classes are designed to meet the needs of day and evening students. South Campus hours are as follows: Monday Thursday 8:00 a.m. $-10: 00$ p.m., Friday 8:00 a.m. $\cdot 5: 00$ p.m., and Saturday 9:00 a.m. - 12:00 noon.

Classes for most degrees are available as well as special noncredit workshops and seminars.




Larimer County students can specify the West Campus - Loveland as their "home campus" and thereby receive time passes and registration information in Loveland. Located in the heart of Loveland, the West Campus facility, donated by the McKee Charitable Trust, opened in the Fall of 1990. Close-in, free parking makes the West Campus ideal for the busy student. Advising, financial aid information, GED testing, and assessment testing are provided. On-line, computerized registration is available.

An expansion of the West Campus facility, donated by the McKee Charitable Trust, was completed in the Fall of 1993. This included several classrooms, offices and the Thomas M. McKee Learning Resource Center. The Learning Resource Center is equipped with a variety of hardware, software and other reference materials. In addition, two computer classroom labs equipped with a variety of software are available. The Learning Resource Center, open lab, as well as classroom hours are scheduled each quarter during the day, evening and weekends.
The new West Campus facility has allowed Aims Community College to broaden its services to the communities in Larimer County. In particular, the addition of a science laboratory significantly expands


Map not to scale
104 E. Fourth Street
Loveland, Colorado 80537 (303)667-4611
the scope of courses offered for the Associate of Arts Degree as well as other degrees and certificate programs.

Classes for most degree plans are regularly available as well as special non-credit workshops and seminars. The West Campus hours are designed for the working student's convenience: $\mathrm{M}-\mathrm{Th}$, 8:00 a.m. - 10:00 p.m.; F, 8:00 a.m.- 5:00 p.m.; S, 9:00 a.m. - 3:00 p.m. Colorado State University/Aims Community College and University of Northern Colorado/Aims Community College tuition grant information and forms are available. Aims Community College has close working relationships with area colleges and universities including Regis University, in the downtown Loveland Center.



## ADMISSION

Aims Community College will not deny admission to any district resident because of financial need as determined by the Student Financial Assistance Office. No admission fee is required as a condition for admission. Admission does not assure acceptance of an individual student into a particular course or program. Admission to the College does not, therefore, imply entry into any program which has selective admission standards nor does it assure admission to courses and programs in which an applicant's mental or physical handicap may, in the opinion of the College, appear to be impractical or dangerous. The College may deny admission or re-enrollment to individuals who cannot benefit from the programs/courses offered or are considered detrimental to the best interest of the college community.

Some students may be requested to enroll in special courses for correction of scholastic or other deficiencies as identified by the college's assessment process. Minimum skill levels are required for admission to even basic education courses. (See Assessment Requirements)

Students may apply for admission at any time during the quarter; however, in most cases course registration must be made at the beginning of that course's term. Students who may need special accommodations should complete the Admissions process and then contact Supplemental Services. (See Supplemental Services)

Aims Community College does not require (but strongly encourages) immunization for measles or other diseases prior to admission. Students are urged to consult their personal health providers regarding potential health risks

## ENROLLMENT PROCESS

All students are responsible for their own enrollment, for identifying disabilities, and, if needed, requesting special accommodations Details appear in the Schedule of Classes.

To become enrolled at Aims Community College, you must:

- Attend an Information Session.
- Complete the admissions procedure- Complete Request for Special Accommodations forms for Assessment and Supplemental Services, if applicable.
$\qquad$ - Complete the assessment process
- Apply for financial aid (if desired).
- Attend Orientation (new students)
- Complete the advising process.
- Complete the registration process.
- Complete payment/down payment process.


## ADMISSION PROCEDURE

New students are urged to attend an Information Session where they will receive information about:
-_ program options

- deciding on a degree/major
- required assessment testing
- steps for enrollment
career planning options
orientation sessions
New students should go to the Counseling/Assessment Center in the General Services Building. Sessions are held on a regular basis.

A completed admission application is required for all new students and students returning after a one year absence including students taking courses for self-improvement or personal interest only. Some programs such as Radiologic Technology require separate applications for admission to be submitted to the specific division.

Students are urged to submit applications and acquire registration materials well in advance of registration day to avoid delays and long lines.

## For Domestic Students:

$\qquad$ - Submit Application for Admission

- If pursuing a degree or certificate program and a high school or other college was attended, provide an official transcript of high school or college credits or a certified record of GED completion or ACT/SAT scores.


## ADMISSION REQUIREMENTS FOR INTERNATIONAL (FOREIGN) STUDENTS

1. Submit application for admission.
2. Submit English proficiency results from the Test of English as a Foreign Language (TOEFL). To be considered for admission to Aims Community College, international students must have a minimum score of 520 on the TOEFL. All international students admitted are required to take the college assessment test.
3. Completed application and supporting credentials must be in the Admissions Office by midterm of the quarter preceding the quarter of enrollment.
4. International students must pay their tuition and fees on the day they register. Failure to comply will result in withdrawal of their U.S. Immigration Form 20 (l-20).
5. International students are required to maintain satisfactory progress to be eligible for reenrollment in a subsequent quarter.
If an international student is admissible, the student will be issued the U.S. Immigration Form 20 (l-20). Questions regarding the admission of international students should be forwarded to the Admissions Office.

## ASSESSMENT

Assessment is designed to assist students in understanding their current academic levels and to aid them and their advisors in the selection of college courses. New and returning students are responsible for making arrangements at the Counseling/Assessment Center to meet the assessment requirement prior to conferring with an advisor and registration.

## ADMISSIONS, cont.

The assessment requirement will be met in one of the following ways:

1. Take the Aims Community College assessment tests in reading, English, arithmetic, and algebra (if applicable), or
2. Show proof of successful previous college experience at an accredited college ( 2.0 grade point average with transfer college level English and math classes), or
3. Show proof of minimum ACT scores of 25 in English, 23 in Math, and 25 in Reading on the New Enhanced ACT, or
4. Show proof of minimum SAT scores of 550 in the verbal area and 560 in the math area.
Assessment scores, including ACT and SAT scores, are considered valid for initial placement for a period of two years.
SPECIAL NOTES: Some departments may require that a student take one or more of the assessment tests even if he/she has previous college, ACT or SAT scores. This is done in the best interest of the student to ensure that he/she possesses the necessary basic skills to be successful in the specific area of study.

Some students will be taking courses for self-interest or for job enhancement. If the student chooses not to test for a course which requires an entry-level assessment score, he/she waives any right to tutoring offered by Supplemental Services.

Students requiring special accommodations in testing due to mobility, visual, hearing or learning disabilities must make arrangements for testing at least two weeks prior to the Early Registration deadline.

Students should contact the Counseling/Assessment Center for information and for testing times.

## ORIENTATION

All new degree seeking students are encouraged to attend an Orientation session prior to enrollment. Orientation provides the student with general information concerning admission procedures, registration, academic programs and services. Information on scheduled orientations can be obtained from the Counseling/ Assessment Center or Admissions and Records.

## REGISTRATION

After completing the admissions, orientation, and assessment processes, the student must complete the following registration process at the beginning of each quarter. A schedule of classes listing day and evening courses is published each quarter and is available in the Admissions and Records Office prior to early registration for returning students and registration for new students. Consult the calendar in the front of the schedule of classes for registration dates and other important deadlines.
The steps in the registration process are:

1. Obtain advising/registration form from Office of Admissions and Records.
2. Contact advisor.
3. Apply for financial aid (if desired).
4. Complete the course registration process $\mathrm{a}_{\checkmark}$ described in the schedule of classes.
5. Obtain billing of tuition and fees.
6. Pay tuition and fees. See tuition payment policy. A fee will be charged for late payments.
NOTE: Students must have all financial obligations to Aims Community College paid before they will be permitted to register for subsequent course work.

NOTE: Supplemental Services must be involved in the process of arranging for accommodations for any qualified student with a disability seeking access to educational programs. Students with mobility, visual, hearing or learning disabilities, as well as students with chronic health conditions, are eligible for accommodations. A Request For Special Accommodations form MUST BE COMPLETED BY THE EARLY REGISTRATION DEADLINE FOR EACH QUARTER TO GUARANTEE ACCOMMODATIONS for the first day of classes. These forms are available in Supplemental Services, HH 308. Students may call $330-8008$, extension 388 or TDD (303)339-6388.

## ADD, DROP, WITHDRAWAL, CANCELLATION OF CLASSES AND REFUNDS

## COURSE CANCELLATIONS

Aims Community College must retain the customary right to cancel course offerings where enrollment is too low to make a course educationally sound and economically efficient. Course cancellations will result in refund of tuition.

## ADDING, DROPPING, WITHDRAWING FROM CLASSES

Adding and dropping of classes must be done within the first 8 days of the quarter ( 6 days of summer quarter). For other short term courses the adding and dropping of courses must be done within the first $15 \%$ of the course meetings. This is the registration adjustment period and no academic record will be generated for classes dropped within this time line.
After the $15 \%$ date has passed, adding or registration may be done on an exception basis only if space is available and the instructor has given signed permission to enroll. Students may also enroll in certain courses which are designated as continuous enrollment courses.
Any class drop after the 8th class day for a full term class or atter the $15 \%$ deadline for other short term courses will become a withdrawal and will generate a W grade on the student's record. W grades can affect the student's academic standing. Students may withdraw from classes through $60 \%$ of class meetings. After $60 \%$ of the meetings, the faculty can assign a $W$ grade.

## HOW TO ADD, DROP, WITHDRAW

1. Fill out add/drop/withdrawal form from Admissions and Records, General Services Building Room 202.
2. Obtain instructor's approval and signature to add courses designated in the Schedule of Classes as "Division Approval Required."
3. Submit form to Admissions and Records by deadlines in the Schedule of Classes.

## ADD, DROP, WITHDRAWAL REGULATIONS

1. Students are responsible for properly processing adds, drops, and withdrawals.
2. A faculty member or administrator may withdraw a student from class for non-attendance, failure to achieve course objectives, or if it is considered to be in the student's best interest. This is an optional process; therefore, students cannot expect to be withdrawn due to non-attendance.
3. In case of emergencies, students are to submit written withdrawal requests to Admissions and Records, P.O. Box 69, Greeley, CO 80632. Students should provide an explanation about the situation regarding withdrawal requests.
4. Telephone requests for adds, drops, or withdrawals are not honored.

## REFUND REGULATIONS

Under specific conditions, the College grants refunds for tuition and special course fees to students who withdraw from college or make a reduction in credit hours. EVEN IF CLASSES ARE NOT ATTENDED, THEY MUST BE DROPPED IN ADMISSIONS BY THE SPECIFIED dEADLINE IN THE CURRENT QUARTER SCHEDULE OF CLASSES IN ORDER TO ELIMINATE CHARGES ON ACCOUNT.

To be eligible for a refund, a DROP (reduction in credit hours) form must be initiated in person, or in cases of emergency, by letter through the Admissions Office. The date the request is made at the Admissions Office, or the postmark date for letters, will be used in determining the eligibility of the refund. If the student was provided assistance from College funds or funds managed by the College, the refund will be returned to the appropriate scholarship/grant fund or applied to the student's note in the loan fund.
REFUNDS will be made in accordance with the following schedule. (Please consult calendar in Quarterly Class Schedule for Refund dates.)*
A. Registration day through eighth (8) day of the Quarter, sixth (6) day of Summer Quarter
$100 \%$
B. After eighth (8) day of the Quarter, sixth (6) day of Summer Quarter

NO REFUND
C. Cancelled Classes: $100 \%$ refund will be available after the refund period.
D. Self-Supporting Classes: Refunds will be granted only for classes which are dropped prior to the first class meeting.
*For classes which begin after the first full week of the quarter, the first day a class is to meet will be considered the "first official class date."

## COOPERATIVE REGISTRATION AGREEMENTS

UNC - Aims
Students enrolled for twelve credits and paying full-time tuition at the University of Northern Colorado (UNC) or Aims Community College are eligible to take one class (maximum 5 credits) at the other school without additional tuition charges. The free course must be one not offered at the student's home school during that term. Continuing Education courses (non-credit) do not count in the twelve credit full-time requirement and cannot be taken as the free class. Details are available at the UNC Registration Center in the University Center and at the Aims Admissions and Records Office.

## CSU - Aims

Students enrolled for twelve credits and paying full time tuition at Colorado State University (CSU) or Aims Community College are eligible to take one class (maximum 5 credits) at the other school without additional tuition charges. Continuing Education courses (non-credit) do not count in the twelve credit full-time requirement and cannot be taken as the free class. Details are available at the CSU Admissions Office and at the Aims Admissions and Records office.

(Tuition and fees subject to change after May 1, 1994. Consult quarterly schedule.)

Tuition charges at Aims Community College are dependent upon the student's residency status:

| Number of <br> Credit hours | Tuition Rate and Student Fee Per Credit Hour |  |  |
| :---: | :---: | :---: | :---: |
|  | *In-District | Out-of-District | Out-of-State |
| $1-15$ credit hrs | $\$ 20.50$ | $\$ 38.00$ | $\$ 120.00$ |
| for each credit <br> hour over 15 | $\$ 15.00$ | $\$ 28.00$ | $\$ 90.00$ |

STUDENT FEE: \$2.00 PER CREDIT HOUR THROUGH 15 CREDIT HOURS FOR ALL STUDENTS (MAXIMUM OF $\$ 30.00$ PER STUDENT). THIS FEE INCLUDES INSURANCE.
*In-district classification for tuition purposes is for students who have been Colorado residents for a minimum of one year (according to tuition classification law) and who have lived a minimum of thirty days in the Aims tax district. The Aims tax district is most of Weld County excluding the Mead, Dacono, Erie, Frederick, and Firestone area.

Classes requiring payment of a lab fee will be designated in the quarterly registration materials.

Active duty members of the U. S. Armed Forces (and their dependents) residing in Colorado on a permanent change-of-station status may be eligible for in-state tuition rates. Contact the Registrar for details.

Complete information regarding residency is available in the Admissions/Records office. Also, students may obtain a Change of Residency Petition from the Admissions Office. The final petition must be submitted to the Admissions Office by the deadline published in current quarter Schedule of Classes and approved prior to registration.

ALL TUITION AND FEE CHARGES ARE SUBJECT TO CHANGE BY THE AIMS JUNIOR COLLEGE DISTRICT BOARD OF TRUSTEES AS CIRCUMSTANCES MAY REQUIRE, WITHOUT NOTICE. SEE CURRENT QUARTER SCHEDULE OF CLASSES FOR UPDATED INFORMATION.

## STUDENT ACCIDENT INSURANCE

Student Accident Insurance is provided for students at Aims Community College. Additional information may be obtained through the Dean of Students Office (Ext. 225).

## TUITION PAYMENT POLICY

1. A combined bill/schedule must be picked up by each student at the time of registration, add, drop, or withdrawal.
Each student must make a down-payment at the time of registration according to the following range based on bill total:

| Bill Range | Minimum Down |
| :--- | ---: |
| Up to $\$ 100.00$ | $\$ 25.00$ |
| $\$ 101.00$ to $\$ 250.00$ | $\$ 50.00$ |
| $\$ 251.00$ to $\$ 450.00$ | $\$ 75.00$ |
| $\$ 451.00$ to $\$ 600.00$ | $\$ 100.00$ |
| Over $\$ 550.00$ | $50 \%$ |

If no down-payment is made, classes will be dropped. Financial Aid Awards and Third Party Authorizations will be considered as down payments for those who qualify (only if awarded by the time of registration).

When a down-payment is made, the registered student is required to sign a promissory note, if 18 years of age or older. Otherwise, a parent or legal guardian must sign on the students behalf. Final payment will be due thirty (30) days from the start of the quarter. A $\$ 20.00$ late fee will be assessed on all unpaid accounts at that time. Students will not be allowed to register for subsequent quarters and their records will be held until all financial obligations have been satisfied.

## REFER TO CURRENT QUARTER SCHEDULE OF CLASSES FOR SPECIFIC DUE DATES AND UPDATED INFORMATION.

2. Payments may be made in cash, Money Order, VISA, MasterCard, Choice Card, or Discover Card. Cashier will accept personal, oneparty checks in the amount of charges only. A valid driver's license is required. Every check returned to the College will be collected by CheckRites. Checks will not be accepted from students who have written or submitted two or more returned checks to the College. If a check written as a down-payment or full-payment is returned to the college for any reason, classes will be dropped.
3. Self-Supporting/Continuing Education Classes: Tuition and fees for these classes are due upon registration.
4. Students Sponsored by a Third Party Agency:
A. A valid letter of sponsorship must be on file in Fiscal Services.
B. Students must make arrangements for agency billing with Fiscal Services in accordance with payment deadlines.
C. Students are responsible for any charges not covered by their Agency and are subject to late fees and refund guidelines.
D. Questions? Call Fiscal Services, 330-8008, extension 486.
5. It must be understood that each student is responsible for payment of his/her own expenses. The College is not responsible for making payment arrangements with parents, guardians, international agencies, or other third parties.
6. Seriously past due accounts will be assigned for collection to a local attorney or collection agency by the college. This attorney or collection agency will pursue court proceedings when necessary.

## FINANCIAL OBLIGATIONS OF STUDENTS

The financial obligations of students to the college, such as payments for tuitions, fees, and books, are due and payable on specific dates or at the time the obligations are incurred. Students will not be allowed to register, graduate, or receive transcripts of courses completed unless all financial obligations to the college have been met. See current quarter Schedule of Classes for updated information and specific due dates.

## COUNSELING/ASSESSMENT CENTER



The Center provides a setting in which students may discuss in confidence with qualified professionals problems which may be important to them. The Counseling staff subscribe to the laws of Colorado goveming the practice of mental health occupations. Specifics concerning these rights can be found in the student handbook or at the Center.
Since counseling services are entirely voluntary, the student must initiate contact or be referred by a member of the professional staff in order to receive assistance. The staff assists students in the following areas:

1. Educational Planning
2. Career Planning
3. Advising, Orientation
4. Test Evaluation (interest, aptitude and personality)
5. Referral Services
6. Personal Counseling

## ASSESSMENT: Coordinator, Darlene Nold

The Assessment Center provides the following services:

1. Upon application for admission to the college, new students are assessed in reading, English, basic mathematics, and algebra to determine their skill levels. This information is utilized by the advisor and the student in making appropriate decisions about course scheduling.
2. General Educational Development (GED) Test: Upon passing this test, the student will receive a High School Equivalency Diploma. This test is available to those individuals who did not graduate from high school yet want a certificate in order to qualify for employment or to enter a post-secondary school.
3. Other testing offered by Assessment includes the California Achievement Test for teacher certification, the Vocational Basic Skills Test for a full-time vocational credential, and proctoring of instructional tests as needed.

## COUNSELING:

## Advising Core: Coordinator, Debra Bell.

The Core provides services to all degree seeking students as well as undeclared students. Orientations are held regularly throughout the school year to welcome and introduce new students to the College and to help them become acquainted with programs of study, services available and the registration process.

## Career Resource Center: <br> Supervisor, Bill Hardgrave.

The Center provides resource materials, instruction and individual help with career planning. The lab is open to all students.

## SCHOOL AND COLLEGE RELATIONS:

## Coordinator, Jill Christensen

Provides College information services to high schools and businesses within the service area. Secondary students can meet with the College representative at their high school. Students may also tour the campus through this office.


All students with a declared major and/or any student taking seven or more credits during any quarter must have an advisor. All students who have accumulated eighteen credits which will be applied to a degree must have an advisor's signature. New students need to attend a New Student Information Session through the Counseling/ Assessment Center. Students will be directed by the staff to the appropriate advisor. The advisor becomes conversant with the student's background, aptitudes, educational objectives, and takes a personal interest in the student's education. Generally, an advisor is associated with the student's major field of study. Each student must accept the responsibility to:

1. Meet with an advisor to discuss career objectives;
2. Discuss program and class schedule prior to each registration or early registration;
3. Make an appointment with an advisor when problems arise in the student's program, or if class changes are necessary; and
4. File appropriate advisor and program change forms with Admissions and Records.

Degree/Certificate Seeking Students, full or part-time, must have an advisor and must secure the advisor's signature on registration forms.

Developmental Studies Students, full-time or part-time, must have a faculty advisor.

Undecided Students may secure an advisor through the Advising Core in the Counseling/Assessment Center, however, no advisor's signature is required for enrollment unless the student has accumulated 18 credits toward a degree or when enrolling in 7 credits or more in one term. Courses carrying "instructor/department signature required" designations in the Schedule of Classes always require division/department approval for enrollment.


## TRANSFER CREDIT

Aims Community College gives college credit, according to its policy and at division/department discretion for College Level Examination Program (CLEP), specific education experience in the armed forces, and courses completed at other collegiate institutions. All undergraduate credit hours awarded within the prior ten years from any accredited higher education institution will be transferred into an Aims Community College Degree Program if they apply to the completion of the student's graduation requirements. Credits older than ten years, however, will also receive careful consideration for transfer. The College reserves the right to examine all credits to determine equivalency of content. In the event that course work is found not to be equivalent, the course may not be accepted as transfer credit. Course content which is obsolete is not considered equivalent. The College will accept those courses for transfer which have been completed with a " $C$ " grade or better at an accredited college or university, or other approved institution, and are applicable to the student's program of choice. The acceptance of this credit is documented on the student's permanent record as earned credit only, without any indication of grade or quality points.

Students must submit a request for transfer credit evaluation toward a specified certificate or degree program to Admissions and Records. The request for review and the official transcript to be reviewed must be received in the Admissions Office no later than the quarter prior to the anticipated quarter of graduation. Official transcripts are to be mailed from the previous college; FAX transcripts are not accepted as official. The Registrar will determine the number and nature of transfer credits applicable toward a degree or certificate. Students who have completed courses which may demonstrate their proficiency in math, English, and/or reading may also indicate on the Transfer Credit Evaluation Request their desire to have transcripts forwarded to the Assessment Center to meet the assessment requirement.

Official transcripts and other documentation of previous course work (course descriptions and course syllabi, when needed) are to be forwarded to Admissions and Records directly from the institution maintaining the original record. Occasionally, it may be necessary for the student to obtain and submit course descriptions to assist in the evaluation process. Official transcripts covering a student's previous secondary and college education, submitted to the college as part of the admissions or transfer evaluation procedures, become part of the official file and cannot be returned to the student. The college does not issue or certify copies of transcripts from other institutions. Transfer credit evaluation will be completed within thirty (30) calendar days after all documents are received in the Admissions and Records Office. If the evaluation is not completed within this time frame or if the student is not satisfied with the transcript evaluation, the student may appeal the matter through the office of the Registrar. The decisions regarding course transferability and/or placement made in the initial transcript evaluation will be binding if the student fails to file a written letter of appeal to the Registrar within fifteen (15) calendar days.

## COURSE CHALLENGING PROCEDURE

A student may challenge a course for which the student believes his or her prior training and/or study are adequate to meet the instructor's course requirements. Credits for course work attempted through the challenge procedure do not contribute toward a student's
eligibility for Financial Aid or Veteran's benefits. Only certain courses, identified by individual divisions, are available for this option. This credit will be allowed based on the following conditions and procedures:

1. The student must be currently enrolled in Aims Community College.
2. A course challenge may not be made for a course in which the student is currently enrolled, nor for one in which the student had been previously enrolled or had attended as a listener or visitor.
3. The student must secure a Course Challenge Application Form from the Office of Admissions and Records, and then submit the application to the division offering the course. The division will inform the student of divisional procedures.
4. Upon the approval of the course instructor and the division chair, the student will be offered the opportunity to complete the requirements for the course challenge.
5. A fee of $\$ 20.00$ per quarter hour credit will be charged to the student, and is payable upon divisional approval. Final arrangements for the course challenge will be made when the student presents the instructor with a receipt from the Business Office.
6. Upon successful completion of a challenge for credit, the student shall be awarded full credit for the course. A grade of " $P$ " (passing) will be recorded when it is submitted to Admissions and Records by the faculty on a copy of the application form.
7. Challenge credit is not applicable toward college graduation residency requirements (does not count toward the requirement of 24 of the last 36 hours to be taken at Aims).

## COURSE LOAD

The normal course load for a full-time student is from 12 to 18 credit hours. An employed student should vary a course load for the quarter according to the number of hours the student works. It is recommended that such a student consult with a counselor or faculty advisor about his or her schedule.

## COURSE NUMBERING

| $0-99$ | Precollege level courses not designed for <br> transfer to other institutions. These courses do <br> not count for college credit and are not used in <br> grade point average calculation. |
| ---: | :--- |
| $100-199$ | Courses normally taken by freshmen |
| $200-299$ | Courses normally taken by sophomores |

## ATTENDANCE

Students are expected to attend all classes for which they are registered, except in case of illness or other emergencies. The instructor shall determine and inform students of the effects of absences on the grade. If any student accumulates so many absences that continued enrollment in the class seems to be of little value, the student may be asked by the instructor to withdraw from the course; or by failing to withdraw as requested, the student may be officially withdrawn by the instructor. Withdrawals must be processed by the deadline shown in the schedule of classes.

## REPEATING COURSES

A student who earns a grade of " D " or " $F$ " may repeat the course once to raise the grade to a " $C$ " or better to meet the performance level required for subsequent courses. The course may be used only once to meet the graduation requirements of a particular degree or certificate program. If on the second attempt, the student fails to earn a " C " or higher grade, the student will not be allowed to attempt another repeat for one full academic year unless special approval has been granted by the Academic Standards Committee. A student may not repeat a course in which the student received a letter grade of " $C$ " or higher without instructor approval. All grades will be listed on the student's transcript and will be computed in the student's grade point average (GPA).


## GRADING SYSTEM

Aims Community College assigns the following alphabetical grades:

| Grade | Quality of Work | Grade |
| :--- | :--- | :--- |
| Symbol | Indicated by Symbol | Points |

A Indicates that the student has demonstrated superior achievement of the course objectives. 4

B Indicates that the student has demonstrated above-average achievement of the course objectives.

C Indicates that the student has demonstrated acceptable achievement of the course objectives.

D Indicates that the student has demonstrated less-than-acceptable achievement of the course objective. Although a grade of " $D$ " indicates passing, it does not constitute satisfactory performance according to the standards of some programs. These may, therefore, issue an " $F$ " grade rather than the " $D$ ".

F Indicates that the student has failed to achieve the objectives of the course.

P PASSING: Indicates a successful challenge to a course.

S SATISFACTORY: For designated courses, indicates achievement of the course objectives at a 'C' level or above.

U UNSATISFACTORY: For designated courses, indicates failure to achieve course objectives.

W WITHDRAWAL: Indicates withdrawal from the course. May be student or faculty initiated through $60 \%$ of the course. After $60 \%$ of the course, faculty may assign as a final grade. none

I INCOMPLETE: An instructor may choose not to record a grade when the student has, for good reason, been delayed in completing the required work. The student who meets the instructor's requirements for an "I" must complete an agreement with the instructor which specifically identifies the terms and conditions for completing the course. This agreement must be filed with the Office of Admissions and Records. The student has a maximum of one academic quarter to complete the course requirements. If at the end of this time the "I" has not been completed, the student will receive the " F " designation for the course. If a student's individual circumstances
justify, the instructor and/or the Division Chairman may approve an extension for an "I" completion up to a four-quarter maximum.
none
NC NO CREDIT: Available only in below-100 and non-credit courses

GRADE POINT AVERAGE
A student's grade point average (GPA) is computed according to the following formula:

Number of credits of "A" multiplied by 4; plus
Number of credits of "B" multiplied by 3 ; plus
Number of credits of "C" multiplied by 2; plus
Number of credits of "D" multiplied by 1 ;
Number of credits of " $F$ " multiplied by 0 .
Divided by total number of credits accumulated.
Only the credits accumulated and grade points earned in college level courses at Aims Community College are used in computation of quarterly and cumulative GPAs which appear on grade reports. Courses numbered below 100 do not count for college credit or in the grade point average. Courses graded "S" count for college credit, but are not used in the grade point average.


The primary objective of the College's Academic Standards policy is to ensure that students are provided timely assistance by their advisors when they experience academic difficulties.
Academic progress is measured by both the cumulative and the quarter grade point average (GPA). All students, both full and parttime, are expected to meet minimum standards of progress determined on the basis of the GPA.
Any student who does not maintain an appropriate GPA will be placed on Academic Probation. With this status comes the requirement that the student work with his/her advisor during the probationary period. The academic probation period is for one quarter and is a period during which the student's academic progress is monitored by the faculty advisor. During this time the student should assess, with the assistance of an advisor, his/her academic skills, study habits, class load, and/or program selection.

Any of the following criteria constitutes unsatisfactory progress:

1. Less than a 1.75 Quarterly GPA the first quarter.
2. Less than a 1.90 cumulative GPA through the second quarter.
3. Less than a 2.00 cumulative GPA through the third quarter.
4. Less than a 2.00 Quarterly GPA for any quarter following the second.
5. Any international student who fails to complete twelve credits any quarter with a 2.00 Quarterly GPA; or fails to maintain a 2.00 Cumulative GPA.
6. Certain academic programs may require more rigid standards; these will be identified within a program's description in the catalog.
Students who are placed on academic probation for one quarter and continue to make unsatisfactory progress or fail to improve their GPA standing above the probationary level will be referred to the Academic Standards Committee for an Academic Standards
Hearing. The Academic Standards Committee will determine which option is best for the student. Among the options are the following:
7. Remedial course work
8. Course load reduction
9. Continued probation
10. A program change
11. Suspension from program
12. Suspension from the college

If the findings of the hearing result in academic suspension from the college, the student may be readmitted after one academic quarter.

If a student finds the action of the Academic Standards Committee unsatisfactory, he/she may appeal in writing to the President of the College. This must be done within ten (10) calendar days after receiving the official ruling of the Academic Standards Committee.
If the student still feels unsatisfactory resolution has been achieved, the case may be presented to the Aims BOARD OF TRUSTEES based only on the written information submitted in previous steps. Such a meeting between the Board and the student shall be in an Executive Session of the Board. The Board may have the College Attorney in attendance and the student may bring one person of his or her choice. The request to address the Board must be made within seven (7) calendar days following the decision of the President and may be arranged through the secretary to the President.

## HONORS

Full-time students who complete at least 12 credit hours of college level courses which are used to compute the GPA during a quarter and who earn a GPA of 4.0 (straight A) will be listed on the President's List. Full time students who earn a GPA of 3.5 but less than 4.0, will be on the Dean's List. The achievement of honor status is noted on student transcripts.

## STANDARDS OF CONDUCT

Aims Community College does not deem it necessary to set forth a negative code of conduct as is typical of criminal law. It is expected, however, that students of Aims Community College will obey federal, state and local laws and respect the rights, privileges, and property of others. They are expected to conduct themselves in a manner which is not disruptive of college functions, does not interfere with free movement of students, school personnel, or guests and does not cause injury to persons or damage to property. Aims will not tolerate menacing behavior or threats by any student toward another student or toward any college employee. Exhibiting such behavior is grounds for suspension or dismissal from Aims Community College.

Any such interference, damage, or threat to persons or property will not be tolerated. In situations which he feels warrant such action, the College President may summarily suspend all persons involved in a violation of these standards, pending final dispensation of the case by the appropriate body.

## CHEATING

Cheating takes place in different ways, but basically, it involves dishonest behavior, such as copying from another person or obtaining any form of unauthorized help or assistance from any person or source.

Breaches of academic honesty will result in disciplinary measures. These can include:

1. A failing grade for a particular assignment.
2. A failing grade for a particular course.
3. Suspension for various lengths of time from the college.
4. Permanent expulsion from the college.

## DISMISSAL

In the case of serious breaches of acceptable conduct or in the case of a repetitive pattern of poor conduct, a student may be dismissed from Aims Community College.

## NOTICE FOR INFORMING STUDENTS OF PERFORMANCE EXPECTATIONS

## INSTITUTIONAL ACCOUNTABILITY FOR INSTRUCTIONAL OUTCOMES:

The objectives and course content within the Arts and Sciences curriculum reflect six institutional expectations for instructional outcomes for the students who successfully complete courses or the Liberal Arts degrees and majors at Aims Community College. They are:

1. Plan and write well organized essays and papers that focus on interpretation, critical analysis, and evaluation using the basic resources of the library to conduct research at success or minimum competency levels established by the faculty in the
division and course work.
2. Read critically and respond logically using both oral and written language skills at success or minimum competency levels established by the faculty in the division and course work.
3. Think critically about psychological, sociological and geographical issues at success or minimum competency levels established by the faculty in the division and course work.
4. Weigh and respect different systems of human values, both contemporary and historical, making appropriate connections between past, present and future at success or minimum competency levels established by the faculty in the division and course work.
5. Use mathematical data and quantitative reasoning skills, and to collect and analyze data using scientific methods at success or minimum competency levels established by the faculty in the division and course work.
6. Acquire subject matter content, including vocabulary and basic concepts appropriate to the breath and depth of the topics covered.

The objectives and course content within the Occupational Education curriculum reflect four institutional expectations for instructional outcomes for the students who successfully complete courses or the Occupational Degrees and certificates at Aims Community College. They are:

1. Demonstrate the ability to perform specific tasks for specific jobs for clusters of related jobs at success or minimum competency levels established by the faculty in the occupational majors.
2. Demonstrate the practical applications of theory in a technical specialty at success or minimum competency levels established by the faculty in the occupational majors.
3. Use communications skills related to the field of study (reading, writing, speaking) at success or minimum competency levels established by the faculty in the occupational majors.
4. Use mathematical data and quantitative reasoning skills in relation to a field of study at success or minimum competency levels established by the faculty in the occupational majors.

The objectives and course content within the Developmental Studies curriculum reflect three institutional expectations for instructional outcomes for the students who successfully complete designated developmental studies courses at Aims Community College. They are:

1. Read, write, and perform arithmetic skills at a level necessary to succeed in college level courses.
2. Possess the study skills necessary to succeed in college level courses.
3. Pass the GED exam.


## GRADUATION REQUIREMENTS

The general requirements for receipt of an Associate of Applied Science (A.A.S.) degree, an Associate of Arts (A.A.) degree, an Associate of Science (A.S.) degree, an Associate of General Studies (A.G.S.) degree, or Certificates in Occupational Education programs are outlined in the curricula section of this catalog. A minimum cumulative grade point average of 2.0 is required in the particular program's curriculum for receipt of any type of degree or certificate, and normally only courses numbered 100 or above are applicable toward the degree or certificate. Specific requirements for individual programs may be secured from either the Admissions and Records Office or the Counseling Center.
Twenty-four of the student's last thirty-six quarter hours of course work applicable to the degree or certificate program and taken prior to graduation must be taken in residence at Aims Community College.
Students must make application for graduation by the end of midterm week, the quarter prior to the anticipated quarter of graduation. Graduation applications are available from the Admissions and Records Office. Completed graduation applications and degree worksheets with the faculty advisor's signature must be returned to the Admissions and Records Office where final evaluations will be made. Additional signatures are needed for the following degrees: the A.S. degree requires the Mathematics and Science Division Director's signature and the A.G.S. degree requires the signatures of the Dean of Arts \& Sciences and the Dean of Occupational Education. A.A. or A.S. degrees with an emphasis require signatures of the Division Director. The student will be notified by mail of the conditions required for graduation.

## EFFECTIVE CATALOG

The catalog in use during a student's first enrollment in the College normally is used in determining completion of degree or certificate requirements. The effective catalog may, however, be no more than seven years old at the time of graduation. A student may elect to meet the requirements of any subsequent catalog published during the seven year period, including the current year. This election must be made when the student files a graduation application.

A student who has a break in enrollment in the College and/or degree or certificate program of four consecutive quarters or more, excluding summer sessions, must meet the program requirements of the catalog in use at the time of readmission. Any previously completed Aims occupational course work may be subject to an evaluation of its relevancy to any revised program. If the occupational program in which the student was previously enrolled has been discontinued, or if a public notice of program discontinuance has been given, the student cannot re-enroll in that program.

The College reserves the right to substitute courses for those no longer offered, to modify course content at any time, to approve the substitution of one course for another in any degree or certificate program, or waive any course prerequisite or corequisite.


## STUDENT RECORDS

The Admissions and Records Office under the direction of the registrar keeps the following student information:

1. Personal Data: name, address, phone number, gender, birthdate, ethnic background, employment status, student/social security number.
2. Educational background information: previous high school, and/or college attended, degrees earned.
3. College major and degree expectations.
4. Degrees and honors received.
5. College records containing courses attempted, grades earned, credits eamed, and dates of enrollment.
6. Courses, hours, and credits of current enrollment.

A cumulative record of each student's college application, correspondence, and other miscellaneous forms is kept active while the student is enrolled in the College. If the student's enrollment ceases, the file is kept active for two years. If the student does not enroll again during this two-year period, the record is retired, and the file is destroyed in accordance with the regulations of the Colorado State Archives. A security copy of the inactive permanent transcript also is on file in the Colorado State Archives.

All students in attendance and students who have previously attended Aims Community College are provided access to their records in compliance with the requirements under the Federal Family Education Rights and Privacy Act of 1974 (Public Law 93-380 Subsection 513,88 Stat. $571 ; 20$ U.S.C. 1232q).

Students may review their records upon request in the Admissions and Records Office. Students may contact the registrar to appeal any errors which they feel have been made on their records.

The college will not permit the access to or the release of student educational records or personally identifiable information contained therein, other than items designated as public information, without the written consent of the student except as noted below under "Requests for Information."

## TRANSCRIPTS

A student may request a transcript (copy of academic record) in writing from the Admissions and Records Office. Transcripts are issued by Aims Community College free of charge. Updated transcripts are available seven working days after the end of the term. Transcripts are mailed or picked up but will not be FAXed. All student accounts with Aims College must be settled and students must be in compliance with the terms of any student loans before a transcript may be released. Transcripts or copies of transcripts from other colleges or institutions which were used for evaluation of transfer credit are not released by Aims and must be obtained from the institution holding the original record.

## REQUESTS FOR INFORMATION

The following items are considered public data/information and may be disclosed by the College in response to inquiries concerning individual students whether the inquiries are in person, in writing, or over the telephone.

1. Name
2. Affirmation of whether currently enrolled full time or part time.
3. Dates and terms of attendance.
4. Major fields of study.
5. Degrees and/or certificates earned.

Addresses are considered personally identifiable information and are not released except for the following:

1. Graduation lists released to news media.
2. Other listings to the news media for special awards, honors, and events.

Consent for release of education records or personally identifiable information shall not be required for the following parties:

1. Aims Community College officials.
2. Officials of other schools or colleges where the student intends to enroll.
3. State or federal educational authorities in connection with a student's application for financial aid.
4. State and local officials requiring reporting data.
5. Organizations conducting studies for educational institutions or agencies.
6. Accrediting organizations.
7. Parents of a dependent child as certifiable with notarized documents.
8. In compliance with judicial order or subpoena..
9. Law enforcement agencies of Colorado demonstrating that requested information is necessary for an investigation.
10. In case of emergency to protect the health, safety, or welfare of the student or other persons.
11. Officials of reciprocal lending libraries when materials borrowed are overdue.

Currently enrolled students may request that the college prohibit the release of public information by notifying the registrar in wiring. The college will honor the request as soon as possible, but no later than 5 days after the registrar receives the notice. The college will honor the request until

1. The student is no longer currently enrolled, or
2. The student notifies the registrar in writing to void the request (it may take up to 5 days after receiving the notice to void the request).
If the student has a break in enrollment, other than between Spring and Fall terms, the request to prohibit the release of public information will be considered voided. The student must notify the registrar in writing of the request to prohibit the release of public information when the student re-enrolls. The college assumes no liability which may arise from compliance with a request to prohibit the release of public information.

## CONTINUING EDUCATION

Continuing Education at Aims Community College is an exciting and dynamic unit of the institution geared to helping bring the resources of the college to the community. The major goal of Continuing Education is to provide opportunities for life-long learning. Although one of the smallest divisions on campus, we provide a wide diversity of services.

## WORKSHOPS \& SEMINARS

Life-long learning can be fun and stimulating when shared with a group of people who have similar interests. Short-term, sessions are offered in a no-stress, relaxed atmosphere for nominal cost.
A variety of workshops for adults, teens and families are offered throughout the year, based on current interests, including: crafts, nutrition, photography, study/research skills and driver education.
Seminars for professional growth on topics including career advancement, interpersonal relationships and skill enhancement are offered.

## TELE-CONFERENCES

Live teleconferences provide an opportunity to bring national topics and speakers to the Greeley area at a reasonable price, and include telephone/fax connections for live questions. Previous telecasts have included Deming, Juran, Scholtes, Senge, and Covey. Broadcasts are often followed with special presentations or local panel discussions with guests. Some live broadcasts are taped and can be rebroadcast as a videoconference, depending on the licensing involved. Additional opportunities to view tapes of some broadcasts can be arranged individually.

## CUSTOMIZED TRAINING

Through Continuing Education, Aims is dedicated to identifying the needs of our customers (organizations) and to developing and offering customized training to meet those needs. Recognizing that organizations need training designed specifically for them, and that they need that training in a timely fashion, the Continuing Education Division provides just-in-time training. With the ability to call upon the expertise provided by professional and support staff at Aims Community College and others in the area, the specific needs of organizations can be met. Our goal is to provide high quality, low cost support in helping an organization or individual meet their training needs. Current efforts include: basic skills training, team communication, facilitating the quality improvement in an organization, ISO' 9000 industry information sessions, quality improvement process, and stress management. Because Aims Community College believes in providing customers with quality service, the Continuing Education Division extends a simple guarantee for contracted services: If our services fail to meet your requirements as contractually agreed upon, we will re-provide the services at no charge.

## QUALITY IMPROVEMENT CERTIFICATE PROGRAM

Quality Improvement is a belief that the quality of products and services provided by an organization or individual can be continuously improved when leadership has a focus on customers. The Continuing Education Quality Improvement Certificate Program is a comprehensive, in-depth exposure to one of the most important issues facing our democratic system. Quality Improvement is a mind set and action-oriented approach to create high-performance work systems that strive to satisfy CUSTOMERS through LEADERSHIP that promotes TEAMWORK and uses DATA to continuously improve products and services. The requirements for a certificate include 62
contact hours of core subjects and a minimum of 24 contact hours of electives, over a period of four to six months.

## CENTER FOR QUALITY IMPROVEMENT AT AIMS (CQIA)

For an organization to suvive and compete in the global economy, they need to be involved in the quality movement. Aims Community College is dedicated to leading the quality revolution in the northern Colorado area. To achieve that end, the Center for Quality Improvement at Aims was established with the goal of providing organizations and individuals help as they progress on the quality journey. The Center offers help with the improvement process, a forum for networking, a resource center, and a Quality Improvement Update Newsletter, among other services.

## CONFERENCE CENTER

Added to our ability to serve the community, Aims is able to offer the use of its conference center, classrooms and grounds to the community. Priority is given to Aims related functions. The community may request the use of the facilities based upon availability. Space is available for small groups of up to 30 people, medium groups of $31-50$ people, large groups of $51-150$, and extra-large groups of up to 300 people. Tables, chairs, and a variety of audiovisual equipment are available, as well as use of our campus food services. For further information, contact the Information Receptionist.

## "COLLEGE FOR KIDS"

"College for Kids," is an enrichment program for students in grades one through twelve. Emphasis is placed on the summer program, with additional courses offered throughout the year. Classes are held at the Aims Campus sites and with special arrangements, at local schools.

Schedules vary from one-day sessions to eight-week sessions for nominal cost. A variety of classes in six categories are offered: Computer Activities, Fine and Performing Arts, Languages, Physical Education, Smart Kids--Safe Kids, Explorations in Science. Instructors include Aims faculty, public/private school teachers and other approved professionals.
"College for Kids" began in 1982 with an enrollment of 90 students in 7 classes. During the tenth anniversary year-1991, the enrollment increased to approximately 2,000 students in 175 classes.

## CONTINUING EDUCATION UNITS (CEUs)

Adult learners can receive recognition for their efforts to broaden their knowledge and skills by keeping a record of non-credit learning experiences with Continuing Education Units known as "CEUs". Based on 10 hours $=1$ CEU, individuals may use transcripts of CEUs earned for:

1. Maintenance or improvement of professional competence.
2. Documenting qualifications for renewing licensure, recertification or registration.
3. Presenting evidence of personal and vocational growth.
4. Preparation for a new career, whether because of personal preference or the pressure of technological obsolescence.
Aims Community College participates in the National Registry for Continuing Education Service. For a small fee included with a "participant form," the Continuing Education staff will forward record of completion to the central registry. Additional information can be obtained through the Continuing Education Office.

## COMMUNITY INTEREST PROGRAMS

Classes are offered in a number of instructional areas for the person who desires to broaden his or her experiences with the study of subjects of special interest. Major emphasis is on personal and
professional improvement and growth. Courses are offered if the need or demand arises, an appropriate number of students is available, and a qualified instructor can be secured. Adult education classes also are offered in communities outside Greeley, including Ault, Eaton, Windsor, Kersey, Johnstown, Gilcrest, Fort Lupton, Keenesburg, Loveland, Estes Park, Berthoud, Ft. Collins, and others.
Examples of classes which may be offered are conversational Spanish, conversational German, microcomputers, community pottery, word processing, community guitar, social dance, and community photography.

## DEVELOPMENTAL STUDIES

Many students achieve success at Aims by first taking one or more courses in the Developmental Studies Division. By taking assessment tests, they learn what initial courses they need to help them succeed in their particular program of study. The students improve their skills in math, reading, writing, listening, and speaking. Then they proceed toward their goal, such as attaining a particular certificate or degree.

## FAMILY \& LIFE EDUCATION

Provides learning opportunities to meet the needs of expectant families, parents, teachers, and older adults in various locations throughout Weld and Larimer County. Expectant Families, Parent Education and Senior Health classes are co-sponsored by North Colorado Medical Center.

The Early Childhood Education Program provides training for students who want to work with young children in preschools, day care centers, Head Start and other child care facilities.

## SENIOR EDUCATION PROGRAM

The Senior Education Program presents stimulating opportunities for the mature adult population to enhance their quality of life through the philosophy of Lifelong Learning. The program is committed to the furtherance of the intellectual, social, and physical wellness of the participants.

Exciting educational courses and physical fitness classes are held at convenient off-campus locations in Greeley and throughout Weld County at senior and community centers, churches, housing units, and long term care facilities. Subject areas include world and local history and geography, painting, drawing, music, computer, literature, writing, language study, dancing, and physical fitness. Newly organized classes are available each quarter to meet the needs and expectations of this fast-growing population. Consequently, hundreds of participants of various ages enroll in approximately 260 classes offered throughout the school year, thus making this Program unique throughout the country.



Aims Community College participates in a wide variety of federal, state, and local programs designed to assist undergraduate students in meeting the costs of education. Applications and information concerning Financial Aid programs are available in the Student Financial Assistance Office, General Services Building, and the South Campus and West Campus.

## ELIGIBILITY

Most financial aid is awarded to students on the basis of NEED. In determining NEED in a consistent way for aid candidates, Aims Community College requires financial aid applicants to apply for financial assistance by using the Federal Financial Aid form or one of the Multiple Data Entry agencies forms' ACT (American College Testing) CSS (College Scholarship Service). There is no fee to process any of the above applications. Applications and information about financial aid may be obtained from high school guidance counselors and/or the Student Financial Assistance Office at Aims Community College.

Complete program eligibility guidelines are listed in the Student Financial Assistance Handbook. Contact Student Financial Assistance Office for additional information.

## APPLICATION PROCEDURES

The following items are required from those students requesting financial assistance and must be submitted before consideration may be given:

1. Federal Student Aid Report.
2. Financial Aid Transcript (only for students who have attended another college)
3. Copy of previous year's Federal Income Tax 1040 Form
4. Verification of Non-taxable Income
5. Any other required documents as determined by your financial aid application.

Applicants for financial assistance are considered after the applicants have complied with the admissions and assessment testing procedures listed in this catalog. The following dates will be the deadlines for submitting applications for guaranteed processing:

Summer and Fall Quarter $\qquad$ April 15
Winter quarter $\qquad$ October 31
Spring quarter $\qquad$ January 31
Students are advised that the availability of aid funds is limited, so apply early. Consequently, students who are seeking financial assistance are urged to submit their completed application and all required documentation well in advance of the deadline date before the anticipated quarter of registration. The Student Financial Assistance Office will accept applications after the deadline dates, but awards will depend on the availability of funds at the time of processing.

## ESTIMATED ACADEMIC YEAR BUDGETS (9 MONTHS)

Single Resident
(Weld County)
Tuition/Fees ....... $\$ 911.00$
Room/Board ....... 4934.00
Books/Supplies..... 336.00
Personal Exp....... 1116.00
Transportation ...... 700.00

Single Nonresident
Tuition/Fees ............... $\$ 4941.00$
Room/Board................. 4934.00
Books/Supplies ............. 336.00
Personal Exp............... 1116.00
Transportation............... 700.00
\$12,027.00
These budgets are current as of the publication date. Check with the Student Financial Assistance Office for most recent estimates.


## LOANS

## FEDERAL PERKINS LOANS

Undergraduate students may borrow up to $\$ 3,000$ per academic year depending upon the available funds in the Federal Perkins Loan program at Aims Community College. Funding priority will be given to students with exceptional financial need after determination has been made on Pell Grant eligibility. Repayment of the Perkins loan begins nine months after the student ceases to be a half-time ( 6 to 8 credit hours) student. Perkins loan funds are to be repaid at a minimum of $\$ 40$ per month. The current interest rate is $5 \%$. Principal and interest payments are deferrable during periods of at least part time study. The period of repayment may not exceed ten years. Additional information may be obtained in the Student Financial Assistance Office. Federal, CSS or ACT application is required to determine eligibility.

## FEDERAL FAMILY EDUCATION LOAN PROGRAMS

The Federal loan programs as defined below require students and parents (if dependent) to complete an application for student assistance. In addition, the student is required to submit to the Office of Student Financial Assistance a Student Aid Report (the result of the Federal application), and a student loan application. Student Loan applications are available in the Office of Student Financial Assistance.
The Federal loan programs requires a 30 day delayed disbursement for all first time borrowers. Therefore, the Office of Student Financial Assistance will check class attendance and grade progress before loan checks can be disbursed to students.

## 1. FEDERAL STAFFORD LOANS

LOAN LIMIT - Depending on the students eligibility, a student who has not successfully completed the first year of a program of undergraduate education, may borrow up to $\$ 2,625$ per academic year. Depending on the students eligibility, a student who has successfully completed the first year of a program of undergraduate education, may borrow up to $\$ 3,5000$ per academic year.
INTEREST RATE - Bond equivalent rate of 91 -day $T$-bills.

## 2. FEDERAL UNSUBSIDIZED STAFFORD LOANS

Students who do not qualify for the total amount of a Federal Stafford Loan as listed above may be eligible to borrow the remaining amount under this program.
INTEREST RATE - Bond equivalent rate of 91 -day $T$-bills.

## 3. FEDERAL PLUS LOANS

Parents of dependent undergraduate students who do not qualify for a Federal Stafford or Federal Unsubsidized Stafford loan may apply for this loan program. PLUS loan checks are made copayable to the parent and Aims College and mailed to the College. Currently the college is endorsing the checks and mailing them by certified mail to the parent. Contact Fiscal Services for additional information on PLUS check disbursements. LOAN LIMITS - A parent may borrow up to the cost of education minus any student assistance (this includes scholarships) the student may receive during the academic year.
INTEREST RATE - Bond equivalent rate of 52 week T-bills.

* Actual interest rates can be determined by calling the lender at the time of the loan disbursement.


## WILLIAM M. THORKLIDSEN TRUST

Eligible students shall be Colorado high school graduates, of good character, considered by their college or university administration as responsible citizens. The specific purposes for the loans are limited to tuition, student fees, laboratory fees, book and supply costs.
Loans shall be funded by the United Bank of Greeley as Trustee at $5 \%$ interest per annum. The loans shall have maturities not to exceed five years following scheduled graduation. Payments will be due in equal monthly installment commencing six months after scheduled graduation or withdrawal from school whichever occurs first.

For further details, contact the Aims Student Financial Assistance Office.

## GRANTS

## FEDERAL PELL GRANT:

Federal Pell Grant eligibility is determined by the Federal Government. Pell Grant awards are preliminary and may be adjusted, depending upon residency status while attending classes, number of credit hours carried, and the final payment schedule developed by the Office of Education. Awards will be made after all required documentation is received by the Student Financial Assistance Office. Financial Aid applicants must establish their eligibility for this program before cther aid can be awarded. Awards ranged from $\$ 200$ to $\$ 2300$ for the $1993-94$ academic year. Federal or MDE agency application is required to determine eligibility.

## FEDERAL SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT:

Awards will be made to undergraduate students with the lowest family contribution who are also receiving a Pell Grant. Allocated after all other sources of aid are awarded and the applicant still has unmet need. Awards currently range from $\$ 400$ to $\$ 4,000$ for full academic year of attendance. Federal or MDE Agency application is required to determine eligibility.

## COLORADO STATE GRANT:

State funds made available to Colorado resident undergraduate students. Awards are made after Pell Grant determination is made. Awards vary from $\$ 200$ to $\$ 2,500$ per academic year depending upon the financial need of the individual student and the amount of funds allocated to the College by the State of Colorado. Federal or MDE Agency application is required to determine eligibility.

## COLORADO STUDENT INCENTIVE GRANT:

Awarded to students with exceptional need as defined by the State of Colorado as students with family contribution of less than $\$ 900$ per year. Awards range from $\$ 200$ to $\$ 2,500$ per academic year dependent upon the student's need and available funds. Funds are allocated to the college in $50 \%$ Federal and $50 \%$ State monies. Federal or MDE Agency application is required to determine eligibility.

## COLORADO DIVERSITY GRANT:

Funds are to be used for undergraduate students from diverse backgrounds as defined by the college. Awards range from $\$ 300$ to $\$ 1,500$ per academic year. Awarding of funds is dependent upon funding from the Colorado General Assembly. The Federal Aid or MDE Agency application is required to determine eligibility.

## STUDENT EMPLOYMENT

## FEDERAL COLLEGE WORK-STUDY PROGRAM:

Awards from the college work-study program are made to students who have financial need or their cost of education exceeds their family contribution. Wages are paid on the basis of an hour's pay for an hour's work. Students may not earn over the maximum award figure as allocated by the Student Financial Assistance Office. Awards can range from $\$ 900$ to $\$ 2,400$ per academic year. Federal Aid or MDE Agency application is required to determine eligibility.

## COLORADO NEED WORK-STUDY PROGRAM:

Awards from the Colorado work-study program are made to students who have financial need or their cost of education exceeds their family contribution. Wages are paid on the basis of an hour's pay for an hour's work. Students may not earn over the maximum award figure as allocated by the Student Financial Assistance Office. Awards can range from $\$ 900$ to $\$ 2,400$ per academic year. Federal Aid or MDE Agency application is required to determine eligibility.

## COLORADO NO-NEED WORK-STUDY PROGRAM:

Awards from the Colorado No-Need Work-Study Program must be made to students who do not demonstrate financial need. Students who demonstrate financial need are not eligible for funds under this program. Wages are paid on the basis of an hour's pay for an hour's work. Students may not earn over the maximum award figure as allocated by the Student Financial Aid Office. Awards can range from $\$ 900$ to $\$ 2,400$ per academic year. Federal Aid or MDE Agency application required to determine eligibility.

## AIMS TUITION GRANTS

Aims tuition grants are available to in-district students whose financial status is defined as low income by the Student Financial Assistance Office guidelines. Grants are made to cover the costs of tuition. Students approved for tuition grants are required to apply for a Pell Grant.

Tuition grants do not cover student fees, lab fees. books or student insurance.

## SCHOLARSHIPS

(See following section)

## VETERANS BENEFITS

The Student Financial Assistance Office helps the Department of Veterans Affairs implement the provisions of the various programs of benefit to veterans or eligible relatives of veterans under benefits of Chapter 31, 32, 35, 106, Chapter 30 - Montgomery GI Bill, and Title 38, United States Code.

Students who are eligible for Veterans Benefits should contact the Veterans Office, preferably at least eight weeks before actual enrollment, to assure timely payment of benefits.

Students receiving VA benefits are required to complete a quarterly enrollment form for the Veterans' Office during registration for each quarter they are enrolled. Failure to do so will result in termination of enrollment certification to the VA.

## CHAPTER 30 - MONTGOMERY GI BILL

Full-Time (12 credit hrs.) ............................................................. $\$ 400$
Three-Fourths Time ( $9-11$ credit hrs.)...................................... 300
Half Time ( $6-8$ credit hrs.)...................................................... 200
Above rates are based on 4 years of military service. Rates for 2 years of service may vary.

## CHAPTER 32 - VEAP

Students eligible for this program should contact the Student Financial Assistance Office for information on application procedure and pay rates. Individual rates may vary according to amount of contribution.

## CHAPTER 106 - SELECTED RESERVE - MONTHLY RATES

 Full-Time ( 12 credit hrs.) ......................................................... $\$ 190$Three-Fourths Time ( $9-11$ credit hrs.)...................................... 143
Half Time ( $6-8$ credit hrs.)...................................................... 95
Students who are receiving VA benefits must report any change in their program of study or training status immediately. Failure to do so may result in overpayments which the student must pay back to the Department of Veterans Affairs. Collection of overpayments will be aggressively pursued by the Department of Veterans Affairs.

If a veteran or eligible student has previously attended other colleges, universities, trade or vocational schools, VA requires that the student provide the Admissions Office with an official academic transcript from each school attended. The transcripts are evaluated to determine whether or not any transfer credits can be accepted toward the student's program at Aims.

## COLORADO NATIONAL GUARD TUITION ASSISTANCE PROGRAM

The State of Colorado has extended the National Guard Tuition Assistance Program to include students attending Aims. The purpose of the program is to encourage enlistment and promote retention in the Colorado National Guard. Students must meet the following eligibility requirements:

1. be a current member of the Colorado National Guard
2. be pursuing studies leading to an associate degree or a certificate of completion
3. be approved for participation by the Department of Military Affairs
4. have agreed to serve two years in the Colorado National Guard for each year of tuition assistance granted
5. be in good standing and demonstrate academic progress according to standards established by the Tuition Advisory Board.
The maximum amount of the award is 75 percent of the student's in-state tuition charges each quarter. Assistance may not be granted for more than 198 quarter hours of course work.

Applications for this program should be obtained from the National Guard Unit Commanders. Completed, approved applications should be presented to the Fiscal Office at the time of registration.

## FINANCIAL AID SATISFACTORY PROGRESS

Aims Community College students who receive Federal or State Aid, Student Loans, and/or Veterans assistance are required to:
A. Enroll each quarter for the minimum number of credit hours determined by awarded enrollment status in classes that are applicable to the students degree or certificate program.

1. Full-time award = Minimum of 12 credit hours of enrollment each quarter
2. Three-quarter time award = Minimum of 9 credit hours of enrollment each quarter
3. Half-time award = Minimum of 6 credit hours of enrollment each quarter
4. Less than half time award $=1$ to 5 credit hours of enrollment each quarter
B. Maintain satisfactory academic progress each quarter while receiving aid as defined below.
C. Seek and receive advising from his/her area of emphasis.

## MEASURABLE SATISFACTORY ACADEMIC PROGRESS

A. All students, both full and part-time, are expected to make satisfactory academic progress. The Grade Point Average (GPA) and number of credit hours completed each quarter are used as the basis for determining STANDARDS OF PROGRESS. A Standard $0(\mathrm{~F})$ to 4.00 (A) scale is used to determine satisfactory academic progress:

1st Quarter of enrollment: 1.75 quarter GPA
2nd Quarter of enrollment: 1.90 cumulative GPA
3rd Quarter and all subsequent quarters of enrollment: 2.00 cumulative GPA

1. Full-time students must complete a minimum of 12 credit hours each quarter.
2. Three-quarter time students must complete a minimum of 9 credit hours each quarter.
3. Half-time students must complete a minimum of 6 credit hours each quarter.
4. Less than half time students must complete the total number of credit hours each quarter depending upon the total credits awarded during each quarter.
B. Courses which receive the following passing grades shall be considered as credits completed:
5. " $A$ " through " $D$ " grades ( $D$ grade will not meet passing requirements or graduation requirements in some programs).
6. " S " (passing with credit)
C. The following shall not be considered as credit completed:
7. "F" grades
8. "W" withdrawals
9. "U" unsatisfactory grades 4. "NC" no credits
10. "I" incomplete (see section on reinstatement)
D. Prior academic progress will be a consideration for eligibility of financial aid assistance. Continuing students who have never received student assistance and have failed to maintain satisfactory progress during one prior quarter will be placed on FINANCIAL AID PROBATION, Those students who have attended more than one quarter at Aims College and have failed to meet the conditions of satisfactory progress during two or more quarters will not be eligible for financial aid assistance until they meet the conditions of reinstatement. Students in this situation may appeal this decision using the regular appeal procedure.

REVIEW PROCEDURE - Following every quarter the GPA and number of credit hours completed by each student will be reviewed in the Student Financial Assistance Office.

## FINANCIAL AID PROBATION

A. In the event a students fails to meet satisfactory academic progress criteria in a particular quarter, the student will be placed on FINANCIAL AID PROBATION. Probation status will remain on the student's financial aid record for the entire time the student receives aid at Aims Community College. Probation can only be removed by grade changes.

1. A student on probation may receive assistance for the subsequent quarter in which he/she enrolls, but must maintain satisfactory academic progress during future quarters in order to continue schooling with financial assistance.

## FINANCIAL AID SUSPENSION

A. If a student fails to meet satisfactory academic progress after being placed on FINANCIAL AID PROBATION, the student is considered to be making "unsatisfactory progress" and is placed on FINANCIAL AID SUSPENSION. Suspension mean the TERMINATION of all financial aid assistance. Suspension will remain until the student has achieved the reinstatement requirements. After being placed on Financial aid Suspension, it is the student's responsibility to contact the Cashier's Office for prompt payment of the next quarter's tuition and fees.

## CONDITIONS OF REINSTATEMENT

A. To be reinstated a student must:

OPTION I- Have their appeal approved by Financial Aid Committee.
OPTION II - With his/her own funds enroll in and complete the appropriate number of credit hours (based upon the awarded enrollment status at the time of suspension) with a cumulative GPA of at least 2.00 . At that time a student may request in writing (also submitting proof of payment for the prior quarter) to have their financial aid (if funds are available) to be reinstated for the subsequent quarters for which they will enroll. All requests must be submitted to the Student Financial Assistance Office.
B. Students reinstated will receive financial aid, but they remain on financial aid probation.
C. A student placed on suspension may be reinstated only once.
D. Probation and or Suspension as a result of incomplete grades will be reviewed by the Director of Financial Aid after the student completes the class and submits to the Student Financial Assistance Office a grade change form completed by the class instructor.

## APPEAL OF FINANCIAL AID SUSPENSION

Once "unsatisfactory progress" has been determined, the student may appeal the decision to terminate all financial aid awards using the following steps:
A. Student must complete a financial aid appeal form and indicate in writing to the Financial Aid Committee:

1. The reason why he/she did not achieve satisfactory academic progress.
2. The reason why his/her aid should not be terminated.
B. The Financial Aid Committee will review the appeal and determine whether the financial aid suspension is justified. The students will be advised in writing of the Committee's decision. The Financial Aid Committee meets only once each quarter and will only process appeals turned in on time. The deadline for submitting appeals is 7 days after the end of the quarter.

## STUDENT FINANCIAL ASSISTANCE, cont.

C. A student wishing to appeal the decision of the Financial Aid Committee may do so in writing to the Vice President of Student Services.
D. A student will be granted the right to an appeal only once after being placed on financial aid suspension. If suspension occurs again they may not appeal again.

## LIMIT ON STUDENT AID ASSISTANCE

A. Students in a degree program two or more years in length may receive aid for up to 10 quarters or the completion of one degree program. Students retain the right to appeal for additional quarters beyond the maximum of 10 quarters.
B. Students in a degree/certificate program one year or less in length may receive aid up to 6 quarters or the completion of one degree/certificate program. Students retain the right to appeal for additional quarters beyond the maximum of 6 quarters.

## APPEAL OF LIMIT FOR STUDENT AID ASSISTANCE

A. The student must complete a financial aid limit appeal form. A program evaluation form is to be completed by the student's Academic Advisor. Both forms are to be submitted to the Financial Aid Committee.
B. The Financial Aid Committee will review the appeal and determine whether additional quarters of assistance are justified. The student will be advised, in writing, of the Committee's decision. The Financial Aid Committee meets only once each quarter and will only process appeals turned in on time. The deadline for submitting appeals is 10 days after the end of the quarter.
C. A student wishing to appeal the decision of the Financial Aid Committee may do so in writing to the Vice President of Student Services.
D. A student will be granted the right to an appeal only once and may not appeal again.

## PRO-RATA REFUNDS

Federal Titte IV Student Financial Assistance regulations require the college to calculate pro-rata refunds for students attending Aims Community College and receiving Federal Financial Aid for the first time. Pro-rata means a refund of tuition and fees for a student who's date of withdrawal is at or before the $60 \%$ point in the quarter for which the student has been charged. Any refund calculated under this policy will be returned to the actual funds from which the student received Federal Title IV aid for the quarter of enrollment.


## AN INVITATION TO PLANT AN INVESTMENT

You're invited to plant an investment.
Aims Community College wants to go beyond excellence in education. The College desires to provide superior training in innovative and creative programs, which will set the standard for year to come.
The key to this dream is the success of the Aims Community College Foundation.
Since 1979, the Foundation has sponsored several programs recognized nationally for their impact on higher education.

Help us continue our pacesetting trend. Plant an investment that will flourish for years to come.
You may designate a gift or bequest for a specific purpose, or make available an unrestricted gift to be used at the discretion of the Foundation. In either case, you will be helping Aims Community College to continue its role as a leader in higher education.
For further information, call the Aims Community College Foundation Office, 330-8008, extension 365.

## MISSION STATEMENT

"The Mission of the Aims Community College Foundation, Inc., is to support the goals and objectives of the College by providing supplemental resources to ensure success.

The Foundation is charged with enhancing community awareness of the college; securing and receiving private contribution, bequests and donations; and accounting for, managing, conserving and appreciating funds or property assigned to the Foundation.

Such funding is managed by the Foundation and is distributed to benefit and advance the College and its teaching efforts. This involves attracting, supporting encouraging and subsidizing students, employees and worthy programs."

## FOUNDATION BOARD

Ken Whitney, President
Sherry White, Vice President
Dr. Robert Mitchell, Secretary/Treasurer
Dr. Bryan Ericson
Marion Jobe
Linda Morgensen
Ruth Slomer
Jerry Winters

## Roger Bates

Dayna Bedingfield Don Commins Wes Goehring Carol McDermott Jack Shupe Pat Thomas


## SCHOLARSHIPS

## COMMUNICATIONS AND HUMANITIES

\(\left.\begin{array}{ll}AWARD: \& DOROTHY M. STEWART <br>

WRITING AWARD\end{array}\right]\)| Awarding Division: | Communications/Humanities |
| :--- | :--- |
| Award Amount: | \$100 cash prize and framed certificate |
| Application Deadline: | No deadline. Recipient chosen by <br> instructors |
| Qualifications: | Contact awarding Division for criteria. |

## MATH/SCIENCE/COMPUTER

AWARD:
Awarding Division: Award Amount:

Application Deadline:
Qualifications:

CHEMICAL RUBBER COMPANY (CRC) CHEMISTRY AWARD
Math/Science (Chemistry) Handbook of Chemistry and Physics, Current Edition. No deadline. Recipient chosen by instructors.
Contact awarding Division for criteria.

## DEVELOPMENTAL STUDIES

## AWARD:

Awarding Division:
Award Amount:
Application Deadline:
Qualifications:

ED BEATY MEMORIAL SCHOLARSHIP
Developmental Studies
Tuition grant for one academic year, (in-district).
May 1
Contact awarding Division for criteria.

## SCHOOL OF OCCUPATIONAL EDUCATION

AWARD:
Awarding Division: Award Amount: Application Deadline: Qualifications:

## BERGER SCHOLARSHIP

School of Occupational Education $\$ 1,500$. Up to four awards given. End of Spring Quarter Contact the Assistant Dean of Occupational Education for criteria

## BUSINESS

## AWARD:

Awarding Division:
Award Amount:
Application Deadline:
Qualifications:

MIRIAM E. PETERSON SCHOLARSHiP Business
Two \$1,200 scholarships
Contact awarding Division
Contact Division for criteria

| PUBLIC SERVICE |  |
| :---: | :---: |
| AWARD: | GREELEY MEDICAL FOUNDATION SCHOLARSHIP |
| Awarding Division: | Public Service (Geriatric Aide) |
| Award Amount: | Reimbursement for books and supplies. Award given quarterly. |
| Application Deadline: | Prior to first day of class each quarter |
| Qualifications: | Contact awarding Division for criteria |
| AWARD: | LOUIS C. RIEKER SCHOLARSHIP |
| Awarding Division: | Public Service (Criminal Justice) |
| Award Amount: | Reimbursement for portion of books/supplies |
| Application Deadline: | No deadline. See department chair |
| Qualifications: | Contact awarding Division for criteria |
| AWARD: | WESTERN MEDICAL SERVICES SCHOLARSHIP |
| Awarding Division: | Public Service (Geriatric Aide) |
| Award Amount: | Tuition reimbursement after satisfactory employment. Award given quarterly. |
| Application Deadline: | Prior to first day of class each quarter. |
| Qualifications: | Contact awarding Division for criteria |

## TECHNOLOGY DIVISION

| AWARD: | CAPTAIN AL HAYNES AVIATION SCHOLARSHIP |
| :---: | :---: |
| Awarding Division: | Technology (Aviation) |
| Award Amount: | \$500 |
| Application Deadline: | Mid-term of Spring quarter |
| Qualifications: | Contact awarding Division for criteria |
| AWARD: | AVIATION DEPARTMENT SCHOLARSHIP |
| Awarding Division: | Technology (Aviation) |
| Award Amount: | \$750 |
| Application Deadline: | Mid-term of Spring quarter |
| Qualifications: | Contact awarding Division for criteria |
| AWARD: | GIL BORTHICK MEMORIAL SCHOLARSHIP |
| Awarding Division: | Technology (Engineering) |
| Award Amount: | Handbook in Field of Study |
| Application Deadline: | No Application - Selected by Faculty |
| Qualifications: | Outstanding Engineering Technology Graduate |
| AWARD: | ROY L. SMITH MEMORIAL SCHOLARSHIP |
| Awarding Division: | Technology (Automotive Mechanics) |
| Award Amount: | $\$ 100$ per quarter throughout the recipient's program |
| Application Deadline: | Eighth week of Fall quarter |
| Qualifications: | Contact awarding Division for criteria |
| AWARD: | BILL YOUDER SCHOLARSHIP |
| Awarding Division: | Technology (Automotive Collision Repair) |
| Award Amount: | \$200 to \$300 |
| Application Deadline: | Mid-term of Winter quarter |
| Qualifications: | Contact awarding Division for criteria |

SCHOLARSHIPS, cont.

## AWARD:

Awarding Division:
Award Amount:
Application Deadline:
Qualifications:

WINOGRAD'S STEEL AND SUPPLY SCHOLARSHIPS
Technology (Welding)
Two $\$ 300$ awards
End of Fall and Winter quarters
Contact awarding Division for criteria

## FOUNDATION

AWARD:
Awarding Division:
Award Amount:
Application Deadline:
Qualifications:

NORWEST BANK SCHOLARSHIPS
Aims Foundation
Two \$100 scholarships
Contact the Foundation Office at Aims Must be a graduate from Greeley Central or Greeley West High School.

## COLORADO UNDERGRADUATE SCHOLARSHIP PROGRAM:

Awards are made to recognize outstanding academic achievement of Colorado undergraduate residents. Applications are available in the Financial Aid Office. Award recipients are selected by the Financial Aid Director after all application requirements are met. This program is funded by the Colorado General Assembly. Awards will range from $\$ 100$ to $\$ 1,800$ per academic year.

## UNPUBLICIZED SCHOLARSHIPS

Local, regional and private scholarship information is contained in the Aims Library, located on the second floor of the College Center. Ask to see the "Available Scholarships" file.


## BOOKSTORE

The Aims College Bookstore, located in the College Center Building, is an institutionally owned facility operated for the convenience of the students of the College. Students may purchase textbooks, supplies, and soft goods during posted hours.

Textbooks and supplies are also available for purchase at the South Campus, Fort Lupton, and for Loveland classes at the West Campus - Loveland.

## BUS SERVICE

The City of Greeley has a bus system which includes two routes that provide service to Aims Community College. Riders can also transfer to Aims campus routes from other routes which serve the City.

## EARLY CHILDHOOD EDUCATION CENTER

Aims Community College offers, for a nominal fee, an Early Childhood Education Center on the Greeley Campus. The preschool program is directed by Students teachers who are supervised by a State certified director.

Applications for enrolling children are available at the Early Childhood Education Center during registration each quarter. The Center serves children ages 3 to 5 years (but not yet in kindergarten) for part-day ( 3 hour) sessions Tuesday through Friday.

The purpose of the Center includes:

1. Providing children the opportunity to gain social relationships with other children.
2. Providing play experiences that contribute to the physical, social and emotional needs of the child.

## FOOD SERVICE

The Campus Kitchen I cafeteria is located in the College Center. Regular hours are 8:00 a.m. - 4:30 p.m., Monday through Friday. Summer hours are 7:00 a.m. - 4:00 p.m. Monday through Thursday.

Food and snack vending machines are located in buildings on each campus.

## HEALTH SERVICES

Aims Community College provides emergency health services by a trained Emergency Medical Technician. The EMT provides first aid and emergency care on campus and referrals to appropriate health agencies when deemed necessary.

Disabled Parking Permits are issued by the Dean of Student Services Office.

The mandatory Student Accident Insurance Program is administered in the Dean of Student Services Office. A student must file an Accident/Incident Report within 24 hours following an accidentincident. All medical bills resulting from an accidentincident must be presented by the student to the Dean of Student Services Office for processing of insurance claims.

## HOUSING

Since the College does not provide student housing, it is the student's responsibility to make arrangements for his or her living quarters. It is recommended that these arrangements be made prior to the beginning of the quarter for which the student intends to enroll. It should be noted that most parties who have facilities to rent to
college students will require that a security deposit be paid when the final arrangements are made.

Students who attend Aims Community College have chosen to live in a variety of facilities. Many students commute daily from their family residences in the area. Others have rented private apartments available in the City of Greeley.

## JOB PLACEMENT SERVICES

Each year a large number of students qualify for employment upon graduation or upon completion of a specific course of study in the vocational-technical programs

A record of available positions, both full and part-time, is kept in the Job Placement Office. This office coordinates all of the College's efforts in assisting students to obtain full-time employment in occupations for which they have been prepared. The College also cooperates with local businesses to assist students in securing parttime employment while attending school. An effort is made to place students in job fields which relate to their college programs.
The Placement Office provides resource materials and instruction on careers and employers. Resume assistance is also available.
The Job Placement Office is located in Trades \& Industry Building. Students interested in full and part-time jobs should contact the Job Placement Office and complete an application for employment. This free service is available to all past and present students of Aims Community College.

## LIBRARY

## LIBRARY - GREELEY CAMPUS

Located on the second floor, South, of the College Center, the Library stores and circulates about 40,000 print materials (books, journals, magazines) and nonprint materials (records, audio cassettes, filmstrips). The library subscribes to nearly 400 magazines, journals, and newspapers. Access to the holdings of UNC and other Front Range libraries is available on the CARL System on-line terminals.

Aims employees and students check out materials by providing their Social Security Numbers. Community users check out materials by providing their addresses in addition to their Social Security Numbers.
Reserve materials assigned by instructors are checked out at the main desk. Knowing the instructor's name and the exact title of the material ensures speedy service. Call 330-8008, ext. 227 for further information.

AV equipment (projectors, recorders) is available at the main desk for student check-out with the instructor's approval.
Library hours appear every quarter in the front part of the Class Schedule. Handy phone numbers: Ext. 227 for renewals and questions about overdue materials; Ext. 326 for AV equipment; Ext. 237 for the Director of Library Services.

## LIBRARY - SOUTH CAMPUS

Located at Fort Lupton High School, the expanded Fort Lupton Public and School Library provides a full range of library services to Aims students. In the South Campus Center itself, the Resource Lab contains a few standard reference materials, such as an encyclopedia, dictionaries, thesauruses, and the like, for immediate on-site needs. A microcomputer with CD-ROM has additional reference materials, such as world and U.S. atlases, almanac, encyclopedia, and a "book" of quotations.

## LIBRARY - WEST CAMPUS

In addition to the new, on-campus McKee Learning Resource Center, the Loveland Public Library provides a full range of library services to Aims students. The Loveland Public Library is located in downtown Loveland at 415 East 5th Street. Please call 667-4040 for hours and other information.

## MEDIA SERVICES/ TELECOMMUNICATIONS/ TV DISTRIBUTION

The Media Services department supports Aims Community College programs, students, faculty, administrative and support staff personnel in the development, production and distribution of instructional materials.

This award-winning department is dedicated to the highest standards of service to the academic community and has gained recognition at local, state, regional and national levels.

Media production areas of this department include: graphics, photography, audio, video, and distance or interactive instruction.

Graphic services include overhead transparencies, poster mounting, lettering, lamination, dry mounting and framing.

Photographic services include black and white and/or color original photography, either in-studio or on location, darkroom services for black and white film, duplication of slides and filmstrips, and copy stand work. Archives of historic photographs and slides are available for slide tape programs. Original graphic slides can also be produced.

Audio production is done in a four-track audio recording/production studio which includes both sound effects and production music libraries. Original narration, sound tracks, and pulsing for slide-tape programs are produced in this facility. On location audio taping, such as guest lectures, and audio duplication services are also available.

Color television production is provided either on location or in the three-camera studio and editing suite. Television is used for a variety of instructional purposes including mirror teaching, student observation, evaluation and testing, training videotapes, telecourses, promotion and public relations and duplication services.

The Telecommunications area is used by students and faculty to develop original programming for instruction and includes scriptwriting, pre-production services, production, and post-production editing. Internships are available for qualified students seeking further television production experience. Telecommunications also coordinates PBS telecourse offerings with KRMA-TV for students wishing to utilize this academic resource.

The Television Distribution area includes a twelve channel closedcircuit television distribution system which feeds nearly $100 \%$ of the main campus classrooms from a 1700 volume tape library. TV distribution also provides access to cable and satellite transmissions for off-air recording and prepares programming supplied by Aims for cablecast on Greeley Cablevision channel 8. This area also coordinates teleconferences and videotape purchases for the college.

## PARKING

Vehicular parking is available on campus in designated lots. Parking regulations are enforced by the Department of Public Safety.

## SUPPLEMENTAL SERVICES

SUPPLEMENTAL SERVICES PROGRAM: Provides extra help with courses at Aims. The tutorial staff is prepared to help students with specific problems in individual classes and to help students strengthen their academic skills.
Instructor referrals and completion of assessment and/or course prerequisites and an assigned advisor are required for a student to be eligible for one-on-one tutoring. However, drop-in tutoring is available in English, math, and other courses for all students. Also, additional help is available through computer programs that enhance course content or reinforce basic skills. Neither referrals nor appointments are needed for these resources.
Any student with a disability requesting accommodations must contact Supplemental Services by the early registration deadline for each upcoming quarter. A student needs a completed and signed Time Pass plus a completed Request For Special Accommodations form to ensure that accommodations are available on the first day of classes. Please call 330-8008 extension 388, 267, 248,or the South and West Campuses. TDD (303)339-6388.


The Associated Students of Aims Community College, ASACC, is a student organization comprised of the students enrolled at Aims Community College. This organization serves the students at Aims in dealing with student concerns, student related non-academic issues, and diversified student activities. The organization is governed by a student group consisting of a governing board and a programming board, with representation from all three campuses. These boards work together, forming the Associated Students Board.

The goveming board represents the diverse needs and interests of Aims' students and assists in chartering and working with student organizations. This board takes an active role in providing student participation in the decision making process of the college. Members of this board represent the opinions and concerns of the students at Aims on various campus and community committees. They provide input on student life issues to the college administration and the Governing Board of the institution. This board also recognizes that student organizations provide valuable services to student, especially if they emphasize programs for professional, philosophical, or occupational development. To encourage success of students organizations a method of financial assistance has been implemented by the Associated Students Board for projects and activities. All students at

Aims are encouraged to seek professional and/or personal growth through involvement. Organizations currently recognized are:

VICA - Vocational and Industrial Clubs of America (Electronics)<br>PBL - Phi Beta Lambda APRS - Aims Program Radiography Students ACAEYC - Association for Education of Young Children AHS - Aims Honor Society SOARD - Signs of Aims, Recognition of the Deaf MECHA - Chicano Student Movement of Aztlan BSNC - Bonsai Society of Northern Colorado

The programming board of the Associated Students is responsible for initiating activities to complement the educational aspect of college life. These activities encompass the social, cultural, and recreational needs of the students at Aims. The activities produced by this board include: Fall-in, Winter-fest, Spring-fest, Coffee houses, comedy acts, films, lectures, workshops, ski trips, and sporting contests to name but a few. The college believes that such activities are an important element of the college experience and aid in the development of a meaningful, productive, and balanced student life.
The Associated Students in conjunction with the college also provide the student with an opportunity to relax, converse with fellow students, study, and/or participate in light recreation in the student areas of the College Center. These areas have been designed to help meet the needs of the student's non-academic life. They include general and club lounges with couches, table, chairs, and a big screen television; a light recreation/game room with pool tables, video machines, and pinball machines; and a copy center with a copy machine, computer, typewriter, and assembly area for documents or papers. The student areas are accessible to all students during normal school hours Monday through Friday. All students are encouraged to take advantage of these facilities as well as the library, bookstore, and food services also located in the College Center.



# SCHOOL OF ARTS AND SCIENCES 



The School of Arts and Sciences offers a large number of courses intended to serve a variety of student needs. In general, Arts and Sciences courses are designed for students enrolled in a two-year Associate of Arts, Associate of Science, or Associate of General Studies degree and for students preparing to complete a baccalaureate program at a four-year institution.

In addition, Arts and Sciences offerings may benefit Occupational Education students, serving as requirements or electives within particular occupational programs. The Arts and Sciences curriculum provides day and evening courses and, through continuing education offerings, serves the special educational interests of the community.

Students who earn the Associate of Arts and Associate of Science degrees will meet most requirements for transfer to a four-year institution. Students enrolled in these degree programs should fulfill elective requirements by taking courses that relate directly to a career or academic major at another college or university. For the Aims student who desires to begin work toward a particular major, the Arts and Sciences instructional divisions have developed areas of emphasis, some of which are described within this section of the catalog.

## DEGREES AND CERTIFICATES

Each degree granted by the college contains a minimum number of general education courses. "General Education" refers to a group of courses designed to assist individuals to assume the responsibilities that they share in common as citizens in a free society and to promote wholesome and creative participation in a wide range of life activities. Aims Community College will accept any of the following courses as meeting the general education requirement of the appropriate degree:

1. Those courses accepted toward fulfilling the core requirements toward the Associate of Arts, Associate of Science and Associate of General Studies degrees.
2. Those non-occupational courses specifically designed to meet

Associate of Applied Science degree requirements (see School of Occupational Education).
3. Other courses that the College's Academic Council identifies as falling within the overall general education definition.
Students may earn more than one degree or certificate concurrently at Aims Community College if all course and program requirements for each degree or certificate are satisfied. Students may not earn more than one A.A., A.S., or A.G.S. degree. Additional A.A.S. degrees or certificates must be earned in a different major/option.

Included within the Arts and Sciences program are three degree options: the Associate of Arts (A.A.) degree, the Associate of Science (A.S.) degree and the Associate of General Studies (A.G.S.) degree.

## ASSOCIATE OF ARTS (A.A), AND

## ASSOCIATE OF SCIENCE (A.S.) DEGREES

The Associate of Arts (A.A.), and the Associate of Science (A.S.), degrees are awarded to the student who successfully completes a program designed to transfer to a four-year college or university for the purpose of earning a baccalaureate degree. Although the requirements of the two degrees are similar, the Associate of Science degree program includes more science and mathematics.

Liberal Arts is the only major a student may pursue within the A.A. and A.S. degrees. However, the student who plans to pursue a particular major at a four-year institution may wish to select a particular area of emphasis within the A.A. or A.S. degrees. Also the student may select only one emphasis to be recorded with the Liberal Arts major for the A.A. or A.S. degree.

Although all courses included within an Associate of Arts or an Associate of Science program are intended to be transferable, the student should realize that occasional Arts and Sciences courses and many occupational courses may not be accepted for transfer by baccalaureate institutions. The student who desires to include these courses as electives within an A.A. or an A.S. program should check carefully the requirements of the receiving institution as well as the particular program into which he or she wishes to transfer.

## ASSOCIATE OF GENERAL STUDIES (A.G.S.) DEGREE

The A.G.S. degree includes selected professional courses and serves students who need an individualized or professional degree program toward job requirements, career advancement, and/or personal development. The A.G.S. degree, however, does not guarantee transferability nor employability.

A unique characteristic of the degree is that the field of study is determined by the student in consultation with a faculty advisor. Each student must develop a written statement of Goals and Objectives and specific courses needed to satisfy those objectives. In addition, a core curriculum of general education courses must be completed. A degree contract must be signed by the student, faculty advisor and the Advising Coordinator in the Counseling and Assessment Center prior to acceptance into the degree program.

Liberal Arts is the designated major for the Associate of General Studies degree, and no emphasis will be recorded with this degree. The A.G.S. degree may include professional or occupational courses, which often are not transferable to four-year institutions. Therefore, an A.G.S. student who plans to transfer to a four-year college or university should check carefully the receiving institution's requirements.

## GENERAL REQUIREMENTS FOR THE A.A., A.S., AND A.G.S. DEGREES

The following are general requirements for the A.A., A.S. and A.G.S. degrees:

1. Ninety-six quarter hours' credit in approved course work are required for graduation. Particular program requirements are outlined in this catalog under the section on the School of Arts and Sciences.
2. A student must maintain a minimum cumulative grade point average of 2.0 (a "C" average) in the A.A., A.S., or A.G.S. degree program curriculum.
3. Twenty-four of the last thirty-six quarter hours of course work applicable to the student's program and completed prior to graduation must be taken in residence at Aims Community College.
4. Most general education courses numbered 100 and above are applicable toward the A.A., A.S., or A.G.S. degrees.
5. Occupational courses are accepted toward the A.A., A.S., and A.G.S. degree requirements only upon the approval of the Dean of Arts and Sciences or her designee. This approval is given only when the courses are appropriate to the student's educational objectives.
6. The student's faculty advisor must sign the application for graduation. For A.S. degrees, the Mathematics, Science and Computer Division Director must also sign the application. The Associate of General Studies degree requires the signature of the faculty advisor and the Advising Coordinator in the Counseling and Assessment Center. Required signatures certify the advisor has reviewed completion of the student's degree requirements.

## CERTIFICATE IN OCCUPATIONAL EDUCATION

A Certificate in Occupational Education is awarded to a student who successfully completes an occupational program not leading to
an associate degree. Normally, these programs are of one year or less in duration. These programs are designed exclusively to prepare students for immediate employment. No general education course work is required. Course requirements for the various certificate programs are outlined in this catalog within the School of Occupational Education section.

The following are general requirements for the Certificate in Occupational Education:

1. A minimum cumulative grade point average of $2.0(\mathrm{a} " \mathrm{C}$ " average) in the particular certificate program curriculum.
2. A minimum of one-half ( $50 \%$ ) of course work applicable to the student's program and completed prior to graudation must be taken in residence at Aims Community College.
3. Normally, only courses numbered 100 or above are applicable toward a Certificate of Occupational Education.
4. Courses used as electives in meeting certificate requirements and taken in addition to specified courses in a particular program are accepted toward certificate requirements only upon the approval of the appropriate program official. This approval is given only when appropriate to the educational objectives of the student.
5. A faculty advisor in the field of study must sign the application for graduation to certify the student has met requirements according to the advisor's review.


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## GENERAL EDUCATION CORE TRANSFER PROGRAM

A student attending one of Colorado's 15 community/junior colleges can complete a common core of classes that will meet the freshman-sophomore general education requirements at most baccalaureate, degree-granting programs in Colorado's publicly supported four-year institutions.

The Core Transfer Curriculum provides a comprehensive block of transferable classes that Aims Community College students may complete alone or as the general education component of the twoyear Associate of Arts or Associate of Science degrees. In order to be accepted for transfer under the core transfer agreement, a grade of " C " or better is required in each core class.

For more information, students should consult their advisor.

## CORE TRANSFER CLASSES

## Communications

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

## Mathematics

MAT 121 College Algebra
MAT 125 Survey of Calculus
MAT 135 Introduction to Statistics
MAT 201 Calculus I
MAT 202 Calculus II
MAT 203 Calculus III

## Science

BIO 105 Science of Biology
BIO 111 General College Biology I
BIO 112 General College Biology II
BIO 113 General College Biology III
CHE 101 Introduction to Chemistry I
CHE 102 Introduction to Chemistry II
CHE 111 General College Chemistry I
CHE 112 General College Chemistry II
CHE 113 General College Chemistry III
GEY 111 Physical Geology
GEY 121 Historical Geology
PHY 105 Conceptual Physics
PHY 111 Physics: Algebra-based I
PHY 112 Physics: Algebra-based II
PHY 113 Physics: Algebra-based III
PHY 211 Physics: Calculus-based I
PHY 212 Physics: Calculus-based II
PHY 213 Physics: Calculus-based III
Behavioral and Social Sciences
ANT 101 Cultural Anthropology
ANT 111 Physical Anthropology
ECO 201 Principles of Macroeconomics
ECO 202 Principles of Microeconomics
GEO 105 Geography
HIS 101 Western Civilization I
HIS 102 Western Civilization II
HIS 103 Western Civilization III
HIS 201 U.S. History I

HIS 202
HIS 203
U.S. History III

POS 111 American Government
PSY 101 General Psychology I
PSY 102 General Psychology II
SOC 101 Introduction to Sociology I
SOC 102 Introduction to Sociology II

## Humanities

ART 111 Art History I
ART 112 Art History II

* 111 Foreign Language I
* 112 Foreign Language II, Part 1
* 113 Foreign Language II, Part 2
* 211 Foreign Language III
* 212 Foreign Language IV, Part 1
* 213 Foreign Language IV, Part 2

HUM 121 Survey of Humanities I
HUM 122 Survey of Humanities II
HUM 123 Survey of Humanities II
LIT 115 Introduction to Literature I
LIT 201 Masterpieces of Literature I
LIT 202 Masterpieces of Literature II
MUS 120 Music Appreciation
MUS 121 Introduction to Music History I
MUS 122 Introduction to Music History II
PHI 111 Introduction to Philosophy
PHI 112 Ethics
PHI 113 Logic
THE 211 Development of Theatre I
THE 212 Development of Theatre II

* Includes Spanish, French, German, Japanese, and others recognized as meeting Core requirements. Check the current schedule of classes for Foreign languages offered.

Not all courses are offered at Aims Community College and courses listed may not be offered each quarter.

## INDEPENDENT STUDY COURSES

Some courses are offered on an independent study basis. This format provides an opportunity for the student to study intensively a specific topic under the direction of a faculty member. Prerequisites may be required. Credits available vary with each division. These courses may be repeated at different levels of proficiency. Also, the number of independent study credits taken per quarter may be limited. Consult the contact person listed with the course description for specific information regarding divisional requirements and to register for the independent study. This information is applicable also to practicums listed in the Communications and Humanities Division.

## INDIVIDUALIZED COURSES

Some classes are offered on an individual basis. These courses generally are available throughout the academic year. The format requires no class attendance, allows entry at any time, and permits the student to proceed at his or her own pace. Help is available on request. Consult the contact person listed with the course description for specific information regarding divisional requirements and how to register for the individualized class.

## ASSOCIATE OF ARTS (A.A.) DEGREE (LIBERAL ARTS MAJOR)

Students seeking the Associate of Arts degree must earn minimum credits in the following subject areas:
General Education Credits
Communications ..... 15
Humanities ..... 15
Behavioral and Social Sciences ..... 15
Mathematics, Science and Computer ..... 15
Physical Education ..... 5
Electives$\begin{array}{r}31 \\ \hline 96\end{array}$
Total96
CORE CURRICULUM
Total Minimum Requirements: CREDITS
COMMUNICATIONS
ENG 121 English Composition ..... 5As a result of placement testing, students may be
required to take Composition Style and Technique(ENG 100) as a prerequisite for ENG 121. Studentswho take ENG 100 , which is a non-transferable course,must have a ' $C$ ' or better in that course before they willbe admitted to ENG 121.
Proficiency in essay writing is required for a passinggrade, and students must have a 'C' or better in ENG121 before they will be admitted to ENG 122.Students should take ENG 121 within the first twoquarters of their degree program.
ENG 122 English Composition II ..... 5
Prerequisite: ENG 121
SPE 115 Principles of Speech Communication ..... 5
Total Credits for A.A. Degree ..... 15
HUMANITIES ..... CREDITS
Students will take three courses from at least two different disciplines.The following course is required of all students:HUM 121 Survey of Humanities I5Students will select the other two courses from those listed below.
ART 111 Art History I ..... 5
ART 112 Art History II ..... 5

* 111 Foreign Language I ..... 5
* 112 Foreign Language II, Part 1 ..... 5
* 113 Foreign Language II, Part 2 ..... 5
* 211 Foreign Language III ..... 5
* 212 Foreign Language IV, Part 1 ..... 5
* 213 Foreign Language IV, Part 2 ..... 5
HUM 122 Survey of Humanities II ..... 5
HUM 123 Survey of Humanities III ..... 5
LIT 115 Introduction to Literature ..... 5
LIT 201 Masterpieces of Literature I ..... 5
LIT 202 Masterpieces of Literature II ..... 5
MUS 120 Music Appreciation ..... 5
MUS 121 Introduction to Music History । ..... 5
MUS 122 Introduction to Music History II ..... 5
THE 211 Development of Theatre I ..... 5
THE 212 Development of Theatre II ..... 5
PHI 111 Introduction to Philosophy ..... 5
PHI 112 Ethics ..... 5
PHI 113 Logic ..... 5
* Includes Spanish, French, German, Japanese, and othersrecognized as meeting Core requirements. Check the currentschedule of classes for Foreign languages offered.
Total Credits for A.A. Degree15
BEHAVIORAL AND SOCIAL SCIENCESSelect one from the following courses5
PSY 101 General Psychology I ..... 5
SOC 101 Introduction to Sociology I ..... 5
Select from two of the following areas: ..... 10
ANTHROPOLOGY
ANT 101 Cultural Anthropology ..... 5
ANT 111 Physical Anthropology ..... 5
ECONOMICS
ECO 201 Principles of Macroeconomics ..... 5
ECO 202 Principles of Microeconomics ..... 5
HISTORY
HIS 101 Western Civilization I ..... 5
HIS 102 Western Civilization II ..... 5
HIS 103 Western Civilization III ..... 5
HIS 201 United States History I ..... 5
HIS 202 United States History II ..... 5
HIS 203 United States History III ..... 5
POLITICAL SCIENCE
POS 105 Introduction to Political Science ..... 5
POS 111 American Government ..... 5
GEOGRAPHY
GEO 105 Geography ..... 5
Total Credits for A.A. Degree ..... 15

NOTE: Behavioral-Social Science Courses not listed as core requirements will fulfill elective credits for the A.A. degree.

## MATHEMATICS, SCIENCE, COMPUTER

Note: All course prerequisites must be met for the following courses. Students who earn a $D$ grade in a course which is part of a sequence (e.g. MAT 100, MAT 105, MAT 135) should not continue on with the next course in the series. They are required to repeat the course and demonstrate mastery of the material by earning a grade of C or better.

## MATHEMATICS

CREDITS
Students will select a minimum of one of the following choices:
MAT 121 College Algebra ..... 6
MAT 125 Survey of Calculus ..... 5
MAT 135 Introduction to Statistics ..... 5
MAT 201, Calculus I, II and III
202, ( 5 credits each)15
203
SCIENCE
Students will select a minimum of one of the following choices:
BIO 105 Science of Biology ..... 5
BIO 111 General College Biology I ..... 5

## SCHOOL OF ART AND SCIENCES, cont.

BIO 112 General College Biology II 5
BIO 113 General College Biology III 5
CHE 111 General College Chemistry I 5
CHE 112 General College Chemistry II 5
CHE 113 General College Chemistry III 5
GEY 111 Physical Geology 6
GEY 121 Historical Geology 6
PHY 105 Conceptual Physics 5
PHY 111 Physics: Algebra-based I 5
PHY 112 Physics: Algebra-based II 5
PHY 113 Physics: Algebra-based III 5
PHY 211 Physics: Calculus-based I 5
PHY 212 Physics: Calculus-based II 5
PHY 213 Physics: Calculus-based III 5

## MATHEMATICS, SCIENCE, COMPUTER

Students will select from courses having the following prefixes: AST, BIO, CHE, CIS, CSC, EAS, GEY, MAT, PHY, SCl or STA.
minimum of 5 credits
Note: The following courses may not be used towards the Mathematics and Science requirements for the A.A. degree: MAT 100, MAT 101, MAT 105, MAT 110, MAT 113, PHY 101, SCI 230 and any courses numbered below 100 .
Total Credits for A.A. Degree

## PHYSICAL EDUCATION

A minimum of five, separate credits of prefixes PEA, PEB, PED, PEF will be selected from any physical education activities offered. This will provide the student with adequate opportunity to be introduced to a variety of physical fitness and leisure time activities to round out his or her general education.
Veterans or students with a doctor's excuse may have their physical education requirements waived. They must still meet the 96 credit hour requirements for the A.A. degree. Students who desire a physical education waiver must contact the registrar.

## Total credits for A.A. Degree

## ELECTIVES

Electives may be chosen from the core curriculum, other Arts and Sciences courses and specific Occupational Education courses. Occupational Education courses may be used if they will support a student's particular educational goals. However, some colleges and universities may not accept the transfer of courses that are in the School of Occupational Education. Students should consult their advisors for help in choosing appropriate courses for their specific educational needs.
Total credits for A.A. Degree
Minimum of 31


## ASSOCIATE OF SCIENCE (A.S.)DEGREE (LIBERAL ARTS MAJOR)

Students seeking the Associate of Science degree must earn minimum credits in the following subject areas.
General Education ..... CREDITS
Communications ..... 15
Humanities ..... 15
Behavioral and Social Science ..... 15
Physical Education ..... 5
Mathematics, Science and Computer ..... 46
Total96
CORE CURRICULUMTotal Minimum Requirements:CREDITS
COMMUNICATIONS
ENG 121 English Composition ..... 5
As a result of placement testing, students may be required to take Composition Style and Technique (ENG 100) as a prerequisite for ENG 121. Students who take ENG 100 , which is a non-transferable course, must have a ' C ' or better in that course before they will be admitted to ENG 121. Proficiency in essay writing is required for a passing grade, and students must have a 'C' or better in ENG 121 before they will be admitted to ENG 122. Students should take ENG 121 within the first two quarters of their degree program.
ENG 122 English Composition II ..... 5
Prerequisite: ENG 121
SPE 115 Principles of Speech Communication5
Total Credits for A.S. Degree ..... 15
HUMANITIES ..... CREDITSStudents will take three courses from at least two differentdisciplines. The following course is required of all students:HUM 121 Survey of Humanities I5Students will select the other two courses from those listed below.
ART 111 Art History I ..... 5
ART 112 Art History II ..... 5

* 111 Foreign Language I ..... 5
* 112 Foreign Language II, Part 1 ..... 5
* 113 Foreign Language II, Part 2 ..... 5
- 211 Foreign Language III ..... 5
* 212 Foreign Language IV, Part 1 ..... 5
- 213 Foreign Language IV, Part 2 ..... 5
HUM 122 Survey of Humanities II ..... 5
HUM 123 Survey of Humanities III ..... 5
LIT 115 Introduction to Literature ..... 5
LIT 201 Masterpieces of Literature I ..... 5
LIT 202 Masterpieces of Literature II ..... 5
MUS 120 Music Appreciation ..... 5
MUS 121 Introduction to Music History I ..... 5
MUS 122 Introduction to Music History II ..... 5
THE 211 Development of Theatre I ..... 5
THE 212 Development of Theatre II ..... 5
PHI 111 Introduction to Philosophy ..... 5
PHI 112 Ethics ..... 5
PHI 113 Logic ..... 5
* Includes Spanish, French, German, Japanese, and others recognized as meeting Core requirements. Check the current schedule of classes for Foreign languages offered.
Total Credits for A.S. Degree15
BEHAVIORAL AND SOCIAL SCIENCES CREDITS
Select one of the following courses: ..... 5
PSY 101 General Psychology I ..... 5
SOC 101 Introduction to Sociology I ..... 5
Select from two of the following five areas: ..... 10
ANTHROPOLOGY
ANT 101 Cultural Anthropology ..... 5
ANT 111 Physical Anthropology ..... 5
ECONOMICS
ECO 201 Principles of Macroeconomics ..... 5
ECO 202 Principles of Microeconomics ..... 5
HISTORY
HIS 101 Western Civilization I ..... 5
HIS 102 Western Civilization II ..... 5
HIS 103 Western Civilization III ..... 5
HIS 201 United States History I ..... 5
HIS 202 United States History II ..... 5
HIS 203 United States History III ..... 5
POLITICAL SCIENCE
POS 105 Introduction to Political Science ..... 5
POS 111 American Government ..... 5
GEOGRAPHY
GEO 105 Geography ..... 5
Total Credits for A.S. Degree ..... 15


## PHYSICAL EDUCATION

A minimum of five, separate credits of prefixes PEA, PEB, PED, PEF will be selected from any physical education activity offered. This will provide the student with adequate opportunity to be introduced to a variety of physical fitness and leisure time activities to round out his or her general education.

Veterans or students with a doctor's excuse may have their physical education requirements waived. They must still meet the 96 credit requirement for the A.A. degree. Students who desire a physical education waiver must contact the registrar.
Total Credits for A.S. Degree

## MATHEMATICS, SCIENCE, COMPUTER

Note: Students pursuing an Associate of Science degree must see an advisor in the Mathematics, Science and Computer Division to help them plan their academic program. Furthermore, all degree plans must be approved by the faculty advisor or by the Division Director of Mathematics, Science and Computer.

The Associate of Science Degree is awarded only to those students who have met the minimum degree requirements and who have demonstrated competency in both mathematics and science disciplines. This degree will not be granted to students who have completed only survey type courses in several mathematics and science areas.

A minimum of 46 credits is required for the Associate of Science Degree. Students should give maximum attention to prerequisites and corequisites as stated in the catalog. All mathematics and science courses applied to this degree must be completed with a grade of 'C' or better.

SCHOOL OF ART AND SCIENCES, cont.

## MATHEMATICS

CREDITS
Students will select a minimum of one of the following choices:

MAT 121 College Algebra
6
MAT 125 Survey of Calculus
MAT 201, Calculus I, II and III
( 5 credits each) 15
202 \&
203

## SCIENCE

Students will select a minimum of one of the following sequence choices:
BIO 111, General College Biology I, II and III
112 \&
113
CHE 111, General College Chemistry I, II and III

PHY 111, Physics: Algebra-based I, II and III
112 \&
113
PHY 211, Physics: Calculus-based I, II and III
212 \&
213
GEY 111, Physical Geology,
121 Historical Geology

## MATHEMATICS, SCIENCE, COMPUTER

Students will select from approved courses having the following prefixes: AST, BIO, CHE, CIS, CSC, EAS, GEY, MAT, PHY or STA.

29 or less as appropriate
Note: The following courses may not be used towards the mathematics and science requirements for the A. S. Degree: MAT 100, MAT 101, MAT 105, MAT 110, MAT 113, PHY 101 and any courses numbered below 100 .
Total Credits for the A. S. Degree
minimum of 46


## SCHOOL OF ART AND SCIENCES, cont.

## ASSOCIATE OF GENERAL STUDIES (A.G.S.) DEGREE

Students seeking the Associate of General Studies degree must complete the Associate of General Studies Degree Contract to be signed by the faculty advisor and the Advising Coordinator prior to acceptance into the degree program.

Students must then earn minimum credits in the following subject areas:

|  |  | CREDITS |
| :---: | :---: | :---: |
| Communications and Humanities |  | 15 |
| Mathematics and Science |  | 10 |
| Behavioral and Social Science |  | 10 |
| Professional Courses |  | 14 |
| Physical Education |  | 2 |
| Electives |  | 45 |
| Total |  | 96 |
| Total Minimum Requirements: |  | CREDITS |
| COMMUNICATIONS AND HUMANITIES |  | 15 |
| Required Courses: |  |  |
| ENG 121 | English Composition I | 5 |
| SPE 115 <br> or | Principles of Speech Communication | 5 |
| $\begin{aligned} & \text { SPE } 125 \\ & \text { or } \end{aligned}$ | Interpersonal Communication | 5 |
| SPE 221 | Professional Oral Communication | 5 |
| Select one in the curre | f the Humanities five-hour courses listed catalog for the A.A. degree. | 5 |

MATHEMATICS, SCIENCE, COMPUTER
10
Any combination of courses with the following prefixes which are 100 level and above: AST, BIO, CHE, CSC, EAS, GEY, PHY, STA or MAT. (The following courses will not apply to this category: MAT 101, MAT 110, PHY 101.)

BEHAVIORAL AND SOCIAL SCIENCES
Any combination of courses listed in the current catalog for the A.A. degree.

## PHYSICAL EDUCATION

Veterans or students with a doctor's excuse may have their physical education requirements waived by the Registrar (See catalog). However, students must still meet the 96 credit requirement for the A.G.S. degree. Select from courses with the following prefixes: PEA, PEB, PED, PEF.

PROFESSIONAL COURSES
Any combination of professional courses with the following prefixes as listed in the current catalog: ACC, BUS, CSC, EDT, EDU, MAN, MAR, CIS, HLH, ECE.

## ELECTIVE CREDIT

Requirement may be satisfied with courses in the Arts and Sciences and/or Occupational Education areas as listed in the current catalog. Total credits earned with a specific occupational program or academic discipline may not exceed 30 credits.



The curricula described in the following sections are designed to assist those students who are pursuing particular majors at a fouryear institution or particular careers. The A.A. degree Liberal Arts Major requirements must be met for each area of emphasis. It may be necessary, however, to enroll in specific courses to fulfill those degree requirements for a particular area of emphasis.


## ELEMENTARY EDUCATION EMPHASIS

This emphasis is designed to provide orientation and background for the student anticipating a teaching career in elementary education. However, students are strongly urged to obtain specific information regarding the requirements and recommendations of the institution to which they plan to transfer as well as the assistance of an Aims faculty advisor. The following plan has been designed to assist in transfer to the University of Northern Colorado.
Recommended degree requirements for area of emphasis:
CREDITS
COMMUNICATIONS 15
ENG 121 English Composition I 5
ENG 122 English Composition II 5
SPE 115 Principles of Speech Communication 5
HUMANITIES 15
HUM 121 Survey of Humanities I 5
LIT 115 Introduction to Literature 5
See A.A. degree requirements 5
BEHAVIORAL AND SOCIAL SCIENCES 15
HIS 201 U.S. History I or HIS 202 or HIS $203 \bullet 5$
GEO 105 Geography 5
See A.A. degree requirements 5
PHYSICAL EDUCATION 5
See A.A. degree requirements 5
MATHEMATICS, SCIENCE AND COMPUTER 15
$\begin{array}{ll}\text { BIO } 105 & \begin{array}{l}\text { Science of Biology } \\ \text { (or EAS } 105 \text { Earth Science) }\end{array}\end{array}$
PHY 105 Conceptual Physics 5
See A.A. degree requirements 5
ELECTIVES AND MAJOR 31
A. UNC requires a Liberal Arts and Sciences major, selected from a specific list, for those in the Elementary Education program. Transferable lower-division courses may be taken at Aims.
B. UNC requires the following additional courses for those in the Elementary Education program. They may be taken at Aims.
ART 110 Art Appreciation 5
MUS 100 Fundamentals of Music Theory 5
SOC 218 Sociology of Minorities 5
POS 111 American Government 5
PSY 235 Developmental Psychology
(or LIT 115 - listed as option under Humanities) 5
C. It is recommended that the following three courses be taken during the first half of a bachelor's program. They are not available at Aims, but can be acquired through concurrent registration at UNC.
EDFE 170 Introduction to Field Based Experience
MATH 181 Fundamentals of Mathematics I
EDFE 270 Field Based Experience
Total Credits for Area of Emphasis

## GENERAL PSYCHOLOGY EMPHASIS

(Associates of Arts Degree)
This emphasis prepares students for transferring to UNC's undergraduate program in psychology.

Recommended degree requirements for area of emphasis:
CREDITS
COMMUNICATIONS
See A.A. degree requirements
HUMANITIES
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER 15
MAT 121 College Algebra (for CSU) 6
MAT 135 Introduction to Statistics (for UNC) 5
BIO 120 Basic Human Anatomy \& Physiology 5
PHYSICAL EDUCATION 5
BEHAVIORAL AND SOCIAL SCIENCES 15
PSY 101 General psychology I 5
See A.A. degree requirements 10
Electives 25
PSY 102 General Psychology II 5
PSY 235 Developmental Psychology 5
PSY 241 Health Psychology \& Biofeedback I 5
PSY 249 Abnormal Psychology 5
PSY 261 Theory and Practice of Counseling 5
Take six additional credits of your choice 6
(Check with advisor to ensure the credits are transferable to UNC).
Total credits for Area of Emphasis

## BIOFEEDBACK EMPHASIS (Associates of Arts Degree)

Recommended degree requirements for area of emphasis:
COMMUNICATIONS
CREDITS
See A.A. degree requirements
HUMANITIES
See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCES 15
PSY 101 General Psychology I 5
See A.A. degree requirements 10
PHYSICAL EDUCATION 5
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER 15
MAT 135 Introduction to Statistics 5
BIO 120 Basic Human Anatomy and Physiology 5
See A.A. degree requirements 5
Electives 14
PSY 138 Biofeedback and Stress Management 4
PSY 241 Health Psychology \& Biofeedback I 5
PSY 261 Theory and Practice of Counseling 5
Take 17 additional credits of your choice. 17
Electives 17
Total Credits for Area of Emphasis 96


## COUNSELING EMPHASIS <br> (Associates of Arts Degree)

Recommended degree requirements for area of emphasis. CREDITS
COMMUNICATIONS 15
See A.A. degree requirements
HUMANITIES
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER 15
MAT 135 Introduction to Statistics 5
See A.A. degree requirements 10
PHYSICAL EDUCATION 5
BEHAVIORAL AND SOCIAL SCIENCES 15
PSY 101 General Psychology I 5
See A.A. degree requirements 10
Electives 31
PSY 261 Theory and Practice of Counseling 5
PSY 249 Abnormal Psychology 5
PSY 241 Health Psychology \& Biofeedback I 5
PSY 138 Biofeedback and Stress Management 4
Take 12 additional credits of your choice 12
Total Credits for Area of Emphasis 96


## COUNSELING EMPHASIS

## (Associates of General Studies Degree)

This program is for students who after completing a bachelor's degree in family studies and sociology at UNC wish to pursue an advanced degree in counseling at UNC or CSU.
Recommended degree requirements for area of emphasis.
CREDITS

COMMUNICATIONS

20

SPE 125 Interpersonal Communication 5
ENG 121 English Composition I 5
Humanities Elective
HUMANITIES 10
(Choose two classes with two different prefixes - ART, MUS, THE, SPA, LIT, HUM, PHI)

MATHEMATICS, SCIENCE AND COMPUTER 10
BIO 120 Anatomy \& Physiology 5
Choose one class with one of the following prefixes 5 which is 100 level and above: AST, CHE, CSC, EAS, GEY, PHY, SCI, STA, or MAT (MAT 100, 101, 105, 110, 113, PHY 101 will not apply to this category)

PHYSICAL EDUCATION
Any combination of classes listed in the current catalog for the A.A. degree

BEHAVIORAL AND SOCIAL SCIENCES

PSY 101 General Psychology I

SOC 101 Introduction to Sociology 5
PROFESSIONAL COURSES
Any combination of professional courses with the following prefixes as listed in the current catalog: BUS, CSC, MGT, CIS, HLH, ECE, EDU, MAN, MAR

| Electives |  | 40 |
| :--- | :--- | ---: |
| ENG 122 | Research Paper | 5 |
| PSY 138 | Biofeedback and Stress Management | 4 |
| PSY 241 | Health Psychology \& Biofeedback I | 5 |
| PSY 249 | Abnormal Psychology | 5 |
| PSY 261 | Theory and Practice of Counseling | 5 |
| SOC 218 | Sociology of Minorities | 5 |
|  | Choose eleven other credits of your choice | 11 |
| Total Credits for Area of Emphasis |  | 96 |

ENG 122 Research Paper 5
PSY 138 Biofeedback and Stress Management 4
PSY 241 Health Psychology \& Biofeedback I 5
PSY 249 Abnormal Psychology 5
PSY 261 Theory and Practice of Counseling 5
SOC 218 Sociology of Minorities 5
Total Credits for Area of Emphasis 96

## COLORADO ALCOHOL AND DRUG ABUSE CERTIFICATION PROGRAM: DRUG/ALCOHOL COUNSELOR I

(Associates of General Studies Degree)
PRoGRAM DESCRIPTION:
Completion of certificate requirements will fulfill academics and experience requirements established by the Colorado Department of Health's Alcohol and Drug Abuse Division (ADAD), allowing the student to apply to work in certified drug/alcohol treatment centers and to apply for ADAD certification as a COUNSELOR I. Students may simultaneously work toward the completion of an A.G.S. degree and the Counselor I certificate.

## POTENTIAL OPPORTUNITIES:

Certified Drug/Alcohol Treatment Counselors are employed by treatment centers, hospitals, and private clinics. ADAD certification is required of all employees working in certified treatment centers in Colorado.

## REGISTRATION REQUIREMENTS:

Advisors for the program are Roger DeWitt (Loveland Campus), Robert Shellenberger (Greeley Campus), and Ron Courson (Fort Lupton Campus).

| COUNSELOR I CERTIFICATE REQUIREMENTS | CREDITS |  |
| :--- | :--- | ---: |
| PSY 287 | Client Records Management | 3 |
| PSY 288 | Basic Therapeutic Skills | 4 |
|  | PLUS |  |

1,000 hours of field experience in state-approved treatment centers.


## COLORADO ALCOHOL AND DRUG ABUSE CERTIFICATION PROGRAM: DRUG/ALCOHOL COUNSELOR II

## (Associates of General Studies Degree)

The following program is for students who wish to upgrade form Counselor I to Counselor II.

COMMUNICATIONS \& HUMANITIES

SPE 125 Interpersonal Communication 5
ENG 121 English Composition I 5
HUMANITIES ELECTIVE
5
(Choose one class with one of the following prefixes: ART, MUS, THE, SPA, LIT, PHI, HUM)

BEHAVIORAL AND SOCIAL SCIENCES
Any combination of classes listed in the current catalog for the A.A. degree

PHYSICAL EDUCATION
Any combination of classes listed in the current catalog for the A.A. degree

MATHEMATICS, SCIENCE, AND COMPUTER 10
Any combination of classes with the following prefixes which are 100 level and above:
AST, BIO, CHE, CIS, CSC, EAS, GEY, PHY, SCI, STA, or MAT (MAT 100, 101, 105, 110, 113, PHY 101 will not apply to this category)

PROFESSIONAL COURSES
14
Any professional courses with the following prefixes as listed in the current catalog: BUS, CSC, MGT, CIS, HLH, ECE, MAR, EDU, MAN

Electives Credits (Choose from the following courses) 45
PSY 138 Biofeedback and stress Management 4
PSY 217 Group Counseling 5
PSY 219 Resistant Client 2
PSY 225 Advanced Counseling 4
PSY 229 Introduction to Addictive Behaviors 5
PSY 241 Health Psychology \& Biofeedback I 5
PSY 247 Family Dynamics of Substance Abuse 3
PSY 249 Abnormal Psychology 5
PSY 256 Domestic Violence Counseling 5
PSY 261 Theory \& Practice of Counseling 5
PSY 278 Psychology of Criminal Behavior 3
$\begin{array}{ll}\text { PSY } 297 & \begin{array}{l}\text { Psychology of Substance Abuse/Young Adults } \\ \text { and Criminals }\end{array}\end{array}$
Total Credits For The AGS Degree 96

## CRIMINAL JUSTICE EMPHASIS

This emphasis will prepare individuals for transfer to four-year college or university criminal justice, pre-law, political science, social work, or sociology programs. For further information and advising, contact the Counseling Center "Advising Core" (Ext. 251).
Criminal Justice Courses are offered in sequential order. Students are strongly urged to take courses in the proper sequence.

Recommended degree requirements for area of emphasis:
CREDITS
COMMUNICATIONS
15
See A.A. degree requirements

## HUMANITIES

See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCES 15
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER 15
See A.A. degree requirements
PHYSICAL EDUCATION
See A.A. degree requirements

| Electives |  | 40 |
| :--- | :--- | ---: |
| CRJ 110 | Introduction to Criminal Justice | 5 |
| CRJ 111 | The Police Function | 5 |
| CRJ 112 | The Judicial Function | 5 |
| CRJ 113 | The Correctional Function | 5 |
| CRJ 114 | Community and the Justice System | 5 |
| CRJ 201 | Criminal Law | 5 |
| CRJ 202 | Constitutional Law | 5 |
| CRJ 203 | Criminal Procedure | 5 |
| Total Credits for Area of Emphasis | 105 |  |



## PRELAW EMPHASIS

Since most law schools do not prescribe a rigid prelaw curriculum, students intending to enter law school should tailor subject selection to provide strong foundations in writing, speaking, studying, and logical thinking. Social science is frequently the undergraduate field for the prelaw student, but all law schools require sufficient English to ensure competence in grammar, composition, spelling, and speech. Both mathematics and philosophy promote the capacity to think analytically. In some instances, students who wish to provide a base for future specialization may select some beginning courses related to that specialty. Tax law, for example, could be facilitated by a strong accounting background; patent law by engineering or natural sciences; comparative or international law by foreign language competency and acquaintance with other cultures; criminal and civil law by criminal justice courses. The Political Science Department will be pleased to assist prelaw students.


## POLITICAL SCIENCE EMPHASIS

This emphasis leads graduates through university transfer to a wide variety of careers in governmental service, teaching, law practice, or journalism. For further information on career or transfer possibilities, call the Behavioral and Social Science Division.

Recommended degree requirements for area of emphasis:
CREDITS

## COMMUNICATIONS

See A.A. degree requirements
HUMANITIES
See A.A. degree requirements and consult with advisor.
BEHAVIORAL AND SOCIAL SCIENCES 15
Select one of the following:
PSY 101 General Psychology I 5
SOC 101 Introduction to Sociology I 5
Also:
POS 105 Introduction to Political Science 5
POS 111 American Government 5
POS 205 Internal Relations 5
PHYSICAL EDUCATION 5
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER 15
See A.A. degree requirements
Electives
Select courses in political science, history, and humanities in consultation with advisor.

Total Credits for Area of Emphasis 96


## SOCIAL SCIENCE EMPHASIS

An understanding of human society is necessary for the informed citizen in today's world. The Social Science curriculum is designed to fulfill this purpose as well as to provide specialized training for those desiring it. Employment opportunities include teaching, research, social work, prelaw, law enforcement, government, and other fields where an understanding of human beings and human institutions is highly desirable, if not required.

Recommended degree requirements for area of emphasis:
CREDITS
COMMUNICATIONS
See A.A. degree requirements
HUMANITIES
15
See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCES 15
GEO 105 World Geography 5
PSY 101 General Psychology I 5
POS 111 American Government 5
Consult with an advisor to determine which of these courses will apply to the A.A. degree "area" requirements and which will apply to "elective" requirements. All of the above courses are required to complete this emphasis.

PHYSICAL EDUCATION
5
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER
15
See A.A. degree requirements
Electives * 31
ANT 101 Cultural Anthropology 5
*ECO 201 Principles of Macroeconomics 5
*HIS 103 Western Civilization III 5
*SOC 101 Introduction to Sociology I 5
Select an additional two credit hours in consultation with advisor.
Total Credits for Area of Emphasis


## COLORADO ALCOHOL AND DRUG ABUSE CERTIFICATION PROGRAM AND EMPHASIS: DRUG/ALCOHOL COUNSELOR I

## PROGRAM DESCRIPTION:

Completion of certificate requirements will fulfill academic and field experience requirements established by the Colorado Department of Health's Alcohol and Drug Abuse Division (ADAD), allowing the student to apply to work in certified drug/alcohol treatment centers and to apply for ADAD certification as a COUNSELOR I. Students may simultaneously work toward the completion of an A.A. degree and the Counselor I certificate by using cerifificate requirements as an area of emphasis within their degree program.

## POTENTIAL OPPORTUNITIES:

Certified Drug/Alcohol Treatment Counselors are employed by treatment centers, hospitals, and private clinics. ADAD cerififcation is required of all employees working in certified treatment centers in Colorado.

## COUNSELOR I CERTIFICATE REQUIREMENTS

CREDITS
PSY 287 Client Records Management 3
PSY 288 Basic Therapeutic Skills 4 PLUS
1,000 hours of field experience in state approved treatment center. Students may receive academic credit for field experience hours by enrolling in:
PSY 267 Field Experience A 10
PSY 268 Field Experience B 10
PSY 269 Field Experience C 10
Electives from list, below 15
Total Credits for Certificate 52

## Electives

PSY 217 Group Counseling 5
PSY 225 Advanced Counseling 5
PSY 229 Intro to Addictive Behaviors 5
PSY 241 Health Psychology and Biofeedback I 5
PSY 247 Family Dynamics of Substance Abuse 3
PSY 249 Abnormal Psychology 5
PSY 261 Theory and Practice of Counseling 5
HEN 107 Advanced Red Cross First Aid 5

## UPGRADING CERTIFICATION

In addition to clinical work experience and the completion of an A.A., B.A., or other degree, the State of Colorado will upgrade Counselor 1 certificate holders to Counselor II or Counselor III after completion of certain course work.

## COLORADO ALCOHOL AND DRUG ABUSE CERTIFICATION PROGRAM DRUG/ALCOHOL COUNSELOR II AND COUNSELOR III EMPHASIS

The following courses may be used to upgrade Counselor I certificate holders to Counselor II or Counselor II certificate holders to Counselor III.

Recommended degree requirements for area of emphasis:
CREDITS
COMMUNICATIONS 15
See A.A. degree requirements
HUMANITIES
See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCES 15
PSY 101 General Psychology I 5
See A.A. degree requirements
PHYSICAL EDUCATION
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER
15
See A.A. degree requirements
ELECTIVES: STUDENTS MUST SELECT A MINIMUM OF 31

## ELECTIVE

CREDITS
PSY 138 Biofeedback and Stress Management 4
PSY 217 Group Counseling 5
PSY 219 Resistant Client 2
PSY 225 Advanced Counseling 4
PSY 229 Introduction to Addictive Behaviors 5
PSY 261 Theory \& Practice of Counseling 5
PSY 241 Health Psychology and Biofeedback I 5
PSY 244 Biofeedback and Cardiovascular Health 5
PSY 247 Family Dynamics of Substance Abuse 5
PSY 249 Abnormal Psychology 5

## PROGRAM ADVISING

The Program Advisor will assist students who are ADAD certified Counselor I or Counselor II to select courses from the above Electives which will meet training requirements for upgrade.


## FAMILY AND LIFE EDUCATION

John Turner, Ph.D.<br>Division Director<br>Behavioral \& Social Sciences<br>Aims Community College<br>Mellie Brand, M.A.<br>Department Chair<br>Aims Community College<br>North Colorado Medical Center<br>Joan Eisenman, B.A. - Parent and Professional Education Coordinator Kathleen Stevens, R.N., M.S.N., I.C.C.E. - Expectant Families Coordinator<br>Kathy Hamblin, M. A. - Early Childhood Education Faculty<br>Maurine Summers, M. Ed. - Early Childhood Education Faculty

## SENIOR EDUCATION PROGRAM

John Turner, Ph.D.
Division Director
Behavioral and
Social Sciences
Aims Community College

Marilyn Gerbrandt, M.A. Director, Senior Education Program Behavioral and Social Science Aims Community College

## EARLY CHILDHOOD EDUCATION

## CERTIFICATE PROGRAM

PRESCHOOL GROUP LEADER
Program Length: Usually three quarters ( 47 credits) for a Certificate in Occupational Education.
Potential Opportunities: The rapid increase of services needed for young children provides a wide variety of positions available to the person trained in Early Childhood Education. The expansion of knowledge in child development methods, coupled with the economic need for parents to seek part or full-day care outside their home, has created specialized fields for working with young children and their families. Because of the demand for quality child care, the traditional role of baby-sitter has given way to a number of career options in the exciting and rewarding field of Early Childhood Education.
The program is designed to prepare students for Group Leader entry level positions in private preschools, small and large day care centers, nursery schools, child development centers, and Head Start programs and summer day camps. Work experience is required in addition to courses listed.
Prerequisites: After enrollment, but before the conclusion of the 10 -week quarter, each student must submit a dated report of physical examination, dated report of satisfactory tuberculin test or chest $x$-ray, criminal record check, and Central Registry for Child Protection check as required by the Colorado Department of Social Services. Forms and information will be provided by program advisors.
Registration Requirement: All students taking a course or courses in a Occupational Education program must have an appropriate Occupational Education program adviscr's signature on the course registration form before registering. The advisors for the Early Childhood Education area are: Kathy Hamblin, Maurine Summers, or Family \& Life Education Department Chair.

ECE 103

ECE Lab Experience II
ECE 104 ECE Lab Experience III ..... 8
ECE 115 Creativity and the Young Child ..... 3
ECE 116 Science/Math and the Young Child ..... 3
ECE 162 Guidance Techniques ..... 2
ENG 100 Composition Style and Technique ..... 5
OR
BUS 141 Introduction to Communications ..... (5)
SPE 125 Interpersonal Communication ..... 5
TEM 100 Introduction to Emergency Care ..... 2
ECE 238 Child Development ..... 5
Total Credits for Certificate ..... 47

## DEGREE PROGRAM

## EARLY CHILDHOOD EDUCATION

Program Length: Usually six quarters for an Associate of Applied Science degree ( 97 credits).

Potential Opportunities: The program is designed to continue the academic requirements for the assistant director and director position in the same work sites as described in the Certificate Program. Work experience is required in addition to the courses listed.

Prerequisites: Completion of the Courses required for the Certificate Program.

Registration Requirement: All students taking a course or courses in a Occupational Education program must have an appropriate Occupational Education program advisor's signature on the course registration form before registering. The advisors for the Early Childhood Education area are: Kathy Hamblin, Maurine Summers, or Family \& Life Education Department Chair.

General Education Courses: A minimum of 23 quarter credit hours of General Education courses are required with advisors approval. The General Education courses are identified by an (*).

## Degree Requirements: <br> CREDITS

## First Year

ECE 101 Intro. to Early Childhood Education 2
ECE 102 ECE Lab Experience I 4
ECE 103 ECE Lab Experience II 8
ECE 104 ECE Lab Experience III 8
ECE 115 Creativity and the Young Child 3
ECE 116 Science/Math and the Young Child 3
ECE 162 Guidance Techniques 2
ENG 100 Composition Style and Technique 5
OR
BUS 141 Introduction to Communications (5)
SPE 125 Interpersonal Communication 5
TEM 100 Introduction to Emergency Care 2
ECE 238 Child Development 5
Total Credits for First Year 47
Second Year
ECE 202 ECE Lab Experience IV 8
ECE 203 ECE Lab Experience $V$ 8
ECE 204 Field Experience 6
ECE 205 Nutrition and the Young Child 3
ECE $216 \begin{aligned} & \text { Human Relations for Early Childhood } \\ & \text { Administrators and Staff }\end{aligned}$
ECE 226 Administration of Early Childhood Programs 3
ECE 227 Methods/Techniques: Curriculum Development 2

BEHAVIORAL \& SOCIAL SCIENCES DIVISION, cont.

ECE 287 Exceptional Child 2
MAT 110 Applied Business Mathematics 5
PSY 101 General Psychology I 5 OR
PSY 248 Child Psychology
SOC 101 Introduction to Sociology I 5
OR
SOC 205 Sociology of Marriage and Family (5)
Total Credits for Second Year 50
Total Credits for A.A.S Degree 97
"Students must have a " $C$ " or better in each practicum course before they can advance to the next practicum course. Practicum courses are: ECE 102, ECE 103, ECE 104, ECE 202, ECE 203, ECE 204."

## Program Electives

ECE 151 Early Childhood Leadership Development I 1
ECE 152 Early Childhood Leadership Development II 1
ECE 153 Early Childhood Leadership Development III 1
COLORADO DEPARTMENT OF SOCIAL SERVICES REQUIREMENTS:
Academic Courses Required for Director

- Total of 18 quarter credits of Child Development and Nursery School Education Classes
- 4.5 quarter credits in Psychology
- 4.5 quarter credits in Sociology
- Total of 9 quarter credits of Nutrition/Administration for Child Care classes
Documented work experience is required.
All ECE courses listed in Degree Program for Early Childhood Education meet the Social Services requirements for group leader and director with the exception of the practicum courses: ECE 131, ECE 132, ECE 133, ECE 231, ECE 232 and ECE 233.

The practicum courses however are accepted as partial completion of the documented work experience.

## EARLY CHILDHOOD EDUCATION

 ADVISORY COMMITTEETerri Kellor, Director
Family Educational Network of Weld County

Barbara McFerron
Children's World \&
Learning Center
Susan Krcmarik, Training
Specialist
Dept. Of Social Services

Terri Hunter
Early Childhood Specialist
Peggy Burdan, Director
My Friends and Me Learning Center

Patricia Thomas, Director
Faith Preschool Parent
Cooperative


# COMMUNICATIONS \& HUMANITIES DIVISION 



FULL-TIME FACULTY AND AFFILIATED PERSONNEL:
Jane Abbott, Division Chair, West Campus
Alysan Broda, Department Chair, Speech, Visual \& Performing Arts Susan Cribelli, Division Director
Diane (Vantine) Brotemarkle, Department Chair, Humanities
Don Butler, Composition
Jose Fajardo, Spanish
Chuck Fisher, Composition
John Jordan, Writing Center Coordinator, Composition
Nancy Martz, Humanities
Michael Ort, Composition, Humanities
Tony Park, Composition, Humanities
Ken Peterson, Department Chair, Music, Theatre
Keith Reierstad, Division Chair, South Campus
Nancy Roy, Speech
Tedd Runge, Fine Arts, Design
Kenneth Sauer, Chairman, Communications Media
Ralph Tarnasky, Department Chair, Foreign Language
Russ Ward, Department Chair, English
Jean Warnke, Composition
COMMUNICATIONS AND HUMANITIES SCHOLARSHIP
\(\left.\begin{array}{ll}AWARD: \& DOROTHY M. STEWART WRITING <br>

AWARD\end{array}\right]\)| Communications/Humanities |
| :--- |
| Awarding Division: | | \$100 cash prize and framed certificate |
| :--- |
| Award Amount: |
| Application Deadline: |
| No deadline. Recipient chosen by |
| faculty |



BUSINESS TRANSFER EMPHASIS<br>ADVISORS: Alysan Broda, John Jordan, Nancy Martz, Michael Ort, Nancy Roy, Jean Warnke - Greeley Campus Jane Abbott, Tony Park, - West Campus Keith Reierstad - South Campus

Communications/Humanities faculty advise those students who plan to complete an A.A. degree at Aims and then obtain a business degree at a four-year institution. Business transfer degrees are complex for two reasons: (1) university business departments are sometimes reticent to accept business transfer courses; and (2) university business requirements are diverse. Therefore, the Business Transfer Emphasis is designed not only to inform students interested in a four-year business degree, but also to alert them of the need to consult a competent advisor.

Because different universities have different requirements, it is necessary that all full and part-time students in this emphasis have one of the above listed advisors.

The business transfer program is designed for students who are interested in pursuing a four-year degree in business. The Business Transfer Emphasis combines general education classes with specific business courses.

Recommended degree requirements for area of emphasis:
CREDITS
COMMUNICATIONS 15
See A.A. degree requirements
HUMANITIES
15
See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCES
15
See advisor for requirements
PHYSICAL EDUCATION
5
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER
See A.A. degree requirements
Electives ..... 31
Select electives based on transfer institution requirementsSEE ADVISOR
ACC 121 Principles of Accounting I ..... 5
ACC 122 Principles of Accounting II ..... 5
ACC 123 Principles of Accounting III ..... 5
BUS 216 Legal Environment of Business ..... 5
BUS 217 Business Communications \& Report Writing ..... 5
CIS 118 Introduction to Microcomputer Applications ..... 5
ECO 201 Principles of Macroeconomics ..... 5
ECO 202 Principles of Microeconomics ..... 5
POS 105 Introduction to Political Science ..... 5
POS 111 American Government ..... 5
STA 201 Statistics for Business, Science, and Social Science ..... 5
STA 202 Statistics for Business, Science and Social Science II ..... 5
Total Credits for Area of Emphasis ..... 96

## COMMUNICATIONS MEDIA EMPHASIS

ADVISORS: Kenneth Sauer and Scott Lowe
The Communications Media Emphasis is designed for students who wish to transfer to a four-year college, or for students who wish to complete the two-year degree and move immediately into a career. For information on careers in the field, students may consult brochures available in the Communications and Humanities Division Office or the Career Resource Center.

Students preparing for this area of study should ensure proper preparation in writing and speaking skills. Assessment in reading and writing is a requirement before registering in this major emphasis.

Recommended degree requirements for area of emphasis: CREDITS

## COMMUNICATIONS

 15The following courses are required:
ENG 121 English Composition I 5
ENG 122 English Composition II 5
SPE 115 Principles of Speech Communication 5
HUMANITIES 15
See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCES 15
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER
See A.A. degree requirements
PHYSICAL EDUCATION 5
See A.A. degree requirements
Electives 31
COM 112 Introduction to Mass Media 5
COM 113 Introduction to Radio Broadcasting I 5
COM 114 Introduction to Television Broadcasting I 5
COM 118 Introduction to Audio Production 5
COM 136 Broadcast Announcing 3
COM 210 Newswriting I 5
COM 211 Newswriting II 5
COM 213 Introduction to Radio Broadcasting II 5
COM 214 Introduction to Television Broadcasting II 5
COM 241 Cable Television Production I 5
COM 242 Cable Television Production II 5
COM 245 Broadcast Copywriting and Production 5
COM 260 Broadcast Sales/Management 5
COM 280 Desktop Video Production 3
COM 291 TV Field Production 5
COM 295 Advanced Video Tape Editing 3
COM 298 Mass Media Internship 5
COM 299 Communications Practicum 1-3
Total Credits for Area Emphasis 96

## LITERATURE EMPHASIS

ADVISORS: Nancy Martz, and Diane (Vantine) Brotemarkle Greeley Campus
Jane Abbott, Tony Park - West Campus
Keith Reierstad - South Campus
The Literature Emphasis is intended to be transferable to a fouryear college or university for a variety of literature and other humanities-related majors. Humanities and elective courses should be selected with the help of an advisor to fit the student's interests and intended concentration within the field. Information on careers in the field can also be obtained from the student's advisor.
Students preparing for this area of study should acquire adequate preparation in writing, reading, and speaking. Assessment in reading and writing skills is required before the student registers for the Literature Emphasis. Skills-building courses may be necessary before the student can undertake literature and/or humanities courses.
Recommended degree requirements for area of emphasis:
CREDITS
COMMUNICATIONS
15
The following courses are required:
ENG 121 English Composition I 5
ENG 122 English Composition II 5
SPE 115 Principles of Speech Communication 5
HUMANITIES 15
Students will take three courses from al least two different disciplines. The following course is required of all students:
HUM 121 Survey of Humanities I 5
Students will select the other two courses from those listed below:
LIT 115 Introduction to Literature 5
LIT 201 Masterpieces of Literature I 5
LIT 202 Masterpieces of Literature II 5
HUM 122 Survey of Humanities II 5
HUM 123 Survey of Humanities III 5
BEHAVIORAL AND SOCIAL SCIENCES 15
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER
See A.A. degree requirements
PHYSICAL EDUCATION 5
See A.A. degree requirements

Electives

## 31

LIT 216 The Literature of Horror 5
LIT 225 Introduction to Shakespeare 5
LIT 235 Science Fiction 5
LIT 245 Literature of the American West 5
LIT 246 The Literature of Women 5
ENG 221 Creative Writing I 3-5
THE 211 Development of Theatre I 5
THE 212 Development of Theatre II 5
HUM 105 World Mythology 3-5
HUM 109 Modern American Culture 5
ART 111 Art History I 5
ART 112 Art History II 5


In the study of design and the arts, students may work to deepen their understanding of human expression and invention, to strengthen their sensory skills, to develop creative thinking abilities, and to create their own unique expressions, images, or objects.

Some transfer-level courses may be taken as general education requirements; others serve as electives within the program, or as course work toward a four-year program in design, visual arts, music, or theatre. Each course is not offered quarterly; some are offered annually, biannually, or on demand. (See Aims Quarterly Class Schedule.)

The curriculum for each area of emphasis is developed to fulfill both transfer university program requirements and needs of Northern Colorado firms offering work opportunities. Students who have specific plans for transfer should consult the faculty in Visual and Performing Arts to choose appropriate course combinations. Areas of emphases are intended as guides and do not designate major requirements in a specific four-year designate program.


## DESIGN EMPHASIS

ADVISOR: Tedd Runge

## Recommended degree requirements for area of emphasis:

## COMMUNICATIONS

HUMANITIES
Students will take three courses from at least two different disciplines. The following course is required of all students:
HUM 121 Survey of Humanities I
Students may select the other two courses from those listed below.
ART 111 Art History I 5
ART 112 Art History II 5
MUS 120 Music Appreciation 5
MUS 121 Introduction to Music History I 5
MUS 122 Introduction to Music History II 5
THE 211 Development of Theatre I 5
THE 212 Development of Theatre II 5
BEHAVIORAL AND SOCIAL SCIENCES 15
See A.A. degree requirements
PHYSICAL EDUCATION 5
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER 15
See A.A. degree requirements
Electives
Select from the following courses, with advisor approval:
(These are required prerequisites in most college art and design programs.)
ART 111 Art History I 5
ART 112 Art History II 5
ART 121 Drawing I 3
ART 122 Drawing II 3
ART 131 Design I 3
ART 132 Design II 3

## Electives

Select from the following courses, with advisory approval:
(These are required prerequisites in most college art and design programs.)
ART 110 Att Appreciation
ART 113 Non-Western Art 5
ART 116 Lettering I 3
ART 117 Lettering II 3
ART 118 Lettering III 3
ART 135 Computer Graphics I 3
ART 136 Computer Graphics II 3
ART 151 Photography I 3
ART 152 Photography II 3
ART 231 Watercolor I 3
ART 232 Watercolor II 3
ART 244 Graphic Design I 3
ART 245 Graphic Design II 3
ART 246 Graphic Design III 3
ART 270 Figure Drawing I 3
ART 271 Figure Drawing II 3
ART 295 Independent Study 1-3
ART 299 Art Practicum 1-3
AAD 243 Photography III 3
AAD 244 Photography IV 3
AAD 251 Interior Design I 3
AAD 252 Interior Design II 3
AAD 253 Interior Design III 3
Total Credits for Area of Emphasis 96

## FINE ARTS EMPHASIS

ADVISOR: Tedd Runge
The Fine Arts Emphasis may be directed toward teacher preparation. Two options are available to the student: Art or Theatre. All students complete the same total minimum requirements (65 credits) for the A.A. degree. In choosing the remaining elective courses ( 31 credits) to complete the A.A. degree ( 96 credits), the student selects from either the Art electives listed, or from the Theatre electives listed.
Recommended degree requirements for area of emphasis:
CREDITS

## COMMUNICATIONS

See A.A. degree requirements

## HUMANITIES

15
Students will take three courses from at least two different disciplines. The following course is required of all students:
HUM 121 Survey of Humanities I
Students may select the other two courses from those listed below.
ART 111 Art History I 5
ART 112 Art History II 5
MUS 120 Music Appreciation 5
MUS 121 Introduction to Music History I 5
MUS 122 Introduction to Music History II 5
THE 211 Development of Theatre I 5
THE 212 Development of Theatre II 5
BEHAVIORAL AND SOCIAL SCIENCES 15
See A.A. degree requirements
PHYSICAL EDUCATION
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER
See A.A. degree requirements
Electives - Art
Select from the following courses with advisor approval:
(These are required prerequisites in most college art and design programs.)

| ART 111 | Art History I | 5 |
| :--- | :--- | :--- |
| ART 112 | Art History II | 5 |
| ART 121 | Drawing I | 3 |
| ART 122 | Drawing II | 3 |
| ART 131 | Design I | 3 |
| ART 132 | Design II | 3 |

Select from the following studio art courses, with advisor approval:
ART 110 Art Appreciation
ART 113 Non-Western Art 5
ART 116 Lettering I 3
ART 117 Lettering II 3
ART 118 Lettering III 3
ART 141 Jewelry and Metalwork I 3
ART 142 Jewelry and Metalwork II 3
ART 161 Ceramics I 3
ART 162 Ceramics II 3
ART 163 Handbuilt Clay I 3
ART 164 Handbuilt Clay II 3
ART 211 Painting I 3
ART 212 Painting II 3
ART 224 Sculpture I 3
ART 225 Sculpture II 3
ART 231 Watercolor I 3
ART 232 Watercolor II 3
ART 241 Jewelry and Metalwork III 3
ART 242 Jewelry and Metalwork IV 3
ART 261 Ceramics III 3
ART 262 Ceramics IV 3
ART 265 Handbuilt Clay III 3
ART 266 Handbuilt Clay IV 3
ART 270 Figure Drawing I 3
ART 271 Figure Drawing II 3
ART 273 Figure Painting I 3
ART 274 Figure Painting II 3
ART 295 Art Independent Study 1-3
ART 299 Art Practicum 1-3
ARS 281 Weaving I 3
ARS 282 Weaving II 3
Total Credits for Area of Emphasis 96
Electives - Theatre 31
Select from the following courses, with advisor approval:
THE 116 Screen Acting | 3
THE 117 Screen Acting II 3
THE 118 Screen Acting III 3
THE 211 Development of Theatre I 5
THE 212 Development of Theatre II 5
THE 299 Theatre Practicum 1-3
Total Credits for Area of Emphasis 96


## MUSIC EMPHASIS

## Ken Peterson, Music/Theatre Chair

The Music Emphasis is designed for those preparing for a career in music. This program combines units of study in four areas: Applied Lessons, Music Theory and Music History, and Performance.
Courses required of all students with a Music Emphasis include: Music Theory I (MUS 101), Music Theory II (MUS 102), eight credits of Applied Lessons (MUS 141-146), and four credits of performance oriented courses (MUS 151, 152, 155, 176, 205). Additional courses in Music History are recommended.

## Recommended degree requirements for area of emphasis:

MUS 101 Music Theory I 4

MUS 102 Music Theory II 4
MUS 141 -
146 Applied Lessons 8
MUS 151 Performance 4
152, 155, 176, 205
Total Credits for Area of Emphasis 20

## COMMUNICATIONS

See A.A. degree requirements

## HUMANITIES

Students may take three courses from at least two different disciplines. The following course is required of all students:
HUM 121 Survey of Humanities I
Students will select the other two courses from those listed below.

| ART 111 | Art History I | 5 |
| :--- | :--- | :--- |
| ART 112 | Art History II | 5 |
| MUS 120 | Music Appreciation | 5 |
| MUS 121 | Introduction to Music History I | 5 |
| MUS 122 | Introduction to Music History II | 5 |
| THE 211 | Development of Theatre I | 5 |
| THE 212 | Development of Theatre II | 5 |
|  | See A.A. degree requirements |  |

BEHAVIORAL AND SOCIAL SCIENCES 15
See A.A. degree requirements
PHYSICAL EDUCATION 5
See A.A. degree requirements
MATHEMATICS, SCIENCE AND COMPUTER
See A.A. degree requirements
ELECTIVES - MUSIC
Select from the following courses, with advisor approval:

| MUS 100 | Fundamentals of Music Theory | 5 |
| :--- | :--- | :---: |
| MUS 101 | Music Theory I | 4 |
| MUS 102 | Music Theory II | 4 |
| MUS 111 | Music Expressions I | 1 |
| MUS 112 | Music Expressions II | 1 |
| MUS 113 | Music Expressions III | 1 |
| MUS 299 | Music Practicum | $1-3$ |

MUS 161 Keyboard Expressions I* ..... 2
MUS 162 Keyboard Expressions II* ..... 2
MUS 163 Keyboard Expressions III* ..... 2
MUS 161 Voice Expressions I* ..... 2
MUS 162 Voice Expressions II* ..... 2
MUS 163 Voice Expressions III** ..... 2
MUS 161 Guitar Expressions I* ..... 2
MUS 162 Guitar Expressions II* ..... 2
MUS 163 Guitar Expressions III* ..... 2
MUS 131 Class Piano I ..... 2
MUS 132 Class Piano II ..... 2
MUS 133 Class Piano III ..... 2
MUS 134 Class Piano IV ..... 2
MUS 135 Class Piano V ..... 2
MUS 136 Class Piano VI ..... 2
MUS 141 Applied Piano l* ..... 2
MUS 142 Applied Piano II* ..... 2
MUS 143 Applied Piano III* ..... 2
MUS 144 Applied Piano IV* ..... 2
MUS 145 Applied Piano V* ..... 2
MUS 146 Applied Piano VI* ..... 2
MUS 141 Applied Voice I* ..... 2
MUS 142 Applied Voice II* ..... 2
MUS 143 Applied Voice III* ..... 2
MUS 144 Applied Voice IV* ..... 2
MUS 145 Applied Voice V* ..... 2
MUS 146 Applied Voice VI* ..... 2
MUS 131 Class Guitar I ..... 2
MUS 132 Class Guitar II ..... 2
MUS 133 Class Guitar III ..... 2
MUS 134 Class Guitar IV ..... 2
MUS 135 Class Guitar V ..... 2
MUS 136 Class Guitar VI ..... 2
MUS 141 Applied Guitar I* ..... 2
MUS 142 Applied Guitar II* ..... 2
MUS 143 Applied Guitar III* ..... 2
MUS 144 Applied Guitar IV* ..... 2
MUS 145 Applied Guitar V* ..... 2
MUS 146 Applied Guitar VI* ..... 2
MUS 151 Community Chorale ..... 1
MUS 152 Concert Chorale ..... 1
MUS 155 Jazz/Fusion/Blues Ensemble ..... 1
MUS 176 Music Theatre Performance ..... 3
MUS 205 Recital Performance ..... 1-3
MUS 223 Jazz-Rock Theory/Improvisation ..... 2
Total Credits for Area of Emphasis ..... 96

NOTE: * Course requires one-half hour lesson and one hour lecture per week.


FULL-TIME FACULTY AND AREAS OF ACADEMIC SPECIALTY
Alan Ackerman, Chemistry and Health Sciences
Randall P. Boan, Mathematics and Statistics
Douglas Clay, Computer Disciplines
Sam Cooper, Computer Disciplines and Physics
Marsha Driskill, Mathematics, Coordinator, Aims/UNC Math Program
Phil Edwards, Division Chair, Computer Disciplines, Mathematics
\& Physics, Loveland
Thomas J. Griffin, Mathematics and Science, Loveland
Catherine Hall, Computer Disciplines
Donald Harris, Chemistry and Chemical Technology
Liz Ryan, Division Chair, Computer Disciplines, Mathematics \&
Physics, Ft. Lupton
Keith Lane, Mathematics
Ruby Loveless, Computer Disciplines
Rex A. Parr, Computer Disciplines
Walt Richter, Division Director, Chemistry and Health Sciences
Karen Robinson, Mathematics and Computer Disciplines
Lyndon Robinson, Geology, Earth Science and Physics
Leba Sarkis, Biology
Thelma Stephenson, Computer Disciplines
The Mathematics, Science and Computer Division provides a wide variety of course offerings which can enrich the student in one or more of the following ways:

1. We provide course work which will fulfill requirements leading to the A.A., A.S. or A.G.S. degrees.
2. We provide course work and training which enables the student to earn an A.A.S. degree in Computer Information Systems.
3. We provide freshman and sophomore level course work in a number of areas that will transfer readily to four-year colleges and universities, even if the student transfers without first completing a degree.
4. We provide courses in selected areas which can lead to entry level employment opportunities.
5. We provide the non-degree seeking student with mathematics, science or computer courses which will upgrade knowledge and skills.
6. We offer the "life-long learner" a variety of interesting courses from which to choose.

## AREAS OF EMPHASIS:

The following pages list ten areas of emphasis along with suggested course choices. These emphases were created for two main reasons:

1. they indicate to the student who is contemplating earning a Bachelor's degree in a specific area the typical freshman and sophomore level courses required of that major.
2. they provide a concentrated program of theory and skills for those who plan to enter the work force after completing one of the Associate's degrees.
The following areas of emphasis and Associate's degrees are available:

Computer Information Systems
Computer Programming
Computer Science
Chemistry
Chemical Testing Technology
Pre-engineering
Mathematics
Life Science
Pre-health Profession
Pre-nursing
A.A.S. or A.A.
A.S. or A.A.
A.S. or A.A.
A.S. or A.A.
A.S. or A.A.
A.S. or A.A.
A.S. or A.A.
A.S. or A.A.
A.S. or A.A.
A.S. or A.A.

It is important for students to understand that they need not complete all the requirements for an area of emphasis in order to earn either the A.A. or A.S. degree. Students can elect to earn an A.A. or A.S. degree by completing the College's general education and elective requirements without a concentration of courses in one area of emphasis. Many students who earn a degree, do so without completion of an area of emphasis. Some students, on the other hand, find it advantageous to complete the degree requirements with a concentration of courses in an area of emphasis.

The courses listed under each emphasis are guidelines to help students identify which courses are the most applicable to their chosen area of interest. Not all of the courses listed under an area of emphasis need be taken in order for a student to earn the emphasis in conjunction with an A.A. or A.S. degree; some substitutions are allowed. However, the Division Director must approve all courses applied to a chosen program.

All students planning to major in the sciences, mathematics or computer disciplines or pursue a majority of course work in these disciplines must have a faculty advisor from this division. The advisor will work closely with students in planning their programs. This applies to students who do not intend to continue their education after earning an A.A. or A.S. degree as well as to students who are planning to transfer selected courses into a Bachelor's program at the college or university of their choice. For transfer students, it is the student's responsibility to become informed about the course requirements particular to the Bachelor's program the student intends to pursue.

The Associate of Science (A.S.) Degree will not be granted to students who have completed only survey type courses in mathematics, science and computer areas. All mathematics, science and computer courses applied to this degree must be completed with a grade of "C" or better.

## MATH, SCIENCE \& COMPUTER SCHOLARSHIP

AWARD:
Awarding Division:
Award Amount:
Application Deadline:
Qualifications:

CHEMICAL RUBBER COMPANY (CRC) CHEMISTRY AWARD Math/Science/Computer (Chemistry) Handbook of Chemistry and Physics, Current Edition. No deadline. Recipient chosen by instructors.
Contact awarding Division for criteria

## COMPUTER INFORMATION SYSTEMS (A.A.S. DEGREE)

(Cathy Hall, Ruby Loveless, Rex A. Parr, Thelma Stephenson)

Potential Opportunities: Students who desire a career as a programmer trainee, computer operator, or microcomputer specialist may elect this curriculum. This program is designed so a student may choose to have an emphasis in the microcomputer environment or in the more traditional mainframe programmer/operator environment.
Logical reasoning, problem-solving ability, perseverance, and inquisitiveness are definite assets to students.
Courses to develop an understanding of business organizations, accounting, and communication skills are included.

Registration Requirement: All students taking a course or courses in a CIS program must have an appropriate CIS program advisor's signature on the course registration form before registering.
Students who earn a D grade in a course which serves as a prerequisite to another course may not enroll in the higher level course. They are strongly advised to repeat the prerequisite course and demonstrate mastery of the material by earning a grade of C or better.

General Education Requirements: A minimum of 23 quarter credit hours of General Education Courses are required with advisor's approval. The General Education courses are identified by an asterisk (*).

## DEGREE PROGRAM

Required:
CREDITS
ACC 122
Accounting II
*BUS 142 Intermediate Communications
*BUS 217 Business Communications and Report Writing 5
OR
*SPE 115 Principles of Speech Communications
CIS 110 Intro to Microcomputer Operating Systems - DOS 3
CIS 116 Logic and Programming Design 5
CIS 117 Computer Operations 5
*CIS 118 Intro to Microcomputer Applications 5
CIS 138 Microcomputer Interfaces: Windows 3
CIS 160 BASIC Language Programming 5
CIS 175 UNIX 5
CIS 245 Database Management Systems 5
CIS 250 Local Area Networks 3
CIS 251 Local Area Network Administration 5
CIS 260 COBOL Programming 5
CIS 261 Advanced COBOL Programming 5
CIS 292 JCL and Writing Computer Documentation 5
CSC 230 C Language Programming 5
*MAT 105 Intermediate Algebra 5
Select one from Category I:
CIS 125 Ventura
CIS 139 Advanced Microcomputer Interfaces: Windows 3
CIS 165 RPG Programming 5
CIS 252 Multi-Vendor Networking 5
CIS 276 Systems Analysis and Design 5

## Select one from Category II:

*BUS 115 Introduction to Business ..... 5
'BUS 165 Human Relations at Work ..... 5
*BUS 216 Legal Environments in Business ..... 5
Select one from Category III:
CIS 140 Intro to Microcomputer Databases: dBase ..... 5
CIS 253 LAN Service and Support ..... 5
CIS 265 Assembly Language Programming (BAL) ..... 5
CSC 231 Advanced C Language Programming ..... 55
Electives (selected with advisor approval) Tectives (selocial ..... 0-2
Total Credits for A.A.S. Degree ..... 99
COMPUTER INFORMATION SYSTEMSADVISORY COMMITTEE

| Richard Boggs | Gary Parker <br> Aims Community College |
| :--- | :--- |
| State Farm Insurance <br> Company |  |
| Marilyn Jenkins | Donn Ruby |
| Hewlett Packard | Weld County |
| Duane Nelson | Vicki Sauer |
| School District Six | Montort of Colorado |



## COMPUTER INFORMATION SYSTEMS EMPHASIS

(A.A. DEGREE)

(Douglas Clay)
The Computer Information Systems emphasis is for the student who is leaning towards a career in business programming and is interested in transferring to a four year college. This emphasis combines specific courses from both the Mathematics/Science/ Computer and Business Divisions. These courses will provide exposure to both Computer Science and Business topics such as: computer software, computer programming, accounting, economics and statistics.

Recommended degree requirements for area of emphasis: COMMUNICATIONS CREDITS
See A.A. degree requirements

## HUMANITIES

See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCES
Select one from the following courses:
PSY 101 General Psychology I 5
SOC 101 Introduction to Sociology I 5
Select from two of the following courses:
ECO 201 Principles of Macroeconomics 5
ECO 202 Principles of Microeconomics 5
SOC 101 Introduction to Sociology I 5
ANT 101 Cultural Anthropology 5
POS 105 Introduction to Political Science 5
POS 111 American Government 5
GEO 105 Geography 5
PHYSICAL EDUCATION 5
See A.A. degree requirements
MATHEMATICS AND SCIENCE 15
Select one of the following required Mathematics courses:
MAT 121 College Algebra
MAT 125 Survey of Calculus 5
See A.A. degree requirements for Science selection 5
Select from CSC prefixed courses min. 5

## ELECTIVES:

Note: Some colleges and universities may not accept the transfer of courses which are under the School of Occupational Education, while other schools will accept selected courses from these areas. The courses suggested here are intended for transfer to four-year schools. Consult with your advisor regarding the transferability of these courses to the school of your choice.

Select one from the following courses:
CSC 100 The Computer and Society

Required:
CREDITS
CIS 160
BASIC Language Programming 5
CIS 260
COBOL Programming 5
CIS 261 Advanced COBOL Programming

Select any of the following courses:
CIS 110 Intro to Microcomputer Operating Systems - DOS 3
CIS 116 Logic and Program Design 5
CIS 138 Microcomputer Interfaces: Windows 3
CIS 165 RPG Programming 5
CIS 175 UNIX 5
CIS 250 Local Area Networks 3
CIS 251 Local Area Networks Administration 5
CSC 148 FORTRAN Programming 5
CSC 160 Computer Science I (PASCAL Programming) 5
CSC 230 C Language Programming 5
BUS 216 Legal Environment of Business 5
ACC 121 Principles of Accounting | 5
ACC 122 Principles of Accounting II 5
ACC 123 Principles of Accounting Ili 5
Total Credits for A. A. degree 96
FOR INFORMATION ABOUT COMPUTER COURSES FOR TEACHER RECERTIFICATION, CONTACT: DOUGLAS CLAY, EDBH 588, 330-8008 EXT. 489.


## COMPUTER PROGRAMMING EMPHASIS (A.S. OR A.A. DEGREE)

## (Douglas Clay, Sam Cooper)

Programming in several high level languages and a general background in information systems are the core of this curriculum. Fifteen credits of mathematics and statistics are included:

| Recommended Courses: |  | TS |
| :---: | :---: | :---: |
| STA 201, 202 | Statistics for Business, Science and Social Science I, II |  |
| CSC 100 | Computer and Society OR | 5 |
| CIS 118 | Introduction to Microcomputer Applications | 5 |
| Computer Information Systems Courses: |  |  |
| CIS 110 | Intro to Microcomputer Operating Systems - DOS | DOS |
| CIS 116 | Logic and Program Design |  |
| CIS 160 | BASIC Language Programming | 5 |
| CIS 161 | Advanced BASIC Language Programming |  |
| CIS 175 | UNIX | 5 |
| CIS 260 | COBOL Programming | 5 |
| CIS 261 | Advanced COBOL Programming | 5 |
| Computer Science Required Courses: |  |  |
| CSC 160 | Computer Science I (Pascal Programming) | 5 |
| CSC 161 | Computer Science II, Part 1 (Using Pascal) | 5 |
| CSC 162 | Computer Science II, Part 2 (Using Pascal) | 4 |
| CSC 225 | Computer Organization | 6 |
| Computer Science Elective Courses: |  |  |
| CSC 148 | FORTRAN Programming | 5 |
| CSC 230 | C Language Programming | 5 |
| CSC 231 | Advanced C Language Programming | 5 |
| CSC 235 | Computer Graphics Programming | 5 |
| CSC 240 | ADA Programming |  |
| CSC 265 | PC Assembly Language - Programming | 5 |
| General Education Courses |  |  |
| Note: Some colleges and universities may not accept the transfer of courses which are under the School of Occupational Education, while other schools will accept selected courses from these areas. |  |  |
| The Courses suggested here are intended for transfer to four-year schools. Consult with your advisor regarding the transferability of these courses to the school of your choice. |  |  |

## COMPUTER SCIENCE EMPHASIS (A.S. OR A.A. DEGREE)

## (Douglas Clay, Sam Cooper)

This option provides specialized courses in the theory, functions, architecture and applications of computer hardware and software. Mathematics and statistics are an integral part of this curriculum.

## Recommended Courses:

CREDITS
MAT 121 6
MAT 122 College Trigonometry 5
MAT 201, Calculus I, II, III (each) 5
202, 203
MAT 255 Linear Algebra 5
STA 201, Statistics for Business, Science, and Social
202 Science I, II (each) 5
CSC 100 The Computer and Society 5 OR
CIS 118 Introduction to Microcomputer Applications 5
Computer Information Systems Courses:
CIS 110 Intro to Microcomputer Operating Systems - DOS 3
CIS 116 Logic and Program Design 5
CIS 160 BASIC Language Programming 5
CIS 175 UNIX 5
Computer Science Required Courses:
CSC 160 Computer Science I (Pascal Programming) 5
CSC 161 Computer Science II, Part 1 (Using Pascal) 5
CSC 162 Computer Science II, Part 2 (Using Pascal) 4
CSC 225 Computer Organization 6
Computer Science Elective Courses:
CSC 148 FORTRAN Programming 5
CSC 230 C Language Programming 5
CSC 231 Advanced C Language Programming 5
CSC 235 Computer Graphics Programming 5
CSC 240 ADA Programming 5
CSC 265 PC Assembly Language - Programming 5
General Education Courses

## CHEMISTRY EMPHASIS

(A.S. OR A.A. DEGREE)

## (Alan Ackerman, Don Harris)

Chemistry is one of the most basic yet diverse of the sciences.Options include a professional career in chemistry or preparation to enter professional schools in, for example, pharmacy or veterinary medicine. Mathematics and physics are important corequisites for the chemistry student.

## CREDITS

INITIAL COURSE BLOCK:
CHE 111, General College Chemistry I, II, III (each) 5
112, 113
MAT 121, College Algebra 6
MAT 122 College Trigonometry 5
MAT 201 Calculus I 5
General Education Courses
TERMINAL COURSE BLOCK:
CHE 211, Organic Chemistry I, II, III
(each) 5
212, 213
MAT 202, Calculus II, III
(each) 5
203
PHY 211, Physics: Calculus -based I, II, III
(each) 5
212, 213
CSC 148 FORTRAN Programming
General Education Courses
Note: This emphasis includes College Algebra and Trigonometry which may transfer as electives only. Consequently, students entering at this level may require a longer period for completion of the baccalaureate degree.


## CHEMICAL TESTING TECHNOLOGY EMPHASIS

(A.S. OR A.A. DEGREE)

## (Don Harris)

This emphasis is designed to train chemical laboratory testing technicians who will be qualified for immediate employment as chemical technicians or research assistants in area industries. They may enter such diverse fields as film processing, soil testing, sugar and associated product manufacture, animal assay, cement manufacture and research, and general analytical laboratory testing involving physical and chemical analysis. This course of study is also designed for transfer to four-year colleges and universities. Consult faculty advisor for details.

INITIAL COURSE BLOCK:
CREDITS
Required:
CHE 111, General College Chemistry I, II, III
(each) 5
112, 113
CHE 115, Chemical Technology I
(each) 1
116
MAT 121 College Algebra 6
CIS 160 BASIC Language Programming 5
HEN 106 Safety and First Aid 3
General Education Courses

## Recommended:

GEY 111 Physical Geology 6
PHY 111, Physics: Algebra-based I, II, III (each) 5
112,113
MAT 201 Calculus I 5
BIO 105 Science of Biology 5
TERMINAL COURSE BLOCK:
Required:
CHE 211, Organic Chemistry I, II, III
(each) 5
212, 213
CHE 215, Chemical Technology II
(each) 1
216
CHE 225, Chemical Technology III
(each) 1
226
CHE 235, Chemical Technology IV
(each) 1
236
General Education Courses
Recommended:
CHE 295 Independent Study - Chemical Literature and Study Methods

1
MAT 135 Introduction to Statistics 5
CSC 148 FORTRAN Programming 5
BIO 205 Microbiology 5
CHEMICAL TESTING TECHNOLOGY
ADVISORY COMMITTEE

| Scott Stringer | Randy Worthy |
| :--- | :--- |
| Water Quality Analyst | Chief Chemist |
| City of Longmont | Loveland Industries |

Mike Cheney
Maxtor Corporation

## PRE-ENGINEERING EMPHASIS

## (A.S. OR A.A. DEGREE)

## (Randall Boan, Keith Lane, Karen Robinson)

Engineering is involved with all facets of modern technology. As such, it is a highly specialized area of study. This curriculum is designed to give the student basic courses, which may be applied to different engineering specialties at the baccalaureate level.

INITIAL COURSE BLOCK:
CREDITS
MAT 121, College Algebra 6
MAT 122 College Trigonometry
MAT 201, Calculus I, II, III 5

202, 203
CSC 160 Computer Science I: (PASCAL Programming) 5
CSC 148 FORTRAN Programming 5
CHE 111, General College
112, 113 Chemistry I, II, III
General Education Courses
(each) 5

TERMINAL COURSE BLOCK:
PHY 211, Physics: Calculus-based I, II, III (each) 5
212, 213
MAT 255 Linear Algebra
MAT 260 Calculus IV 5
MAT 265 Elementary Differential Equations
General Education Courses

Note: This emphasis contains College Algebra and Trigonometry which may transfer as electives only. Consequently, students may require a longer period of time to complete the baccalaureate degree.

## MATHEMATICS EMPHASIS

## (A.S. OR A.A. DEGREE)

(Randall Boan, Keith Lane, Karen Robinson)
Students may complete the first two years of a typical requirement through Elementary Differential Equations.

INITIAL COURSE BLOCK:
CREDITS
CIS 116 Logic and Program Design 5
CIS 160 BASIC Language Programming 5
CSC 148 FORTRAN Programming 5
MAT 121, College Algebra 6
MAT 122 College Trigonometry 5
MAT 201, Calculus I, II, III (each) 5
202, 203
STA 201, Statistics for Business, Science and
202 Social Science I, II
(each) 5
General Education Courses
TERMINAL COURSE BLOCK:
MAT 255 Linear Algebra 5
MAT 260 Calculus IV 5
MAT 265 Elementary Differential Equations 5
PHY 211, Physics: Calculus-based I, II, III (each) 5
212, 213
General Education Courses
Note: This emphasis contains College Algebra and Trigonometry which may transfer as electives only. Consequently, students may require a longer period of time to complete the baccalaureate degree.


## LIFE SCIENCES EMPHASIS

(A.S. OR A.A. DEGREE)

## (Lyndon Robinson)

Students entering into biological sciences may prepare for a variety of fields such as biology, wildlife management, forestry, and biology teaching. Some fields require modified programs and students should plan this area of emphasis carefully with their advisors.

INITIAL COURSE BLOCK:
CREDITS
(each) 5
(each) 5

6
MAT 121 College Algebra
General Education Courses

## TERMINAL COURSE BLOCK:

BIO 201, Human Anatomy and Physiology I, II, III (each) 5
202, 203
BIO 205 Microbiology
General Education Courses

## PRE-HEALTH PROFESSION <br> EMPHASIS (A.S. OR A.A. DEGREE)

## (Leba Sarkis)

This emphasis is designed for persons who want to enter various health-care professions other than nursing. The typical program would prepare students for further study in such areas as prephysical therapy, pre-veterinary medicine, pre-dentistry, pre-medicine, and pre-chiropractic medicine. Some fields require modified programs and should be planned with the assistance of an advisor.

INITIAL COURSE BLOCK:
CREDITS
(each) 5
(each) 5
(each) 5
112
112, 113
General Education Courses
TERMINAL COURSE BLOCK:
BIO 201, Human Anatomy and Physiology I, II, III (each) 5
202, 203
BIO 205 Microbiology 5
CHE 211, Organic Chemistry, I, II, III (each) 5
212, 213
General Education Courses


## PRE-NURSING EMPHASIS

(A.S. OR A.A. DEGREE)

(Alan Ackerman, Leba Sarkis)
This curriculum is designed to provide the student with the general education, statistics and basic science requirements that will transfer into a university program leading to the Bachelor of Science in Nursing Degree (BSN). The course work can be chosen to lead to either an A.A. or A.S. Degree, or the student may opt to take a number of required courses and transfer into the program without earning an Associate Degree. The student should contact the PreNursing advisor for help in choosing the proper courses.

## Recommended Courses:

CREDITS
MAT 135 Introduction to Statistics
CHE 110 Introduction to Inorganic Chemistry
CHE 120 Introduction to Organic Chemistry 5
CHE 210 Introduction to Human Biochemistry
BIO 201, Human Anatomy and Physiology, I, II, III
(each) 5
202, 203
PSY 235 Developmental Psychology
SOC 101 Introduction to Sociology I
ANT 101 Cultural Anthropology
General Education Courses
Note: Aims can also provide the essential science and general education courses which are required for two year Nursing programs leading to the Associate Degree Nursing, (ADN). The college has established transfer agreements with area community colleges who do offer this program. Contact a Pre-Nursing advisor in the Mathematics, Science, and Computer Division for details.


## EMERGENCY MEDICAL SERVICES MANAGER EMPHASIS:

For those EMS field providers who desire to more into management positions such as field supervisor, manager, director etc.

## Pre-Requisites:

TEM 105 EMT-B, TEM 107 EMT-I or EMT-P and computer skills
Degree Requirements for Area of Emphasis

## Recommended Courses:

CREDITS
COMMUNICATIONS
See A.A. degree requirements

## HUMANITIES

HUM 121 Survey of Humanities
PHI 112 Ethics
PHI 113 Logic
BEHAVIORAL AND SOCIAL SCIENCES
PSY 101 General Psychology
POS 111 American Government
ECO 201 Principles of Macroeconomics
or
ECO 202 Principles of Microeconomics
MATHEMATICS AND SCIENCES
See A.A. Degree requirements
BIO 120 Basic Human Anatomy and Physiology
PHYSICAL EDUCATION 5
See A.A. degree requirements
ELECTIVES: 36
TEM 186 EMS Internship 2
TEM 205 Law in Emergency Services 2
TEM 209 Ethics in Emergency Services 1
TEM 215 Communication-Documentation-Terminology 2
BUS 165 Human Relations at Work 5
ACC 207 Financial Management 5
PSY 138 Biofeedback/Stress Management 4
PSY 120 Psychology of Leadership and Management 5
or
MGT 207 Human Relations Management 5
MGT 236 Law Labor Relations 5
MGT 237 Supervisory Management 5
Total Credits for Area of Emphasis:

## EMERGENCY MEDICAL SERVICES FIELD SPECIALIST EMPHASIS:

Students entering EMS may want to prepare for this increasingly competitive field by enrolling in the field specialist degree program. This is for the person who will be providing care in the EMS setting.

Degree Requirements for Area of Emphasis Recommended Courses:

CREDITS
COMMUNICATIONS
See A.A. degree requirements
HUMANITIES
HUM 121 Survey of Humanities
PHI 112 Ethics
PHI 113 Logic
BEHAVIORAL AND SOCIAL SCIENCES
PSY 101 General Psychology
POS 111 American Government
ECO 201 Principles of Macroeconomics
or
ECO 202 Principles of Microeconomics

## MATHEMATICS AND SCIENCES

See A.A. Degree requirements
BIO 120 Basic Human Anatomy and Physiology
PHYSICAL EDUCATION
See A.A. degree requirements
ELECTIVES:36
TEM 105 EMT-B, TEM 116 IV MAST, TEM 131 EKG ..... 18
or
TEM 107 EMT-I, TEM 205 PALS, EMT-P, EMS Internship ..... 18
TEM 147 Career Development ..... 3
TEM 187 Emergency Driving ..... 2
TEM 207 Street Survival ..... 1
TEM 208 Law in Emergency Services ..... 2
TEM 209 Ethics in Emergency Services ..... 1
TEM 215 Communication-Documentation-Terminology ..... 2
PSY 138 Biofeedback/Stress Management ..... 4
PSY 227 Death and Dying ..... 3
Total Credits for Area of Emphasis: ..... 101



## DEVELOPMENTAL STUDIES



FULL-TIME FACULTY AND AFFILIATED PERSONNEL
E.C. "Vera" Benavidez, English as a Second Language, South Campus
Ruth Gomez, Reading \& Adult Basic Education
Phyllis Gosch, Chair, Reading
Barbara Maxfield, GED
Les Race, Division Chair, West Campus
Ruth Slomer, Division Director
Karen Soutar, Division Chair, South Campus
Robert Sullivan, Reading Lab Chair
Arthur Terrazas, Mathematics
Maria Velasquez, Chair, English as a Second Language
Joann Wilcox, Chair, English
Julia Wilson, Chair, Mathematics
The Developmental Studies Division plays an important part in the success of many students. New students take assessment tests and talk to advisors to find out whether they are ready to enter a particular course of study or program. Some students need to improve their academic skills in order to get a successful start in college; others need to get a high school equivalency certificate. All of these students receive the instruction they need in the Developmental Studies Division. The courses offered there are in the areas of math, reading, writing, and English as a second language.

The college offers its developmental studies through four programs:

## SURVIVAL ENGLISH AS A SECOND LANGUAGE (ESL)

This program is for students who wish to improve or gain English speaking skills. The courses emphasize verbal skills related to subject matter which is relevant to the adult learners in the class, such as consumer education, jobs, schools, and the community. This program is not intended to be an English preparatory program for students who are seeking entrance to colleges and universities. Foreign students wishing to take this curriculum must have their visa cleared by the Office of Admissions and Records.

## DEVELOPMENTAL EDUCATION

Developmental courses include a sequence of skill development classes in reading, writing, and mathematics. They are contentoriented and designed to prepare students for GED or college skills courses.

## GENERAL EDUCATION DEVELOPMENT

The GED program is designed to help students develop the skills necessary to pass the GED examination in the content areas of mathematics, writing, literature, social science, and science. The program contains group activities, instructor presentations, and individualized activities. Students will be encouraged to study any of the content areas in greater depth than required for the GED in order to prepare themselves for future college or vocational goals. The GED diploma is equivalent to the high school diploma and is accepted by most employers and schools of higher education. The GED diploma often provides increased opportunities for future education.

## COLLEGE SKILLS PROGRAM

The College Skills Program of Aims Community College is designed for students who want to improve their math, reading, writing, or basic communication skills. The purpose in taking courses in the program may be to improve such skills for greater achievement in college transfer or vocational courses. Students who intend to pursue a program of study may be advised into certain math, writing and reading courses as a result of their pre-assessment test scores.

## DEVELOPMENTAL STUDIES SCHOLARSHIP

AWARD:
Awarding Division:
Award Amount:
Application Deadline:
Qualifications:

ED BEATY MEMORIAL SCHOLARSHIP
Developmental Studies
Tuition waiver for one academic year. (in-district)
May 1
Contact awarding Division for criteria



## SCHOOL OF OCCUPATIONAL EDUCATION

Aims Community College offers a variety of vocational technical courses designed to prepare adults, post high school, and high school students for useful and gainful employment. Persons who wish to prepare for initial employment, who are employed but desire to improve their skills, or who seek a new vocation will find a variety of programs from which to choose.

Supplemental Services, which includes individual and drop-in tutoring, are available to assist students in successfully completing their courses. Students with disabilities can receive special assistance if needed. See Supplemental Services section.

Since the purpose of occupational education is to prepare students for employment, programs are developed according to the identified needs of business and industry. Advisory committees are formed to provide communication links between business, industry, public service, and education.

Students may enroll in programs leading to a Certificate in Occupational Education or to an Associate of Applied Science degree. Persons enrolling in and successfully completing an occupational course may request a certificate of completion or competency.

The Occupational Education programs are not intended for transfer to baccalaureate degree programs; however, a number of the courses may be accepted towards a bachelor's degree at some institutions. Please consult an academic advisor for further information.

NOTE: Each Associate of Applied Science degree contains a minimum 23 credit hours of "General Education." The prefixes and/or course titles for general education courses are subject to change on short notice in an effort to comply with State Guidelines.

Registration Requirement: All students taking a course or courses in the School of Occupational Education must have an appropriate Occupational Education program advisor's signature on the course registration form before registering.

## SCHOOL OF OCCUPATIONAL EDUCATION SCHOLARSHIP

AWARD:
Awarding Division: Award Amount: Application Deadline:
Qualification:

BERGER SCHOLARSHIP
School of Occupation Education $\$ 1,500$ up to four awards given. End of Spring Quarter Contact the Assistant Dean of Occupational Educational for criteria



The Business Division offers courses leading to degrees or certificates in Accounting, Office Technology, and Marketing/ Management, as well as courses required for a Colorado Real Estate License. The Division offers a wide variety of business-related workshops and seminars designed for employed persons who wish to increase their knowledge, upgrade their skills, or upgrade or acquire skills using the latest in business Technology.

The Business Division is a member of the Association of Collegiate Business Schools and Programs (ACBSP).

Students entering Aims Community College with high school credit in typewriting, bookkeeping, and/or shorthand may substitute other courses with the consent of their advisor.

A student who intends to enroll in Business Division courses should consult a faculty advisor in the Division at the earliest opportunity to plan a program that is appropriate to his or her needs.

The Business Lab, Westview 606 and 618, is designed to assist students in their various business courses through the use of personal and individualized instruction, instructional media, reference materials, computers, typewriters, and adding \& calculating machines.

## ACCOUNTING

ACCOUNTING
(two-year A.A.S. degree)
ACCOUNTING CERTIFICATE
(one-year certificate)

## GENERAL BUSINESS

OFFICE TECHNOLOGY
(two-year A.A.S. degree)
ADMINISTRATIVE SUPPORT OPTION
LEGAL OFFICE OPTION
OFFICE TECHNOLOGY
(one-year certificate)

## MARKETING/MANAGEMENT

MARKETING/MANAGEMENT (two-year A.A.S. degree)
SUPERVISORY MANAGEMENT OPTION
MARKETING OPTION
SMALL BUSINESS MANAGEMENT OPTION
MARKETING/MANAGEMENT CERTIFICATE (one-year certificate)
REAL ESTATE
COURSES FOR COLORADO LICENSING

## ACCOUNTING

(Betty Buxman, Kerry Colton, Marthanne Edwards, Ken Neet)

Potential Opportunities: This program is designed to prepare the student for employment in accounting positions which would include: accounts receivable or accounts payable clerk, cash receipts and disbursements clerk, payroll accounting technician, and junior accountant.

Registration Requirement: All students taking a course or courses in a Business Division program must have an appropriate Business Division program advisor's signature on the course registration form before registering.

General Education Requirements: A minimum of 23 quarter credit hours of General Education Courses are required with advisor's approval. The General Education Courses are identified by an asterisk (*).

## DEGREE PROGRAM

## CREDITS

Degree Requirements:
ACC 105 Payroll Accounting 3
ACC 121 Principles of Accounting | 5
ACC 122 Principles of Accounting II 5
ACC 123 Principles of Accounting III 5
ACC 196 Accounting Practicum 1
ACC 197 Computerized Practicum I 1
ACC 198 Computerized Practicum II 2
ACC 207 Financial Management 5
ACC 208 Lotus 1-2-3 Applications for Business 3
ACC 209 Lotus 1-2-3 Applications for Cost Accounting 3
ACC 211 Intermediate Accounting | 5
ACC 212 Intermediate Accounting II 5
ACC 215 Lotus 1-2-3 Applications for Finance 3
ACC 226 Cost Accounting 5
ACC 228 Accounting Systems 5
BTE 108 Ten-Key by Touch 1
*BUS 142 Intermediate Communications 5
*BUS 217 Business Communications and Report Writing 5
*MAT 110 Applied Business Mathematics 5
Total credits from above courses 72
Select one from the following courses:
*CIS 116 Logic and Program Design 5
*CIS 118 Introduction to Microcomputer Applications 5
Total credits from above courses 5
Select one from the following courses:
*BUS 216 Legal Environment of Business 5
*BUS 221 Business Law 5
Total credits from above courses 5
Select one from the following courses:
*BUS 115 Introduction to Business 5
*BUS 165 Human Relations at Work 5
Total credits from above courses 5
Electives (selected with advisor's approval) 9
Total Credits for A.A.S. Degree 96

## ACCOUNTING CERTIFICATE PROGRAM

## Certificate Requirements:

CREDITS
ACC 105 Payroll Accounting 3
ACC 121 Principles of Accounting I 5
ACC 122 Principles of Accounting II 5
ACC 123 Principles of Accounting III 5
ACC 196 Accounting Practicum 1
ACC 197 Computerized Practicum I 1
ACC 208 Lotus 1-2-3 Applications for Business 3
BTE 108 Ten-Key by Touch 1
BUS 142 Intermediate Communications 5
BUS 217 Business Communications and Report Writing 5
CIS 118 Introduction to Microcomputer Applications 5
MAT 110 Applied Business Mathematics 5
Total credits from above courses 44

Select one from the following courses:
BUS 115 Introduction to Business
BUS 165 Human Relations at Work 5
Total credits from above courses 5
Total Credits for Certificate

## ACCOUNTING ADVISORY COMMITTEE

Vicki Sears
Anderson \& Whitney
Judi Pippin
Aims Community College
Pam Vincent
Hewlett-Packard
Thomas Dye
Monfort, Inc.

Marcia Siebring
Kosmicki Frick Kadlecek
\& Company
Allen McConnell
University of Northern
Colorado

David Ransome
Greeley National Bank


## GENERAL BUSINESS

(Bobbi Benesch, Jerry Goddard, Judy Leusink, Maxine Marquez, Paul Martin, Carol Monthei, Trudi Manuel, Sue Musil, Linda Scott)
Potential Opportunities: The programs are designed for persons interested in gaining skills and knowledge using state-of-the-art equipment and up-to-date technology. Employment opportunities include: government, small business, banking, medical, real estate, insurance, law offices, and the judicial legal system.
Registration Requirement: All students taking a course or courses in a Business Division program must have an appropriate Business Division program advisor's signature on the course registration form before registering.
General Education Requirements: A minimum of 23 quarter credit hours of General Education Courses are required with advisor's approval. The General Education courses are identified by an asterisk (*).

## OFFICE TECHNOLOGY DEGREE PROGRAM

## Degree Core Requirements: <br> CREDITS

ACC 101 Fundamentals of Accounting I
ACC 208 Lotus 1-2-3 Applications for Business 3
BTE 102 Basic Keyboarding Applications 4
BTE 108 Ten-Key by Touch 1
BTE 151 Word Processing I (WordPerfect) 4
BUS 103 Advanced Keyboarding Applications 4
BUS 129 Telephone Communications 1
*BUS 142 Intermediate Communications 5
BUS 147 Notetaking and Organizational Skills 5
*BUS 165 Human Relations at Work 5
*BUS 217 Business Communications and Report Writing 5
*CIS 118 Introduction to Microcomputer Applications 5
*MAT 110 Applied Business Mathematics 5
Total credits from above courses 52

## ADMINISTRATIVE SUPPORT OPTION

Additional Degree Requirements: CREDITS
BUS 107 Basic Office Procedures
*BUS 115 Introduction to Business 5
BUS 152 Word Processing II (WordPerfect) 4
BUS 197 Combined Bookkeeping Practicum 3
BUS 204 Machine Transcription 4
BUS 206 Introduction to Business Telecommunications 2
BUS 241 Integrated Office Procedures 4
BUS 257 Managing Office Technology 4
CIS 138 Microcomputer Interfaces Windows 3
Total credits from above courses 34
Electives Select 10 credits from the following courses: (or other courses as approved by advisor)
ACC 105 Payroll Accounting 3
ACC 121 Principles of Accounting I 5
ACC 122 Principles of Accounting II 5
BTE 100 Touch Keyboarding 4
BUS 101 Speed and Accuracy I 4
BUS 116 Introduction to International Business 5
BUS 126 Proofreading Techniques ..... 1
BUS 127 Business Word Usage ..... 3
BUS 128 Keyboarding for Computers ..... 2
BUS 131 Speed \& Accuracy II ..... 4
BUS 136 Computerized Proofreading Applications ..... 1
BUS 138 Word Processing for the Macintosh ..... 1
BUS 141 Introduction to Communications ..... 5
BUS 146 Office Internship ..... 3
BUS 221 Business Law ..... 5
BUS 234 Business Seminar .....  5
BUS 235 Business Seminar ..... 1
BUS 236 Business Seminar ..... 2
BUS 237 Business Seminar ..... 3
BUS 238 Business Seminar ..... 4
BUS 239 Business Seminar ..... 5
BUS 256 Desktop Publishing ..... 2
BUS 296 Business Honors ..... 3
CIS 110 Intro to Microcomputer Operating System: DOS ..... 3
MAN 125 Teambuilding ..... 2
MAN 207 Human Resources Management ..... 5
MAN 237 Supervisory Management I ..... 5
MAN 246 Business Ethics ..... 2
MAN 247 Supervisory Management II ..... 5
Total credits for A.A.S. Degree ..... 96
LEGAL OFFICE OPTION
Additional Degree Requirements: CREDITS
BUS 114 Legal Keyboarding ..... 4
BUS 117 Legal Terminology ..... 5
BUS 118 Legal Machine Transcription ..... 4
BUS 195 Bookkeeping Practicum ..... 1
BUS 211 Legal Office Procedures ..... 5
BUS 212 Career Legal Secretary ..... 4
*BUS 216 Legal Environment of Business ..... 5
BUS 231 Legal Word Processing ..... 4
BUS 255 Advanced Word Processing ..... 2
BUS 291 Legal Internship ..... 3
Total credits from above courses ..... 37
Electives (selected with advisor approval) ..... 7
Total Credits for A.A.S. Degree ..... 96
MEDICAL OFFICE OPTION
Additional Degree Requirements: CREDITS
BUS 245 Medical Office Procedures ..... 4
BUS 246 Medical Machine Transcription ..... 4
HLH 131 Medical Terminology ..... 4
PSY 101 General Psychology I ..... 5
TEM 127 Cardiopulmonary Resuscitation (CPR) ..... 1
Total Credits from above courses ..... 18
Electives (selected with advisor approval - see Administration Support electives list above) ..... 26
Total Credits for A.A.S. Degree ..... 96

| OFFICE TECHNOLOGY CERTIFICATE PROGRAM |  |
| :---: | :---: |
| Certificate | quirements: CREDITS |
| BTE 102 | Basic Keyboarding Applications |
| BTE 108 | Ten-Key by Touch |
| BTE 151 | Word Procession I (WordPerfect) (or BUS 181 and 182 with program advisor approval) |
| BUS 103 | Advanced Keyboarding Applications |
| BUS 107 | Basic Office Procedures |
| BUS 129 | Telephone Communications |
| *BUS 142 | Intermediate Communications |
| BUS 147 | Notetaking and Organizational Skills |
| *BUS 217 | Business Communications and Report Writing |
| *CIS 118 | Introduction to Microcomputer Applications |
| *MAT 110 | Applied Business Mathematics |
| Total credits from above courses |  |

Select 7 credits from the following courses (with business advisor approval):
ACC 101 Fundamentals of Accounting I 5
ACC 105 Payroll Accounting 3
ACC 121 Principles of Accounting I 5
ACC 122 Principles of Accounting II 5
ACC 208 Lotus 1-2-3 Applications for Business 3
BTE 100 Touch Keyboarding 4
BUS 101 Speed \& Accuracy I 4
BUS 111 Multimedia Business Presentation I 2
BUS 112 Multimedia Business Presentation II 2
BUS 115 Introduction to Business 5
BUS 116 Introduction to International Business 5
BUS 121 Alpha Shorthand I 5
BUS 126 Proofreading Techniques 1
BUS 127 Business Word Usage 3
BUS 128 Keyboarding for Computers 2
BUS 131 Speed \& Accuracy II 4
BUS 136 Computerized Proofreading Applications 1
BUS 138 Word Processing for the Macintosh 1
BUS 141 Introduction to Communications 5
BUS 146 Office Internship 3
BUS 152 Word Processing II (WordPerfect) 4
BUS 171 Business Leadership Activities 2
BUS 172 Business Leadership Activities 2
BUS 173 Business Leadership Activities 2
BUS 181 Introduction to Word Processing 2
BUS 196 Computerized Bookkeeping Practicum 1
BUS 197 Combined Bookkeeping Practicum 3
BUS 204 Machine Transcription 4
BUS 206 Telecommunications 2
BUS 255 Advanced Word Processing 2
BUS 256 Desktop Publishing 2
CIS 138 Microcomputer Interfaces Windows 3
Total credits from above courses 7
Total Credits for Certificate 51

GENERAL BUSINESS ADVISORY COMMITTEE

Jan Barthel
Snyder Oil Corporation
Kathy Egan
Express Temporary
Joyce Geiger
Windsor High School
Anna Marie Giese
University of Northern Colorado

Pam Ingmire
Hewlett Packard
Judy Nelson
William L. Crosier, Attomey
Cynthia Reighter
Burton, Busch, \& Garcin
Judy Stencel
Learning Dynamics

Bob Hayes
Farr Feeders


## MARKETING/MANAGEMENT

(Claudia Stevens, Maxine Christenson, Mary Webster)
Program Length: Usually six quarters for Associate of Applied Science degree program. The degree will be awarded in Marketing/ Management, with curriculum options available, such as: Fashion Merchandising, Supervisory Management, Marketing, and Small Business Management. Real Estate courses are offered toward the completion of the Colorado Real Estate Agent license or the Colorado Real Estate Broker license. No degree is offered in real estate. Insurance education courses are offered, see INS prefix under course description for specifics. No degree is offered in insurance.
A student seeking an Associate of Applied Science degree in Marketing/Management must consult with a Marketing/Management faculty advisor in the Business Division at the earliest opportunity to plan a program that is appropriate to his or her needs. The individual program should be planned to strengthen and/or broaden the student's background in one or more areas relating to individual needs and to satisfy the degree requirements.
While the programs described are designed to assist those management students who are interested in pursuing a particular major or in career preparation, these suggested programs should be used only as a guide. Course substitutions may be made when new courses are offered and when the Marketing/Management advisor agrees that alternate courses better fit the career goals and objectives of the student.

Real estate courses are offered for those students interested in taking courses toward preparation for the real estate agent's or broker's license and those interested in real estate for their personal information or investment purposes. Students who want to complete the real estate agent's or broker's license should consult with the real estate faculty advisor in the Business Division.

Aims Community College Marketing/Management Department supports Delta Epsilon Chi (DEC) as a student organization which provides the opportunity for leadership.

Registration Requirement: All students taking a course or courses in a Business Division program must have an appropriate Business Division program advisor's signature on the course registration form before registering.

Marketing/Management General Education Requirements: A minimum of 23 quarter credit hours of General Education Courses are required with advisor's approval. The General Education courses are identified by an asterisk (*).

## MARKETING/MANAGEMENT DEGREE PROGRAM <br> Degree Core Requirements: CREDITS

*BUS 165 Human Relations at Work 5
*BUS 217 Business Communication and Report Writing 5
*CIS 118 Introduction to Microcomputer Applications 5
MAN 125 Teambuilding 2
MAN 155 Total Quality Improvement: Principles 3
MAN 156 Total Quality Improvement: Decision Making Tools and Techniques
MAN 157 Total Quality Improvement: Customer Focus 3
MAN 207 Human Resource Management 5
MAN 226 Principles of Management 5
MAN 246 Business Ethics 2
MAR 111 Sales 5
MAR 125 Marketing Resource Systems 2
MAR 216 Principles of Marketing 5
Total credits from above courses: 50
Select one form the following:
*MAT 110 Applied Business Mathematics ..... 5
-MAT 111 Beginning Algebra ..... 5
Total credits from above courses: ..... 5
Select one from the following:
*ECO 201 Principles of Macroeconomics ..... 5
'ECO 202 Principles of Microeconomics ..... 5
*GEO 105 Geography ..... 5
*PSY 101 General Psychology I ..... 5
*SOC 101 Introductions to Sociology ..... 5

* 111 Foreign Language I ..... 5
Total credits form above courses: ..... 5
Total credits for degree core requirements: ..... 60
MARKETING OPTION
Degree Option Requirements: ..... CREDITS
MAN 206 Sales Management ..... 5
MAN 235 Organizational Behavior ..... 5
MAR 105 Principles of Advertising ..... 5
MAR 211 Advanced Sales ..... 5
Total credits from above courses: ..... 20
Select one from the following courses:
*BUS 216 Legal Environment of Business ..... 5
*BUS 221 Business Law ..... 5
Total credits from above courses: ..... 5
Select two from the following courses:
MAN 292 Cooperative Work Experience ..... 6
MAR 117 Retailing ..... 5
MAR 238 Marketing Research ..... 3
Total credits from above courses: ..... 8-11
Electives (selected with advisor approval) ..... 5-8
Total Credits for A.A.S. Degree ..... 101
SMALL BUSINESS MANAGEMENT OPTION
Degree Option Requirements: ..... CREDITS
ACC 101 Fundamentals of Accounting I ..... 5
MAN 208 Small Business Management ..... 5
MAN 212 Management Decision Making ..... 5
MAR 105 Principles of Advertising ..... 5
Total credits from above courses: ..... 20
Select one from the following courses:
*BUS 216 Legal Environment of Business ..... 5
'BUS 221 Business Law ..... 5
Total credits from above courses: ..... 5
Select two from the following courses:
MAN 292 Cooperative Work Experience ..... 6
MAR 117 Retailing ..... 5
MAR 238 Marketing Research ..... 3
Total credits from above courses: ..... 8-11
Electives (selected with advisor approval) ..... 5-8
Total Credits for A.A.S. Degree ..... 101
SUPERVISORY MANAGEMENT OPTION
Degree Option Requirements:CREDITS
ACC 101 Fundamentals of Accounting ..... 5
MAN 235 Organizational Behavior ..... 5
MAN 236 Labor Law Relations ..... 5
MAN 237 Supervisory Management I ..... 5
MAN 247 Supervisory Management II ..... 5
MAN 292 Cooperative Work Experience ..... 6
Total credits from above courses: ..... 31
Select one from the following courses:
'BUS 216 Legal Environment of Business ..... 5
'BUS 221 Business Law ..... 5
Total credits from above courses: ..... 5
Electives (selected with advisor approval) ..... 5
Total Credits for A.A.S. Degree ..... 101
MARKETING/MANAGEMENT CERTIFICATE PROGRAM
Certificate Requirements: ..... CREDITS
BUS 165 Human Relations at Work ..... 5
BUS 217 Business Communication and Report Writing ..... 5
CIS 118 Introduction to Microcomputer Applications ..... 5
MAN 125 Teambuilding ..... 2
MAN 207 Human Resource Management ..... 5
MAN 226 Principles of Management ..... 5
MAN 237 Supervisory Management I ..... 5
MAN 246 Business Ethics ..... 2
MAR 111 Sales ..... 5
MAR 125 Marketing Resource Systems ..... 2
MAR 216 Principles of Marketing ..... 5
Total credits from above courses: ..... 46
Electives (selected with advisor approval) ..... 5
Total Credits for Certificate ..... 51


## REAL ESTATE

Courses offered toward completion of the Colorado Real Estate Agent License:

| MAR 257 | Real Estate Practice and Law <br> MAR 258 <br> Colorado Real Estate Law and Colorado <br> Real Estate Contracts | 6 |
| :--- | :--- | :--- |
| Elective/Support Courses |  |  |
| MAR 255 | Real Estate License Preparation | 3 |
| MAR 256 | Real Estate Closing and Trust Accounts | 3 |
| MAR 265 | Real Estate Finance | 3 |
| MAR 266 | Real Estate Appraisal | 2 |
| MAR 267 | Advanced Real Estate Law | 5 |
|  |  | 1 |

Courses offered toward completion of the Colorado Real Estate Broker License:

| MAR 256 | Real Estate Closing and Trust Accounts | 3 |
| :--- | :--- | :--- |
| MAR 257 | Real Estate Practice and Law |  |
| MAR 258 | Colorado Real Estate Law and |  |
|  | Colorado Real Estate Contracts | 6 |
| MAR 265 | Real Estate Finance | 3 |
| MAR 267 | Advanced Real Estate Law | 2 |

Elective/Support Courses
MAR 255 Real Estate License Preparation
MAR 259 Real Estate Sales Training3
MAR 268 Real Estate Mandatory License Renewal 1

INSURANCE COURSES
The following insurance classes are offered through the Marketing/Management department:
INS 100 Licensure Property/Casualty Insurance 1.5
INS 101 Licensure Life Insurance 1.5
INS 102 Licensure Accident/Health Program 1.5
INS 105 Introduction to Claims 1.5
INS 106 Insurance Personal Residential Property .75
INS 107 Insuring Personal Auto Exposures 75
INS 108 Introduction to Commercial Casualty Insurance . 75
INS 109 Introduction to Commercial Property Coverage . 75
INS 110 Agency Operations . 75
INS 200 Property and Liability Insurance Principles 3
INS 201 Personal Insurance 3
INS 202 Commercial Insurance 4.5

## MARKETING/MANAGEMENT/REAL ESTATE ADVISORY COMMITTEE

| David Sanchez <br> Greeley/Weld Chamber of Commerce | Ray Ulibarri <br> Norwest Bank |
| :--- | :--- |
| Suzanne Sereff | Steve Young |
| Ramkota Inn | State Farm Insurance <br> Company |




The Public Service Division, in addition to the programs listed, has the capability to work individually or collectively with employers to offer Continuing Education, in-service or upgrading training.

Training or classes may be conducted on the job or on campus. Training time may vary from a number of hours or quarters to a one or two year Certificate in Occupational Education program, or to the Associate of Applied Science (A.A.S.) degree program. Some classes are subject to state approval.

Registration Requirement: All students taking a course or courses in a Public Service Division program must have an appropriate Public Service Division program advisor's signature on the course registration before registering.

The Public Service Division offers the following programs:

| CRIMINAL JUSTICE | (minimum two-year A.A.S. degree) |
| :---: | :---: |
| CRIMINAL JUSTICE | PHASIS (minimum two-year A.A. degree) |
| BASIC PEACE OFFIC | ACADEMY (certificate) |
| FIRE SERVICE TEC OPTION: FIRE PR FIRE SC | LOGY <br> (two-year A.A.S. degree) ECTION TECHNOLOGY CE TECHNOLOGY |
| FIRE SERVICE TRA | G ACADEMY (one-quarter certificate) |
| VOLUNTEER FIRE S | VICE TRAINING (certificate) |
| EMERGENCY MEDIC | SERVICES (two-year A.A. degree) |
| EMERGENCY MEDIC | TECHNICIAN (certificate) |
| RADIOLOGIC TECHN | OGY (two-year A.A.S. degree) |
| OTHER HEALTH SER |  |
| GERIATRIC AIDE | (certificate) |
| PUBLIC SERVICE SCHOLARSHIPS |  |
| AWARD: | ARA LIVING CENTERS |
| Awarding Division: | Public Service (Geriatric Aide) |
| Award Amount: | Reimbursement for books and in-district tuition Award given quarterly. |
| Application Deadline: | First day of class each quarter. |
| Qualifications: | Contact awarding division for criteria. |


| AWARD: | GREELEY MEDICAL FOUNDATION <br> SCHOLARSHIP |
| :--- | :--- |
| Awarding Division: | Public Service (Radiology) <br> Reimbursement for books and supplies. |
| Award Amount: | Award given quarterly. |
| Application Deadline: | Prior to first day of class each quarter <br> Contact awarding Division for criteria |
| Qualifications: |  |
| AWARD: | WESTERN MEDICAL SERVICES |

Fire Service (Trades \& Industry Building)

| Doug Dale | Ext. 309 |
| :--- | :--- |
| Veme Einspahr | Ext. 461 |
| Jay Franey, Dept. Chair | Ext. 263 |
| John Lee | Ext. 452 |
| Darrel Schneider | Ext. 276 |

Emergency Medical Service (Emergency Service Academy)

| Nancy Hills (CPR) | Ext. 407 |
| :--- | :--- |
| Jon Kushner, Dept Chair | Ext. 460 |
| Mary Mast | Ext. 421 |
| Angie Wiley (CPR) | $352-4664$ |

Nurse Aide/Health Occupations (Ed Beaty Hall)
Ruth Lorenson Ext. 312
Radiologic Technology (Ed Beaty Hall)

| Diana Duncan | Ext. 341 |
| :--- | :--- |
| Luci Evans | Ext. 420 |
| Debi Knudson | Ext. 419 |
| Jan Specketer | Ext. 436 |

## CRIMINAL JUSTICE

(Chad Myers, Dept. Chair, Ext. 451; Sue Beecher, Ext. 313; Susan Gearheart, Ext. 560; Donna Meier, Ext. 453)
Program Length: At least two years for Associate of Applied Science degree.
Non-Majors: Students do not have to be Criminal Justice majors to enroll in Criminal Justice classes.
Course Sequence: Criminal Justice courses are offered in sequential order. Students are strongly urged to take courses in the proper sequence.

Program Description: The criminal justice field cries out for compassionate, humane, enlightened, prejudice-free practitioners who fully understand and who believe in the service role that government plays in a free society that guarantees, through them, equity for all its citizens within a very precisely-defined constitutional framework. It is our mission to provide the criminal justice field with such people.

This program is concerned with the concept of justice-its implications, its practice, and its demands in relation to the social, political, legal, and economic institutions that define our society. The emphasis is on the total environment in which the justice system operates.

Potential Opportunities: Graduates may find positions with various state and local criminal justice agencies.

Assessment Guidelines: Anyone taking a Criminal Justice course is expected to assess at the college freshman level in reading (85), sentence skills (105), arithmetic.math (85).

## QUESTIONS AND ANSWERS

Q:Can I transfer credits from Aims Criminal Justice Program to other colleges?
A: Just as we have our own criteria in considering acceptance of credits, so each individual school has its own requirements and criteria regarding accepting courses from other schools. When you are ready to transfer, consult the school to which you are transferring.

Q: How long does it take to complete an entire A.A. or A.A.S. Criminal Justice degree program?
A: Each student progresses at their own pace, depending upon the student's background, academic ability, work schedule and most importantly, motivation.

Q:What is the difference between A.A. and A.A.S. in Criminal Justice?
A: The A.A. degree prepares you for a four year college education; while the A.A.S. degree prepares you for a career in a criminal justice or a related field.

## DEGREE PROGRAM

Criminal Justice General Education Courses: A minimum of 30 quarter credit hours of General Education Courses are required.

The General Education Courses are identified by an asterisk (*) to demonstrate that human knowledge is not a disconnected series of specialized subjects but interrelated domains of thought.
NOTE: This program includes changes which are subject to approval by the Colorado Community College and Occupational Education System. Courses listed are subject to change. Students can verify the course offerings with the Department Chair.

Degree Requirements:
FRESHMAN LEVEL COURSES
CRJ 110 Introduction to Criminal Justice 5
CRJ 111 The Police Function 5
CRJ 112 The Judicial Function 5
CRJ 113 The Correctional Function 5
CRJ 114 Community and the Justice System 5
CRJ 141 Legal Research/Writing I 2
CRJ 142 Legal Research/Writing II 2
CRJ 143 Legal Research/Writing III 2

## SOPHOMORE LEVEL COURSES

CRJ 201 Criminal Law 5
CRJ 202 Constitutional Law 5
CRJ 203 Criminal Procedure 5
CRJ 204 Juvenile Justice 5
CRJ 205 Civil Law/Procedure 5
CRJ 211 Seminar: Issues in Policing 3
CRJ 212 Seminar: Issues in Criminal Courts 3
CRJ 213 Seminar: Controversial Issues in Corrections 3
CRJ 248 Seminar: The Etiology of Crime 3
CRJ 249 Seminar: Discretionary Justice/Ethics 5
WRITTEN COMMUNICATIONS 5
*ENG 121 English Composition I OR
*BUS 142 Intermediate Communications
ORAL COMMUNICATIONS
5
*SPE 115 Principles of Speech Communication
MATH
"MAT 100 Elementary Algebra OR
*MAT 135 Introduction to Statistics

## COMPUTERS

*CIS 116 Logic and Program Design OR
*CIS 118 Introduction to Microcomputer Applications OR
*CSC 100 The Computer and Society
BEHAVIORAL AND SOCIAL SCIENCES
(select two (2) from the following courses.)
*ANT 101 Cultural Anthropology
*MAS 106 Psychology of the Mexican American
*POS 118 State and Local Government
*PSY 101 General Psychology I
*PSY 120 Psychology of Leadership and Management
*PSY 249 Abnormal Psychology
*PSY 288 Basic Therapeutic Skills
*SOC 101 Introduction to Sociology I
*SOC 218 Sociology of Minorities

## electives

10
Classes chosen must be made with a CRJ Advisor's prior approval.
A student may select one of the following areas of study which will fulfill the Criminal Justice Elective requirement:
(1) Criminal Justice Generalist
(2) Law Enforcement/Peace Officer Academy

|  |  |  |
| :--- | :--- | :--- |
| (3) | Corrections/Detention Academy |  |
| (4) | Legal Assistant/Paralegal |  |
| (5) | Legal Administration |  |
| Total Credits for A.A.S. Degree |  |  |
|  |  |  |
| Support Courses |  |  |
| (Fees may be required) |  |  |
| CRJ 196 | Seminar in Police Prac/Prob |  |
| CRJ 197 | Seminar in Police Prac/Prob | 1 |
| CRJ 198 | Seminar in Police Prac/Prob | 2 |
| CRJ 199 | Seminar in Police Prac/Prob | 3 |
| CRJ 250 | Advanced Officer Academy | 4 |
| CRJ 296 | Special Issues/CRJJ | 4 |
| CRJ 297 | Special Issues/CRJ | 1 |
| CRJ 298 | Special Issues/CRJ | 2 |
| CRJ 299 | Special Issues/CRJ | 3 |
|  |  | 4 |

CRIMINAL JUSTICE ADVISORY COMMITTEE

| Tom Wagoner, Chief | Philip L. Reichel, Ph.D. |
| :---: | :---: |
| Loveland Police Department | Professor, Department of Sociology U.N.C. |
| John L. Davis, Investigator |  |
| District Attorney's Office | Rick Dill, UnderSheriff |
| Larimer County | Weld County Sheriff's Office |
| Al Dominguez, Jr. | Susan "MK" Beecher |
| District Attorney | Certified Legal Assistant |
| Weld County |  |
|  | Donna Meier |
| William E. West | Attorney at Law |
| District Court Judge |  |
| 19th Judicial District |  |



## BASIC PEACE OFFICER ACADEMY

Academy Director, Charles E. Myers II
Associate Academy Director, Sue Beecher, 330-8008, Ext 313
Academy and Registration Information: Must consult with the Associate Academy Director, (Sue Beecher).

Part-time Program: Forty weeks (Fall, Winter, Spring Quarters)
Tuesday, Wednesday, Thursday nights; Saturdays and Sundays.
Full-time Program: Fifteen weeks (Summer Quarter), Monday through Saturday.

Mission Statement: To educate and train peace officers to think clearly and act wisely in their profession.

Goal Statement: Achieving excellence by doing the basics well, over and over again, under all conditions, and in all circumstances.

Program Objective: We provide prospective peace officers with the opportunity to acquire the necessary academic knowledge and technical skills to perform effectively in their professional work assignments. Therefore, our academy is oriented toward academicstress and technical proficiency.
We follow to the best of our understanding the KSAs (Knowledge, Skills, and Abilities) established by the Colorado P.O.S.T. Board.

Program Workload: We believe that students can only be selfmotivated; that students cannot be motivated for reasons external to their own needs.

Students will be expected to study a minimum of 20 hours per week outside of the classroom and to ferret out that knowledge necessary to successfully complete this Academy and to prepare for the P.O.S.T. examination.
College Credit: Success in the Academy leads to a "certificate of completion" and 40 (quarter) college credits.
Potential Opportunities: Our Academy graduates have been found to be excellent peace officers. Career opportunities appear good although an in-depth study of career placement has not been completed.

Assessment Guidelines: Academy students are expected to score at college freshman level in reading (85), sentence skills (105), Arithmetic/math (75).

Registration Requirement: Must consult with the Associate Academy Director, (Sue Beecher, Ext. 313).

## CERTIFICATE PROGRAM

Certificate Requirements:40
CRJ 261 Criminal Justice Practicum "Police Academy" ..... 40
Total Credits for Certificate ..... 40

Q:Is there financial aid available for the Academy?
A: Yes. However, due to the strict guidelines involved, you should contact Terry Carr in Financial Aid at extension 548/280 for specific details.

Q:How do I become certified after the Academy?
A: This is governed by the Colorado P.O.S.T. Board. For details, you should contact John Shell, Director of P.O.S.T., at $866-5380$ (Denver).

## FIRE SERVICE TECHNOLOGY DEGREE PROGRAM

(Jay Franey, Dept Chair, Ext. 263; John Lee, Ext. 452; Darrel Schneider, Ext. 276; Verne Einspahr, Ext. 461; Doug Dale, Ext. 309)

Program Length: Usually two years for Associate of Applied Science degree per option.

Potential Opportunities: The protection of life and property from fire is the primary function of a fire fighter. With today's sophisticated techniques, training, and equipment, however, modern fire fighters must be well educated in physics, chemistry, other sciences, and state and city laws and codes applicable to fire science. A high school diploma or the equivalent is required at a minimum. Some departments are adopting varying levels of higher eduction as a prerequisite for hiring and promotion. Sound health, good physical condition, the ability to give and take orders, and common sense are helpful. Civil Service requirements for height, weight, and vision may be obtained from the appropriate fire protection agency.

The Public Service Division provides students with the option to specialize in Fire Science Technology (fire fighting) or in Fire Protection Technology (fire prevention). Job opportunities may be found in small or large municipal fire departments, special fire protection districts, or in industrial fire departments.

Registration Requirement: All students taking a course or courses in the Fire Science Technology Degree Program must have the appropriate advisor's signature on the course registration before registering, if so indicated in the particular quarter schedule of classes. However, students do not have to be Fire Service majors to enroll in Fire Service classes.
Fire Service Technology General Education Courses: 39 quarter credit hours of General Education Courses are required. The General Education courses are identified by an asterisk (*).
Common Requirements for Degree ..... CREDITS
Core Degree Requirements: ..... 34
FIS 100 Introduction to Fire Science \& Suppression ..... 5
FIS 111 Fire Fighter Occupational Safety ..... 5
FIS 115 Industrial Fire Safety Concepts ..... 3
FIS 117 Effective Fire Service Presentations ..... 5
FIS 207 Chemistry for Fire Protection ..... 5
FIS 208 Hazardous Materials । ..... 3
FIS 209 Hazardous Materials II ..... 3
FIS 230 Building Plans and Construction ..... 5
General Education Requirements ..... 39
*ENG 121 English Composition I ..... 5
*MAT 100 Elementary Algebra ..... 5
PPH 113 Logic ..... 5
"PHY 105 Conceptual Physics ..... 5
POS 111 American Government ..... 5
*PSY 138 Biofeedback and Stress Management ..... 4
*SOC 101 Introduction to Sociology ..... 5
${ }^{*}$ CIS 118 Introduction to Microcomputer Applications ..... 5
Recommended Electives: (with advisor's approval) ..... 13/17
BUS 100 Touch Keyboarding ..... 4
*COM 112 Introduction to Mass Media ..... 5
*ENG 100 Composition Style and Technique ..... 5
*ENG 225 Advanced Composition ..... 5
FIS 112 Fire Service Planning ..... 3
FIS 119 Fire Instructor ..... 3
FIS 214 Fire Department Administration ..... 3
PED 112 Aerobics II ..... 1
PSY 177 Career and Life Planning ..... 5
Total Credits for A.A.S. Degree ..... 108
** Students that are Colorado State Certified as Fire Fighter I or above will be granted four credit hours of elective credits toward the AAS Degree.
*-Students receiving certification as an Emergency Medical Technician through non-college based training programs will be granted five credit hours of elective credits toward the AAS Degree upon presentation of a current Colorado State certification.

## FIRE PROTECTION TECHNOLOGY OPTION

Option Requirements: ..... 18
FIS 190 Fire Service and the Law ..... 3
FIS 202 Fire Inspection Practices ..... 3
FIS 204 Related Codes \& Ordinances I ..... 3
FIS 205 Related Codes \& Ordinances II ..... 3
FIS 212 Fixed Fire Protection Equipment \& Systems ..... 3
FIS 218 Arson Investigation ..... 3
FIRE SCIENCE TECHNOLOGY OPTION
CREDITS
Option Requirements: ..... 22
FIS 102 Fire Prevention Awareness ..... 3
FIS 104 Fire Company Organization \& Procedure ..... 3
FIS 106 Fire Fighting Strategy and Tactics ..... 5
FIS 110 Fire Apparatus and Procedures ..... 5
FIS 118 Fire Cause Determination ..... 3
FIS 213 Fire Service Supervision ..... 3

## VOLUNTEER FIRE FIGHTER TRAINING

Program Length: Will vary from four quarters to eight quarters or more.

The Volunteer Fire Fighter Training Program is designed to provide theory and practical training for volunteer fire fighters and those who wish to become volunteer fire fighters.

Potential Opportunities: Opportunities to become volunteer fire fighters exist locally as well as nationwide. This training will also benefit those who wish to become career fire fighters.

Registration Requirement: Fire Service Department signature required as necessary - refer to current quarter schedule of classes

PUBLIC SERVICE DIVISION, cont.


FIRE SERVICE ADVISORY COMMITTEE

| Bradley A. Burdick | Katherine Ridenhour-Martin <br> Aurora Fire Department |
| :--- | :--- |
| Matt Carlson |  |
| Milliken Fire Department |  |$\quad$| Willard (Bill) Martin |
| :--- |
| Greeley Fire Department |

Rawhide Generating Station
Gerald Ward
Mountain View Fire Protection District


## EMERGENCY MEDICAL SERVICES

Emergency Medical Services (Emergency Service Academy) (Mary Mast, Ext. 421; Nancy Hills (CPR) Ext. 407; Jon Kushner, Department Chair, Ext. 460; Angie Wiley (CPR) South Campus, 352-4664

Program Length: EMT is currently a 12 week program within the occupational education program with a certificate awarded upon completion. Twelve credit hours required ( 160 clock hours). The students are required to be proficient in both the cognitive and practical skills to pass the program and become state certified by the Emergency Medical Services Division of the Colorado Department of Health. This certificate must be renewed every 3 years by taking an EMT-refresher class ( 40 hours, 4 credits) or Continuing Medical Education.

Potential Opportunities: This course is offered to the general public and to individuals from a variety of occupations such as: ambulance employees, fire department employees (paid or volunteer), police officers, military medical personnel, ski patrol, and search and rescue personnel. Entry level employment as an EMT-B is becoming easier with a wide variety of opportunities now available. With advanced training, there are also opportunities as EKG and IV technicians in the hospital setting, or as EMT-Intermediates in the rural areas.

Registration Requirement: All students taking a course or courses in a Public Service Division program must have an appropriate Public Service Division program advisor's signature on the course registration before registering. All EMT students are required to take the pre-assessment test and meet minimum assessment requirements.

## CERTIFICATE PROGRAM

## CREDITS

12
Certificate Requirements:
TEM 105 Emergency Medical Technician Basic 12
Total Credits for Certificate

## EMERGENCY MEDICAL TECHNICIAN INTERMEDIATE

Program Length: EMT-I is currently a two quarter program within the occupational education program with a certificate awarded upon completion. The student must have specific EMS field experience and a current physician advisor for entry into the program. Fourteen credit hours required. The students are required to be proficient in both the cognitive and practical skills to pass the program and become state certified by the Emergency Medical Services Division of the Colorado Department of Health. This certificate must be renewed every 3 years in order to work as an EMT-I.

Potential Opportunities: Entry level employment as an EMT-I is often easier in the rural areas, but opportunities do exist in the hospital setting or with several advanced life support ambulance services.

Registration Requirements: The student must meet with an EMS Dept. advisor prior to enrolling in the course. There are various prerequisites and certifications required prior to enrollment along with physician advisor approval. The program advisor's signature is required prior to registration.

PUBLIC SERVICE DIVISION, cont.


PUBLIC SERVICE DIVISION, cont.

| HUMANITIES |  | 15 |
| :---: | :---: | :---: |
| HUM 121 | Survey of Humanities |  |
| PHI 112 | Ethics |  |
| PHI 113 | Logic |  |
| BEHAVIORAL AND SOCIAL SCIENCES |  | 15 |
| PSY 101 | General Psychology |  |
| POS 111 | American Government |  |
| ECO 201 | Principles of Macroeconomics |  |
| or |  |  |
| ECO 202 | Principles of Microeconomics |  |
| MATHEMATICS AND SCIENCES |  | 15 |
| See A.A. Degree requirements |  |  |
| BIO 120 | Basic Human Anatomy |  |
| PHYSICAL EDUCATION |  | 5 |
| See A.A. degree requirements |  |  |
| ELECTIVES: |  | 36 |
| TEM 186 | EMS Internship | 2 |
| TEM 205 | Law in Emergency Services | 2 |
| TEM 209 | Ethics in Emergency Services | 1 |
| TEM 215 | Communication-Documentation-Terminology | 2 |
| BUS 165 | Human Relations at Work or PSY 120 | 5 |
| ACC 207 | Financial Management | 5 |
| PSY 138 | Biofeedback/Stress Management | 4 |
| PSY 120 | Psychology of Leadership and Management | 5 |
| MAN 207 | Human Relations Management | 5 |
| MGT 236 | Law Labor Relations | 5 |
| MAN 237 | Supervisory Management | 5 |
| Total Credits for Area of Emphasis: |  | 101 |

## EMERGENCY MEDICAL SERVICES ADVISORY COMMITTEE

| Brad Baker, Paramedic <br> Director A-1 Prof Amb. Longmont | Gary Sandau, <br> LaSalle Fire Department |
| :--- | :--- |
| Jeff Schanhals, Paramedic | Don Forster, EMT |
| EMS Education Coordinator EPMC | Greeley Fire Department |
| Lyn Maier, RN | Carol Vanetti, MD |
| Air Life, NCMC | North Colorado Medical <br> Center |
| Gary McCabe, Paramedic | Julia Sulliran Paramedic |
| Director, Weld County | Thompson Valley Ambulance |
| Ambulance Service | Service |

## RADIOLOGIC TECHNOLOGY

(Diana Duncan, Dept. Chair, Ext. 341; Debi Knudson, Ext. 419; Luci Evans, Ext. 420; Jan Specketer, Ext.436)

Program Length: Requires minimum of eight quarters for Associate of Applied Science degree starting fall quarter only.

Entrance Requirements: Prerequisites for program application are: XRT 100 Introduction to Radiologic Technology, TEM 127 CPR, high school biology and chemistry, and a math assessment score equivalent to basic understanding of intermediate algebra. This program starts ONLY in the fall quarter. Entry is highly competitive and early application is recommended. A SPECIAL RADIOLOGIC TECHNOLOGY PROGRAM APPLICATION distributed only in the XRT-100 course, must be completed and submitted to the department. Students are placed on a first-come-first served basis, once pre-requisites and acceptable rating are achieved. Contact Counseling Center for entrance specifics as soon as possible.

Registration Requirement: XRT majors in the program or working toward the program must have radiography advisor's signature on all registration forms each quarter.

Potential Opportunities: The radiographer as part of the health care team is dedicated to the conservation of life and health and the discovery of existing disease.

This program is designed to train individuals in the art and science of Radiologic Technology.
Students successfully completing the program are eligible to take a National Registry examination that upon successful completion will allow the graduate to hold the status of Registered Technologist (R.T.).

NOTE: This program includes changes which are subject to approval by the Colorado Community College and Occupational Education System. Courses listed are subject to change. Students can verify the course offerings from the program director.

## DEGREE PROGRAM

Radiologic Technology General Education Courses: A minimum of 24 quarter credit hours of General Education Courses are required with advisor's approval. The General Education courses are identified by an asterisk (*).

## Degree Requirements:

CREDITS
XRT 101 Radiographic Positioning I 4
XRT 102 Radiographic Positioning II 4
XRT 103 Radiographic Positioning III 4
XRT 104 Radiographic Positioning IV 4
XRT 105 Procedures in Patient Care 5
XRT 111 Clinical Experience I 3
XRT 112 Clinical Experience II 8
XRT 113 Clinical Experience III 8
XRT 114 Clinical Experience IV 14
XRT 118 Radiation Protection \& Biology 3
XRT 121 Radiographic Exposure I 4
XRT 122 Radiographic Exposure II 3
XRT 205 Special Procedures 3
XRT 206 Radiographic Pathology 3
XRT 211 Clinical Experience V 8
XRT 212 Clinical Experience VI 8

## PUBLIC SERVICE DIVISION, cont.

| XRT 213 | Clinical Experience VII |  | 10 |
| :---: | :---: | :---: | :---: |
| XRT 214 | Clinical Experience VIII |  | 10 |
| XRT 221 | X-ray Physics |  | 5 |
| XRT 225 | Radiographic Quality Assurance |  | 3 |
| XRT 226 | Radiographic Equipment \& Imaging |  | 4 |
| XRT 227 | Computers in Medicine |  | 2 |
|  |  |  | 120 |
| *HLH 131 | Medical Terminology |  | 4 |
| *BIO 120 | Basic Human Anatomy \& Physiology |  | 5 |
| *SPE 125 | Interpersonal Communication |  | 5 |
| *PSY 101 | General Psychology |  | 5 |
| *ENG 100 | Composition Style and Technique |  | 5 |
|  |  |  | 24 |
| Total Credit hours for Radiologic Technology |  |  | 144 |
| Related Courses |  |  |  |
| XRT 100 | Introduction to Radiologic Technology |  | 5 |
| XRT 215 | Registry Review |  | 1 |
| XRT 231 | Radiologic Sciences |  | 3 |
| XRT 235 | Radiologic Computers |  | 1 |
| XRT 236 | Cross-sectional Anatomy of CT Images |  | 1 |
| XRT 237 | Why Ulitrasound? |  | 1 |
| XRT 238 | Mammography |  | 1 |
| XRT 289 | Clinical Activity |  | 1-10 |
| to 298 |  |  |  |
| RADIOLOGIC TECHNOLOGY |  |  |  |
| ADVISORY COMMITTEE |  |  |  |
| Samuel Potts, R.T. (R) |  | Greg Messmer, R.T.(R) |  |
| Administrative Technologist |  | Administrative Technologist |  |
| Longmont United Hospital |  | Mckee Medical Center |  |
| Hank Thode M.D. |  | Sandra Pool-Smith R.T.(R) |  |
| Department of Radiology |  | Department of Radiology |  |
| McKee Medical Center |  | Poudre Valley Hospital |  |
| Glenn Hewitt, M.D. |  | Beth Post, R.T.(R) |  |
| Department of Radiology |  | Department of Radiology |  |
| North Colorado Medical Center |  | North Colorado Medical Center |  |
| Dennis Isaacson, R.T. |  | Elizabeth Fegley, R.T. |  |
| Administrative Technologist |  | Department of Radiology |  |
| Poudre Valley Hospital |  | Poudre Valley Hospital |  |
| Jon Lapp, R.T. |  | Tammy Tripp-Daniels, R.T.(R) |  |
| Administrative Technologist |  | Department of Radiology |  |
| North Colorado Medical Center |  | North Colorado Medical Center |  |
| John Budge, M.D. |  | Raymond Geis, M.D. |  |
| Department of Radiology |  | Department of Radiology |  |
| Longmont United Hospital |  | Poudre Valley Hospital |  |

## GERIATRIC AIDE

(Ruth Lorenson, Ext. 312)
Program Length: Clock hours TBA.
Program Description: Intended for the individual desiring to be a nursing assistant focusing on caring for the elderly patient/ client/resident living at home or in a long term care facility. Methods of learning include classroom activities, skills practice and simulations, and clinical practice giving actual patient care. The program meets all relevant federal and state requirements. Upon successful completion, the program graduate is qualified to apply for the State of Colorado Nurse Aide Certificate examination.

Potential Opportunities: Plentiful employment opportunities exist for the state-certified nursing assistant in long term care, home health care, residential care. Local opportunities are limited for employment in hospitals and medical offices. Also useful for persons wanting wage-earning ability while preparing for nursing or medical careers. Most employment opportunities require a current State of Colorado Nurse Aide Certificate.

Registration Requirements: All students taking a course or courses in a Public Service Division program must have an appropriate Public Service Division program advisor's signature on the course registration before registering.

## CERTIFICATE PROGRAM

Certificate Requirements: CREDITS

HLH 135 Geriatric Aide TBA
Total Credits for Certificate: TBA

## Support Courses

| HLH 128 | Health Care Seminar | $.5-12$ |
| :--- | :--- | ---: |
| HLH 129 | School Health Clerk | 4 |
| HLH 206 | IV Medications for LPNs | 1.5 |
| HLH 207 | Basic IV Therapy and Medications for LPNs | 5 |

## GERIATRIC AIDE ADVISORY COMMITTEE

Karen Guyette, RNC
Nurse Consultant and
Coordinator
Living Centers of America
Bernie Gorek, RNC, GNP
Director of Nursing Services
Bonell Good Samaritan Center

Mindy Rickard, BS
Ombudsman,
Area Agency on Aging
Bonnie G. Bryant, CNA
Program Graduate

Eva Jewell, MA
Long-term Care Coordinator
Area Agency on Aging,
Sue Morse, RN
Manager, Normedco Home Care

Jim Griffith, RN
Alzheimer's Unit Charge Nurse Bonell Good Samaritan Center


The Technology Division, in addition to the programs listed, has the capability to work collectively or individually with employers to offer in-service or to upgrade training. Training or classes may be conducted on-the-job or on campus and may vary from a few hours to several quarters in duration.

We are also committed to assisting students in the acquisition of job related skills through demonstration and hands-on practice.
Registration Requirement: All students enrolling in courses within the division must obtain the appropriate program advisor's signature on their course registration form before registering.
General Program Requirements:
Students enrolling in Technology Division Programs should meet the following general qualifications if they wish to successfully complete the program:

1. A good general mathematics background. (Some programs require a math background through algebra and trigonometry. See program requirements.)
2. Students should have high school level reading and communication skills.
3. Good eyesight (corrected or uncorrected) and good hand dexterity are helpful.
4. Students enrolling in designated programs should complete assessment examinations (in College Assessment Center) prior to enrollment. Additional placement or diagnostic evaluations may be required before acceptance into a specific program.
5. Students lacking specific essential skills or background may obtain required knowledge through preparatory courses within the College. See a program advisor for additional information. General Education Requirements:

Each A.A.S. degree requires a minimum of 23 quarter credit hours of general education courses These courses may be program specific or recommended by the program advisor in some areas.

TECHNOLOGY DIVISION PROGRAMS:
AGRICULTURE TECHNOLOGY

Farm and Ranch Business Management Option
Farm and Ranch Business Management Option
Agriculture Accounting for Computer Users
Young Farmer Program Training Option
Computer Users Option
Marketing Option
A.A.S. Degree Certificate Certificate Certificate Certificate Certificate

AUTOMOTIVE COLLISION REPAIR TECHNOLOGY
Auto Body Repair Option
A.A.S. Degree Certificate Certificate
Auto Body Refinishing

## AUTOMOTIVE MECHANICS TECHNOLOGY

General Automotive Technician Option
General Automotive Technician Option Electronics/Computerized Diagnostics Option Electronics/Computerized Diagnostics Option
A.A.S. Degree Certificate A.A.S. Degree Certificate

AVIATION TECHNOLOGY
General Aviation Pilot Option A.A.S. Degree

Professional Pilot Program Option
General Aviation Pilot
ELECTRONICS TECHNOLOGY
General Electronics Technician Option A.A.S. Degree
Automated Process Technician
ENGINEERING TECHNOLOGY
Architectural/Civil Option
Drafting/Design Option
Computer Aided Manufacturing Option
Drafting Technology
A.A.S. Degree
A.A.S. Degree

Certificate A.A.S. Degree
A.A.S. Degree
A.A.S. Degree
A.A.S. Degree

Certificate
GRAPHIC TECHNOLOGY
Pre-Press Option
A.A.S. Degree

Pre-Press Option
Press Option
Press Option
Certificate
A.A.S. Degree

Certificate
WELDING TECHNOLOGY
Welding Technician Option
Welding Technician Option
Welding Systems Management Option
A.A.S. Degree Certificate Certificate

TECHNOLOGY DIVISION SCHOLARSHIPS
AWARDING DEPARTMENT Award:

Award Amount:
Application Deadline: Qualifications:

AVIATION TECHNOLOGY CAPTAIN AL HAYNES AVIATION SCHOLARSHIP $\$ 500$
Mid-term of Spring quarter. Contact awarding Department for criteria

Award:
Award Amount: Application Deadline: Qualifications:

AVIATION DEPARTMENT SCHOLARSHIP
$\$ 750$
Mid-term of Spring quarter. Contact awarding Department for criteria

## AWARDING DEPARTMENT

 Award:Award Amount:
Application Deadline: Qualifications:

AWARDING DEPARTMENT AUTOMOTIVE MECHANICS Award:

Award Amount:
Application Deadline: Qualifications:

ENGINEERING TECHNOLOGY GIL BORTHICK MEMORIAL AWARD Handbook in Field of Study No application - Selected by Faculty Outstanding Engineering Technology Graduate TECHNOLOGY
ROY L. SMITH MEMORIAL SCHOLARSHIP
$\$ 100$ per quarter throughout the recipients program Eighth week of Fall quarter Contact awarding Department for criteria

## AWARDING DEPARTMENT

## Award:

Award Amount:
Application Deadline:
Qualifications:

## AWARDING DEPARTMENT

 Award:Award Amount:
Application Deadline: Qualifications:

AUTOMOTIVE COLLISION
REPAIR TECHNOLOGY BILL YOUDER SCHOLARSHIP \$200 TO \$300
Mid-term of Winter quarter Contact awarding Department for criteria

WELDING TECHNOLOGY WINOGRAD'S STEEL AND SUPPLY SCHOLARSHIP
Two \$300 awards
End of Fall and Winter quarters Contact awarding Department for criteria

## AGRICULTURE TECHNOLOGY

Program Advisors: Richard Dunn, David Schaubert, Glen Sowder

Farm and Ranch Business Management is a systematic program designed for farmers and ranchers who are actively engaged in farming/ranching and involves 30 hours of classroom instruction per year along with $10-12$ farm/ranch visits per year. Individual instruction on the use of the personal computer using agriculture software is studied and used to maintain farm/ranch records during farm/ranch visits.

Students are enrolled as a farm/ranch unit (a unit consists of two (2) people). Students enrolled in this program may use the credits in either the degree or certificate program.
For additional information on program costs and enrollment periods, please contact the Technology Division Office, Extension 286.

## FARM AND RANCH BUSINESS MANAGEMENT OPTION DEGREE PROGRAM

Potential Opportunities: This program is designed to prepare the student as: (1) an Agriculture Accounting Technician, (2) Data Entry Technician for Farm or Ranch Accounting and/or Management firms, (3) Farm and Ranch Business Manager, (4) Miscellaneous AgriBusiness Occupations.

Registration Requirement: All students enrolling in classes in a Technology Division course or program MUST have an appropriate Technology Program advisor's signature on the course registration (enrollment) form before registering.

Agriculture Technology General Education Courses: A minimum of 23 quarter credit hours of General Education Courses are required with advisor's approval. The General Education courses are identified by an asterisk (*).

## Degree Core Requirements:

CREDITS
FMT 101 Farm \& Ranch Business Management I
FMT 102 Farm and Ranch Business Management II 27
Total credits from above courses
54
Upon completion of the 54 credit hours of core courses, the student must complete a comprehensive examination of the material covered. If successful, the 54 credits will fulfill the core requirement for the AAS degree program.

Suggested Electives (Select with advisor approval)
FMT 103 Farm \& Ranch Business Management III 27
FMT 107 Agriculture Commodity Marketing 6
FMT 111 Agriculture Accounting for Computer Users I 6
FMT 112 Agriculture Accounting for Computer Users II 6
FMT 113 Agriculture Accounting for Computer Users III 6
Total credits from above courses 30
General Education Courses: ( 23 credits required)
*ENG 100 Composition Style and Technique
Select 8 credit hours from the following:
*CSC 100 The Computer and Society 5
*CSC 105 Introduction to Personal Computing 3
*CIS 160 BASIC Language Programming 5
Total credits from above courses 8

Select 10 credit hours from the following:
*PSY 101 General Psychology I 5
*SOC 101 Introduction to Sociology I 5
*ECO 201 Principles of Macroeconomics 5
*ECO 202 Principles of Microeconomics 5
*PHI 113 Introduction to Logic 5
Total credits from above courses 10
Total Credits for A.A.S. Degree
Farm and Ranch Business Management Option 107

## FARM AND RANCH BUSINESS MANAGEMENT CERTIFICATE PROGRAM

Certificate Requirements:
FMT 101 Farm and Ranch Business Management I 27

FMT 102 Farm and Ranch Business Management II 27
FMT 103 Farm and Ranch Business Management III 27
Total credits for Certificate
Farm and Ranch Business Management 81

## AGRICULTURE ACCOUNTING FOR COMPUTER USERS CERTIFICATE PROGRAM

Certificate Requirements:
FMT 111 Agriculture Accounting for Computer Users I 6
FMT 112 Agriculture Accounting for Computer Users II 6
FMT 113 Agriculture Accounting for Computer Users III 6
Total credits for Certificate


## YOUNG FARMER PROGRAM

Young Farmer programs are designed to meet occupational needs of persons who are at least 16 years of age and are not regularly enrolled in secondary school, or who have completed their secondary (12th grade) education.
The major instructional objective is to develop the group and individual responsibility of young farmers through programs of instruction in Vocational Agriculture. These programs are designed to help the young farmers to meet their needs to become efficiently established in farming or an agricultural occupation.
No degree will be awarded to persons enrolled in this program since it is considered to be an upgrading of the profession in which they are presently employed. These programs will be ongoing in nature and will not be considered as separate classes or programs. College credit may be awarded on a yearly basis to individuals enrolled in this program.
These programs preferably will be started in July, but in many cases will start after the beginning of the school year as soon as they can be organized. Programs have some flexibility as the fiscal year runs from July 1 to June 30 of each year.
For additional information on Young Farmer programs, please contact Technology Division, Extension 286.

## CERTIFICATE PROGRAMS

Three Young Farmer Programs are available through Aims Community College. Each program consists of two courses that are administered from 1 July through 30 June each academic year.

## Certificate

CREDITS

## YOUNG FARMER TRAINING PROGRAM

AGF 170 Young Farmer Training ..... 4
AGF 171 Young Farmer Training - Part II ..... 2
Total Credits for Certificate ..... 6
YOUNG FARMER TRAINING PROGRAM
AGF 180 Young Farmer Training/Computer Group ..... 4
AGF 181 Young Farmer Training - Part II/Computer Group ..... 2
Total Credits for Certificate ..... 6
YOUNG FARMER TRAINING PROGRAM
AGF 190 Young Farmer Training/Marketing ..... 4
AGF 191 Young Farmer Training - Part IIMMarketing ..... 2
Total Credits for Certificate ..... 6
AGRICULTURE ADVISORY COMMITTEE
Richard Hergert

Gary Herman
Farmer
Ft. Lupton, CO
Andrew T. Morehead Agriculture Accountant Eaton, CO

Michael Urbanowicz
Agri-Businessman
Arvada, CO

William Farr, Jr.
Banker
Greeley, CO
Farmer
Platteville, CO
Ed Printz
Agricultural Accountant
Platteville, CO
Marty Weber
Farmer
LaSalle, CO

## AUTOMOTIVE COLLISION REPAIR TECHNOLOGY

Program Advisors: Pat Hergenreter, Nick Zenzen
Program Length: 450 clock hours for a certificate in Occupational Education, Auto Body Refinishing Option, or, 1000 clock hours for a Certificate in Occupational Education, Auto Body Repair option, or 1140 clock hours for an Associate of Applied Science Degree.
Potential Opportunities: Opportunities for the tradesman range from the actual repair of the damaged auto to being owner of the shop, shop foreman, shop estimator, or insurance adjustor. A constant manpower demand has existed for several years in this field. The demand exists in small local shops as well as large agency organizations.
The program will help develop the skills and knowledge needed to repair a damaged auto including glass removal and replacement, straightening of damaged panels and frames, checking of wheel alignment, panel alignment, filling dents, welding of torn panels, and preparing for the application of modern automotive finishes. The program is designed to give the student skill and knowledge for entry level employment.

Each quarter students will be required to provide some very basic hand tools for use in the body shop. These tools also will be needed to acquire a job in the trade after completion of the program.

Auto Refinish Option: This is a specialized, three quarter certificate program to help develop the knowledge and skills used by an automotive or truck refinisher. Students will learn about materials and equipment, including their uses, in order to qualify for entry level jobs.

Opportunities will be in the refinishing field as a painter or possible paint shop foreman. The shop may repair cars or include large truck refinishing.

It is our purpose to meet the training needs of the community. In most cases we are able to offer special vocational classes or programs upon request from industry or a group of students.

Program Requirements: Completion of the eight certificate requirements will earn a Certificate in Occupational Education. When possible, courses will be scheduled so that the student may take one ABR prefix course per quarter for 12 credits or two ABR prefix courses per quarter for 24 credits.

To earn an Associate of Applied Science degree, the student must complete all ABR prefix certificate requirements and at least 23 credit hours of general education courses.

Registration Requirement: All students taking a course or courses in the Technology Division program must have an appropriate Technology Division program advisor's signature on the course registration before registering.

## AUTO BODY REPAIR OPTION CERTIFICATE PROGRAM

| Certificate |  | Requirements: |
| :--- | :--- | ---: |
| ABR 141 | Auto Body Repair I | CREDITS |
| ABR 142 | Auto Body Repair II | 12 |
| ABR 143 | Auto Body Repair III | 12 |
| ABR 241 | Auto Body Repair IV | 12 |
| ABR 242 | Auto Body Repair V | 12 |
| ABR 243 | Auto Body Repair VI | 12 |
| Total Option Credits | 12 |  |

TECHNOLOGY DIVISION, cont.

Required General Education
ENT 115 Introduction to Technical Mathematics 5
PHY 105 Conceptual Physics 5
Total General Education 10
Total Credits for Auto Body Repair Option Certificate 82

## AUTO BODY REFINISH OPTION

Certificate Requirements: CREDITS
ABR 151 Auto Refinish 12
ABR 152 Auto Refinish II 12
ABR 153 Auto Refinish III 12
Total Option Credits 36
Required General Education
ENT 115 Introduction to Technical Mathematics 5
PHY 105 Conceptual Physics 5
Total General Education 10
Total Credits for Auto Body Refinish Option Certificate 46

## AUTO BODY REPAIR OPTION DEGREE PROGRAM

## Degree Requirements:

CREDITS
ABR 141 Auto Body Repair I 12
ABR 142 Auto Body Repair II 12
ABR 143 Auto Body Repair III 12
ABR 241 Auto Body Repair IV 12
ABR 242 Auto Body Repair V 12
ABR 243 Auto Body Repair VI 12
Total Option Credits 72
Required General Education
CSC 100 The Computer and Society 5
ENG 100 Composition Styles \& Techniques 5
ENT 115 Introduction to Technical Mathematics 5
HEN 106 Red Cross/Standard First Aid/CPR 3
PHY 105 Conceptual Physics 5
Total General Education 23
Total credits for A.A.S. Degree Auto Body Repair Option 95

Support Courses:
(Night offerings will not support Certificate or AAS)
ABR 102 Basic Straightening 4
ABR 103 Basic Refinishing 4
ABR 111 Damage Repair 4
ABR 112 Panel Replacement 4
ABR 121 Electrical and Alignment 4
ABR 122 Advanced Refinishing 4
ABR 123 Damage Appraisal Estimating 4
ABR 199 Special Needs/Auto Body Repair 1
ABR 201 Quarter Panel Replacement 4
ABR 202 Basic Sheet Metal Replacement 4
ABR 203 Advanced Sheet Metal Replacement 4
ABR 211 Basic Frame Repair 4
ABR 212 Conventional Frame Repair 4
ABR 213 Unitized Frame Repair 4
ABR 221 Auto Body Rebuilding I 4
ABR २२2 Auto Body Rebuilding II 4
ABR 223 Auto Body Rebuilding III 4

## AUTOMOTIVE COLLISION REPAIR TECHNOLOGY ADVISORY COMMITTEE

Mike Foster
Stevens Automotive
Dave Keiser
Keiser Paint \& Body
Randy Milan
Import Auto Body
JR Cirillo
Import Auto Body

Don Westerman
State Farm Insurance
Don Wilson
Precision Auto Body
Al Yago
Precision Auto Body
Tom Milan
Ratired Employee

Steve Peif
Hi-Tech Autobody


## AUTOMOTIVE MECHANIC TECHNOLOGY

Program Advisors: Dennis Schossow
Program Length: 1000 clock hours for Certificate in Occupational Education, or 1180 clock hours for Associate of Applied Science degree. Students have the alternative of completing one option of the program in one year (six hours per day) or two years (three hours per day).

Potential Opportunities: The automotive repair industry is becoming an increasingly technical area and is demanding a new class of technician that will accept the challenges of the modern changes to the automobile. Companies are experiencing difficulty in finding qualified technicians who can successfully and efficiently cure the driveability and computerized problems of the now-generation vehicle.
The automotive technology department offers two options for the individual who has a desire to meet the challenges in the repair field. For the individual who enjoys working on the entire vehicle, the General Automotive Technician option provides entry-level knowledge and skill training of the major systems of the automobile. From brake repair, to wheel alignment, to engine rebuilding; the student receives an interesting variety of theory training and practical hands-on experiences. In the Electronics/Computerized Diagnostics option the individual has chosen to become heavily involved in advanced technology. The course of study is concentrated around the computer system that controls the engine's performance, economy, and emissions; plus may include the areas of the transmission, brakes, suspension, and lighting. Major emphasis is placed on identification of systems, use of diagnostics equipment, and proficient troubleshooting skills. A graduate with this option should have valuable entry skills as a driveability technician. Employment opportunities are rapidly expanding in this area as more repair facilities are seeking qualified service people who can accurately repair the cars of the 90 s. It is our purpose to meet the training needs of the community. In most cases we are able to offer special vocational classes or programs upon request from industry or a group of students.

Program Requirements: Completion of the eight certificate requirements will earn a Certificate in Occupational Education. When possible, courses will be scheduled so that the student may take one AMT prefix course per quarter for 12 credits or two AMT prefix courses per quarter for 24 credits. This scheduling allows the student to complete the general technician option in one year. The diagnostics option, however, will require a two-year commitment from the student; unless the student has completed the 3 core courses at another time or can provide sufficient proof of prior training equivalent to the core group. For first time, first year students, the core courses must be completed before entering the diagnostics option.

To earn an Associate of Applied Science degree, the student must complete the AMT prefix certificate requirements and at least 28 credit hours of general education courses.

Students are required to furnish their own hand tools, air tools and personal safety gear. They should also make arrangements for purchasing additional specialty tools each quarter for the courses they are taking.

Registration Requirement: All students taking a course or courses in a Technology Division program must have an appropriate Technology Division program advisor's signature on the course registration before registering.
GENERAL AUTOMOTIVE TECHNICIAN OPTION DEGREE PROGRAM
Degree Requirements: ..... CREDITS
AMT 131 Brakes and Manual Power Trains ..... 12
AMT 132 Steering and Suspensions Systems ..... 12
AMT 133 Engine Performance ..... 12
AMT 231 Automotive Engines ..... 12
AMT 232 Electrical ..... 12
AMT 266 Automotive Electronics \& Computer Systems I ..... 12
Total Option Credit Hours ..... 72
Required General Education Courses
CSC 100 The Computer and Society ..... 5
HEN 106 Red Cross/Standard First Aid/CPR ..... 3
PHY 105 Conceptual Physics ..... 5
Select one of the following:
ENT 115 Introduction to Technical Mathematics ..... 5
MAT 110 Applied Business Mathematics ..... 5
MAT 112 Intermediate Algebra ..... 5
Select one of the following:
BUS 141 Introduction to Communications ..... 5
BUS 142 Intermediate Communications ..... 5
ENG 100 Composition Style \& Technique ..... 5
Select one of the following:
BUS 115 Introduction to Business ..... 5
Total General Education Credit Hours ..... 28
Total Credit Hours For A.A.S. Degree ..... 100
GENERAL AUTOMOTIVE TECHNICIAN
CREDITS Certificate Requirements: ..... 12
Brakes and Manual Power Trains ..... 12
AMT 133 Engine Performance ..... 12
AMT 231 Automotive Engines ..... 12
AMT 232 Electrical ..... 12
AMT 266 Automotive Electronics \& Computer Systems I ..... 12
Total Option Credit Hours ..... 72
Required General Education Courses
ENT 115 Introduction to Technical Mathematics ..... 5
PHY 105 Conceptual Physics ..... 5
Total General Education Hours ..... 10
Total Credit Hours for Certificate ..... 82
ELECTRONICS/COMPUTERIZED DIAGNOSTICS OPTION DEGREE PROGRAM
Degree Requirements: ..... CREDITS
AMT 133 Engine Performance ..... 12
AMT 232 Electrical ..... 12
AMT 266 Automotive Electronics \& Computer Systems I ..... 12
AMT 267 Advanced Tech/New Car Systems ..... 12

TECHNOLOGY DIVISION, cont.

AMT 268 Auto Electronics \& Computer Systems II 12
EMT 269 Computer Systems: Diagnostics \& Driveability 12
Total Option Credit Hours 72
Required General Education Courses
CSC 100 The Computer and Society
HEN 106 Red Cross/Standard First Aid/CPR 3
PHY 105 Conceptual Physics 5
Select one of the following:
ENT 115 Introduction to Technical Mathematics 5
MAT 110 Applied Business Mathematics 5
MAT 112 Intermediate Algebra 5
Select one of the following:
BUS 141 Introduction to Communications 5
BUS 142 Intermediate Communications 5
ENG 100 Composition Style \& Technique 5
Select one of the following:
BUS 115 Introduction to Business 5
Total General Education Credit Hours 28
Total Credit Hours For A.A.S. Degree 100

## ELECTRONICS/COMPUTERIZED DIAGNOSTICS CERTIFICATE OPTION

Certificate Requirements:
CREDITS
AMT 133 Engine Performance 12
AMT 232 Electrical 12
AMT 266 Automotive Electronics \& Computer Systems I 12
AMT 267 Advanced Tech/New Car Systems 12
AMT 268 Auto Electronics \& Computer Systems II 12
EMT 269 Computer Systems: Diagnostics \& Driveability 12
Total Option Credit Hours

## Required General Education Courses

ENT 115 Introduction to Technical Mathematics 5
PHY 105 Conceptual Physics 5
Total General Education Hours 10
Total Credit Hours for Certificate 82
Electives:
AMT 101 Auto Mechanics for Beginners 4
AMT 104 Brake Repair 4
AMT 105 Advanced Electrical 4
AMT 106 Tune-up 4
AMT 107 Advanced Engine Tune-up 4
AMT 108 Automatic Transmissions 4
AMT 115 Foreign Car Tune-up 4
AMT 116 Four Wheel Alignment 4
AMT 124 Automotive Service Management 3
AMT 125 Auto Certification Refresher 2
AMT 135 Colorado Emission License 2
AMT 136 Emission Control 5
AMT 199 Special Needs/Auto Mechanics 1
AMT 233 Air Conditioning and Comfort Controls 5
AMT 234 Automotive Transmission \& Air Conditioning 12
AMT 261 Computer Controlled Engine Systems 4
AMT 262 Automotive Electronics 6

## AUTOMOTIVE MECHANICS TECHNOLOGY ADVISORY COMMITTEE

Glen Morehead
U.S. West Communications

Art Heselius
Greeley Dodge

Lorraine Toni
Colorado State University
Charles Jacquinot
Pastor Mazda


## AVIATION TECHNOLOGY

Program Advisors: Marvin Bay, Walter Bjorneby, Gina Kline, Loyal Kelsey, Val Taylor

Program Length: Usually three quarters for the General Aviation Pilot Certificate program, six quarters for the General Aviation Pilot Option A.A.S. degree program, and seven quarters for the Professional Pilot Program (PPP) program. Times may be shorter if the student is eligible to receive credit for previous flying experience. Additional time may be required, depending on assessment scores.

Potential Opportunities/General Aviation Programs: The program is designed to qualify the student for immediate entry into employment as a pilot. Many enter the field as flight instructors. With additional experience, there may be opportunities available in corporate flying, charter work, and some airlines.

Potential Opportunities/AWS Professional Pilot Program (PPP): The Airway Science Pilot Professional Program is designed to train pilots to be eligible for employment into CFI, commuter, regional, and major airline flying positions. It is anticipated that, after two years of successful commuter airline flying along with the experience and flying hours acquired, the student would be prepared to move to a major airline as flight positions become available. Completion of PPP DOES NOT GUARANTEE that the graduate will be employed by any airline. However, Aims Community College, including the Aviation Department and the Placement Office will assist the student in possible employment opportunities throughout the industry.

Program Requirements: Students pursuing a degree in Aviation Technology MUST complete the AIMS Assessment examinations prior to program enrollment. If qualifying scores are not attained, program advisors will determine preparatory courses that will be required to gain program or class admittance.

Students will be required to take the following tests:

1. Reading skills
2. Writing
3. Math
4. Algebra
5. Computer Literacy

Tests $1,2, \& 3$ are Aims College requirements; tests $4 \& 5$ are requirements of the Aviation Department. If you successfully pass the Computer Literacy test, you will not be required to take a computer class. Otherwise, you will be required to take one computer class with advisor approval.

The student MUST also pass the required flight physical exam prior to the end of the first quarter of enrollment. The student MAY also be required to undergo drug testing at any time.

Many of the classes in the aviation program have prerequisites that MUST be met PRIOR to class admittance. (See course descriptions for specific requirements.)

General Information: Additional charges are made for rental of aircraft for flight labs. Flight training is conducted by the Aims College Flight Training Center located at the Greeley-Weld County Airport. (See course descriptions for flight lats.)

The Aviation Department will have information detailing the fees and flight expenses. For more information, call the Aims Flight Center at 356-0790.

Credit for previous flying experience may be awarded with the approval of the division/department. This will be determined on an individual basis.

Registration Requirement: All students enrolling in Technology Division courses MUST have an appropriate Technology Division program advisor's signature on the registration form BEFORE registering.

## GENERAL AVIATION PILOT OPTION DEGREE PROGRAM

Aviation Technology General Education Courses: A minimum of $२ ३$ quarter credit hours of General Education Courses are required with Advisors approval. The General Education Courses are identified by an (") AVT 100 Aviation Seminar 1
AVT 101 Private Flight Lab I 2
AVT 102 Private Flight Lab II 2
AVT 103 Instrument/Commercial Flight Lab I 3
AVT 104 Instrument/Commercial Flight Lab II 4
AVT 105 Private Flight Simulator 3
AVT 108 Private Ground School 6
AVT 109 Instrument Ground School 6
AVT 111 Instrument Flight Simulator I 3
AVT 115 Aviation Management \& Economics 5
AVT 205 Flight Instructor Ground School 5
AVT 206 Commercial Ground School 5
AVT 213 Advanced Instrument Simulator 6
AVT 216 Instrument/Commercial Flight Lab III 4
AVT 217 Instrument/Commercial Flight Lab IV 4
AVT 226 Multi-Engine Simulator I, Single Pilot 3
*EAS 106 Meteorology 4
*ENG 121 English Composition I 5
Total credits from above courses 71
Select a math course with advisor approval:
*MAT $121 \quad$ College Algebra
ENT $116 \quad$ Technical Mathematics
Total credits from above courses 5-6
Select one of the following with advisor approval:
*PHY $105 \quad$ Conceptual Physics
*PHY 111 Physics - Algebra Based I 5
*PHY 112 Physics - Algebra Based II 5
*PHY 113 Physics - Algebra Based III 5
Total credits from above courses 5
Select one of the following with advisor approval:
*SPE $115 \quad$ Principles of Speech Communication
*SPE 221 Professional Oral Communication 5
Total credits from above courses 5
Aviation Electives These electives may include non-aviation subjects. (Select 13-14 credit hours with advisor approval to total 100 credit hours.)
AVT 119 Conventional Gear Transition Lab 2
AVT 207 Basic Ground Instructor 2
AVT 208 Advanced Ground Instructor 2
AVT 209 Instrument Ground Instructor 2
AVT 218 Certified Flight Instructor Flight Lab 5
AVT 219 Instrument Flight Instructor Flight Lab 3
AVT 225 Multi-Engine Transition Lab 4
AVT 227 Multi-Engine Simulator II, Single Pilot 3
AVT 228 Multi-Engine Simulator III, Single Pilot 2
Total credits from above courses (Aviation Electives) 13-14 Total Credits for Degree General Aviation Option minimum 100

## AWS PROFESSIONAL PILOT PROGRAM OPTION DEGREE PROGRAM <br> GENERAL INFORMATION

The AWS Professional Pilot Program requires additional testing prior to program completion. Additional training and fees will be required to complete PPP requirements. Any course for which a grade of " D ", or " "F" is recorded must be repeated.

The Aviation Department will have additional information on applicable fees-REQUIREMENT AND FEES IN THIS PROGRAM MAY CHANGE WITHOUT NOTICE.

New students with Private or advanced certificates may be given credit only for AVT 101, AVT 102, AVT 105, and AVT 108. A minimum of 140 flight hours MUST be completed while enrolled in the program.

Any student not meeting program requirements may be placed on program probation. If the student makes satisfactory progress at the end of the probationary period the student will be allowed to continue in the program. This evaluation will be accomplished by an Aviation Evaluation Board.

NOTE: Peer evaluations MAY be used by the Evaluation Board and for Student Counseling. An Evaluation Board may also be convened to consider individual cases where a student displays performance and/or behavioral characteristics NOT consistent with those expected of a future Airline Transport Pilot.

A student entering this program MUST meet the qualification as noted for the Aviation program. Graduates who wish to earn the "Professional Pilot Associate Degree", which is a recommendation that the graduate has skill for immediate airline placement, must also meet the following requirements.

1. Average academic GPA of at least 3.0
2. Score of 85 or better on the Flight Engineer written exam.
3. Satisfactory completion of industry observation ride.
4. Completion of all required training and testing which may include Cockpit Resource Management, Weather Avoidance Radar, FITPAC and required written testing.
5. Award of AWS Aviation Technology degree PPP option.

Professional Pilot Program Option General Education
Courses: A minimum of 23 quarter credit hours of General Education Courses are required with Advisors approval. The General Education Courses are identified by an (*).

Degree Requirements:
AVT 100 Aviation Seminar
AVT 101 Private Flight Lab I
AVT 102 Private Flight Lab II
AVT 103 Instrument/Commercial Flight Lab I
AVT 104 Instrument/Commercial Flight Lab II 4
AVT 105 Private Flight Simulator 3
AVT 108 Private Ground School 6

AVT 109 Instrument Ground School 6
AVT 111 Instrument Flight Simulator I 3
AVT 115 Aviation Management \& Economics 5
AVT 206 Commercial Ground School 5
AVT 213 Advanced Instrument Simulator 6
AVT 214 Multi-Engine Simulator, Airline Transition 5
AVT 216 Instrument/Commercial Flight Lab III 4
AVT 217 Instrument/Commercial Flight Lab IV 4
AVT 225 Multi-Engine Transition Lab 2
AVT 226 Multi-Engine Simulator I, Single Pilot 3
AVT 235 Flight Engineer: Systems 6

AVT 236 Flight Engineer: Power Plant 6
AVT 237 Professional Pilot Preparation 2
*EAS 106 Meteorology 4
*ENG 121 English Composition I 5
*MAT 121 College Algebra 6
Total credits from above courses 93

Select one of the following with advisor approval:
*PHY 105 Conceptual Physics 5
*PHY 111 Physics - Algebra Based I 5
*PHY 112 Physics - Algebra Based II 5
*PHY 113 Physics - Algebra Based III 5
Total credits from above courses 5

Select one of the following with advisor approval:
*SPE 115 Principles of Speech Communication 5
*SPE 221 Professional Oral Communication 5
Total credits from above courses 5
*Select a Social Science course with advisor approval
(Psychology recommended)
*Select a Humanities course with advisor approval 5
Total credits for A.A.S. Degree
Professional Pilot Program Option • 113
AVIATION CERTIFICATE PROGRAM
Certificate Requirements:
CREDITS
AVT 100 Aviation Seminar 1
AVT 101 Private Flight Lab I 2


| AVT 102 | Private Flight Lab II | 2 |
| :--- | :--- | ---: |
| AVT 103 | Instrument/Commercial Flight Lab I | 3 |
| AVT 104 | Instrument/Commercial Flight Lab II | 4 |
| AVT 105 | Private Flight Simulator | 3 |
| AVT 108 | Private Ground School | 6 |
| AVT 109 | Instrument Ground School | 6 |
| AVT 111 | Instrument Flight Simulator I | 3 |
| AVT 206 | Commercial Ground School | 5 |
| AVT 213 | Advanced Instrument Simulator | 6 |
| AVT 216 | Instrument/Commercial Flight Lab III | 4 |
| AVT 217 | Instrument/Commercial Flight Lab IV | 4 |
| Total Credits For Certificate | 49 |  |

AVIATION TECHNOLOGY ADVISORY COMMITTEE

Robert Anderson
Commercial Pilot/Bank Officer
George Hopper
Commercial Pilot
Flight Instructor
Russ McKnair
Captain
Continental Express
Jack Taylor
FAA Flight Examiner

David Droegemuller
Commercial Pilot
Ernest Kampe
Commercial Pilot
Flight Instructor
Roy Shore, M.D.
FAA Medical Examiner Pilot

John D. Warrender Corporate Chief Pilot


## ELECTRONICS TECHNOLOGY

Program Advisors: Fred Bantin, Bob Beck, Gene Cross
Program Length: Usually six quarters for Associate in Applied Science degree program.

Potential Opportunities: Students can expect to secure entry level positions with progress toward jobs as research and development technicians, engineering aides, field service representatives, production test technicians, electronic tooling maintenance technicians, design and fabrication technicians, or system technicians for computers, controls, and communications.

Program Requirements: Students entering this program are required to complete Aims assessment examinations in the areas of reading, writing, math and algebra. If qualifying scores are not attained, program advisors will determine the preparatory courses that will be required to gain admittance to the program. APPLIED TECHNICAL MATH (ENT-116) AND INTRODUCTION TO MICROCOMPUTER OPERATING SYSTEMS: DOS (CIS-110) MUST BE COMPLETED PRIOR TO ENTRY INTO PROGRAM.

The A.A.S. degree in Electronics Technology requires a demonstrated proficiency in composition. This may be accomplished by SUCCESSFULLY completing (ENG 100) Composition Style and Technique, or QUALIFYING performance on the assessment examination. Completion of ENG 100 must be accomplished during first year in the Electronics Program.

Many of the Electronic Technology courses have prerequisites that MUST BE MET PRIOR TO CLASS ADMITTANCE. See ELT course descriptions for specific requirements.

General Information: Certain courses may be waived if applicant has $3-5$ years of appropriate experience in electronics or a closely related industry. This assessment will be made on an individual basis. Advisor approved courses will be selected in lieu of waived courses. Advanced standing is possible if the applicant has had military or other adult electronic schooling. Advanced standing will be determined on an individual basis.

A Comprehensive Final Exit Examination must be passed as a final graduation requirement. If this is not passed an advisor can require additional course work to be successfully completed prior to retaking the Comprehensive Final Exit Examination.

Transfer Credit: Transfer credit will NOT be accepted until all assessment requirements have been met and successful completion of subsequent courses indicate that the student is indeed proficient in the transfer areas.

TESTING CENTER: Aims Community College is an authorized testing center for NARTE, ETA. and the FCC exam. NARTE (The National Association of Radio and Telecommunications Engineers, Inc.)

Students completing the degree program are eligible for a NARTE Third Class Technician Certificate without further examination upon payment of appropriate membership and certification fees. Additional work experience may establish eligibility for a second or first class certification as determined by the NARTE classification board.
ETA (The Electronics Technician Association, International)
This organization is sanctioned by lowa State University. Students may obtain an associate membership certificate without work experience by examination and payment of appropriate membership fees.

Registration Requirement: All students taking a course or courses in a Technology Division program must have an appropriate Technology Division program advisor's signature on the course registration form before registering. Prior to beginning their first quarter, new students may be advised by the Advising Core.
Electronics Technology General Education Courses: A minimum of 23 quarter credit hours of General Education Courses are required with Advisors approval. The General Education Courses are identified by an (*).

## GENERAL ELECTRONIC TECHNICIAN OPTION DEGREE PROGRAM

## Degree Requirements:

CREDITS
ENT 118 Intro to CAD
ENT 207 Technical Job Seeking 1
ENT 100 Intro to Engineering Technology 1
*PHY 111 Physics: Algebra Based I 5
*PHY 112 Physics: Algebra Based II 5
ELT 144 Digital Fundamentals I 5
ELT 150 DC Fundamentals I 5
ELT 151 DC Fundamentals II 5
ELT 152 AC Fundamentals I 5
ELT 153 AC Fundamentals II 5
ELT 154 Solid State Circuits I 5
ELT 155 Solid State Circuits II 5
ELT 201 Digital Fundamentals II 5
ELT 202 Microprocessors I 5
ELT 255 Linear ICs and Sensors 5
ELT 266 Electronic Design and Fabrication 5
ELT 268 Practical Solid State Troubleshooting 5
ELT 271 Electronic Communications I 5
ELT 272 Electronic Communications II 5
Total credits from above course 84
Recommended Electives: (select two with advisor approval)
ELT 203 Microprocessors II 5
ELT 224 Programmable Logic Controllers 5
ELT 273 Electronic Communications III 5
ELT 275 Integrated Circuit Fabrication Techniques 5
ELT 276 Automation Control Circuits 5
ELT 277 Video Systems 5
Total credits from above course 10
Select one of the following:
*SPE 115 Principles of Speech Communication 5
*SPE 125 Interpersonal Communication 5
*SPE 221 Professional Oral Communication 5
Total credits from above course 5
Select one of the following with advisor approval:
*CIS 116 Logic and Program Design 5
*CIS 160 BASIC Language Programming 5
*CIS 161 Advanced BASIC Language Programming 5
*CSC 160 Computer Science I: (PASCAL Programming) 5
Total credits from above course 5

Select one of the following with advisor approval:
*PSY 101 General Psychology I 5
*PSY 111 Basic Human Potential Seminar 3
$\begin{array}{ll}\text { *PSY } 120 & \begin{array}{l}\text { Psychology of Leadership and } \\ \\ \\ \text { Management (highly recommended) }\end{array}\end{array}$
Total credits from above course 3-5
Total Credits for A.A.S. Degree
General Electronic Technology Option minimum 107

## AUTOMATED PROCESS TECHNICIAN OPTION DEGREE PROGRAM

| Degree Requirements: | CREDITS |  |
| :--- | :--- | ---: |
| ENT 100 | Intro to Technology | 1 |
| ENT 118 | Intro to CAD | 2 |
| ENT 207 | Technical Job Seeking | 1 |
| ENT 225 | Computer Aided Mif. | 4 |
| ENT 227 | Intro To Robotics | 4 |
| ENT 298 | Engineering Probs. \& Applications/MFG | 4 |
| "PHY 111 | Physics: Algebra Based I | 5 |
| *PHY 112 | Physics: Algebra Based II | 5 |
| ELT 144 | Digital Fundamentals I | 5 |
| ELT 150 | DC Fundamentals I | 5 |
| ELT 151 | DC Fundamentals II | 5 |
| ELT 152 | AC Fundamentals I | 5 |
| ELT 153 | AC Fundamentals II | 5 |
| ELT 154 | Solid State Circuits I | 5 |
| ELT 155 | Solid State Circuits II | 5 |
| ELT 224 | Programmable Logic Controllers | 5 |
| ELT 255 | Linear ICs and Sensors | 5 |
| ELT 268 | Practical Solid State Troubleshooting | 5 |
| ELT 276 | Automation Control Circuits | 5 |
| ENT 111 | Engineering Materials | 3 |
| ENT 112 | Manufacturing Processes | 4 |
| ENT 246 | Mech Design: Manufacturing | 3 |
| ENT 217 | Fluid Power | 3 |
| ENT 216 | Statistical Process Control | 2 |
| Total credits from above courses | 96 |  |

Total credits from above courses ..... 96
Select one of the following with advisor approval:
*SPE 115 Principles of Speech Communication ..... 5
*SPE 125 Interpersonal Communication ..... 5
*SPE 221 Professional Oral Communication ..... 5
Total credits from above courses ..... 5
Select one of the following with advisor approval:
*CIS 116 Logic and Program Design ..... 5
*CIS 160 BASIC Language Programming ..... 5
*CIS 161 Advanced BASIC Language Programming ..... 5
*CSC 160 Computer Science I: (Pascal Programming) ..... 5
Total credits from above courses ..... 5
Select one of the following with advisor approval:
*PSY 101 General Psychology I ..... 5
*PSY 111 Basic Human Potential Seminar ..... 3
*PSY 120 Psychology of Leadership and Management (highly recommended) ..... 5
Total credits from above courses ..... 3-5
Total Credits for A.A.S. DegreeAutomated Process Technician Optionminimum 109

## ELECTRONICS TECHNOLOGY ADVISORY COMMITTEE

| David Frye | Michael Longmore |
| :--- | :--- |
| Kodak of Colorado | Advance Energy |
| Windsor | Ft. Collins |
| Dick Lottes | Rick Peterson |
| Kodak of Colorado | Woodward Governor, Inc. |
| Windsor | Ft. Collins Division |
| Lowell Shatraw | Eric Shropshire |
| Electronics Technician | Hewlett-Packard |
| Greeley | Ft. Collins Division |
| John Vaughn | TBA |
| Hewlett-Packard <br> Fort Collins Division | NCR |
| Stephen Yablonski | Ft. Collins |
| Woodward Governor, Inc. | David Zdanowitz |
| Loveland Division | Hewlett Packard |
| Greeley Division |  |

TBA
Hewlett-Packard
Loveland Division


## ENGINEERING TECHNOLOGY

Program Advisors: Bill Cullins, Don Darling, Jay Freese, Art Giesick, Gary Hunt

Program Length: Usually six quarters for Associate in Applied Science degree program.

Potential Opportunities: The program is designed to prepare a student for activities of a technical nature, usually associated with architectural, civil, mechanical, and manufacturing engineering. These occupation entry level activities may include drafting, estimating, data gathering, technical reports, minor structural, topographic, or mechanical design, surveying, laboratory testing and other engineering assistance skills. The student will develop work skills, an understanding of applied mathematics and physics, and materials and techniques relative to human relations, such as leadership, career planning, and obtaining a position.

Program Requirements: Students entering this program are required to complete Aims assessment examinations in the areas of reading, writing, math, and algebra. If QUALIFYING SCORES are NOT attained, program advisors will determine the preparatory courses required to gain admittance to the program.
The AAS degree in Engineering Technology requires a demonstrated proficiency in composition. This may be accomplished by successfully completing (ENG 100) Composition Style and Technique, or qualifying performance on the assessment examination.
THE FOLLOWING CLASSES MUST BE COMPLETED PRIOR TO ENTRY INTO THE ARCHITECTURAL/CIVIL AND COMPUTER AIDED MANUFACTURING PROGRAMS: APPLIED TECHNICAL MATH (ENT-116), INTRODUCTION TO ENGINEERING TECHNOLOGY (ENT-100), INTRODUCTION TO OPERATING SYSTEMS: DOS (CIS-110), AND COMPOSITION STYLE \& TECHNIQUE (ENG-100) OR QUALIFYING SCORE.

Many Engineering Technology courses have prerequisites the MUST be met prior to class admittance. See course descriptions for specific requirements.

Good eyesight, hand dexterity, and a sense of size and proportion are helpful in many of the technical courses.

General Information: The Engineering Technology student has the choice of completing a degree in the following option areas: Architectura//Civil, Computer Aided Manufacturing, or Dratting/Design.

Registration Requirement: All students taking a course or courses in a Technology Division program must have an appropriate Technology Division program advisor's signature on the course registration form before registering.

## ARCHITECTURALCIVIL OPTION DEGREE PROGRAM

Engineering Technology General Education Courses: A minimum of 23 quarter credit hours of General Education Courses are required with advisor approval. The General Education Courses are identified by an (*).
Degree Requirements:
CREDITS
ENT 100 Introduction to Technology 1
ENT 101 Technical Print Reading 3
ENT 102 Technical Drawing Concepts 3
ENT 103 Drafting Fundamentals I 2
ENT 104 Drafting Fundamentals II 2

TECHNOLOGY DIVISION, cont.

| ENT 105 | Basic Field Survey: Civil 6 | ENT 225 | Computer Aided Manufacturing | 4 |
| :---: | :---: | :---: | :---: | :---: |
| ENT 106 | Engineering Materials: Civil 3 | ENT 227 | Robotics | 4 |
| ENT 111 | Engineering Materials 3 | ENT 246 | Mechanical Design: Manufacturing | 3 |
| ENT 113 | Architectural Print Reading 4 | ENT 298 | Engineering Problems \& Applications | 4 |
| ENT 114 | Introduction to Architectural Drafting 4 | Elective: (select with advisor approval) |  | 5 |
| ENT 118 | Introduction to Computer Aided Drafting 2 | Total Option Hours |  | 82 |
| ENT 121 | Introduction to Descriptive Geometry 2 |  |  |  |
| ENT 122 | Engineering Graphic Applications 2 | Required General Education Courses: |  |  |
| ENT 201 | Introduction to AutoCad I 2 | *CSC 160 BASIC Language Programming |  | 5 |
| ENT 202 | Introduction to AutoCad II 2 | *PHY 111 Physics: Algebra Based I |  | 5 |
| ENT 206 | Statics 5 | *PHY 112 Physics: Algebra Based II |  | 5 |
| ENT 207 | Technical Job Seeking 1 | *PSY 120 Psychology of Leadership \& Management |  | 5 |
| ENT 211 | Intermediate AutoCad I 2 | Total credits from above courses |  | 20 |
| ENT 212 | Intermediate AutoCad II 2 | General Education Elective: (select one with advisor approval) |  |  |
| ENT 215 | Engineering Planning \& Control 2 | *SPE 125 Interpersonal Communication |  | 5 |
| ENT 221 | Strength of Materials 5 | *SPE 221 Professional Oral Communication <br> Total credits from above courses |  | 5 |
| ENT 226 | Civil Hydraulics 3 |  |  | 5 |
| ENT 235 | Drafting: Architectural II 4 | Total Credits for A.A.S. Degree |  |  |
| ENT 236 | Drafting: Structural 5 | Computer Aided Manufacturing Option |  | 107 |
| ENT 237 | Dratting: Civil 5 |  |  | 107 |
| ENT 247 | Mechanical Design: Facilities 4 | DRAFTING/DESIGN TECHNOLOGY OPTION |  |  |
| ENT 298 | Engineering Problems \& Applications 4 | DEGREE PROGRAM |  |  |
| Total Option Hours 83 |  | ENT 100 | Introduction to Technology | 1 |
| Required General Education Courses: |  | ENT 101 | Technical Print Reading | 3 |
|  | HY 111 Physics: Algebra Based I 5 | ENT 102 | Technical Drawing Concepts | 3 |
|  | HY 112 Physics: Algebra Based II 5 | ENT 103 | Dratting Fundamentals I | 2 |
|  | SY 120 Psychology of Leadership \& Management 5 | ENT 104 | Dratting Fundamentals II | 2 |
| General E | cation Elective with advisor approval 3 | ENT 111 | Engineering Materials | 3 |
| Total credits from above courses 18 |  | ENT 113 | Architectural Print Reading | 4 |
|  |  | ENT 114 | Introduction to Architectural Drafting | 4 |
| General Education Elective: (select one) |  | ENT 118 | Introduction to Computer Aided Drafting | 2 |
|  | SPE 125 Interpersonal Communication 5 | ENT 121 | Introduction to Descriptive Geometry | 2 |
|  | SPE 221 Professional Oral Communication 5 | ENT 122 | Engineering Graphic Applications | 2 |
| Total cred | from above courses 5 | ENT 201 | Introduction to AutoCad I | 2 |
| Total Cre | for A.A.S. Degree | ENT 202 | Introduction to AutoCad II | 2 |
| Architect | /Civil Option minimum 106 | ENT 207 | Technical Job Seeking | 1 |
| COMPUTER AIDED MANUFACTURING (CAM) |  | ENT 211 | Intermediate AutoCad I | 2 |
| COMPU | ( ${ }^{\text {a }}$ AIDED MANUFACTURING (CAM) | ENT 212 | Intermediate AutoCad II | 2 |
| TECHNOLOGY OPTION DEGREE PROGRAM |  | ENT 231 | Advanced AutoCad I | 2 |
| ELT 224 | Programmable Logic Controllers 5 | ENT 232 | Advanced AutoCad II | 2 |
| ELT 276 | Automation Control Circuits 5 | ENT 236 | Drafting: Structural | 4 |
| ENT 100 | Introduction to Technology 1 | ENT 237 | Drafting: Civil | 5 |
| ENT 101 | Technical Print Reading 3 | ENT 246 | Mechanical Design: Manufacturing | 3 |
| ENT 102 | Technical Drawing Concepts 3 | ENT 298 | Engineering Problems \& Applications | 4 |
| ENT 107 | Industrial Electricity I 5 | Total credits from above |  | 57 |
| ENT 108 | Electronics for Engineering Technology 5 |  |  |  |
| ENT 111 | Engineering Materials 3 | Select one from the following: |  | 4 |
| ENT 112 | Manufacturing Processes 4 | ENT 247 | Mechanical Design: Facilities | 4 |
| ENT 118 | Introduction to Computer Aided Drafting 2 | Total credits from above |  | 4 |
| ENT 201 | Introduction to AutoCad I 2 | Electives: (selected with advisor approval) |  | 18 |
| ENT 202 | Introduction to AutoCad II 2 | Total Option Hours |  | 79 |
| ENT 205 | Electro/Mechanical Design 5 |  |  |  |
| ENT 207 | Technical Job Seeking 1 | Required General Education Courses: |  |  |
| ENT 211 | Intermediate AutoCad I 2 |  | PHY 111 Physics: Algebra Based I | 5 |
| ENT 212 | Intermediate AutoCad II 2 |  | HY 112 Physics: Algebra Based II | 5 |
| ENT 216 | Statistical Process Control 2 |  | SY 120 Psychology of Leadership \& Management | 5 |
| ENT 217 | Fluid Mechanics: Hydraulic/Pneu 3 |  | ENT 116 Technical Mathematics | 5 |
| ENT 221 | Strength of Materials 5 | Total cred | from above courses | 20 |

General Education Elective: (select one with advisor approval)
*SPE 125 Interpersonal Communication
*SPE 221 Professional Oral Communication
Total credits from above courses
Total Credits for A.A.S. Degree Drafting/Design Option 104

## DRAFTING TECHNOLOGY

CERTIFICATE PROGRAM
Program Advisor: Don Darling, Art Giesick
Manual and computer aided dratting courses are offered to meet the needs of students and industry within the college district.

A series of courses is offered as part of the Drafting Technology certificate and the Engineering Technology degree programs. A student who is interested in developing only drafting skills may enroll in these courses (for skill development) providing course prerequisites are met. (See course descriptions for individual course prerequisites.)

Upon written request, non-certificate or non-degree students will be awarded a "Certificate of Completion" for the classes that have been successfully completed.

High school students who are interested in these courses should contact their high school principal or counselors for details and the possibilities for enrollment.

Program Length: Usually three quarters for completion of Certificate in Occupational Education program.

Potential Opportunities: The program is designed to qualify the student for entry level employment as a drafter. The student will develop an understanding of applied mathematics and drafting techniques utilized in the drafting field.

A student completing this certificate program could be an entry level employee in the following areas:

1. Architectural Drafting
2. Civil Drafting
3. Facilities Drafting
4. Mechanical Drafting

Program Requirements: Good eyesight, hand dexterity, and a sense of size and proportion are helpful.

Many of the courses within this program have prerequisites that must be met prior to class admittance. See specific course descriptions for requirements.

General Information: All students in this program are encouraged to participate in the Aims Community College Chapter of ADDA (American Design Drafting Association).

The student may add electives to the certificate program with advisor approval.
Certificate Requirements: ..... CREDITS
ENT 100 Introduction to Technology ..... 1
ENT 101 Technical Print Reading ..... 3
ENT 102 Technical Drawing Concepts ..... 3
ENT 103 Drafting Fundamentals I ..... 2
ENT 104 Drafting Fundamentals II ..... 2
ENT 111 Engineering Materials ..... 3
ENT 115 Intro to Technical Mathematics ..... 5
ENT 118 Introduction to Computer Aided Drafting ..... 2
ENT 121 Introduction to Descriptive Geometry ..... 2
ENT 122 Engineering Graphic Applications ..... 2
ENT 201 Introduction to AutoCad I ..... 2
ENT 202 Introduction to AutoCad II

ENT 207 Technical Job Seeking 1
ENT 211 Intermediate AutoCad I 2
ENT 212 Intermediate AutoCad II 2
Total credits from above courses 34
Required General Education Courses
ENG 100 Composition Style \& Technique 5
PHY 105 Conceptual Physics 5
Total credits from above courses 10
Electives (select with advisor approval) 10
Total Credits for Drafting Certificate 54

## ENGINEERING TECHNOLOGY SUPPORT COURSES

ENT 109 Engineering Seminar I 1
ENT 119 Engineering Seminar II 2
ENT 129 Engineering Seminar III 3
ENT 209 Independent Study in Engineering Technology 1
ENT 219 Independent Study in Engineering Technology 2
ENT 229 Independent Study in Engineering Technology 3

ENGINEERING ADVISORY COMMITTEE

| Kurt Bachman <br> Kodak of Colorado | Dr. Bill Lee |
| :--- | :--- |
|  | Dept. of Industrial Sciences |
| Robert Backman | Colorado State University |
| Hewlett Packard <br> Greeley Division | John Lenz |
| Steve Caldwell | Engineering Technician |
| Colorado Engineering | Kodak of Colorado |
| Experiment Station, Inc. | James Parnell |
|  | Construction Management |
| Donna Camilliere | Colorado State University |
| City of Loveland | Herb Peralez |
| Dan Correll | Miner \& Miner Consulting |
| Building Inspector | Engineers, Inc. |
| City of Greeley | Shawn Renfro |
| Connie Cross | NCR |
| Woodward Governor Co. | Ft. Collins |
| Chuck Dayton | Elise Sundem |
| Hewlett Packard | AE Associates |
| Greeley Division | Greeley |
| Bill Friehauf |  |
| Woodward Governor, Inc | Jeff Wieringa |
| Ft. Collins, CO | HACH Corporation |
| Phyllis Huston |  |
| Hewlett Packard |  |
| Ft. Collins Division |  |

## GRAPHIC TECHNOLOGY

## Program Advisors: Deb King and Lori Ford

Program Length: 900 clock hours ( 74 credits) for the Certificate in Occupational Education or 1150 clock hours ( 98 credits) for the Prepress Option or 1120 clock hours ( 97 credits) for the Press Option within the Associate of Applied Science degree program.

Potential Opportunities: The program will prepare the student for entry into a number of career fields; opportunities are almost unlimited in Graphic Technology. Key occupations include: computer graphics, desk-top publishing, layout, paste-up, composition, process camera work, image positioning, presswork, platemaking, and bindery. With additional training, the student also can be employed in graphic design, photography, management, sales, service, and repair. If you are interested in high speed, high volume communication within the printing industry (the third largest industry in the United States), a position is available to those with the proper skills.

Program Requirements: Completion of the six certificate requirements will earn a Certificate in Occupational Education.

The Associate of Applied Science degree offers the student additional theory as it is related to the student's area of specialization. The degree is recommended for persons wishing to advance in the printing industry.

Registration Requirement: All students taking a course or courses in a Technology Division program must have an appropriate Technology Division program advisor's signature on the course registration form before registering.

## PRESS OR PRE-PRESS OPTION CERTIFICATE PROGRAM

Certificate Requirements: CREDITS
Fall Quarter 24
BTE 100 Touch Keyboarding 4
GRT 101 Graphic Technology I 20
Winter Quarter 25
BUS 141 Intro to Communications 5
GRT 102 Graphic Technology II 20
Spring Quarter 25
MAT 110 Applied Business Mathematics 5
GRT 103 Graphic Technology III 20
Total Credits for Certificate 74

## DEGREE PROGRAM

Degree Requirements: Completion of eight required courses plus six to seven courses related to the student's option as listed below. (Total Degree Requirements range from 97 to 98 credits.)

General Education Courses: A minimum of 23 quarter credit hours of General Education courses are required with advisors approval.

## PRE-PRESS OPTION

## Required Courses:

GRT 101 Graphic Technology I
GRT 102 Graphic Technology II
GRT 103 Graphic Technology III

## General Education Courses

BUS 141 Intro to Communications ..... 5
BUS 142 Intermediate Communications ..... 5
BUS 165 Human Relations at Work ..... 5
HEN 106 Red Cross/Standard First Aid/CPR ..... 3
MAT 110 Applied Business Math ..... 5
Electives
You must choose 4 credits from them following electives
BTE 100 Touch Keyboarding I ..... 4
BUS 101 Speed and Accuracy I ..... 4
You must choose 11 credits from the following electives
AAD 121 Computer Design I ..... 3
AAD 122 Computer Design II ..... 3
ART 121 Drawing I ..... 3
ART 122 Drawing II ..... 3
ART 131 Design I ..... 3
ART 135 Computer Graphics I ..... 3
ART 136 Computer Graphics II ..... 3
ART 151 Photography I ..... 3
ART 152 Photography II ..... 3
ART 244 Graphic Design I ..... 3
ART 245 Graphic Design II ..... 3
BUS 128 Keyboarding for Computers ..... 2
BUS 256 Desktop Publishing Page Maker Software ..... 2
CIS 118 Introduction to Microcomputer Applications ..... 5
CIS 137 Desktop Publishing: Ventura ..... 5
COM 112 Intro to Mass Media ..... 5
COM 280 Desktop Video Graphics ..... 3
CSC 100 The Computer and Society ..... 5
CIS 160 BASIC Language Programming ..... 5
ENG 100 Composition Style and Technique ..... 5
GRT 104 Graphic Technology IV ..... 10
GRT 199 Graphic Technology/Special Needs ..... 1
GRT 295 Graphic Technology/Independent Study ..... 2
GRT 296 Graphic Technology/Independent Study ..... 3
GRT 297 Graphic Technology/Independent Study ..... 5
GRT 299 Graphic Technology/Practicum ..... 1
MAN 208 Small Business Management ..... 5
Total Pre-Press Option Credits ..... 98
PRESS OPTION
Required Courses
GRT 101 Graphic Technology I ..... 20
GRT 102 Graphic Technology II ..... 20
GRT 103 Graphic Technology III ..... 20
General Education Courses
BUS 141 Intro to Communications ..... 5
BUS 165 Human Relations at Work ..... 5
ENT 115 Intro to Technical Mathematics ..... 5
HEN 106 Red Cross/Standard First Aid/CPR ..... 3
PHY 105 Conceptual Physics

## Electives

You must choose 14 credits from the following electives
BTE $100 \quad$ Touch Keyboarding
BUS 101 Speed and Accuracy I 4
BUS 115 Introduction to Business 5
BUS 142 Intermediate Communications 5
CIS 160 BASIC Language Programming 5
CSC 100 The Computer and Society 5
GRT 104 Graphic Technology IV 10
GRT 199 Graphic Technology/Special Needs 1
GRT 295 Graphic Technology/Independent Study 2
GRT 296 Graphic Technology/Independent Study 3
GRT 297 Graphic Technology/Independent Study 5
GRT 299 Graphic Technology/Practicum 1
MAN 208 Small Business Management 5
MAT 111 Beginning Algebra 5
Total Press Option Credits

GRAPHIC TECHNOLOGY ADVISORY COMMITTEE

Pat Donovan
Choice Printing
Ft. Collins
Margaret Willoughby
Aims/Graphic Production
Chuck Rehmer
Copyworld, Greeley

Mark Simon
United Printing, Denver
Verne Felton
Multigraphics, Cheyenne
Dean Ginther
Printing Plate Product \&
Technology Development
Kodak/Colorado Division

Mark Swisher
R.R. Donnelley, Norwest, Inc.


## WELDING TECHNOLOGY

Program Advisors: Bill Killebrew, Ed Schwartz, and Mike Spika, Phone: (303)330-8008 ext. 203

Program Scheduling: The Welding Department advisors will work with individuals and companies alike to plan customized programs of study that will meet their needs. The standard scheduling for certificates and degrees are listed below:

WELDING TECHNOLOGY DEGREE: (One Year Option)
3 to 4 quarters ( 1160 classroom and lab hours)
WELDING TECHNOLOGY DEGREE: (Two Year Option) 6 to 7 quarters ( 1160 classroom and lab hours)
WELDING SYSTEMS MANAGEMENT DEGREE: (Two Year Option)
6 to 7 quarters ( 1160 classroom and lab hours)
WELDING TECHNICIAN CERTIFICATE: (One Year Option)
3 quarters ( 1000 classroom and lab hours)
WELDING TECHNICIAN CERTIFICATE: (Two Year Option)
6 quarters ( 1000 classroom and lab hours)
WELDING SYSTEMS MANAGEMENT CERTIFICATE: (Two Year Option)
6 quarters ( 1010 classroom and lab hours)
NOTE: The Welding Technician (Two year option) and the Welding Systems Management Option can be taken concurrently.

Potential Opportunities: Welding Technician Option. The program is designed to develop the skills necessary to pass the welder qualification tests. Qualification tests may be given in one or more positions such as flat, horizontal, vertical, or overhead. After completion of this program, the student can find work on bridges, pipelines, power houses, refineries, railroads, automobiles, farm machinery, and earth-moving equipment. Wherever metal is to be joined, welding usually is chosen as the fastest and most economical process. The welder must be able to fabricate all or part of a structure from drawings or blueprints with accuracy and in a reasonable amount of time. Other opportunities exist for students in the welding field as a welding foreman, welding inspector, welding technician, job shop welder, welding supply salesman, welding instructor, or welding engineer. Good hand and eye coordination and the desire to work steadily and patiently to achieve high skills in the art of welding are prerequisites for this program.

Welding Systems Management Option. Designed to develop the skills necessary for managing modern welding processes and related technology with emphasis on improving quality, productivity, and profitability. The principles of Total Quality Leadership are stressed as an integral part of all class and lab work. Students desiring to become American Welding Society Certified Welding Inspectors will find this course very useful. Other employment opportunities exist over a wide spectrum that includes engineering, technical, supervision, research, instruction, consulting, and sales. Craftsmen and supervisors currently employed in the field are especially encouraged to apply for admittance to the program. Persons new to the trade will realize increased employment opportunities by taking this program concurrently with the Welding Technician Option.

Welder Certification Information: Welder Certification Services are available to students and non-students alike. All tests are certified by an independent testing lab. For more information, contact a welding program advisor or call (303)330-8008, ext. 203

Program Requirements: Completion of the certificate requirements for either option will earn a certificate in Occupational Education.

Registration Requirement: All students taking a course or courses in a Technology Division program must have an appropriate Technology Division program advisor's signature on the course registration form before registering.

## CERTIFICATE PROGRAMS

Certificate Requirements: (Welding Technician Option) CREDITS
ENT 115 Introduction to Technical Math 5
PHY 105 Conceptual Physics 5
WLT $141 \quad$ Oxy-Acet Welding 12
WLT 142 Shielded Metal Arc I 12
WLT 143 Shielded Metal Arc II 12

## Certificate Electives:

The student must complete a minimum of 36 credit hours of courses selected from the list below. Courses must be approved by a Welding Department Advisor.

| "WLT 144 | Specialized Welding I | 12 |
| :--- | :--- | :--- |
| WLT 241 | Shielded Metal Arc III | 12 |
| WLT 242 | Pipe Welding | 12 |
| WLT 243 | Gas Metal Arc Welding | 12 |
| "WLT 244 | Specialized Welding II | 12 |
| Total Credits Required | $\mathbf{8 2}$ |  |

*Specialized Welding includes, but is not limited to, these specialities: Gas Tungsten Arc Welding, Gas Tungsten Arc Pipe Welding, Structural Welding Processes and Procedures, Fabrication, Welding Repair and Maintenance Techniques
(Welding Systems Management Option)
Certificate Requirements:
CREDITS

| WLT 121 | Calculator Layout Techniques for Materials | 5 |
| :--- | :--- | :--- |
| WLT 122 | Safety Awareness in Metal Joining Technology | 3 |
| WLT 123 | Modem Metal Joining Processes | 5 |
| WLT 124 | Fundamentals of Welding Metallurgy | 5 |
| WLT 125 | American Welding Society Welding and Testing |  |
|  | Symbols with Blueprint Review | 5 |
| WLT 126 | Welding Inspection and Quality Control | 5 |
| WLT 127 | Principles of Weldment Design | 5 |
| WLT 128 | Principles of Cost Estimating for Welding | 3 |
| ENT 115 | Introduction to Technical Math | 5 |
| PHY 105 | Conceptual Physics | 5 |

## Certificate Electives:

The student must complete a minimum of 36 credit hours of courses selected from the list below. Courses must be approved by a Welding Department Advisor.
*WLT 144 Specialized Welding I 12
WLT 241 Shielded Metal Arc III 12
WLT 242 Pipe Welding 12
WLT 243 Gas Metal Arc Welding 12
*WLT 244 Specialized Welding II 12
Total Credits Required 92
*Specialized Welding includes, but is not limited to, these specialities: Gas Tungsten Arc Welding, Gas Tungsten Arc Pipe Welding, Structural Welding Processes and Procedures, Fabrication, Welding Repair and Maintenance Techniques

## DEGREE PROGRAMS

Welding Technology Option
CREDITS
Completion of the certificate requirements for Welding Technician Option plus the following courses:
CIS 110 Intro to Microcomputer Operating System (DOS) 3
ENT 118 Intro To Computer Aided Drafting 4
HEN 106 Red Cross/Standard First Aid/CPR 3
Selected General Education Courses with Advisor Approval 6
Total Credits Required 98

Welding Systems Management Option CREDITS
Completion of the certificate requirements for Welding Systems Management Option plus the following courses:
CIS 110 Intro to Microcomputer Operating System (DOS) 3
ENT 118 Intro To Computer Aided Drafting 4
PSY 120 Psychology of Leadership and Management 5
Selected General Education Courses with Advisor Approval 12
Total Credits Required 113

## Support Courses

WLT 100 Beginning Welding 2
WLT 105 Basic Oxy/Acet Welding 4
WLT 106 Advanced Oxy/Acet Welding 4
WLT 107 Basic Shield Metal Arc Welding 4
WLT 108 Advanced Shielded Metal Arc Welding 4
WLT 109 Basic Gas Metal Arc Welding 4
WLT 115 Advanced Gas Metal Arc Welding 4
WLT 116 Farm and Ranch Welding 2
WLT 121 Basic Welding Layout 3
*WLT 144 Specialized Welding I 12
WLT 199 Welding Specialities 1
WLT 204 Welding Problems I 4
WLT 205 Welding Problems II 4
WLT 206. Welding Problems III 4
WLT 236 Special Problems in Welding I 24
WLT 237 Special Problems in Welding II 24
*WLT 244 Specialized Welding II 12
WLT 251 Welding Fabrication 24

WELDING TECHNOLOGY

## ADVISORY COMMITTEE

| Lee Benson | Rick Kamerzell <br> Kodak of Colorado |
| :--- | :--- |
| Monfort of Co., Inc. | Dale Majors |
| Mike Emerick | Former Owner of <br> Hobart Brothers Welding |
| Majors Welding Supply <br> Marty Hoium <br> Buckeye Welding Supply | Glenn Vennendaal <br> Monfort Fab Department |

## COURSE DESCRIPTIONS Table of Contents



## COURSE DESCRIPTIONS

## AAD: DESIGN

## AAD 121 COMPUTER DESIGNI

This course will be an introduction to the use of MacIntosh computers and the applications of HyperCard, some of which are how to find, create and store words, pictures and charts in creative ways to be sued as graphic design. This course will be a way for new students to begin using computer graphics and will also be helpful to students with computer graphic knowledge to improve their creative design skills. Emphasis of the course will be on design, not computer skills. The computer is only the tool to be used for creative graphic design. Students will work at the computer each class with specific assignments that will give direction and requirements for completing weekly design problems. Three credits: 40 clock hours.

## AAD 122 COMPUTER DESIGN II

This class will be a continuation of Computer Design I, with new software programs being introduced that give more ability to incorporate and manipulate typography into graphic design. Computer skills \& knowledge will be expanded because of time to work on the computer, solving design problems. Three credits: 40 clock hours.

## AAD 123 COMPUTER DESIGN III

This course will allow students to develop a professional level computer design portfolio. Creative ideas will be emphasized. A comfortable level of computer design skill will be attained. Several software programs will be available. Three credits: 40 clock hours.

## AAD 243 PHOTOGRAPHY III <br> AAD 244 PHOTOGRAPHY IV

Photography I and II include a survey of historical and contemporary photographic styles, the study of relevant design elements and principles of organization, camera mechanics, and darkroom techniques. The planning and execution of photographs of expressive and creative visual content is emphasized. Photography III includes a survey of functional applications of photography (e.g. photo illustration, portraiture), and work with related design principles and photographic techniques. Photography IV emphasizes the aesthetics of contemporary photographic procedures and helps to prepare the serious student of photography to prepare an exhibition grade portiolio. Three credits each: 40 clock hours each.

## AAD 251 INTERIOR DESIGN I <br> AAD 252 INTERIOR DESIGN II <br> AAD 253 INTERIOR DESIGN III

Interior Design I and II cover visual and spatial elements, organizing principles, materials, and their relationships to architecture. Each emphasizes the process of studying and designing for interior spaces. Interior Design III gives students an opportunity to apply, within a structured course setting, interior design concepts to specific problems (e.g. residential interiors, display spaces). Three credits each: 40 clock hours each.

## ABF: AUTO BODY REFINISHING ABR: AUTO BODY REPAIR

ABR 102 BASIC STRAIGHTENING

Students will be able to properly set up a gas welding unit; make lap and butt T-joints in the flat position, and lap and butt in the vertical position using oxyacetylene and MIG welding equipment. Students also will be able to identify types of damage, use the hand tools and power equipment necessary for repairing minor damage and major door damage, and use plastic filler on the large areas of repair. Four credits: 60 clock hours.

## ABR 103 BASIC REFINISHING

Students will become familiar with refinishing material and equipment, and their uses. They will prime, sand, and apply top coats using proper methods. Four credits: 60 clock hours.

## ABR 111 DAMAGE REPAIR

Students will be able to identify auto panels, use power tools and equipment necessary to repair the damage on an auto; and remove and replace interior and exterior trim as needed to complete the repair. Prerequisite: ABR 102, ABR 141, or permission of instructor. Four credits: 60 clock hours.

## ABR 112 PANEL REPLACEMENT

Students will remove, replace, and align damaged panels using proper tools and equipment. Prerequisite: ABR 111 or permission of instructor. Four credits: 60 clock hours.

## ABR 121 ELECTRICAL AND ALIGNMENT

Students will be able to diagnose minor electrical malfunctions resulting from collision damage, using a continuity light. They also will be familiar with the use of front end alignment equipment and methods of aligning a front end. Four credits: 60 clock hours.

## ABR 122 ADVANCED REFINISHING

Students will properly sand, prime, mask, and seal a car; and refinish the car with finishes currently used in industry. Prerequisite: ABR 103 or permission of instructor. Four credits: 60 clock hours.

## ABR 123 DAMAGE APPRAISAL (ESTIMATING)

Students will become familiar with the manuals, forms, and procedures for writing damage estimates. Prerequisite: ABR 141 or permission of instructor. Four credits: 40 clock hours.

## ABR 141 AUTO BODY REPAIR I

Students will learn to weld lap, butt, and T-joints in the flat and vertical positions using oxyacetylene and MIG welding equipment. They will be able to remove small dents with the pick and file method without the use of fillers, and progress to severe or major door damage using power equipment and fillers to repair damage. They also will repair the damaged area using proper priming, sanding, and color application techniques. Twelve credits: 150 clock hours.

## ABR 142 AUTO BODY REPAIR II

Students will learn to identify the panels on an auto and to use power tools in the repair, replacement, and alignment of damaged panels. They will remove and replace interior and exterior trim as necessary for completion of the repair, and refinish partial and complete panels. Prerequisite: ABR 141 or permission of instructor. Twelve credits: 150 clock hours.

## ABR 143 AUTO BODY REPAIR III

Students will learn to diagnose minor electrical malfunctions in circuits, using continuity lights; will properly sand, prime, mask, and seal a car; will refinish the car with finishes currently used in industry, and will become familiar with the use of the front end alignment equipment and methods used in aligning the front end. Students will learn to remove, install, and make adjustment to automotive glass. They also will become familiar with the manuals and procedures of writing estimates. Prerequisite: ABR 141 or permission of instructor. Twelve credits: 150 clock hours.

## ABF 151 AUTO REFINISH I

Students will become familiar with refinishing materials, solvents, primers, sandpapers, top coats, and the use of each. They will become familiar with tools, spray guns, sanders, transformers, air compressors, and accessories used in auto refinishing. Twelve credits: 150 clock hours.

## ABF 152 AUTO REFINISH II

Students will sand, prime, mask, seal and apply top coats to partial and complete panels. Proper color matching using Hi-Tech Paints is included. Prerequisite: ABF 151 or permission of instructor. Twelve credits: 150 clock hours.

## ABF 153 AUTO REFINISH III

Students will prep and apply top coats to the entire car using single and multiple stage painting, with skills developed from previous courses. Prerequisite: ABF 151, or permission of instructor. Twelve credits: 150 clock hours.

## ABR 199 SPECIAL NEEDS/AUTO BODY REPAIR

This course is designed to improve skills in any one of the various areas of auto body. Actual course content will be established as necessary upon agreement of the student, instructor, and advisor. The student must be enrolled in the Auto Body program. One credit: 10 clock hours.

## ABR 201 QUARTER PANEL REPLACEMENT

Students will learm to remove and replace a quarter panel, repair panels and reinforcements, align the sheet metal, and complete the job, including refinishing. Prerequisite: ABR 123, ABR 143, or permission of instructor. Four credits: 60 clock hours.

## ABR 202 BASIC SHEET METAL REPLACEMENT

Students will learn to remove and replace a door skin and front sheet metal. They also will do the alignment and refinishing. Prerequisite: ABR 201 or permission of instructor. Four credits: 60 clock hours.

## ABR 203 ADVANCED SHEET METAL REPLACEMENT

Continuation of ABR 201 and ABR 202. Students will learn to remove and replace the door skin and the front sheet metal, will do the alignment and refinishing, will remove and replace a quarter panel, repair inner panels and reinforcements, will align the sheet metal, and complete the job, including refinishing. Prerequisite: ABR 201, ABR 202, or permission of instructor. Four credits: 60 clock hours.

## ABR 211 BASIC FRAME REPAIR

Students will leam to identify and diagnose types of frames and damage. They will become familiar with reinforcement and replacement methods. Prerequisite: ABR 203, ABR 242, or permission of instructor. Four credits: 60 clock hours.

## ABR 212 CONVENTIONAL FRAME REPAIR

Students will leam to identify and diagnose types of frames and tools used to repair and align conventional frames. Prerequisite: ABR 211 or permission of instructor. Four credits: 60 clock hours.

## ABR 213 UNITIZED FRAME REPAIR

Students will become familiar with the equipment and repair methods used in the alignment of the unitized body. Prerequisite ABR 212 or permission of instructor. Four credits: 60 clock hours.

## ABR 221 AUTO BODY REBUILDING I

Students will learn to repair an auto with severe damage (totaled) and do the operations required to make the auto road-worthy. Prerequisite: ABR 213 and ABR 242, or permission of instructor. Four credits: 60 clock hours.

## ABR 222 AUTO BODY REBUILDING II

Students will leam to repair an auto with severe damage (totaled) and do the operations required to make the auto road-worthy. Prerequisite: ABR 221 or permission of instructor. Four credits: 60 clock hours.

## ABR 223 AUTO BODY REBUILDING III

Continuation of ABR 2२2. Students will learn to repair an auto with severe damage (totaled) and do the operations required to make the auto road-worthy. Prerequisite: ABR 221 and ABR 222 or permission of instructor. Four credits: 60 clock hours.

## ABR 241 AUTO BODY REPAIR IV

Students will learn to remove, replace, and align weld on body panels such as quarter panels, door skins and rear body panels; and completely replace and align the front sheet metal. They will be able to straighten or repair damaged inner structures using power equipment and tools. The job, including refinish work, will be completed by the students. Prerequisite: ABR 141 or permission of instructor. Twelve credits: 150 clock hours.

## ABR 242 AUTO BODY REPAIR V

Students will leam to identify and diagnose types of frames and damages, will be familiar with the repair methods and equipment used in the alignment of conventional and unitized frames and bodies, and will be able to read an accurate estimate. Prerequisite: ABR 141 or permission of instructor. Twelve credits: 150 clock hours.

## ABR 243 AUTO BODY REPAIR VI

Students will learn to repair an auto with severe damage (totaled) and do the operations required to make the auto road-worthy. With instructor approval, the student may be placed in an intern position within the trade. Prerequisite: ABR 141 or permission of instructor. Twelve credits: 150 clock hours.

## ACC: ACCOUNTING

ACC 101 FUNDAMENTALS OF ACCOUNTING I
This course presents the basic elements and concepts or accounting with emphasis on the procedures used for maintaining journals, ledgers, and other related records, and for completion of end-of-period reports for small service and merchandising businesses. This course is not intended as part of the accounting sequence or for transfer credit. Five credits: 50 clock hours.

## ACC 105 PAYROLL ACCOUNTING

An in-depth study of the need for payroll and personnel records, computing gross salary using different methods, determining taxes (Social Security, Federal and State withholding, and unemployment), and various accounting systems used to record payroll. A payroll project will be completed. Prerequisite: ACC 101 or ACC 121 or permission of instructor. Three credits: 30 clock hours.

## ACC 111 ACCOUNTING REVIEW I

To provide the opportunity for the student to review accounting materials that would up-date and refresh their knowledge of Accounting I. Prerequisite: Permission of instructor. One credit: 15 clock hours.

## ACC 112 ACCOUNTING REVIEW II

To provide the opportunity for the student to review accounting materials that would up-date and refresh their knowledge of Accounting II. Prerequisite: Permission of instructor. One credit: 15 clock hours.

## ACC 113 ACCOUNTING REVIEW III

To provide the opportunity for the student to review accounting materials that would up-date and refresh their knowledge of Accounting III. Prerequisite: Permission of instructor. One credit: 15 clock hours.

## ACC 121 PRINCIPLES OF ACCOUNTINGI

This course introduces the study of accounting principles to give the student an understanding of the theory and logic that underlay procedures and practices. Major topics include: the accounting cycle for service and merchandising companies, special journals and subsidiary ledgers, internal control principles and practices, and notes and interest. Five credits: 50 clock hours.

## ACC 122 PRINCIPLES OF ACCOUNTING II

This course continues the study of accounting principles as they apply to sole proprietorships and corporations. Major topics include inventory systems and costing, plant assets and intangible asset accounting, depreciation methods and practices, stocks and bonds, and investments. Prerequisite: ACC 121 (ACC 196 recommended to be taken concurrently). Five credits: 50 clock hours.

## ACC 123 PRINCIPLES OF ACCOUNTING III

A continuation of ACC 122 emphasizing departmental, manufacturing and cost accounting, flow of funds, standard cost and capital budgeting, and statement analysis. Prerequisite: ACC 122 (ACC 197 recommended to be taken concurrently). Five credits: 50 clock hours.

## ACC 131 INCOME TAX FOR INDIVIDUALS

A study of the important income tax code provisions primarily as they affect individuals and sole proprietors. Topics include: filing requirements and status, inclusions/exclusions of gross income, itemized deductions, losses, depreciation, credits, and property transactions. Five credits: 50 clock hours.

ACC 132 INCOME TAX FOR PARTNERSHIPS AND CORPORATIONS
A study of the important income tax code provisions as they apply to C corporations, S corporations, and partnerships. Topics include: analyzing forms or ownership, handling distributions, and preparing required forms. Three credits: 30 clock hours.

ACC 133 INCOME TAX FOR INDIVIDUALS AND BUSINESS
Combined ACC 131 and ACC 132 into one class. Covers same topics. Eight credits: 80 clock hours.

## ACC 196 ACCOUNTING PRACTICUM

The completion of a merchandising practice set for a proprietorship. Prerequisite: ACC 121. One credit: 15 clock hours.

## ACC 197 COMPUTERIZED PRACTICUM I

A practice set to be completed on a microcomputer using integrated accounting software. Prerequisite: ACC 122 and ACC 196 or permission of instructor. One credit: 15 clock hours.

## ACC 198 COMPUTERIZED PRACTICUM II

A practice set to be completed on a microcomputer using integrated accounting software. Prerequisite: ACC 123 and ACC 197 or permission of instructor. Two credits: 30 clock hours.

## ACC 207 FINANCIAL MANAGEMENT

Deals with conceptual alternatives of financial management and emphasizes preparation and analysis of sources and uses of shortand long-term capital, and an in-depth analysis of financial statements. Prerequisite: ACC 123 or permission of instructor. Five credits: 50 clock hours.

## ACC 208 LOTUS 1-2-3 APPLICATIONS FOR BUSINESS

This course introduces the student to concepts and applications of an electronic spreadsheet. Topics include calculations, built-in functions, and spreadsheet design; also an introduction to graphics, database, and macros. Three credits: 30 clock hours.

## ACC 209 LOTUS 1-2-3 APPLICATIONS FOR COST ACCOUNTING

To provide the student with the opportunity to use electronic spreadsheets to solve common cost accounting problems such as job order costing, budgeting, standard costing, and inventory control. Prerequisite: ACC 208 and ACC 226 (may be taken concurrently). Three credits: 45 clock hours.

## ACC 211 INTERMEDIATE ACCOUNTING I

This course is a study of the conceptual framework of financial accounting and advanced theory and practice applicable to the following major topics: financial accounting functions and basic theory, time value of money, current assets, current liabilities, and operational assets. Prerequisite: ACC 123 or permission of instructor. Five credits: 50 clock hours.

## ACC 212 INTERMEDIATE ACCOUNTING ॥

Continuation of ACC 211 with emphasis on long-term assets and liabilities (long-term and shor-tem), investments, and flow of funds. Prerequisite: ACC 211 or permission of instructor. Five credits: 50 clock hours.

## ACC 215 LOTUS 1-2-3 APPLICATIONS FOR FINANCE

Provides the student with the opportunity to use electronic spreadsheets to solve common financial management problems such as ratio analysis, financial forecasting, and asset management. Prerequisite: ACC 207 (may be taken concurrently) and ACC 208. Three credits: 45 clock hours.

## ACC 216 LOTUS 1-2-3 ADVANCED APPLICATIONS FOR BUSINESS

This course continues to build on skills learned in ACC 208. Topics include advanced database creation and manipulation, graphics, advanced functions, spreadsheet linking, advanced macro commands, and data tables. Prerequisite: ACC 208 or permission of instructor. Three credits: 30 clock hours.

## ACC 226 COST ACCOUNTING

This course is a study of cost accumulation methods and management reports. The concepts and procedures of job order, process, standard and direct cost systems are covered and budgeting, planning, and control of costs are included. Prerequisite: ACC 123 or permission of instructor. Five credits: 50 clock hours.

## ACC 228 ACCOUNTING SYSTEMS

A study of the flow of accounting information within an organization, with emphasis on integration of accounting sub-systems, designing a system for a business and viewing systems currently being used. An advanced accounting practice set will be completed. Prerequisite: ACC 105, ACC 198 (may be taken concurrently) and ACC 211 or permission of instructor. Five credits: 50 clock hours.

## ACC 235 VOLUNTEER INCOME TAX ASSISTANCE - VITA

The student will learn to assist taxpayers with the preparation of Forms 1040 A, 1040 EZ, 1040, and selected related schedules. The student will gain technical proficiency in basic tax law. Prerequisite: ACC 131 or permission of instructor. Two credits: 30 clock hours.

| ACC | 280 | ACCOUNTING SEMINAR |
| :--- | :--- | :--- |
| ACC | 281 | ACCOUNTING SEMINAR |
| ACC | 282 | ACCOUNTING SEMINAR |
| ACC | 283 | ACCOUNTING SEMINAR |
| ACC | 284 | ACCOUNTING SEMINAR |
| ACC | 285 | ACCOUNTING SEMINAR |

A series of courses which will provide opportunities for students to update knowledge in specific areas of accounting and explore accounting applications. .5 to 5 credit hours each: contact instructor.

## ACC 297 ADVANCED COMPUTERIZED PRACTICUM

To provide the student with the opportunity to complete a computerized accounting simulation involving advanced accounting theory related to a corporation. Prerequisite: ACC 123 and ACC 197 or permission of instructor. Two credits: 30 clock hours.

## ACC 298 ACCOUNTING PRACTICUM II

The completion of a practice set commensurate with the level of accounting theory the student has taken. It could be a practice set for a corporate merchandising firm, job order or process cost practice set, or working from incomplete records. Prerequisite: ACC 196 and ACC 122 or permission of instructor. One credit: 15 clock hours.

## AMT: AUTOMOTIVE MECHANICS TECHNOLOGY

Safety awareness and accident prevention will be of top priority in all automotive courses.

## AMT 101 AUTO MECHANICS FOR BEGINNERS

Students develop a basic knowledge of the major systems of the automobile upon successful completion of this course. Lesson plans
will cover parts identification and basic theory of operation of the major systems. Minor repair and diagnosing common problems will be taught and students will be provided the opportunity to try the hands-on activities. Good shop safety practices and accident prevention are included with each job in this course. Four credits: 60 clock hours.

## AMT 104 BRAKE REPAIR

Designed to prepare students for diagnostic and repair techniques of modern automobile brake systems. Emphasis will be placed on disc/drum systems with an introduction to anti-lock brake systems. Good shop safety practices and accident prevention are included with each job in this course. Four credits: 60 clock hours.

## AMT 105 ADVANCED ELECTRICAL

Designed to give students the theoretical and practical knowledge necessary to test and repair electrical units on modern automobiles. Good shop safety practices and accident prevention are included. Four credits: 60 clock hours.

## AMT 106 TUNE-UP

Designed to give students the basic skills and knowledge in tuneup and repair procedures as related to engine performance. Upon course completion students should be able to diagnose and repair the components of the ignition and fuel systems. Good shop safety practices and accident prevention are included. Four credits: 60 clock hours.

## AMT 107 ADVANCED ENGINE TUNE-UP

Designed to provide the advanced student additional skills and knowledge in advanced analyzer operation, carburetor overhaul and adjustments, and fuel injection repair. Upon course completion students should be able to use these skills to perform proper repairs. Coolant recovery and recycling will be introduced. Good shop safety practices and accident prevention are included. Prerequisite: AMT 106. Four credits: 60 clock hours.

## AMT 108 AUTOMATIC TRANSMISSIONS

Designed to give students the basic skills and knowledge in automatic transmission services as related to the automobile. Upon course completion students should be able to diagnose and service automatic transmissions (minor repairs including seal replacement, band adjustment, linkage adjustment, and transmission removal). Four credits: 60 clock hours.

## AMT 115 FOREIGN CAR TUNE-UP

Designed to develop the skills and knowledge necessary to correctly tune the engines on foreign cars. Good shop safety practices and accident prevention are included. Four credits: 40 clock hours.

## AMT 116 FOUR WHEEL ALIGNMENT

Designed for the experienced front end alignment mechanic that would like to learn how to align all four wheels on modern front wheel drive automobiles using the latest computer four wheel alignment machine. Four credits: 60 clock hours.

## AMT 124 AUTOMOTIVE SERVICE MANAGEMENT

Students develop basic management concepts relating to automotive service including theory, skills in leadership, human relations, and failures. Students learn duties, problems, and methods of management. Three credits: 30 clock hours.

## AMT 125 AUTO CERTIFICATION REFRESHER

This course prepares professional auto mechanics for certification tests given by National Institute for Automotive Service Excellence. Two credits: 24 clock hours.

## AMT 131 BRAKES \& MANUAL POWER TRAINS

This course begins with a study of disc and drum brake systems. The student will study the many terms plus the theory of operation of the entire brake system in the classroom, and will experience the actual job operations in the shop. Complete brake repair work will be performed by the student to include machining operations. The course will also teach the repair procedures on clutch assemblies, manual-transaxles, and final drive components to include the constant velocity joint. A short session will be devoted to minor service, repair, and testing procedures on the automatic transaxle/transmissions. Classroom work will involve learning the vocabulary and operations of each system. Safety awareness and accident prevention policies will remain a high priority throughout this course of instruction. Twelve credits: 150 clock hours.

## AMT 132 STEERING AND SUSPENSION SYSTEMS

Students should develop necessary skills and knowledge to repair all parts of the suspension system, align front suspensions, perform two and four wheel alignment, balance wheels/tire assemblies, repair manual and power steering to include conventional and rack and pinion units. Repair of MacPherson struts, constant velocity joints and independent rear suspension completes this course. Good safety practices and accident prevention are included with each job in this course. Twelve credits: 150 clock hours.

## AMT 133 ENGINE PERFORMANCE

Students will study the procedures to service the engine and its related systems to obtain maximum performance, economy, and emission control. Part identification and theory learning will be completed in the classroom, while hands-on activities will be accomplished in the shop. Recommended testing and service procedures will be done on the engine, ignition system, and fuel system which would include feedback carburetors and fuel injection. Emission control systems will be introduced. The student will learn the use of equipment that ranges from basic meters and gauges to the more advanced computerized analyzers and testers. Manufacturer and trade manuals will be used to insure proper adjustments and service results. Troubleshooting and diagnostic techniques will be emphasized during each unit of instruction. Safety awareness and accident prevention are stressed throughout the course. Twelve credits: 150 clock hours.

## AMT 135 COLORADO EMISSION LICENSE PROGRAM

This course follows the recommended program outlined by the Colorado Department of Health to prepare automotive technicians for a Colorado Emission License. Study of the emissions rules and regulations and hands on use of the approved testing machines is covered. Two credits: 20 clock hours.

## AMT 136 EMISSION CONTROL

This course provides a basic knowledge and understanding of the various emission control systems and how they function on the automobile to aid in reducing emissions. Students will also cover the program recommended by the Colorado Department of Health for mechanics applying for an emission license. Use of the latest emission testing machines will be stressed. Students will perform mock emission inspections using the Colorado approved inspection machines. Upon completion of the course students may test for a Colorado Emission License with the Colorado Department of Health.

Prerequisite: AMT 106, AMT 107, AMT 133, or permission of instructor. Five credits: 50 clock hours.

## AMT 199 SPECIAL NEEDS/AUTO MECHANICS

This course is designed to improve skills in any one of the various areas of auto mechanics. Actual course content will be established as necessary upon agreement of the student, instructor, and advisor. The student must be enrolled in the Automotive Mechanics program. One credit: 10 clock hours.

## AMT 231 AUTOMOTIVE ENGINES

Students learn construction, parts identification, operation and maintenance procedures on all types of modern automotive engines. Study of cooling and lubricating systems are included. Students will learn to diagnose engine problems that lead to engine teardown for repair and progress to complete engine overhaul. Shop mathematics including fractions, decimals, cubic measurements, formulas, and metric measurements will be covered. Good safety practices and accident prevention are included with each job in this course. Twelve credits: 150 clock hours.

## AMT 232 ELECTRICAL

This course begins with the fundamentals of the electron and conventional theory of electrical energy. Students will study electrical terms, circuit designs, Ohm's law, and perform calculations to determine circuit values. The course then progresses to the study of wiring diagrams, schematics, and the logical approach to circuit troubleshooting. The testing, service and repair of electrical components such as alternators, starters, batteries, relays, solenoids, and switches will be practiced by the student using up-to-date equipment. Proper safety practices and accident prevention are stressed throughout each phase of this course. Twelve credits: 150 clock hours.

## AMT 233 AIR CONDITIONING AND COMFORT CONTROLS

Students study basic theory of refrigeration systems components, diagnosing and solving simulated problems, evacuation, refrigerant recycling, and recharging late model automobile air conditioning systems. Heating and defrosting are also covered. Five credits: 50 clock hours.

## AMT 234 AUTOMATIC TRANSMISSIONS AND AIR CONDITIONING

Students study principles of hydraulics, planetary gear sets, and power flow through modern automatic transmissions. Students gain experience in disassembly, inspection, replacement or simulated replacement of defective parts and complete diagnosis of functions. Basic theory of refrigeration systems, components, evacuation, charging, and testing automotive air conditioners is included. Students will study basic theory of refrigeration systems, components, testing, diagnosing, and repair. The proper procedures in evacuation, refrigerant recycling and recharging late model automobile air conditioners will complete this unit. Good safety practices and accident prevention are included with each job in this course. Twelve credits: 150 clock hours.

## AMT 261 COMPUTER CONTROLLED ENGINE SYSTEMS

This course provides a basic knowledge and understanding of computer command controlled engines. Students will study the feedback computer design that incorporates the process of input, processing, and output. The input sensors and the electronic controls that change engine fuel, timing, and emission controls will be recognized from various manufacturers. The connection will be made between various emission control systems, exhaust pollutants, and computer controlled systems. Study will also include basic service
procedures of feedback carburetion and fuel injection. Students will learn the process of testing computer equipped engines using special test instruments and with basic shop equipment such as an ohmmeter, voltmeter, and dwell meter. Prerequisite: AMT 133 or AMT 106 and AMT 107 or permission of instructor. Four credits: 60 clock hours.

## AMT 262 AUTOMOTIVE ELECTRONICS

This course is designed to emphasize the ever increasing electronic systems of the modern automobile. Students are instructed in a thorough session of electricity fundamentals which include terms, circuits, laws, formulas, and calculations of various electrical circuits. Study will also include an in-depth look at the most common types of semiconductors that are currently used in the electronic circuitry. Students will be allowed to develop a high level of proficiency in using a multimeter through the use of bread-board assignments and actual on-the-car activities. Computer design and operation as it relates to automotive systems will be covered. Six credits: 60 clock hours.

## AMT 266 AUTOMOTIVE ELECTRONICS AND COMPUTER SYSTEMS I

This course will introduce the student to automotive computer systems and their use in the management of emission control systems. Instruction will begin with concentrated study of each emission control system to include component identification and system operation. As the student becomes familiar with these features, the plan will introduce the computer, its sensors, and the process by which it provides optimum pollution control from the automobile. Lab activities will include testing emission control components, analyzing exhaust gases and learning the operational modes of the computer systems. Prerequisite: AMT 133 and AMT 232 or permission of instructor. Twelve credits: 150 clock hours.

## AMT 267 ADVANCED TECHNOLOGY/NEW CAR SYSTEMS

This course is designed to provide an in-depth study of various automotive computerized systems. Students will study specific models, both domestic and import. Training will focus on current year models. The instructional approach will involve a detailed examination of the systems that are controlled or operated by a computer. The student will become proficiently familiar with each component of the system, its individual function, and the interrelation that exists with other components in the system. Emphasis will be placed on thoroughly understanding the operation of specific computerized systems. Prerequisite: AMT 266, or instructor permission. Twelve credits: 150 clock hours.

## AMT 268 AUTOMOTIVE ELECTRONICS \& COMPUTER SYSTEMS II

This course is designed to allow the student to improve his/her knowledge and skills regarding the automotive computerized system. Instruction will review electrical concepts and extend into the area of automotive electronics. Concentrated study with electrical diagrams and schematics will be incorporated with proper troubleshooting and repair techniques. The student will continue to become familiar with the use of digital multimeters, logic probes, scanners, and computer analyzers. Shop activities will also include working with the on-board computer to determine system problems, and activities that relate to diagnosis and repair procedures of such systems. Prerequisitc. AMT 266, or instructor permission. Twelve credits: 150 clock hours.

## AMT 269 COMPUTERIZED SYSTEMS; DIAGNOSIS AND DRIVEABILITY

This course is designed to provide advanced training in the use of electronic equipment to diagnose driveability problems on the modern high-technology automobile. The list of equipment will range from computerized analyzers to the convenient hand-held scanners. Performing automatic diagnostic tests, following a computerized flow chart, or reading a dual trace scope are but a sample of the skills to be practiced. The student will also receive extended training in fuel injection as it interrelates with the electronic systems. This course is designed to allow the student to practice service and repair procedures on a repetitive and daily basis. S/he will encounter numerous driveability problems as a technician would in a working shop. Prerequisite: AMT 266 and AMT 268, or instructor permission. Twelve credits: 150 clock hours.

## ANT: ANTHROPOLOGY

## ant 101 CULTURAL ANTHROPOLOGY

Studies human cultural patterns and learned behavior. Includes linguistics, social and political organization, religion, culture and personality, culture change, and applied anthropology. Cultural Anthropology deals with issues of cultural diversity, pluralism, and relativism as a component of multi-cultural studies. Five credits.

## ANT 111 PHYSICAL ANTHROPOLOGY

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

## ARS: ART

ARS 141 CREATIVE PAINTING I
ARS 142 CREATIVE PAINTING II
ARS 143 CREATIVE PAINTING III
These courses cover various painting techniques as a means for self-expression to discover individual painting styles. One credit each: 20 clock hours each.

## ARS 281 WEAVINGI

This course is the introduction to four harness loom weaving. It includes preparation of warp, dressing the loom and learning tapestry and rug techniques of weaving. A historical review of weaving with emphasis on design is studied prior to individual work. Design emphasis is in the area of tapestry and decorative weaving. Three credits: 40 clock hours.

## ARS 282 WEAVING II

This course continues four harness loom weaving of patterned fabric, teaches reading of pattern drafts and weaving sequences for woven yardage. It includes a more in-depth study of fibers with their wearability and care. The emphasis is on functional and wearable fabric. Three credits: 40 clock hours each.

## ART: ART

## ART 110 ART APPRECIATION

(Formerly ART 100) This course is an introduction to the visual arts including language, concepts, process, and history. Five credits.

## ART 111 ART HISTORY I

Provides the knowledge base to understand the visual arts, especially as related to Western Culture. Surveys the visual arts from the Ancient through Medieval periods, and art of the non-European tradition. Course fulfills a humanities requirement. Five credits.

## ART 112 ART HISTORY II

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. Course fulfills a humanities requirement. Five credits.

## ART 113 NON-WESTERN ART

(Formerly Art History III) Provides the knowledge base to understand the visual arts, especially as related to NON-WESTERN CULTURE. Five credits.

## ART 116 LETTERINGI

(Formerly AAD 225 Calligraphy) This course is an introduction to the manipulation of materials, tools, and styles of lettering and their uses as fine art media. Three credits.

## ART 117 LETTERING II

(Formerly AAD 226 Calligraphy II) This course continues the manipulation of materials, tools, and styles of lettering and their uses as fine art media. Three credits.

## ART 118 LETTERING III

(Formerly AAD 227 Calligraphy III) This course continues advanced manipulation of materials, tools, and styles of lettering and their uses as fine art media. Three credits.

## ART 121 DRAWING I

(Formerly AAD 131) This course is an investigation of various approaches and media designed to develop drawing skills and visual awareness. Three credits.

## ART 122 DRAWING II

(Formerly AAD 132) This course is a study of expressive drawing techniques and development of individual expressive style. Three credits.

## ART 131 DESIGNI

(Formerly AAD 101 Fundamentals of Art/Design I) This course is a study of basic design elements, visual perception, form, and composition. Three credits.

## ART 132 DESIGN II

(Formerly AAD 102 Fundamentals of Art/Design II) This course covers the application of design elements and principles to both two and three dimensional problems. Three credits.

## ART 135 COMPUTER GRAPHICS I

(Formerly AAD 128) This course is an introduction to the processes of generating computer design. Three credits.

## ART 136 COMPUTER GRAPHICS II

(Formerly AAD 129) This course continues the study of the processes of generating computer design. Three credits.

## ART 137 COMPUTER GRAPHICS III

(Formerly AAD 228) This course continues advanced study of the processes of genelating computer design. Three credits.

## ART 141 JEWELRY AND METALWORK I

(Formerly ARS 261) This course is an introduction to the construction of jewelry designs in metals and small casting techniques. Three credits.

## ART 142 JEWELRY AND METALWORK II

(Formerly ARS 262) This course emphasizes conceptual design development, using casting and specialized techniques. Three credits.

## ART 151 PHOTOGRAPHYI

(Formerly AAD 241) This course is an introduction to black and white photography as a fine art medium, and develops skills necessary for basic camera and lab operations. Three credits.

## ART 152 PHOTOGRAPHY II

(Formerly AAD 242) 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. Three credits.

## ART 161 CERAMICSI

(Formerly ARS 271 Pottery and Wheel Throwing I) This course is an introduction to traditional and contemporary ceramic forms and processes including handbuilding and throwing on the potter's wheel. Three credits.

## ART 162 CERAMICS II

(Formerly ARS 272 Pottery and Wheel Throwing II) This course is a continuation of Ceramics I with emphasis on skills, techniques, and form. Three credits.

## ART 163 HANDBUILT CLAY I

(Formerly ARS 125 Ceramic Design I) This course provides instruction in several methods of handbuilding and study of functional and decorative design elements. Three credits.

## ART 164 HANDBUILT CLAY II

(Formerly ARS 126 Ceramic Design II) This course provides continued instruction in several methods of handbuilding. Surface treatment will be emphasized. Three credits.

## ART 211 PAINTINGI

(Formerly ARS 241) This course covers color, composition, materials, and techniques of studio painting. Three credits.

## ART 212 PAINTING II

(Formerly ARS 242) This course emphasizes experimentation with materials, composition, and color. Three credits.

## ART 224 SCULPTUREI

(Formerly ARS 251) This course is an introduction to the fundamentals of sculpture such as modeling, casting, carving, and assemblage processes. Three credits.

## ART 225 SCULPTURE II

(Formerly ARS 252) This course provides a development of the understanding and manipulation of three-dimensional form, with greater concentration on individual creativity and style. Three credits.

## ART 231 WATERCOLORI

(Formerly ARS 243 Water Media I) This course is an introduction to the basic techniques and unique aspects of materials involved with using transparent and/or opaque water media. Three credits.

ART 232 WATERCOLOR II
(Formerly ARS 244 Water Media II) This course provides advanced study of subject development, form, color, and theme. Three credits.

## ART 241 JEWELRY AND METALWORK III

(Formerly ARS 263) This course focuses upon advanced work and emphasizes experimentation with materials and techniques, individual designs, and superior craftsmanship. Three credits.

## ART 242 JEWELRY AND METALWORK IV

(Formerly ARS 264) This course continues the focus on advanced work and emphasizes experimentation with materials and techniques, individual designs, and superior craftsmanship. Three credits.

## ART 244 GRAPHIC DESIGN I

(Formerly AAD 221) This course focuses upon the study of design, layout and conceptual elements concerning graphic design projects such as posters, advertisements, logos and brochures. Three credits.

## ART 245 GRAPHIC DESIGN II

(Formerly AAD 222) This course continues instruction in idea development for advanced graphic design. Prerequisite: Graphic Design I or permission of instructor. Three credits.

## ART 246 GRAPHIC DESIGN III

(Formerly AAD 223) This course continues instruction in idea development for advanced graphic design. Three credits.

## ART 261 CERAMICS III

(Formerly ARS 273 Pottery/Wheel Throwing III) This course encourages students to develop an individual style of wheel thrown and handbuilt ceramic forms with continuing involvement in sufface treatment. Three credits.

## ART 262 CERAMICS IV

(Formerly ARS 274 Pottery/Wheel Throwing IV) This course continues advanced work with emphasis on various clay bodies, unique glazes and engobes, and combining different textures and shapes, and development of personal forms. Three credits.

## ART 265 HANDBUILT CLAY III

(Formerly ARS 127) The course covers advanced problems with importance placed on large scale pieces that promote creativity with techniques and combinations of different textures. Three credits.

## ART 266 HANDBUILT CLAY IV

The study of advanced handbuilding and creative problem solving, with emphasis on innovation, mastering technical skills, and understanding the content of this ant. Three credits.

## ART 270 FIGURE DRAWING I

(Formerly AAD 231) This course is an introduction to the basic techniques of drawing the human figure. Three credits.

## ART 271 FIGURE DRAWING II

(Formerly AAD 232) This course provides continuing study of the various methods of drawing the human figure, with emphasis on the description of form and individual style. Three credits.

## ART 273 FIGURE PAINTING I

(Formerly ARS 135) This course is an introduction to painting the human figure, and includes a brief survey of figure painting, instruction in the fundamental methods of composition and expression. Three credits.

## ART 274 FIGURE PAINTING II

(Formerly ARS 235) This course offers a continued study of painting the human figure with advanced problem solving in composition and experimentation with materials and techniques. Three credits.

## ART 295 ART INDEPENDENT STUDY

This course is designed to facilitate development of creative talents. The particular format and content of each independent study is determined by the art form which the student is working in and his level of proficiency. One to three credits.

## ART 299 ART PRACTICUM

Supervised practical application of creative talents determined by the specific art form in which the student is working, and the student's level of proficiency. One to three credits.

## AST: ASTRONOMY

## AST 105 THE SOLAR SYSTEM

Includes an overview of the history of astronomy, and an indepth look at planets, moons, and the origin of the solar system. Telescopic observations included, weather permitting. Prerequisite: none. Three credits: 30 hours lecture.

## AST 106 STARS AND GALAXIES

Includes an in-depth study of stars and galaxies. Both historical and modern techniques of observation will be presented. Black holes, quasars, and the origin of the universe are among topics studied. Telescopic observations included, weather permitting. Prerequisite: none. Three credits: 30 hours lecture.

## AST 185 SPECIAL TOPICS IN ASTRONOMY

Topics will reflect the special expertise of the faculty and/or the special needs of the students. Prerequisite: Consent of Instructor. One to Six credits.

## AST 295 INDEPENDENT STUDY IN ASTRONOMY

Provides an opportunity for the highly motivated student to engage in intensive study and research on a specified topic under the direction of a faculty member. The student will be limited as to the number of independent study credits taken per quarter. Prerequisite: previous academic study or experience in astronomy. One to Three credits: contact advisor.

## AVT: AVIATION TECHNOLOGY

## AVT 100 AVIATION SEMINAR

A general study of the aviation field which includes theory of flight, history of aviation, radio communication, aviation in today's economy, and aviation careers. For students who wish to be commercial pilots. One credit: 10 clock hours.

## AVT 101 PRIVATE FLIGHT LAB I

Designed for completion of first solo flight and additional training before cross country flight. Prerequisite: recommended concurrent enrollment in AVT 108 \& AVT 105. Two credits: 20 clock hours.

## AVT 102 PRIVATE FLIGHT LAB II

Designed for completion of private pilot license. Includes cross country, emergency procedures, and basic instrument flying. Prerequisite: AVT 101 or previous solo flight. Two credits: 20 clock hours.

AVT 103 INSTRUMENT/COMMERCIAL FLIGHT LAB I
The first of four phases in preparation for the FAA commercial license. Includes an introduction to the basic commercial flight maneuvers. Upon successful completion of the course, the student will pass a phase I flight check. Prerequisite: AVT 102, or Private Certificate or instructor permission. Three credits: 50 clock hours.

## AVT 104 INSTRUMENT/COMMERCIAL FLIGHT LAB II

Continuation of AVT 103 with a greater emphasis on cross country and night flying. Upon successful completion of the course, the student will pass a phase II flight check. Prerequisite: AVT 103 or permission of instructor. Four credits: 60 clock hours.

## AVT 105 PRIVATE FLIGHT SIMULATOR

Upon completion of the course, the student will be able to demonstrate a high level of skill in basic attitude instrument flying in a flight simulator. Students will be expected to complete the flight syllabus for this course. Prerequisite: recommended concurrent enrollment in AVT 108. Three credits: 30 clock hours.

## AVT 107 AIRPLANE PINCH HITTER COURSE

This course is designed to provide training for non-pilots who wish to be able to assist a pilot of a small airplane and also to be prepared to handle the airplane in an emergency. Two credits: 20 clock hours.

## AVT 108 PRIVATE GROUND SCHOOL

By the end of the course, the student should be able to pass the FAA private pilot written test. Includes basic aerodynamics, airplane systems, air traffic control and communications, aircraft weight and balance, meteorology, Federal Aviation regulation, basic navigations and radio navigations, airman's information manual, medical factors of flight, and review for the FAA test. Six credits: 60 clock hours.

## AVT 109 INSTRUMENT GROUND SCHOOL

Includes advanced meteorology, IFR procedures, flight and navigation instruments, IFR regulations and procedures and other information necessary for passing FAA instrument test. Upon successful completion of the course, the student will be able to pass the FAA instrument test. Prerequisite: Private certificate, or permission of instructor. Six credits: 60 clock hours.

## AVT 111 INSTRUMENT FLIGHT SIMULATOR I

Designed to develop skills in VOR navigation and ADF procedures such as holding patterns and DME Arcs. Various instrument approaches will also be covered. Prerequisite: AVT 105, concurrent enrollment in AVT 109 or permission of instructor. Three credits: 30 clock hours.

## AVT 115 AIRLINE MANAGEMENT \& ECONOMICS

A general study of management, marketing and economic aspects of commercial aviation intended to impart an understanding of the requirements necessary for successful operation of an air transport business. Five credits: 50 clock hours.

## AVT 119 CONVENTIONAL GEAR TRANSITION LAB

Includes orientation to tail wheel aircraft including principles of " P " factor and torque. Two credits: 20 clock hours.

## AVT 202 INSTRUMENT SIMULATOR REFRESHER

Course is designed to assist the instrument rated pilot in maintraining current status for IFR flight. Prerequisite: Instrument rating or permission of instructor. One credit: 10 clock hours.

## AVT 205 FLIGHT INSTRUCTOR GROUND SCHOOL

Theory and practice of instructional methods; fundamentals of instruction and preparing a lesson plan. The successful student will be able to pass the FAA Fundamentals of Instruction and Flight Instructor-Airplane written tests. Prerequisites: Commercial and Instrument Ground Schools. Five credits: 50 clock hours.

## AVT 206 COMMERCIAL GROUND SCHOOL

Includes a review of material for commercial flying and FAR part 135. To successfully complete the course, the student will be able to pass the FAA commercial written test. Prerequisite: Private certificate, or permission of instructor. Five credits: 50 clock hours.

## AVT 207 BASIC GROUND INSTRUCTOR

The successful student will pass the FAA Basic Ground Instructor test and receive the Basic Ground Instructor Rating. Prerequisite: permission of instructor. Two credits: 20 clock hours.

## AVT 208 ADVANCED GROUND INSTRUCTOR

The successful student will be able to pass the FAA Advanced Ground Instructor test and receive the Advanced Ground Instructor rating. Prerequisite: permission of instructor. Two credits: 20 clock hours.

## AVT 209 INSTRUMENT GROUND INSTRUCTOR

The successful student will pass the FAA Instrument Ground Instructor test and receive the Instrument Ground Instructor rating. Prerequisite: permission of instructor. Two credits: 20 clock hours.

## AVT 211 INSTRUMENT FLIGHT SIMULATOR II - PART A

This course and AVT 212 meet the requirements for AVT 213. Course designed to refine instrument flying skills. Prerequisite: AVT 111 or permission of instructor. Three credits: 30 clock hours.

## AVT 212 INSTRUMENT FLIGHT SIMULATOR II - PART B

This course and AVT 211 meet the requirements for AVT 213. Cross country flying and communication skills will be stressed. The student will fly an instrument proficiency check ride at the end of the course. Prerequisite: AVT 211. Three credits: 30 clock hours.

## AVT 213 ADVANCED INSTRUMENT SIMULATOR

Course will develop skills in all phases of instrument flying. Includes review of skills learned in AVT 111 and cross country procedures. The student will fly an instrument proficiency check ride at the end of course. Prerequisite: AVT 111 or permission of instructor. Six credits: 60 clock hours.

## AVT 214 MULTI-ENGINE SIMULATOR, AIRLINE TRANSITION

Designed to bring instrument flying skills and procedures to the level of Airline Transport Pilot standards. Prerequisite: AVT 226 Instrument rating and Commercial certificate or permission of instructor. Five credits: 50 clock hours.

## AVT 216 INSTRUMENT/COMMERCIAL FLIGHT LAB III

Includes flight instruction to qualify the student to receive the FAA instrument rating. To successfully complete the course, the student will pass the FAA instrument check ride. Prerequisite: AVT 104 or permission of instructor. Four credits: 60 clock hours.

## AVT 217 INSTRUMENT/COMMERCIAL FLIGHT LAB IV

The final flight lab in preparation for the commercial license. To successfully complete of the course, the student will pass the FAA commercial flight check. Prerequisite: concurrent enrollment in AVT 216 or permission of instructor. Four credits: 60 clock hours.

## AVT 218 CERTIFIED FLIGHT INSTRUCTOR LAB

Theory and practice of instructional methods; fundamentals of instruction and preparing a lesson plan. A review of flight maneuvers. To successfully complete the course, the student will pass the FAA CFI check ride. Prerequisite: AVT 205 or permission of instructor. Five credits: 50 clock hours.

## AVT 219 INSTRUMENT FLIGHT INSTRUCTOR LAB

Theory and practice of teaching basic attitude instrument flying, instrument flight planning, and instructional techniques. To successfully complete the course, the student will pass the FAA IFI check ride. Prerequisite: AVT 218 or permission of instructor. Three credits: 30 clock hours.

## AVT 221 SINGLE ENGINE INSTRUMENT PROFICIENCY CHECK

This course is designed as a refresher on IFR flight for the instrument rated pilot. A proficiency check is given by the instructor. Prerequisites: Instrument flight rating and permission of instructor. One credit: 10 clock hours.

## AVT 222 MULTI-ENGINE INSTRUMENT PROFICIENCY CHECK

This course is designed as a refresher on instrument procedures for the instrument rated pilot. A proficiency check is given by the instructor. Prerequisites: Instrument flight ratings and permission of instructor. One credit: 10 clock hours.

## AVT 225 MULTI-ENGINE TRANSITION LAB

Principles and procedures of light twin-aircraft, complicated systems, orientation and familiarization, emergency situations. To successfully complete the course, the student will pass the multiengine check ride. Prerequisite: commercial pilot license or permission of instructor. Two credits: 20 clock hours.

## AVT 226 MULTI-ENGINE SIMULATOR I, SINGLE PILOT

To prepare the student for single pilot multi-engine operations in multi-engine aircraft. Prerequisite: Private Pilot certificate \& instrument rating or permission of instructor. Three credits: 30 clock hours.

## AVT 227 MULTI-ENGINE INSTRUMENT SIMULATOR III, SINGLE PILOT

Designed to give the student additional skill in instrument flight with a multi-engine airplane and to develop instrument and emergency skills to a high level. Prerequisite: permission of instructor. Two credits: 20 clock hours.

## AVT 228 MULTI-ENGINE SIMULATOR III, SINGLE PILOT

To prepare the student for single pilot, multi-engine aircraft and operations. Course also can provide a comprehensive review for multi-engine rated pilots. Prerequisite: permission of instructor. One credit: 10 clock hours.

## AVT 235 FLIGHT ENGINEER-SYSTEMS

Course covers background and theory necessary to impart understanding of aircraft systems. One of two courses preparing the student for the FAA Flight Engineer written examination. Prerequisites: AVT 206 or permission of instructor. Six credits: 60 clock hours.

## AVT 236 FLIGHT ENGINEER - POWER PLANT

Course covers background and theory necessary to impart understanding of aircraft power plants. One of two courses preparing the student for the FAA Flight Engineer written examination. Prerequisites: AVT 206, or permission of instructor. Six credits: 60 clock hours.

## AVT 237 PROFESSIONAL PILOT PREPARATION

Designed to prepare Professional Pilot Program (PPP) students for entry into the job market as a professional pilot. Emphasis will be placed on professionalism in the cockpit. Prerequisite: AVT 206, or permission of instructor. Two credits: 20 clock hours.

## BIO: BIOLOGICAL SCIENCES

## BIO 105 SCIENCE OF BIOLOGY

Designed for non-science students. Examines the basis of biology in the modern world and surveys the current knowledge and conceptual framework of the discipline. Biology as a science-a process of gaining new knowledge-is explored as is the impact of biological science on society. This course includes laboratory experiences. Five credits: 40 hours lecture, 20 hours lab.

## BIO 106 FIELD BOTANY

Studies methods of collecting, preserving, and identifying plants. Three credits: 20 hours lecture, 20 hours lab.

## BIO 107 INTRODUCTORY NUTRITION

Basic principles involved in human nutrition with the relationships between nutrient intake and health. Enables students to judge the scientific validity of nutritional claims. Prerequisite: none. Five credits: 50 hours lecture.

## GENERAL COLLEGE BIOLOGY I, II, III

This sequence of courses is designed for students interested in the Life Sciences or Pre-Health Professions. It is recommended that students complete and transfer these courses as an aggregate.

## BIO 111 GENERAL COLLEGE BIOLOGY I

Examines the fundamental molecular, cellular and genetic principles characterizing plants and animals. Includes cell structure and function; energy, respiration and photosynthesis; mitosis and meiosis; developmental biology; heredity and evolution. This course includes laboratory experience. Prerequisites: 1 year of high school biology or BIO 105 or permission of instructor. Five credits: 40 hours lecture, 20 hours lab.

BIO 112 GENERAL COLLEGE BIOLOGY II
A continuation of Biology I. Includes classification of animals; structure and function, ecology, and evolutionary relationship. This course includes laboratory experience. Prerequisites: BIO 111. Five credits: 30 hours lecture, 40 hours lab.

## BIO 113 GENERAL COLLEGE BIOLOGY III

A continuation of Biology II. Includes classification of monera, protista, fungi, and plants; structure and function; ecology and evolutionary relationship. This course includes laboratory experience. Prerequisite: BIO 112. Five credits: 30 hours lecture, 40 hours lab.

## BIO 116 INTRODUCTION TO HUMAN HEREDITY

Introduction to the nature of inheritance with emphasis on humans. Includes autosomal dominants and recessives, $x$-linked inheritance, and chromosomal additions and deletions. Genetic screening and counseling, and facets of bioethics introduced by current genetic research will be considered. Prerequisite: None. Four or Five credits: 40 or 50 hours lecture.

## BIO 120 BASIC HUMAN ANATOMY AND PHYSIOLOGY

An introductory course in human anatomy and physiology which emphasizes the relationship between body structure and function. The laboratory portion includes microscopic study of tissue and selected dissections. Prerequisite: None. Five credits: 40 hours lecture, 30 hours lab.

## BIO 150 HUMAN SEXUALITY

A survey of the biological, psychosocial, behavioral, clinical and cultural perspectives of human sexuality with emphasis on anatomy, physiology, reproduction, contraception and developmental sexuality. Prerequisite: None. Three credits, 30 hours lecture.

## BIO 185 SPECIAL TOPICS IN BIOLOGY

Topics will reflect the special expertise of the faculty and/or the special needs of the students. Prerequisite: Consent of instructor. One to Six credits.

## HUMAN ANATOMY AND PHYSIOLOGY I, II, III

This sequence of courses is designed for students interested in the Life Science, Pre-Health or Pre-Nursing emphases. It is recommended that students complete and transfer these courses as an aggregate.

## BIO 201 HUMAN ANATOMY AND PHYSIOLOGYI

This course is an integrated study of the human body in which the histology, anatomy, and physiology of each system is covered. The first part of the three quarter sequence includes molecular, cellular, and tissue levels of organization, integuments, skeletal, and articulations. This course includes laboratory work involving experimental procedures, microscope work in visual histology, dissection and observation covering the same topics as the lecture. Prerequisite: High school biology or BIO 105 or BIO 120 or permission of instructor. High school chemistry or the equivalent is desirable. Five credits: 40 hours lecture, 30 hours lab.

## BIO 202 HUMAN ANATOMY AND PHYSIOLOGY II

This course is an integrated study of the human body in which the histology, anatomy, and physiology of each system is covered. The second part of the three quarter sequence includes muscular, peripheral, central and autonomic nervous systems, endocrine system, the senses, and digestion with nutrition. This course includes laboratory work involving muscular system dissection and physiology, nervous systems response measurements, microscope, observation, and experimentation covering the same topics as the lecture. Prerequisite: BIO 201. Five credits: 40 hours lecture, 30 hours lab.

## BIO 203 HUMAN ANATOMY AND PHYSIOLOGY III

This course is an integrated study of the human body in which the histology, anatomy, and physiology of each system is covered. The third part includes the following sysiems, cardiovascular with hematology, lymphatic, immunology, urinary with fluid and electrolyte balance, respiratory, reproductive with genetics and development. This course includes laboratory experience that involves experimentation, microscope, observation, and dissection. The lab covers the same topics as the lecture. Prerequisite: BIO 202. Corequisite: Valid CPR card or completion of PED 105. Five credits: 40 hours lecture, 30 hours lab.

## BIO 205 MICROBIOLOGY

Foundation course in microbiology emphasizing structure function, development and classification of organisms. Includes both procaryotic and eucaryotic micro-organisms. Emphasizes organisms with medical and economic impact on human populations including viruses. Major laboratory emphasis includes culturing, identifying, and controlling micro-organisms. Prerequisites: BIO 111 or BIO 201 or permission of the instructor. Five credits: 30 hours lecture, 40 hours lab.

## BIO 295 INDEPENDENT STUDY IN BIOLOGY

Provides an opportunity for the highly-motivated student with previous academic experience or work in biology to engage in intensive study and research of a specified topic under the direction of a faculty member. The student will be limited as to the number of independent study credits taken per quarter. Prerequisite: previous academic study or experience in biology. One to Three credits: contact advisor.

## BIS: BUSINESS INFORMATION SYSTEMS

(See Computer Information Systems)

## BUS: GENERAL BUSINESS

## BTE 100 TOUCH KEYBOARDING

This course is an introduction to touch keyboarding as well as basic operations and functions of equipment. Areas of emphasis include learning the alphanumeric keyboard, proper technique, and speed and control. This course is designed for the student who has minimal or no keyboarding skills. Formerly BUS 100 Keyboarding I. Four credits: 50 clock hours.

## BTE 102 BASIC KEYBOARDING APPLICATIONS

This course is designed for students with minimal keyboarding skills. Letters, tables, memos, and reports are introduced. Speed and accuracy is also emphasized. Prerequisite: BTE 100 or one year high school keyboarding and/or 40 wpm with five or fewer errors. Formerly BUS 102 Keyboarding II, Four credits: 50 clock hours.

## BTE 108 TEN KEY BY TOUCH

An introduction to touch control of the ten-key pad. This class emphasizes the development of speed and accuracy using proper technique. Formerly BUS 108 Computerized 10 -Key Touch Calculating. One credit: 15 clock hours.

## BTE 151 WORD PROCESSING I (WORDPERFECT)

This course is designed to provide instruction in the preparation of business documents for the modern office using basic software commands and functions. This includes originating, processing, and editing documents using Word Perfect. Prerequisite: Permission of instructor or BTE 102 with a grade of C or better. Formeriy BUS 151 Word Processing I (WordPerfect). Four credits: 50 clock hours.

## BUS 101 SPEED AND ACCURACYI

This is an individualized keyboarding course designed to increase speed and improve accuracy. Effective in helping students refresh their key-boarding skills. Additional lab hours will be needed. Prerequisite: BTE 100 or one year high school keyboarding class and/or keyboarding speed of more than 28 wpm with five or fewer errors. Formerly BUS 131 Keyboarding I. Four credits: 50 clock hours.

## BUS 103 ADVANCED KEYBOARDING APPLICATIONS

Further development of keyboarding techniques and use of electronic typewriters or personal computers. Emphasis on production of mailable copy of business letters, tabulations, business communication forms, and special reports. Prerequisite: BTE 102 or 50 wpm with five or fewer errors. Formerly BUS 103 Keyboarding III. Four credits: 50 clock hours.

## BUS 106 OFFICE SKILLSI

The basic objectives of this course include giving students fundamental skills, competencies, and confidence to enable them to succeed in a vocational setting. Whenever possible, the course will draw on available resource materials and/or persons available in the immediate vicinity of the Aims campus or its environs. Three credits: 30 clock hours.

## BUS 107 BASIC OFFICE PROCEDURES

A study of general business office duties and problems, job interviewing and application, business etiquette, reception and messenger work, mail handling, telephone technique, and filing. Prerequisite: BTE 100 or equivalent. Five credits: 50 clock hours.

## BUS 109 OFFICE SKILLS II

Review of basic keyboarding, filing procedures, communication, mailing procedures, human relations, personnel, use of duplicating processes, as well as other similar duties. Two credits: 30 clock hours.

## BUS 111 MULTIMEDIA BUSINESS PRESENTATION I

Students will develop knowledge of the components of a multimedia system and learn design and layout concepts for developing multimedia business presentations. Emphasis will be placed on developing business presentations utilizing multimedia technology to create overheads, handouts, and other business documents to help present data in a more meaningful and professional manner. Prerequisite: Previous computer experience recommended or permission of instructor. Two credits: 30 clock hours.

## BUS 112 MULTIMEDIA BUSINESS PRESENTATION II

Students will develop more extensive knowledge of multimedia technology by creating/designing a business slide presentation. Designed for students having completed Multimedia Business Presentation I. Prerequisite: BUS 111. Two credits: 30 clock hours

## BUS 114 LEGAL KEYBOARDING

Production practice in preparing legal documents and legal forms. Emphasizes keyboarding and spelling accuracy of legal terminology. Note: BUS 114 is to be taken concurrently with BUS 117.
Note: Successful completion of BUS 114 with a grade of C or better is a prerequisite to both BUS 118 Legal Machine Transcription and to BUS 211 Legal Office Procedures. Prerequisite: BUS 103 and BTE 151 (or BUS 181 and BUS 182) and 60 wpm keyboarding speed. Four credits: 50 clock hours.

## BUS 115 INTRODUCTION TO BUSINESS

A survey of the operation of the American Business System; fundamentals of the economy, careers and opportunities, marketing, management, production, governmental regulations, tools of business, and social responsibilities. Five credits: 50 clock hours.

## EUS 116 INTRODUCTION TO INTERNATIONAL BUSINESS

A foundation course introducing students to international business practices. Emphasis will be placed on world market competition and multi-cultural trade markets and the effect they have on foreign and domestic business operations. Five credits: 50 clock hours

## BUS 117 LEGAL TERMINOLOGY

A study of the language of law. Basic preparation for secretaries training to work in a legal office. Emphasizes understanding terminology as well as being able to spell and use terms correctly.
Note: Successful completion of BUS 117 with a grade of C or better is a prerequisite to BUS 118 and BUS 211. Five credits: 50 clock hours.

## BUS 118 LEGAL MACHINE TRANSCRIPTION

Students will learn to transcribe mailable and properly formatted copy from legal dictation, master legal terms, use proper grammar and spelling, proofread accurately and keyboard the legal forms and correspondence commonly used in legal offices. Prerequisite: BUS 114, BUS 117, and BUS 142. Four credits: 50 clock hours.

## BUS 121 ALPHA SHORTHAND I

This is an introductory course covering the theory of an alphabetic system of shorthand. Brief forms, theory, dictation speed, and transcription skills will be developed. Prerequisite: Permission of instructor or BUS 141 and BUS 100 or 30 wpm keyboarding speed. Five credits: 50 clock hours.

## BUS 126 PROOFREADING TECHNIQUES

This course will assist individuals in developing proofreading skills necessary to create error-free communications. Recommended for all office occupations majors. One credit: 10 clock hours.

## BUS 127 BUSINESS WORD USAGE

This course will assist individuals in developing business language skills necessary to create error-free communications. Recommended for all office occupations majors. Prerequisite: Permission of instructor or BUS 141. Three credits: 45 clock hours.

## BUS 128 KEYBOARDING FOR COMPUTERS

This course offers the opportunity to learn or improve keyboarding skills on a computerized keyboard. This course is intended for nonsecretarial majors. Two credits: 30 clock hours.

## BUS 129 TELEPHONE COMMUNICATIONS

This course gives students an orientation and hands-on training to develop effective telephone skills. These skills include communicating with difficult callers and presenting a business-like manner. One credit: 15 clock hours.

## BUS 131 SPEED AND ACCURACY II

This is an individualized keyboarding course designed to increase speed and improve accuracy. Effective in helping students refresh their keyboarding skills. Additional lab hours will be needed. Prerequisite: BTE 100 or one year high school keyboarding class and/or keyboarding speed of more than 28 wpm with five or fewer errors. Four credits: 50 clock hours.

## BUS 136 COMPUTERIZED PROOFREADING APPLICATIONS

Practical hands-on-experience of proofreading applications on the microcomputer. The student's proofreading skills will be improved through self-paced learning experiences delivered by computer software. Prerequisite: Permission of instructor or BUS 126. One credit: 15 clock hours.

## BUS 138 WORD PROCESSING FOR THE MACINTOSH

A beginning computer seminar for the MAC user in which students will learn to use basic word processing commands to produce reports and other assignments for communication classes, personal business letters, and other business and educational applications. Pre-approved elective for A.A., A.S., and A.G.S. degrees. One credit: 10 clock hours.

## BUS 139 YOU AND YOUR WORLD OF WORK

Students will be provided with the business skills necessary to select,critique, and evaluate position opening notices; to present themselves successfully in job interviews; to integrate themselves effectively into the world of work. As part of the course, students will learn office procedures commonly used in business, job interview skills, job maintenance skills, and communication skills necessary for success in the work environment. One credit: 8 clock hours.

## BUS 141 INTRODUCTION TO COMMUNICATIONS

Fundamentals of communication theory and practice. Includes a study of vocabulary, spelling, mechanics, parts of speech, sentence analysis, and dictionary usage as these principles apply to the business world. Written business communication will be introduced through computerized applications. Five credits: 50 clock hours.

## BUS 142 INTERMEDIATE COMMUNICATIONS

Students will develop more extensive vocabularies and learn parts of speech, sentence structure, punctuation, spelling, and word division as used in business communication. Practical application of principles learned will be demonstrated through the writing of business communications through computerized applications. Prerequisite: Permission of instructor or BUS 141 \& BTE 100 or BUS 128. Five credits: 50 clock hours.

## BUS 146 OFFICE INTERNSHIP

The office internship is a transition/capstone course that offers on-the-job experience in a business office. Designed for students with limited or no office work experience. Prerequisite: Permission of instructor and GPA of 2.75 or higher. Three credits: 90 clock hours.

## BUS 147 NOTETAKING AND ORGANIZATIONAL SKILLS

The student will learn an abbreviated, alphabetic, rapid-writing system. Emphasis will be placed on improved notetaking techniques, incorporating time management and organizational skills. The skills acquired can be applied to business, professional, and/or education endeavors. Five credits: 50 clock hours.

## BUS 150 INFORMATIONAL CONCEPTS FOR BANKERS

This course introduces students to the basics of computer operation, and, in particular, the skills necessary for the banking industry. Two credits: 20 clock hours.

## BUS 152 WORD PROCESSING II (WORDPERFECT)

A continuation course designed to provide students the opportunity to develop proficiency, speed, and independence in using WordPerfect word processing software and personal computers for production of business correspondence. Expand knowledge of office automation functions and procedures. Prerequisite: Permission of instructor or BTE 151 with a grade of $C$ or better. Four credits: 50 clock hours.

## BUS 155 RECORDS MANAGEMENT

Students will learn the nature and purpose of records and the need to implement and use rules to maintain up-to-date records and to retrieve records. Two credits: 20 clock hours.

## BUS 162 SHORTHAND II

Students will develop their ability to construct outlines for unfamiliar words and increase their skill in transcription. This course emphasizes the production of mailable letters from office-style dictation, reviews the theory of shorthand, and increases the students' shorthand reading speed. Prerequisite: BUS 121 and BUS 142 or previous shorthand. Five credits: 50 clock hours.

## BUS 165 HUMAN RELATIONS AT WORK

This course is a study of several topics including personal development and adjustment in business and industry, as well as attitudes and working relationships with co-workers and supervisors, so that the information learned will help organizations function in greater harmony. Five credits: 50 clock hours.

## BUS 171 BUSINESS LEADERSHIP ACTIVITIES <br> BUS 172 BUSINESS LEADERSHIP ACTIVITIES <br> BUS 173 BUSINESS LEADERSHIP ACTIVITIES

These courses are designed to encourage growth and development through activities in a student organization with professional goals. Two credits: 20 clock hours each.

## BUS 181 INTRODUCTION TO WORD PROCESSING

A beginner's level word processing class to be taught on various word processing programs (such as WordPerfect, MicroSoft Word, or MicroSoft Works) utilizing personal computers (such as IBM or Macintosh). Students will learn to use basic commands and functions used in producing various documents, including business letters, memos, reports, and tables. (This course may not be substituted for BTE 151 in Office Occupations degree requirements.) Prerequisite: Permission of instructor or BUS 128 and/or keyboarding skills of 20 wpm. Two credits: 30 clock hours.

## BUS 182 INTERMEDIATE WORD PROCESSING

A continuation (intermediate) word processing class to be taught on various word processing programs (such as WordPerfect, MicroSoft Word, or MicroSoft Works) utilizing personal computers (such as IBM or Macintosh). Students will have the opportunity to learn intermediate commands and functions used in producing various business documents. These commands will assist in producing applications utilizing search and replace, mail merge, columnar text formatting, move and copy, on header and footer features, and tables. (This course may not be substituted for BTE 151 or BUS 152 in Office Occupations degree requirements.) Prerequisite: Permission of instructor or BUS 181. Two credits: 30 clock hours.

## BUS 185 OFFICE INDEPENDENT STUDY <br> BUS 186 OFFICE INDEPENDENT STUDY <br> BUS 187 OFFICE INDEPENDENT STUDY <br> BUS 188 OFFICE INDEPENDENT STUDY <br> BUS 189 OFFICE INDEPENDENT STUDY

These courses provide the opportunity for the student to study a specific area or skill under the direction of a qualified faculty member. One to Five credits

## BUS 195 BOOKKEEPING PRACTICUM

This course provides students with the opportunity to apply basic bookkeeping theory by working through the bookkeeping cycle through the completion of a merchandising proprietorship practice set. Prerequisite: Permission of instructor or ACC 101. One credit: 15 clock hours.

## BUS 196 COMPUTERIZED BOOKKEEPING PRACTICUM

This course provides students with the opportunity to apply basic bookkeeping principles by working through the bookkeeping cycle through the completion of a merchandising proprietorship computerized practice set. Prerequisite: Permission of instructor or ACC 101 and BUS 195. One credit: 15 clock hours.

## BUS 197 COMBINED BOOKKEEPING PRACTICUM

This course provides students with the opportunity to review and apply basic bookkeeping theory by working through the completion of a merchandising proprietorship practice set manually and on the computer. Prerequisite: Permission of instructor or ACC 101. Three credits: 45 clock hours.

## BUS 204 MACHINE TRANSCRIPTION

Further development of keyboarding techniques as applied in machine transcription and in office-type situations (choice of general business or medical applications). Emphasis will be placed on production of mailable copy. Additional lab hours may be needed. Prerequisite: Permission of instructor or BUS 103, BUS 142, and BTE 151 and 55 wpm with five or fewer errors. Formerly BUS 104 Keyboarding IV. Four credits: 50 clock hours.

## BUS 206 INTRODUCTION TO BUSINESS TELECOMMUNICATIONS

This course presents the fundamental concepts of telecommunications, which primarily involves transmission of data from one location to another by way of computers. Prerequisite: CIS 118. Two credits: 30 clock hours.

## BUS 210 BUSINESS AND BANKING

This is an introductory course in finance with special emphasis on various types of financial institutions and the roles they play in the economy and society. Five credits: 50 clock hours.

## BUS 211 LEGAL OFFICE PROCEDURES

This course acquaints students with the tasks performed in a legal office and shows them how these tasks relate to the court system. Prerequisite: BUS 114 and BUS 117 both with a grade of C or better. Five credits: 50 clock hours.

## BUS 212 CAREER LEGAL SECRETARY

A comprehensive course designed for advanced-level students who desire to become legal secretaries. It is designed to meet the needs of a legal trainee by integrating previously acquired knowledge and applying it to a legal office. Prerequisite: BUS 211. Four credits: 50 clock hours.

## BUS 215 NALS LEGAL TRAINING I

This course is designed for the legal secretary who may perform the duties of a legal assistant; it assumes some knowledge of the law. Three credits: 33 clock hours.

## BUS 216 LEGAL ENVIRONMENT OF BUSINESS

The student will gain an understanding of the nature of the legal system from the standpoint of sources, philosophy, and relationship to ethics with emphasis on its application to business relations through government regulation. Five credits: 50 clock hours.

## BUS 217 BUSINESS COMMUNICATIONS AND REPORT WRITING

Students will develop communication skills to write with clarity and confidence. Students work toward precise, powerful business writing through computerized applications. The basic principles and practices of business letters, reports, memos, and oral communication are studied and applied. Prerequisite: Permission of instructor or BUS 142. Five credits: 50 clock hours.

## BUS 220 CPS REVIEW I

This is a review course highlighting six areas of business: business law, economics and management, accounting, behavioral science, office administration and communication, and office technology. It is designed to prepare the student for the Certified Professional Secretary Examination. Two credits: 20 clock hours.

## BUS 221 BUSINESS LAW

An introductory study of Business Law to include, but not restricted to, such topics as: foundations of the legal system, contracts, sales (UCC), agency, and property (real and personal). Five credits: 50 clock hours.

## BUS 222 CPS REVIEW II

This course is a continuation of BUS 220. Prerequisite: BUS 220. Two credits: 20 clock hours.

## BUS 225 NALS LEGAL TRAINING II

This course is a continuation of BUS 215 and is designed for the legal secretary who may perform the duties of a legal assistant; it assumes some knowledge of the law. Prerequisite: BUS 215. Three credits: 33 clock hours.

## BUS 231 LEGAL WORD PROCESSING

In this course the student will learn to use the word processor to prepare legal documents and legal correspondence from rough drafts and to further develop problem solving and proofreading skills. Students will gain production experience on word processing software. Prerequisite: BUS 114 and BTE 151. Four credits: 50 clock hours.

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Unique, customized training available to business and industry that provides workers and employers opportunities to update knowledge and skills. May include computer applications covering the latest office technology on state-of-the-art equipment. One-half to Five credits: 5 to 50 clock hours.

## BUS 241 INTEGRATED OFFICE PROCEDURES

A capstone course designed to simulate a typical business office. This class provides culminating, integrating experience in keyboarding, word processing, shorthand, communications, and interpersonal skills. Students will gain production experience on word processing equipment. Prerequisite: Permission of instructor or BUS 107, BUS 147, BTE 151, BUS 121, and BUS 204. Four credits: 50 clock hours.

## BUS 245 MEDICAL OFFICE PROCEDURES

A capstone course designed to simulate a typical medical office. This class provides a culminating, integrating experience in keyboarding, word processing, notehand, communications, and interpersonal skills in the medical office. Students will gain production experience on word processing equipment. Prerequisite: Permission of instructor or BUS 107, BUS 121, BUS 147, BTE 151, BUS 152, BUS 204, and HLH 131. Four credits: 50 clock hours

## BUS 246 MEDICAL MACHINE TRANSCRIPTION

Further development of keyboarding techniques as applied in medical machine transcription and in medical office situations. Emphasis will be placed on production of mailable copy. Additional lab hours may be needed. Prerequisite: Permission of instruction or BUS 103, BUS 142, BTE 151, and HLH 131and 55 WPM keyboarding speed with five or fewer errors. Four credits: 50 clock hours.

## BUS 255 ADVANCED WORD PROCESSING

An advanced-level continuation course designed for experienced users of word processing software. Emphasis of the curriculum includes desktop publishing applications of producing business correspondence, the math feature of tables, columnar text, and the sorting function. This includes production of documents utilizing the line draw feature, graphics, shading, horizontal and vertical rules, and multiple-column layout. (This course may not be substituted for BTE 151 or BUS 152 in Office Occupations degree requirements.) Prerequisite: Permission of instructor or BUS 182, with a grade of C or better. Two credits: 30 clock hours.

## BUS 256 DESKTOP PUBLISHING

An introductory course which provides the opportunity to learn basic software commands used in producing business correspondence, such as a company letterhead, sales flyer, business newsletter, and a three-panel brochure. Emphasis includes design and layout concepts which should be applied when integrating graphics and text in a document. The curriculum is taught using PageMaker 4.0 software, Windows 3.0, laser printers, and a laser scanner. Participants will apply these concepts through hands-on applications in the production of these business applications. Prerequisite: Touch keyboarding skills recommended. Two credits: 30 clock hours.

## BUS 257 MANAGING OFFICE TECHNOLOGY

An advanced-level office automation course utilizing integrated software applications. Students will explore the concepts of the cooperative computing environment and how office productivity is affected by modern technology. Prerequisite: Permission of instructor or BUS 152. Four credits: 50 clock hours.

## BUS 285 SECRETARIAL INDEPENDENT STUDY BUS 286 SECRETARIAL INDEPENDENT STUDY <br> BUS 287 SECRETARIAL INDEPENDENT STUDY <br> BUS 288 SECRETARIAL INDEPENDENT STUDY

These courses provide opportunities for the students to study a specific knowledge or skill under the direction of a qualified faculty member. One to Four credits.

## BUS 291 LEGAL INTERNSHIP

This course provides legal secretarial students with work experience in the legal field and prepares them to accept a position as a legal trainee. Prerequisite: BUS 211. Three credits: 90 clock hours

## BUS 296 BUSINESS HONORS

This course includes the presentation and discussion of topics of current interest to business persons. It will provide students the opportunity to discuss the issues with local and regional business leaders and individuals whose expertise will be of interest to business persons. Prerequisite: Business Division Advisor approval. Three credits: 30 clock hours.

## CHE: CHEMISTRY

## CHE 100 FUNDAMENTALS OF CHEMISTRY

A preliminary college chemistry course designed to be the basis of a thorough preparation for the higher level college chemistry courses which are required of science and engineering majors (CHE 111, 112, 113). The basic principles of chemistry are studied and may include classroom and laboratory studies of measurements, nuclear chemistry compounds, energy, elements, conversions, mole concept, gases, atomic structure, periodic table, chemical bonding, formulas, nomenclature, chemical equations, chemical anithmetic, acids, bases, pH and organic compounds. The laboratory exercises are designed to complement and reinforce lecture topics. Prerequisite: one year of high school algebra, MAT 100 or equivalent. Five credits: 30 hours lecture, 40 hours lab.

## CHE 110 INTRODUCTION TO INORGANIC CHEMISTRY

The first course in a three quarter chemistry sequence designed to meet the needs of allied health students. This course will introduce the student to the fundamental laws and theories of inorganic chemistry. Applications to health related areas will be stressed where appropriate. Prerequisite: One year high school algebra or MAT 100 or the equivalent. High school chemistry or is recommended. Five credits: 40 hours lecture, and 30 hours lab.

## GENERAL COLLEGE CHEMISTRY I, II, III

Students majoring in chemistry, chemical technology, biology, preveterinary medicine, pre-medicine, pre-dental medicine and prechiropractic medicine should complete this series as fulfillment of a full year of general chemistry. Pre-engineering requires all or part of this series. Each course includes an integrated lecture and laboratory study. It is recommended that students complete and transfer these courses as an aggregate.

## CHE 111 GENERAL COLLEGE CHEMISTRY I

Includes the study of measurements, atomic theory, chemical bonding, stoichiometry and gases. Also includes the problem solving skills and descriptive contents for these topics. Laboratory techniques used in the experiments will demonstrate the above concepts as well as the qualitative and quantitative analytical techniques involved in chemistry. Prerequisite: One year of high school chemistry or CHE 100. Intermediate Algebra (MAT 105) or consent of the instructor. Five credits: 30 hours lecture, 40 hours lab.

## CHE 112 GENERAL COLLEGE CHEMISTRY II

A continuation of CHE 111. Includes condensed states, solutions, thermodynamics, chemical kinetics, chemical equilibrium and organic chemistry. Also includes the problem solving skills and descriptive contents for these topics. The laboratory experiments will demonstrate both qualitative and quantitative analytical techniques using instrumentation where practical. Prerequisite: CHE 111 and MAT 121. Five credits: 30 hours lecture, 40 hours lab.

## CHE 113 GENERAL COLLEGE CHEMISTRY III

A continuation of CHE 112. Includes acid-base, ionic and solubility equilibrium, electrochemistry, and nuclear chemistry. Also includes the problem solving skills and descriptive contents for these topics. The laboratory experiments will includu qualitative elemental analysis of selected cations and anions, and demonstrate quantitative analytical techniques using instrumentation where practical. Prerequisite: CHE 112. Five credits: 30 hours lecture, 40 hours lab.

## CHE 115, 116 CHEMICAL TECHNOLOGY I

Consists of two modules: Gravimetric Analysis and Volumetric Analysis.

## CHE 115 GRAVIMETRIC ANALYSIS

Intensive laboratory oriented study of the methods and procedures of chemical analysis involving the use of a semi-micro analytical balance. Prerequisite: CHE 111 or permission of instructor. One credit: two hours lecture, sixteen hours lab.

## CHE 116 VOLUMETRIC ANALYSIS

Laboratory oriented study of the methods of chemical analysis through the use of pipets, burets and other volume measuring devices. Prerequisite: CHE 111 or permission of instructor. One credit: two hours lecture, sixteen hours lab.

## CHE 120 INTRODUCTION TO ORGANIC CHEMISTRY

The second course in a three quarter sequence designed primarily for the allied health student. The course content includes structures, nomenclature, and chemical properties of alkanes, alkenes, alkynes, aromatic molecules, alcohols, organic halides, ethers, epoxides, acids, aldehydes, ketones, heterocyclic and nitrogen compounds. Selected topics in the chemistry of molecules of biological interest also will be presented. Prerequisite: CHE 100 or CHE 110 or equivalent. Five credits: 40 hours lecture, 30 hours lab.

## CHE 185 SPECIAL TOPICS IN CHEMISTRY

Topics will reflect the special expertise of the faculty and/or the special needs of the students. Prerequisite: Consent of instructor. One to Six credits.

## CHE 210 INTRODUCTION TO HUMAN BIOCHEMISTRY

The third course of a three quarter sequence designed primarily for the allied health student. This course will introduce the student to the chemistry of living systems with emphasis on biochemical structures and the reactions involved in metabolic pathways. Applications to human disease processes will be introduced where appropriate. Prerequisite: CHE 120 or equivalent. Five credits: 40 hours lecture, 30 hours of lab.

## ORGANIC CHEMISTRY I, II, III

Students majoring in chemistry, chemical technology, biology, preveterinary medicine, pre-medicine, pre-dental medicine and prechiropractic medicine should complete this series as fulfillment of a full year of organic chemistry. Each course integrates laboratory and lecture.

## CHE 211 ORGANIC CHEMISTRY I

The topics in this course include structure and reactions of aliphatic hydrocarbons and selected functional group families. Nomenclature of organic compounds, stereochemistry and reaction mechanisms will be covered. The laboratory will demonstrate the above concepts and techniques. Prerequisite: CHE 112 or equivalent. Five credits: 30 hours lecture, 40 hours lab.

## CHE 212 ORGANIC CHEMISTRY II

The topics in this course include structure, reactions and reaction mechanisms of aromatic compounds and a continuation of functional group families from CHE-211. Instrumental methods of analysis, including Infra-Red and Nuclear Magnetic Spectroscopy are explored in both lecture and laboratory. The laboratory will demonstrate the above concepts and techniques. Prerequisite: CHE 201 or permission of instructor. Five credits: 30 hours lecture, 40 hours lab.

## CHE 213 ORGANIC CHEMISTRY III

The topics in this course include structure, reactions and reaction mechanisms of alcohols, carbonyls, acids and derivatives, and a continuation of functional group families from CHE-212. Introduction to the chemistry of heterocycles, and biologically related compounds will be covered as time permits. The laboratory will demonstrate the above concepts and techniques. Prerequisite: CHE 212 or permission of instructor. Five credits: 30 hours lecture, 40 hours lab.

## CHE 215, 216 CHEMICAL TECHNOLOGY II

Consists of two modules: UV-Visible Spectroscopy and Atomic Absorption Spectroscopy.

## CHE 215 UV-VISIBLE SPECTROSCOPY

Concentrated study of instrumentation, applications, and analysis in ultra-violet and visible absorption spectra. Prerequisite: CHE 112 or permission of instructor. One credit: two hours lecture, sixteen hours lab.

## CHE 216 ATOMIC ABSORPTION SPECTROSCOPY

Concentrated study of applications, theory, operation, and adjustment of instrumentation. Preparation of solutions and interpretations of analytical data. Prerequisite: CHE 112 or permission of instructor. One credit: two hours lecture, sixteen hours lab.

## CHE 225, 226 CHEMICAL TECHNOLOGY III

Consists of two modules: pH Millivolt Titrations and Specific Ion Electrodes and Gas Chromotography.

## CHE 225 SPECIFIC ION ELECTRODES

Intensive investigation of electrode construction for hydrogen ion and redox titrimetry. Theory and application of specific ion electrodes for both cation and anion analysis will be investigated. Prerequisite: CHE 112 or permission of instructor. One credit: two hours lecture, sixteen lab hours.

## CHE 226 GAS CHROMOTOGRAPHY

Instrument operation parameters, column selection and applications using internal and external standards will be investigated. Prerequisite: CHE 201 or permission of instructor. One credit: two hours lecture, sixteen hours lab.

## CHE 235, 236 CHEMICAL TECHNOLOGY IV

Consists of two modules: Infrared Spectroscopy and High Performance Liquid Chromatography.

## CHE 235 INFRARED SPECTROSCOPY

Concentrated study of instrumentation, sample preparation, applications and interpretation of infrared absorption spectra. Prerequisite: CHE 202 or permission of instructor. One credit: two hours lecture, sixteen hours lab.

## CHE 236 HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

Instrument operation parameters and applications will be investigated using various mobil phases and detectors. Prerequisite: CHE 112 or permission of instruciul. une credit: two hours lecture, sixteen hours lab.

## CHE 295 INDEPENDENT STUDY IN CHEMISTRY

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. The student will be limited to the number of independent study courses taken per quarter. Prerequisite: previous academic study or experience in chemistry. One to three credits: contact advisor.

# CIS: COMPUTER INFORMATION SYSTEMS 

## CIS 110 INTRODUCTION TO MICROCOMPUTER OPERATING SYSTEM: DOS

(Formerly BIS 138) This course introduces concepts, terminology, and skills in the use of a operating system. The emphasis will be on understanding and using an operating system in a practical way, in order to complement the student's use of application software on the microcomputer. Prerequisite: None. Three credits: 30 clock hours.

## CIS 116 LOGIC AND PROGRAM DESIGN

(Formerly BIS 110) This course is an introduction to the development of computer program design using the concepts of structured programming and logic. Topics include pseudocode and/or flowcharts, structure charts, and other current structure design tools. Five credits: 50 clock hours.

## CIS 117 COMPUTER OPERATIONS

(Formerly BIS 117) This course introduces the student to computer mainframe operating systems. Topics include problem solving techniques, data communication, job scheduling and report distribution. Prerequisite: CIS 116. Five credits: 50 clock hours.

## CIS 118 INTRO TO MICROCOMPUTER APPLICATIONS

(Formerly BIS 105) This course introduces standard software packages available to support a microcomputer-based work station. Included are descriptions of hands-on work with word processors, spreadsheets, file and database management systems, or other common application packages. Prerequisite: None. However, some touch typing skills or BUS 128 is recommended. Five credits: 50 clock hours.

## CIS 137 DESKTOP PUBLISHING: VENTURA

(Formerly BIS 215 or CIS 125) This course introduces the concepts and techniques of desktop publishing using VENTURA. Topics include text input, framing, filing, text editing, drawing, layout, and style modification. Prerequisite: None. Five credits: 50 clock hours.

## CIS 138 MICROCOMPUTER INTERFACES: WINDOWS

(Formerly BIS 115 or CIS 208) This course introduces the functions of WINDOWS. Demonstrates the use of the graphic-userinterface (GUI) showing the mechanisms of control and of file manipulation as well as program and graphic regulation. Prerequisite: None. Three credits: 30 clock hours.

## CIS 139 ADVANCED MICROCOMPUTER INTERFACES: WINDOWS

This course is a continuation of the study of Windows, a graphical user interface. Topics may include PIF files, OLE and DDE packages, network, multimedia and performance concepts. Prerequisite: CIS 138 or permission of instructor. Three credits: 30 clock hours.

## CIS 140 INTRODUCTION TO MICROCOMPUTER DATABASES

(Formerly BIS 115) This course introduces the functions of a database. It includes skills such as file creation, searches, sorts, simple editing, and indexing. Topics include use of the user interface provided by the software; design, creation, and maintenance of a database structure; creation and use of custom reports and screen displays; and criteria for selecting a database package for use in home or business. Five credits: 50 clock hours.

CIS 142 ADVANCED MICROCOMPUTER DATABASE: DBASE
(Formerly BIS 235) This continues to build on database application skills. Prerequisite: CIS 140. Five credits: 50 clock hours.

## CIS 160 BASIC LANGUAGE PROGRAMMING

(Formerly BIS 116 and CSC 101) This is an introductory course using the BASIC programming language. Topics include program design, input/output, loop control, string manipulation, subroutines,and arrays. Prerequisite: High School Algebra I or MAT 100 strongly recommended. Five credits: 50 clock hours.

## CIS 161 ADVANCED BASIC LANGUAGE PROGRAMMING

(Formerly CSC 102) Students will study advanced programming concepts and techniques using the BASIC programming language. Topics may include user-defined functions, subroutines, data editing and error handling, sequential and random access files, batch and interactive processing, and sound and graphic functions. Prerequisite: CIS 160 or permission of instructor. Five credits: 50 clock hours.

## CIS 165 RPG PROGRAMMING

(Formerly BIS 126) This is an introductory course using the Report Program Generator language. Topics include form specifications, calculations, indicators, comparisons, control breaks, headings, fetch overflow, arrays and tables, matching records, and file processing. Prerequisite: CIS 118 or CIS 116. Five credits: 50 clock hours.

## CIS 175 UNIX

(Formerly BIS 136) This course covers the structure and fundamentals of UNIX operating system. Topics covered will include the file system and file processing, various utility programs and shell, multi-user operation, memory management, text processing, and communications. Prerequisite: CIS 160 or permission of instructor. Five credits: 50 clock hours.

## CIS 185 SPECIAL TOPICS IN COMPUTER INFORMATION SYSTEMS

Topics will reflect the special expertise of the faculty and/or the special needs of the students. One to Six credits: 10 to 60 clock hours.

## CIS 245 DATABASE MANAGEMENT SYSTEMS

(Formerly BIS 111) This course introduces the principles of database management systems. Topics include relational, hierarchical, and network database structures, query commands, and command level programs. Students will examine current issues including model selection, database design, usage, implementation, and maintenance. Prerequisite: CIS 118. Five credit: 50 clock hours.

## CIS 250 LOCAL AREA NETWORKS (LAN)

This course will discuss how local area networks are used and when they are appropriate. Topics include: hardware and software alternatives, compatibility issues, network configuration, security issues, transmission media and methods. Prerequisite: CIS 118 or CSC 100 or permission of instructor. Three credits: 30 clock hours.

## CIS 251 LOCAL AREA NETWORK (LAN) ADMINISTRATION

This course introduces the student to the concepts and techniques of administering a LAN network. Topics include setting users/groups, directory structures, writing login scripts/menus, and network printer control. Prerequisites: (CIS 110 or CIS 175) and (CIS 250 or CIS 275) or permission of instructor. Five credits: 50 clock hours.

## CIS 252 MULTI-VENDOR NETWORKING

This course provides the practical information and guidance you need to plan and implement effective multi-vendor networks. The course will allow you to evaluate inter-networking solutions for a wide range of PC, mini computer, workstation and mainframe environments. Prerequisite: (CIS 110 or CIS 175) and (CIS 250 or CIS 275) or permission of instructor. Five credits: 50 clock hours.

## CIS 253 LAN SERVICE AND SUPPORT

This course introduces the student to the concepts and techniques of servicing a local area network. Topics include installing network interface cards, memory and storage devices, when to use bridges and routers, trouble shooting and diagnostics software. Prerequisite: (CIS 110 or CIS 175) and (CIS 250 or CIS 275) or permission of instructor. Five credits: 50 clock hours.

## CIS 260 COBOL PROGRAMMING

(Formerly BIS 221) This is computer programming in which the elements of the COBOL language are taught. Students will design, code, debug, and document solutions to a variety of businessoriented problems. Prerequisite: CIS 116 and CIS 160. Five credits: 50 clock hours.

## CIS 261 ADVANCED COBOL PROGRAMMING

(Formerly BIS 222) This course is a continuation of the study of the COBOL programming language. Emphasis will be placed on teaching students the more sophisticated capabilities of COBOL. Prerequisite: CIS 260 . Five credits: 50 clock hours.

## CIS 265 ASSEMBLY LANGUAGE PROGRAMMING (BAL)

(Formerly BIS 205) This is an introductory course using an assembly language. Topics include system organization, data representation, input/output, arithmetic, control structures and debugging techniques. Prerequisite: Any high level programming language. Five credits: 50 clock hours.

## CIS 275 TELECOMMUNICATIONS

This course introduces the student to the concepts of telecommunications/data communications. Topics include hardware devices, transmission characteristics, network configurations, codes and modes of transmission, software, and protocols. Prerequisite: CIS 118 or permission of instructor. Five credits: 50 clock hours.

## CIS 276 SYSTEMS ANALYSIS AND DESIGN

(Formerly BIS 211) This course introduces the student to the materials, techniques, procedures and human interrelations involved in developing a computerized information system. Topics covered include the systems approach, fact gathering techniques, form design, input/output, file design, file organization, various charting techniques, system audits and controls, project management, and implementation and evaluation. Students will complete a systems development project. Prerequisite: One programming language. Five credits: 50 clock hours.

## CIS 290 USER TRAINING I

This student will develop user training skills by assisting in an entry level CIS class or observing on the job in industry. Prerequisite: CIS 118 or CIS 160 or CIS 110. One credit: 20 clock hours.

## CIS 291 USER TRAINING ॥

The student will practice user training skills by assisting in an entry level CIS class or observing on the job in industry. Prerequisite: CIS 290. One credit: 20 clock hours.

CIS 292 JCL AND WRITING COMPUTER DOCUMENTATION
(Formerly BIS 112 AND BIS 137) IBM/OS Job Control Language will be presented; additionally, the student will learn to integrate the disciplines of computer programming and English by applying good writing techniques when documenting a computer system. Prerequisite: CIS 260 (can be taken concurrently). Five credits: 50 clock hours.

## CIS 296 NEW ISSUES AND DEVELOPMENT

(Formerly BIS 206) New hardware and software developments will be researched and presented in this course. In addition, this course will cover job search skills and oral presentation skills. Prerequisite: Sophomore status. Three credits: 30 clock hours.

## COM: COMMUNICATIONS MEDIA

## COM 112 INTRODUCTION TO MASS MEDIA

Students study the history, ethics, current problems, and practices of the mass media within the social system. Newspapers, radio and television broadcasting, and advertising are emphasized. Five credits.

## COM 113 INTRODUCTION TO RADIO BROADCASTING I

This course introduces basic radio principles and production techniques, including laboratory experience in the studio using microphones, mixers, cart machines, CD's and turntables. Five credits: four hours lecture, two hours lab per week.

COM 114 INTRODUCTION TO TELEVISION BROADCASTING I
This course introduces the video production field, including equipment, processes, and possible careers in the field. Students will operate TV cameras, microphones, audio mixers and video switchers, as well as face the camera in live-on-tape studio productions. Five credits: four hours lecture, two hours lab per week.

## COM 118 INTRODUCTION TO AUDIO PRODUCTION

This course introduces the audio production field, including equipment and processes. Students will operate studio recording equipment, including multi-channel recorders, effects processors and MIDI equipment, as well as write and produce various projects. Includes some voice work. Five credits: four hours lecture, two hours lab per week.

## COM 136 BROADCAST ANNOUNCING

This course introduces the field of broadcast announcing, including the techniques and proficiencies involved in announcing for radio and television. Students will acquire practice in announcing and narration with an emphasis on voice, diction, writing and performance. Three credits: two hours lecture, two hours lab per week.

## COM 210 NEWSWRITINGI

Students will learn the basic elements of newswriting and news editing primarily geared toward print publications. Inverted pyramid style writing is taught using the AP stylebook as a reference tool. This course focuses on non-biased news gathering and teaches organizational skills to assist writers in being thorough and nonjudgmental in their news reporting. Prerequisite: ENG 105 or permission of instructor. Five credits.

## COM 211 NEWSWRITING II

This course provides variety and real-life experience in newswriting opportunities and ethics, including on-the-scene newsgathering, dealing with deadline pressures, and developing checklists to strengthen newswriting skills. Broadcast joumalism is emphasized as it is compared and contrasted with print joumalism. Prerequisite: COM 210. Five credits.

COM 213 INTRODUCTION TO RADIO BROADCASTING II
The student will learn advanced concepts of radio broadcasting, such as copyrighting, advanced commercial production, newscasting, broadcast law and management. Prerequisite: COM 113. Five credits: four hours lecture, two hours lab per week.

## COM 214 INTRODUCTION TO TELEVISION BROADCASTING II

This course builds upon the fundamentals of COM 114, including advanced aspects of scripting, visualizing, producing and performing in original videotaped programs, including basic lighting and editing techniques. Prerequisite: COM 114. Five credits: four hours lecture, two hours lab per week.

## COM 241 CABLE TELEVISION PRODUCTION I

Students will synthesize knowledge and experience gained in Introduction to Television Broadcasting I in a real-life simulation of studio television production. The end product will be a weekly campus TV program. Prerequisite: COM 114. Five credits: four hours lecture, two hours lab per week.

## COM 242 CABLE TELEVISION PRODUCTION II

Students will produce regularly scheduled television programs as part of a production unit in a studio and remote shooting environment. The end product will be a weekly campus TV program. Prerequisite: COM 214 and COM 241. Five credits: four hours lecture, two hours lab per week.

## COM 245 BROADCAST COPYWRITING AND PRODUCTION

Students will learn the skills and techniques required of copywriters employed in radio, television, cable TV and advertising agencies. Prerequisite: COM 112. Five credits: four hours lecture, two hours lab per week.

## COM 260 BROADCAST SALES/MANAGEMENT

This course applies basic sales and management principles to radio, television, and cable operations; and address copyright law, promotion, research, broadcast ethics, and human relations in the work place. Through guest speakers from the broadcast industry and individual student projects, the course emphasizes realistic work situations. Prerequisite: COM 112. Five credits.

## COM 280 DESKTOP VIDEO PRODUCTION

This course consists of lecture/demonstration of desktop video production techniques, such as titling, animation, digitizing, genlocking, graphics production and special effects using the Amiga computer. Depending on emerging software, other topics, such as 3 D rendering, modeling, ray-tracing, color cycling, and transition effects will be covered. Prerequisite: None. Three credits: two hours lecture, two hours lab per week.

## COM 291 TV FIELD PRODUCTION

This course prepares students for production of professionalquality video programming. Students will have an opportunity to attain proficiency in single-camera remote videography, as well as postproduction editing and engineering considerations. Prerequisite: COM 214. Five credits: four hours lecture, two hours lab per week.

## COM 295 ADVANCED VIDEOTAPE EDITING

Content will include critical examinations and applications of aesthetic theory and practical "hands-on" technical editing strategies. Prerequisite: COM 291. Three credits: two hours lecture, two hours lab per week.

## COM 298 MASS MEDIA INTERNSHIP

This course affords Communications Media students an opportunity for actual on-the-job experience in specific areas within mass media. Prerequisite: COM 291 and permission of instructor. Five credits.

## COM 299 COMMUNICATIONS PRACTICUM

This course provides an opportunity for the serious-minded students to develop his or her skills in writing or producing programs or media materials under the direction of a faculty member. May be repeated at different levels of proficiency. Prerequisite: permission of instructor. One to three credits.

## COS: COMMUNICATIONS

COS 115 APPLIED COMMUNICATIONS
(This course will not satisfy minimum nor elective requirements for the A.A. or A.S. degree. Public Service and Trades \& Industry courses.) This course explores the communication process through a study of basic theory and principles of communication in man's social and working environment. Study will also include writing business letters, developing resumes, correctly filling out job applications, repair orders and other business forms and an introduction to oral communications. Three credits.

## CRJ: CRIMINAL JUSTICE

CRJ 110 INTRODUCTION TO CRIMINAL JUSTICE
A history and philosophy of the American criminal justice system; an overview of the crime phenomena; organization of federal, state, and local criminal justice agencies and their bureaucratic interaction. (Offered Fall Quarter.) Five credits: 50 clock hours.

## CRJ 111 THE POLICE FUNCTION

Police as agents of social control, the conflict generated by the demands of the "police subculture", society and the formal requirements of law. (Offered Winter Quarter.) Five credits: 50 clock hours.

## CRJ 112 THE JUDICIAL FUNCTION

This course examines the criminal court system and criminal process with an analysis of the major judicial decision-makers, i.e., prosecutors, defense attomeys, judges, and the discretionary aspects of adjudication. (Offered Winter Quarter.) Five credits: 50 clock hours.

## CRJ 113 THE CORRECTIONAL FUNCTION

An examination of the history and philosophy of correctional theory and practice. (Offered Spring Quarter.) Five credits: 50 clock hours .

## CRJ 114 COMMUNITY AND THE JUSTICE SYSTEM

A critical and interdisciplinary examination of the human influences on the justice system; special emphasis on the interrelationships and role expectations of criminal justice actors and society. (Offered Fall Quarter.) Five credits: 50 clock hours.

## CRJ 141 LEGAL RESEARCH/WRITINGI

Materials and methods of legal research and writing. After intensive consideration of the types of law books and their functions, students prepare written material of various kinds designed to develop both research technique and criminal justice writing style. (Outside research required.) (Offered Fall Quarter.) Two credits: 30 clock hours.

## CRJ 142 LEGAL RESEARCH/WRITING II

Materials and methods of legal research and writing. After intensive consideration of the types of law books and their functions, students prepare written material of various kinds designed to develop intermediate research technique and criminal justice writing style. (Outside research required.) (Offered Winter Quarter.) Prerequisite: CRJ 141. Two credits: 30 clock hours.

## CRJ 143 LEGAL RESEARCH/WRITING III

Materials and methods of legal research and writing. After intensive consideration of the types of law books and their functions, students prepare written material of various kinds designed to develop advanced research techniques. (Outside research required.) (Offered Spring Quarter.) Prerequisite: CRJ 141, CRJ 142. Two credits: 30 clock hours.

## CRJ 196 SEMINAR IN POLICE PRACTICES \& PROBLEMS

An examination of the changes and future trends regarding police procedures and practices; focus on critical issues and application of technology to the enforcement service. One credit: 10 clock hours.

## CRJ 197 SEMINAR IN POLICE PRACTICES \& PROBLEMS

An examination of the changes and future trends regarding police procedures and practices; focus on critical issues and application of technology to the enforcement service. Two credits: 20 clock hours.

## CRJ 198 SEMINAR IN POLICE PRACTICES \& PROBLEMS

An examination of the changes and future trends regarding police procedures and practices; focus on critical issues and application of technology to the enforcement service. Three credits: 30 clock hours.

## CRJ 199 SEMINAR IN POLICE PRACTICES \& PROBLEMS

An examination of the changes and future trends regarding police procedures and practices; focus on critical issues and application of technology to the enforcement service. Four credits: 40 clock hours.

## CRJ 201 CRIMINAL LAW

Development, implementation and sociology of criminal law. Examination of how and under what conditions behavior comes to be defined as criminal. (Offered Winter Quarter.) Prerequisite: CRJ 110, 111, 112, and 113. Five credits: 50 clock hours.

## CRJ 202 CONSTITUTIONAL LAW

A study of the powers of government as they are allocated and defined by the United States Constitution; intensive analysis of United States Supreme Court decisions. (Offered Fall Quarter.) Five credits: 50 clock hours.

## CRJ 203 CRIMINAL PROCEDURE

An intensive analysis of United States Supreme Court decisions interpreting the procedural and substantive protections of individual rights. (Offered Spring Quarter.) Prerequisite: CRJ 202. Five credits: 50 clock hours.

## CRJ 204 JUVENILE JUSTICE

A critical examination of the history and development of juvenile delinquency and the juvenile justice system. (Offered Winter Quarter.) Five credits: 50 clock hours.

## CRJ 205 CIVIL LAW/PROCEDURE

A survey of civil procedure and principles of evidence to familiarize students with the basic legal principles, constraints, and requirements for the conduct of civil litigation. (Offered Spring Quarter.) Five credits: 50 clock hours.

CRJ 211 SEMINAR: ISSUES IN POLICING
An in-depth analysis of the principles that could be used by peace officers to deal with crime and society. (Offered Fall Quarter.) Prerequisites: CRJ 111, or permission of instructor. Three credits: 30 clock hours.

## CRJ 212 SEMINAR: ISSUES IN CRIMINAL COURTS

A critical examination of social, psychological, and political variables upon the discretionary judgments of police, prosecuting attorneys, defense attorneys, judges, and jurors during the judicial function. (Offered Winter Quarter.) Prerequisites: CRJ 112, or permission of instructor. Three credits: 30 clock hours.

## CRJ 213 SEMINAR: CONTROVERSIAL ISSUES IN CORRECTIONS

A review of the history and present conditions regarding treatment of law violators. The conflict among rehabilitation, vengeance, and deterrent principles. Analysis of civil rights, racial antagonism, and politicalization in the contemporary American correctional system. (Offered Winter Quarter.) Prerequisites: CRJ 113, or permission of instructor. Three credits: 30 clock hours.

## CRJ 248 SEMINAR: THE ETIOLOGY OF CRIME

Examination of the question of crime causation from legal, social, political, psychological, and theoretical perspectives; history and development of criminology. (Offered Fall Quarter.) Three credits: 30 clock hours.

## CRJ 249 SEMINAR: DISCRETIONARY JUSTICE/ETHICS

The use of discretionary authority throughout all phases of the justice system and the influence of social psychological variables upon the justice actor's discretionary judgments; and the concept of "Peacemaking." (Offered Spring Quarter.) Five credits: 50 clock hours.

CRJ 250 ADVANCED OFFICER ACADEMY
To provide updated and refresher training for sworn peace officers at all levels. Four credits: 40 clock hours.

## CRJ 261 CRIMINAL JUSTICE PRACTICUM ("POLICE ACADEMY")

An intensive theoretical/practical introduction to law enforcement. Courses include: administration of justice, basic law, human relations, patrol procedures, traffic management, criminal investigation, firearms, written communications, driving techniques, and arrest control techniques. (Aims Basic Peace Officer Academy) Forty credits: minimum 450 clock hours .

## CRJ 296 SPECIAL ISSUES IN CRIMINAL JUSTICE

Forum for special course offerings focusing upon special issues in criminal justice by visiting instructors or regular faculty. Topics covered may change. One credit: 10 clock hours.

## CRJ 297 SPECIAL ISSUES IN CRIMINAL JUSTICE

Forum for special course offerings focusing upon special issues in criminal justice by visiting instructors or regular faculty. Topics covered may change. Two credits: 20 clock hours.

## CRJ 298 SPECIAL ISSUES IN CRIMINAL JUSTICE

Forum for special course offerings focusing upon special issues in criminal justice by visiting instructors or regular facult;'. Topics covered may change. Three credits: 30 clock hours.

CRJ 299 SPECIAL ISSUES IN CRIMINAL JUSTICE
Forum for special course offerings focusing upon special issues in criminal justice by visiting instructors or regular faculty. Topics covered may change. Four credits: 40 clock hours.

## CSC: COMPUTER SCIENCE

## CSC 100 THE COMPUTER AND SOCIETY

An introduction to computers, their application and their impact on our lives. Included is an overview of the history, the components, the terminology and uses of the computer. The hands-on lab exposes the student to a sampling of software and programming. Prerequisite: None. Five credits. 50 hours.

## CSC 105 INTRODUCTION TO PERSONAL COMPUTING

Developing programs for home and educational use is emphasized. Microcomputer terminology and concepts of disk handling including initializing, loading, saving, and deleting-are covered. Students will also develop specific criteria for evaluating software. The hands-on lab introduces the student to creating and modifying programs using the programming languages of BASIC and LOGO. (Credit will not be allowed for both CSC 101 and CSC 105; Computer Science students should take CSC 101.) Prerequisite: None. Two to Four credits: 10 to 30 lecture hours, 20 lab hours.

CSC 120 INSTRUCTIONAL COMPUTING IN THE CLASSROOM
Primarily designed for educators, this course will provide an introduction to computers and computerized teaching materials for a variety of fields. Use of the computer as an educational tool will be emphasized. Students will explore educational games, simulations, tutorials, and problem-solving programs and will learn to integrate these materials into their curricula. Computer managed instructional programs and word processing applications will also be presented. Prerequisite: None. Three or Four credits.

## CSC 148 FORTRAN PROGRAMMING

(Formerly CSC 201) Students will attain programming skills using the FORTRAN programming language. Topics include program design, data types, looping structures, formatted and unformatted input/output, array and matrix processing, character manipulations, functions and subroutines, and sequential and direct file applications. Prerequisite: One high-level language and algebra. Five credits, 50 hours.

## COMPUTER SCIENCE I; II, Part 1; II, Part 2

It is recommended that students complete and transfer this sequence as an aggregate.

CSC 160 COMPUTER SCIENCE I (PASCAL PROGRAMMING) (Formerly CSC 121) This course will introduce students to the discipline of computer science. Topics covered will include algorithm development, data representation, arithmetic and logical expressions, sub-programs and input/output operations using a structured programming language. Intensive computer laboratory activities are required. Prerequisite: One high-level language and algebra. Five credits, 50 hours.

## CSC 161 COMPUTER SCIENCE II, Part 1 (USING PASCAL)

(Formerly CSC 233) This course continues the structured algorithm development and problem solving techniques begun in Computer Science I. Students gaining experience in the use of data structures will be emphasized. Intensive computer laboratory experience required. Prerequisite: CSC 160. Five credits.

## CSC 162 COMPUTER SCIENCE II, Part 2 (USING PASCAL)

This course is a continuation of Computer Science II, Part 1. Topics include number representation, iterative approximation, file systems, data base models, and computer graphics. Prerequisite: CSC 161. Four credits, 40 hours.

## CSC 185 SPECIAL TOPICS IN COMPUTER SCIENCE

Topics will reflect the special expertise of the faculty and/or the special needs of the students. Prerequisite: Consent of instructor. One to Six credits.

## CSC 225 COMPUTER ORGANIZATION

(Formerly CSC 225 and CSC 226) This course introduces the student to the organization of a computer at the logic level. Topics covered will include numbering systems, digital logic, digital systems, machine level representation of data, assembly language programming, machine organization and memory system organization. Prerequisite: CSC 148 or CSC 160 or CSC 230. Six credits: 50 lecture hours and 30 lab hours.

## CSC 230 C LANGUAGE PROGRAMMING

(Formerly BIS 201) Students are introduced to the C Programming Language, which is a "mid-level" language whose economy of expression and data manipulation features allow a programmer to deal with the computer at a "low level." Prerequisite: CSC 160 or CIS 261 or permission of instructor. Five credits, 50 hours.

## CSC 231 ADVANCED C LANGUAGE PROGRAMMING

(Formerly BIS 202) This course continues the study of $C$ begun in CSC 230. Topics include pointers, arrays, linked lists, stacks and queues, trees and advanced user interfaces such as menus, windows and cursor control. Prerequisite: CSC 230 . Five credits, 50 hours.

## CSC 235 COMPUTER GRAPHICS PROGRAMMING

This programming course allows the student to experiment with graphic designs while learning proven techniques. Elementary figures, windows, clipping, shading and transformations will be covered. Prerequisite: CSC 160 or permission of the instructor. Five credits, 50 hours.

## CSC 240 ADA* PROGRAMMING

(Formerly CSC 232) The student will learn to program in ADA. Topics include: Overloading procedures/functions, the package concept, data types, scope and visibility, binding modes, variant records, discriminants, and tasking. *Registered trademark of U.A. Government (AJPO). Prerequisite: CSC 160 or CSC 230 or CSC 148. Five credits, 50 hours.

## CSC 265 PC ASSEMBLY LANGUAGE - PROGRAMMING

This course is designed to teach assembly language programming on the IBM/PC. Topics covered will include COM files, screen processing, string instructions, arithmetic (Binary/ASCII/BCD) operations, table processing and macros. Prerequisite: MAT 121 and CSC 161 or CSC 230.

## CSC 295 INDEPENDENT STUDY IN COMPUTER PROGRAMMING

Provides an opportunity for the experienced programming student to complete appropriate projects if interested. The student will be limited as to the number of independent study credits to be taken. Prerequisite: Previous computer programming courses or programming experience. One to Three credits: contact advisor.

## EAS: EARTH SCIENCE

EAS 100 FIELD STUDY OF ROCKS AND MINERALS
A study of the field characteristics of rocks and common rock forming minerals. Two credits: 10 hours lecture, plus two field trips.

## EAS 105 EARTH SCIENCE

Provides an understanding of the planet earth and its place in the universe. Includes general geology of the earth, weather and climate on the earth, and descriptive astronomy of the solar system. Five credits: 40 hours lecture, 20 hours lab.

## EAS 106 INTRODUCTION TO METEOROLOGY

Basic course in meteorology. Studies the atmosphere, its composition, thermal structure, pressure, humidity, wind, precipitation, clouds, and storm fronts. Practical aspects such as weather for flying, measurements of atmospheric conditions for weather prediction, and weather map analysis will be emphasized. Prerequisite: PHY 105 or equivalent. Four credits: 30 hours lecture, 20 hours lab.

## EAS 185 SPECIAL TOPICS IN EARTH SCIENCE

Topics will reflect the special expertise of the faculty and/or the special needs of the students. Prerequisite: Consent of instructor. One to Six credits.

## EAS 295 INDEPENDENT STUDY IN EARTH SCIENCE

Provides an opportunity for the highly-motivated student to engage in intensive study and research on a specified topic under the direction of a faculty member. The student will be limited as to the number of independent study credits taken per quarter. Prerequisite: previous academic study or experience in earth science. One to Three credits: Contact advisor.

## ECE: EARLY CHILDHOOD EDUCATION

ECE 101 INTRODUCTION EARLY CHILDHOOD EDUCATION
(Formerly ECE 100) This course is designed to introduce the student to the field of early childhood education including various philosophies, goals, and purposes for early childhood education programs developed for children ages birth through eight. The importance of child growth and development, services available to parents, what constitutes quality programs, curriculum, facilities, professional opportunities, and teacher competencies will be examined. Two credits: 20 clock hours.

## ECE 102 ECE LAB EXPERIENCE

(Formerly ECE 131) Child development principles are seen in a real life setting. Students will develop skills for observing and recording children's growth and development. Appropriate methods for guiding and interacting with young children will be examined. Three (3) hours per week required in observing lab preschool. Four credits: 50 clock hours.

## ECE 103 ECE LAB EXPERIENCE II

(Formerly ECE 132) A practical experience in a laboratory preschool designed to develop skills of an assistant teacher: planning activities for small groups of children; identifying and assessing appropriate techniques for guiding the activities and behaviors of young children. To be taken concurrently with ECE 115 or ECE 116. Prerequisite: ECE 102 or permission of instructor. Eight credits: 120 clock hours.

## ECE 104 ECE LAB EXPERIENCE III

(Formerly ECE 133) A continuation of ECE Lab Experience II. The student will plan implement and evaluate activities for all areas of the preschool classroom. Strategies for classroom management will be discussed. To be taken concurrently with ECE 115 or ECE 116. Prerequisite: ECE 103 or permission of instructor. Eight credits: 120 clock hours.

## ECE 115 CREATIVITY AND THE YOUNG CHILD

(Formerly ECE 141) The facilitation of children's creative expression and problem solving in music, movement, art, drama, literature, and other forms is considered in this course. Emphasis is on the ways to create a curriculum and maintain a classroom atmosphere and environment that allows creative expression and encourages and supports self-expression and creativity in individual children. To be taken concurrently with ECE 103 or ECE 104. Three credits: 30 clock hours.

## ECE 116 SCIENCE/MATH AND THE YOUNG CHILD

(Formerly ECE 148) Students will examine Piaget's theory of cognitive development as a framework for conceptualizing the way young children acquire scientific and mathematical skills, concepts, and abilities. Students will research and develop appropriate individual and group scientific/mathematical activities for young children. To be taken concurrently with ECE 103 and ECE 104. Three credits: 30 clock hours.

## ECE 151 EARLY CHILDHOOD LEADERSHIP DEVELOPMENTI <br> ECE 152 EARLY CHILDHOOD LEADERSHIP DEVELOPMENTII <br> ECE 153 EARLY CHILDHOOD LEADERSHIP DEVELOPMENT III

(Formerly ECE 111, ECE 112 and ECE 113)These courses encourage growth and development through activities in a student organization (Aims Association for the Education of Young Children) with professional goals. One credit: 10 clock hours.

## ECE 162 GUIDANCE TECHNIQUES FOR EARLY CHILDHOOD EDUCATORS

The student will study the components of the guidance system: the child, the adults and the physical environment. Theories will be explored to determine how to guide the child toward self-control and individual competence. Two credits: 20 clock hours.

## ECE 202 ECE LAB EXPERIENCEIV

(Formerly ECE 231) Students develop team teaching skills in the laboratory preschool or in a supervised early childhood classroom. Responsibilities include unit planning and organizing the classroom for effective learning. Emphasis is on the teacher as a team member. To be taken concurrently with ECE 205, 216 or 226. Prerequisite: ECE 104 or permission of instructor. Eight credits: 120 clock hours.

## ECE 203 ECE LAB EXPERIENCE $V$

(Formerly ECE 232) The emphasis of this course is the development of positive and constructive techniques for self appraisal and the appraisal of others as early childhood teachers. Responsibilities include supervisior, of others, unit planning, tracking children's development, parent teacher conferences, and leadership development. To be taken concurrently with ECE 205, 216, or 226. Prerequisite: ECE 202 or permission of instructor. Eight credits: 120 clock hours.

## ECE 204 FIELD EXPERIENCE

(Formerly ECE 233) Students will participate in a licensed group care setting for young children in an off campus setting. Responsibilities include unit planning, participation in regular classroom activities, staff meeting, parent activities, parent-teacher conferences, tracking children's developmental progress and other duties as assigned. Off campus supervisors must meet established criteria for supervising student teachers. Prerequisite: ECE 202 or 203 or permission of instructor. Eight credits: 120 clock hours.

## ECE 205 NUTRITION AND THE YOUNG CHILD

(Formerly ECE 204) This course provides parents and teachers with comprehensive nutritional information and its implications for the optimal growth and development of young children. Students will participate in planning meals and snacks appropriate to the needs of the young child. In addition, activities will be included for planning nutritional curricula for young children. Three credits: 30 clock hours.

## ECE 216 HUMAN RELATIONS FOR EARLY CHILDHOOD STAFFIADMINISTRATORS

(Formerly ECE 203) The focus of this course is on the human relations component of an early childhood educator's responsibilities. Topics include director-staff relationships, parent involvement, staff development, and leadership. Prerequisite: ECE 100 or permission of instructor. Three credits: 30 clock hours.

## ECE 226 ADMINISTRATION OF ECE PROGRAMS

(Formerly ECE 102) This course is designed to provide students in the field of early childhood education with the opportunity to examine and interpret Colorado's minimal requirements pertaining to the establishment and operation of centers for young children. Course content will focus upon site selection, policy formation, administrative forms, staffing needs and patterns, fiscal management, the selection of appropriate indoor and outdoor equipment, program development and evaluation, and administrative styles and techniques. Prerequisite: ECE 100 or permission of instructor. Three credits: 30 clock hours.

## ECE 227 METHODS/TECHNIQUES CURRICULUM DEVELOPMENT

(Formerly ECE 241) This course includes the overall and specific processes of planing appropriate learning environments, materials, and experiences that meet the developmental needs of individuals or groups of children from birth through age eight in a classroom setting. Prerequisite: ECE 115 or ECE 116. Two credits: 20 clock hours.

## ECE 238 CHILD DEVELOPMENT

(Formerly ECE 161) Designed for adults who work with young children, this course examines the theories and sequence of growth and development of children from birth through the early elementary school years. Emphasis is on the concept of the whole child and how adults can provide a supportive environment for positive interactions with children in the early childhood classroom. Five credits: 50 clock hours.

## ECO: ECONOMICS

## ECO 105 INTRODUCTION TO ECONOMICS

This course is a survey of economics. It is designed as a beginning economics class. The course covers how modern economics evolved, supply and demand, national income accounting, money and banking, market structures, and contemporary economics issues. Five credits.

## ECO 201 PRINCIPLES OF MACROECONOMICS

Studies the American economy, stressing the interrelationships among the household, business, and government sectors. Explores saving and investment decisions, unemployment, inflation, national income accounting, taxing and spending policies, the limits of the market and government, public choice theory, the Federal Reserve System, money and banking, and international trade. Five credits.

## ECO 202 PRINCIPLES OF MICROECONOMICS

Studies the firm in-depth, the nature of cost, and how those relate to the economy as a whole. Analyzes economic models of the consumer, perfect competition, monopoly, oligopoly, and monopolistic competition. Explores economic issues including market power, population growth, positive and negative externalities, income distribution, poverty and welfare, discrimination, and international economic interdependence. Five credits.

## EDU: EDUCATION

## BILINGUAL TEACHERS AIDE PROGRAM

## EDU 106 INTRODUCTION TO TEACHER AIDE: BILINGUAL EDUCATION

To provide the student with information on various aspects of organization and planning for instruction in bilingual education. Four credits.

## EDU 107 INTRODUCTION TO BILINGUAL EDUCATION

Students will develop an awareness of bilingual education; its history and current programs. Students will be required to review, select, and use materials applicable to the bilingual classroom. Also included will be development in the adoption of materials for use in a bilingual classroom. Three credits: 30 clock hours.

## EDU 108 FIELD EXPERIENCE IN BILINGUAL TEACHER AIDE PROGRAM

Exposure to actual on-the-job experience in a classroom setting. Five credits.

## EDU 109 METHODS OF TEACHING THE BILINGUAL

Bilingual teaching techniques used in reading, writing, spelling, language arts, arithmetic, social studies, and science will be emphasized as they relate to the role of the bilingual teacher aide. Five credits: 50 clock hours.

## EDU 111 PARAPROFESSIONALS IN THE CLASSROOM

Participants will focus on the roles and responsibilities of the Paraprofessional in the classroom setting. Learn the skills needed by the paraprofessional in order to become an effective educator. OneFive credits.

## EDU 219 ENGLISH AS A SECOND LANGUAGE METHODS

Students will learn the most current research and methodologies for teaching English as a second language (ESL) to Limited English Proficient students (LEP). Two credits.

EDU 237 TEACHING READING TO THE BILINGUAL CHILD
To emphasize the teaching of reading to Limited English Proficient (LEP) students. Course will cover methods and techniques. Three credits.

EDU 267 SELECTION AND EVALUATION OF BILINGUAL MATERIALS
Students develop an understanding of available resource materials for bilingual classroom and give them the skills necessary to evaluate the appropriateness of these resource materials. Three credits.

## EDU 276 LEARNERS WITH SPECIAL NEEDS

Provide students with background on various aspects of planning and teaching learners with special needs. Four credits.

## EDT: EDUCATION

EDT 204 DYNAMICS OF SINGLE PARENTING
(Formerly FLF 151) Designed to aide and support adults and children as they adjust to their roles as single parent families and to help educators understand the dynamics of single parent families. One to Three credits.

## EDT 207 COPING WITH LIFE CHALLENGES

Develop skills for coping with life situations by making a plan for survival and by using a learned optimism approach. One to Three credits.

## EDT 208 CHILDREN AND TV

An examination of the influence of Television on society with an emphasis on how T.V. affects children socially, emotionally and educationally. Focus on using T.V. for positive results. One to Three credits.

EDT 217 BEHAVIOR PATTERNS OF ADOPTED CHILDREN
Learn the insights into the causes of their behavior and learn ways for teachers and parents to deal with it. One to Three credits.

## EDT 225 SUBSTANCE ABUSE PREVENTION IN THE CLASSROOM

Examine and identify signs and symptoms in children where substance abuse is an issue for the student and/or family. One to Three credits.

## EDT 237 TEACHERS TO PARENTS: COMMUNICATIONS

 SKILLSA class for preschool-5th and Special Education teachers to develop communication skills and design effective parent programs. (Developed by Bea Romer's "First Impressions" Initiative) One to Three credits.

EDT 245 INTEGRATING DRAWING INTO THE CLASSROOM (GRADES 3-12)
Learn drawing skills and creative processes to develop lesson plans for the classroom. One to Three credits.

## EDT 256 TEAM BUILDING: CREATING A COOPERATIVE ENVIRONMENT

Discuss the meaning of "Team"; identify the necessary ingredients that make up a work "team"; diagnose "team problems"; and discover new strategies to effective "teamness." One to Three credits.

## EDT 266 CLASSROOM COMMUNITY MEETINGS

Help students become responsible, lifelong communicators and problem-solvers. Discuss guidelines, outcomes, benefits and simulates a community meeting. One to Three credits.

EDT 275 TECHNIQUES ADULT LEARNING
Acquire the ability to utilize a variety of techniques to instruct/facilitate learning in adults. One to Three credits.

## EDT 277 REACHING AND TEACHING ADHD CHILDREN

To identify the most common characteristics of Attention Deficit Hyperactive Disorder children and to provide several intervention strategies and educational management. One to Three credits.

## EDU: EDUCATION

EDU 129 DEVELOPING CAPABLE PEOPLE
Using the curriculum of Stephen Glenn, this class emphasizes the importance of helping children develop positive perceptions of themselves. One to Four credits.

## EDU 141 DYNAMICS IN STEP FAMILIES

Participants will increase their understanding of the dynamics of a blended family unit. One-half to Three credits.

## EDU 152 CHILD SEXUAL ASSAULT: AWARENESS, INTERVENTION \& PREVENTION

Participants will be able to identify signs and symptoms in children and adult survivors of childhood sexual abuse, and learn how to access appropriate resources for intervention. Awareness of this issue will lead participants to develop intervention and prevention strategies. One to Five credits.

## EDU 155 PERSONAL AND PROFESSIONAL ETHICS

To assist participants in identifying ethical dilemmas and issues. The class provides awareness of risks and rewards of ethical decision making and behavior. One credit.

## EDU 165 COPING WITH DIFFICULT PEOPLE

Participants will identify types of difficult people and develop effective strategies for coping with them. One to Three credits.

## EDU 167 FITNESS FOR LIFE

A class to help teachers facilitate personal decisions about lifetime fitness and exercise. One to five credits.

## EDU 175 THE TYPE E WOMAN

This class will help participants develop better balance in their lives and develop ways to reduce inner and outer pressures. One-half to Two credits.

## EDU 208 TURNING POINTS: TEEN SEXUALITY \& RELATIONSHIPS

To assist parents and teachers in communicating effectively with teenagers on sexual issues confronting teens today. One credit.

## EDU 216 SUICIDE: TEACHER AWARENESS <br> AND INTERVENTION

To develop an understanding of the incidence and impact of suicide, and how to implement an intervention program. (Second in a series of 3 classes on Suicide.) One credit.

## EDU 217 DEALING WITH TEENS (PART I)

Participants will learn the reasons for teen misbehavior and learn the appropriate responses. It will emphasize how to develop the teen's responsibility and enhance communication skills. One to Three credits.

EDU 223 CHILDREN'S ADJUSTMENT TO FAMILY SUICIDE
The course explores the dynamics felt by children whose Mom, Dad or family member have suicided. The content is geared to how adults, either surviving parents, or those working with the children, can respond to this traumatic event in a helpful and meaningful way. One to Three credits.

## EDU 225 CRISIS TEAM DEVELOPMENT FOR TEACHERS

Participants are encouraged to involve peers and administrators in their schools to develop a functioning crisis team within their own school. (Third in a series of 3 classes on Suicide.) One credit.

## EDU 229 CREATIVE CONFLICT MANAGEMENT

Designed to look at conflict as a dynamic that occurs within any family setting, and explore ways to deal meaningfully with it. One to Four credits.

## EDU 236 TRANSITIONS AND TRANSFORMATIONS

Participants will explore adult development and identify and integrate predictable issues and tasks arising at midilife. One to Three credits.

## EDU 238 CHILDREN OF DIVORCE

Explore the dynamics felt by children experiencing divorce, and look at ways for the adult world to deal with such dynamics. One credit.

EDU 245 POSITIVE RELATIONSHIPS BETWEEN MEN AND WOMEN IN THE WORKPLACE
Designed for women and men to reflect on their histories and look sensitively at their responses to one another, especially in the work setting. One credit.

## EDU 246 HOW TO TALK SO KIDS WILL LISTEN

For parents of children age 3 years and older. Reviews developmental expectations of the preschool and school age child with a focus on communication skills, discipline techniques, and fostering self-confidence and responsibility. One credit.

## EDU 247 ENRICHING THE CLASSROOM THROUGH FACILITATION AND GROUP SKILLS

Participants will gain an understanding of the role of the facilitator in leading a group through problem solving models, and learn skills for bringing a group to consensus. One to Three credits.

## EDU 248 SELF-ESTEEM FOR CHILDREN

An overview of the origin and development of self worth in individuals within the family. Different parenting styles will be explored to determine the impact of each style on the child's self-esteem. Techniques and skills for fostering positive self-esteem will be presented. One credit

## EDU 253 HUMAN DEVELOPMENT TRAINING

Participants will examine very early influences on development and the impact on learning. Other developmental issues and characteristics that impact the teacher/learner process will be explored. One to Five credits.

## EDU 258 ISSUES OF SELF ESTEEM FOR TEENS

An overview of adolescent issues and tasks that will emphasize the impact of self esteem as an important component of health, growth and development of teens. Prerequisite: EDU 217. One to Three credits.

## EDU 260 THE GIFTED STUDENT

Understand the types of gifted students and understand the instructional and guidance procedure for working with the gifted. Two credits.

## EDU 264 COOPERATIVE LEARNING

Show your students how to interact productively within a structured setting. One to Four credits.

## EDU 268 CLASSROOM MANAGEMENT

This class provides basic knowledge and understanding of the skills that are necessary for effective classroom instruction and practical applications of theory to real problems. One to Three credits.

## EDU 269 THE ASSERTIVE LIFESTYLE

To learn and practice how to stand up for one's rights without infringing upon the rights of others, through direct, honest and appropriate behavior. One credit.

## EDU 275 INTERCULTURAL COMMUNICATION IN THE CLASSROOM

Explore the various differences in the way that people from various cultures communicate. One to Three credits.

## EDU 281 PRINCIPLES OF LEARNING FOR EDUCATORS

Participants will become familiar with different perspectives on learning and review applications of different theories for the classroom. One to Five credits.

EDU 282 LOVE AND LOGIC IN THE HOME \& CLASSROOM
Based on Foster Cline/Jim Fay's book and tapes, this class will help adults teach children to make good choices without power struggles. One to Five credits.

## EDU 283 HABITS OF HIGHLY EFFECTIVE PEOPLE

Participants will use principles of faimess and integrity to develop the seven habits common to highly effective people. One to Four credits.

EDU 286 BUILDING HEALTHY FAMILIES: THE WORLD ACCORDING TO JOHN BRADSHAW
After viewing the John Bradshaw videos on the family, participants will identify the major problems that families face today and learn how to become healthy functioning systems. One credit.

## EDU 288 USING NEWSPAPERS IN THE CLASSROOM

This class will feature the newspaper as a teaching tool in the classroom with activities tailored to individual teaching situations. One credit.

## ELT: ELECTRONICS TECHNOLOGY

## ELT 100 SURVEY OF ELECTRONICS

(This course will not satisfy minimum or elective credit for the AAS degree.) Introduces the wide range of opportunities in electronics. Provides hands on experience in the areas of test equipment operation, circuit fabrication and testing, troubleshooting, and computer programming. Two credits: 32 clock hours

## ELT <br> 109 ELECTRONICS TECHNOLOGY SEMINARI <br> ELT 119 ELECTRONICS TECHNOLOGY SEMINAR II <br> ELT 129 ELECTRONICS TECHNOLOGY SEMINAR III

These courses will cover current and advanced topics in industrial electronics. Prerequisite: permission of instructor.
ELT 109: One credit: 10 clock hours
ELT 119: Two credits: 20 clock hours
ELT 129: Three credits: 30 clock hours

## ELT 144 DIGITAL FUNDAMENTALS I

Study of digital fundamentals beginning with the block diagram of a general purpose digital computer. Includes number systems, IC gates, Boolean algebra, flip-flops and applications including arithmetic circuits. Some software attention. Reference is made to systems (a microprocessor) at appropriate points. Prerequisite: ELT 153 or permission of instructor. Five credits: 60 clock hours.

## ELT 150 DC FUNDAMENTALS

Analysis, construction and measurement procedures for series and parallel DC circuits. Theory and practice of interconnection methods. Prerequisite: ENT 100, and ENT 116 (or may be taken concurrently) and qualifying assessment scores. Five credits: 60 clock hours.

## ELT 151 DC FUNDAMENTALS II

Continuation of ELT 150. The application of basic fundamentals and the study of their functional characteristics, DC complex circuits and circuit theorems. Prerequisite: ELT 150 or permission of instructor. Five credits: 60 clock hours.

## ELT 152 AC FUNDAMENTALSI

A study of passive circuits emphasizing analysis of AC and time varying conditions. Students develop practical measurement and analysis skills and become more aware of systems applications. Prerequisite: ELT 151 or permission of instructor. Five credits: 60 clock hours.

## ELT 153 AC FUNDAMENTALS II

Continuation of ELT 152. The study of reactive component analysis, AC power circuits and resonance. Prerequisite: ELT 152 or permission of instructor. Five credits: 60 clock hours.

## ELT 154 SOLID STATE CIRCUITS I

Introduction to active circuits. Development of analytical and graphic tools for practical applications to commonly encountered solid state circuits. Attention to measurements and troubleshooting. Prerequisite: ELT 153 or permission of instructor. Five credits: 60 clock hours.

## ELT 155 SOLID STATE CIRCUITS II

Continuation of ELT 154. Extends development of analytical tools to increasingly complex solid state circuits including a variety of integrated circuits and solid state devices. Prerequisite: ELT 154 or permission of instructor. Five credits: 60 clock hours.

## ELT 201 DIGITAL FUNDAMENTALS II

Continuation of hardware and software elements of digital machines. Counters, registers, ROM, RAM and reference to systems (microprocessor) continues. Prerequisite. ELT 144 or permission of instructor. Five credits: 60 clock hours.

## ELT 202 MICROPROCESSORS I

Microprocessors are employed to obtain systems experience and application of fundamentals. Involves hardware and software studies and trade-offs between hardware/software. Organization of a microprocessor; clock, CPU, I/O, bus concepts, EPROM, RAM, programming and peripherals. Prerequisite: ELT 201 or permission of instructor. Five credits: 60 clock hours.

## ELT 203 MICROPROCESSORS II

Review of microprocessor fundamentals and special studies in computer systems DIG and analog interfacing, data communications and network systems. Prerequisite: ELT 202 or permission of instructor. Five credits: 60 clock hours.

## ELT 209 ELECTRONICS TECHNOLOGY SEMINAR IV <br> ELT 219 ELECTRONICS TECHNOLOGY SEMINAR V <br> ELT 229 ELECTRONICS TECHNOLOGY SEMINAR VI

These courses will cover current and advanced topics in industrial electronics Prerequisite: permission of instructor.
ELT 209: One credit: 10 clock hours
ELT 219: Two credits: 20 clock hours
ELT 229: Three credits: 30 clock hours

## ELT 223 INDUSTRIAL ELECTRICITY II

To provide a working knowledge of motors, generators, industrial wiring, and production line electricity maintenance. Prerequisite: ENT 107 or permission of instructor. Five credits: 60 clock hours.

## ELT 224 PROGRAMMABLE LOGIC CONTROLLERS

A study of programmable logic controllers (PLC's) and associated I/O devices, design logic diagrams and program controllers. Prerequisite: ELT 255, ELT 276 or permission of instructor. Five credits: 60 clock hours.

## ELT 255 LINEARICS AND SENSORS

Studies linear integrated circuits (especially operational amplifiers). Stresses analysis of commonly encountered applications. Some attention given to sensors and actuators. Prerequisite: ELT 155 or permission of instructor. Five credits: 60 clock hours.

## ELT 266 ELECTRONIC DESIGN AND FABRICATION

Provides a working knowledge of electronics layout, design, and fabrication technique along with print reading and documentation encountered in the industry. Prerequisite: ELT 255, ELT 271, and ELT 201. Five credits: 60 clock hours.

ELT 268 PRACTICAL SOLID STATE TROUBLESHOOTING
A logical approach to troubleshooting modern, solid-state equipment. Lab and industrial systems are stressed. Also covers some electronics used in homes. Prerequisites: ELT 202, ELT 255, \& ELT 272 or permission of instructor. Five credits: 60 clock hours.

## ELT 271 ELECTRONIC COMMUNICATIONS I

Detailed analysis of fundamental circuits of communication systems. Emphasizes mathematical understanding of circuit action and theoretical concepts. Laboratory experiments complement lecture/demonstration. Prerequisite: ELT 155 or permission of instructor. Five credits: 60 clock hours.

## ELT 272 ELECTRONIC COMMUNICATIONS II

Systems approach will be major emphasis as individual circuits studied previously will be combined in complete systems. Modulation modes, transmission lines, and antennas are studied along with methods that enhance information transmission from point to point. Laboratory experiments are included. Prerequisite: ELT 271 or permission of instructor. Five credits: 60 clock hours.

## ELT 273 ELECTRONIC COMMUNICATIONS III

Advanced topics in Electronic Communications are studied. This includes data communications and telecommunications techniques; microwave generation and transmission; vacuum tube, telephone system, antennas and networking theory and applications; satellite technology and global communications, and FCC regulations. Prerequisite: ELT 272 or permission of instructor. Five credits: 60 clock hours.

## ELT 275 INTEGRATED CIRCUIT FABRICATION TECHNIQUES

Provides students with a general view of manufacturing processes. Topics include physics of semiconductors, materials used, processes including photolithography, diffusion/vacuum systems, device recognition, and data acquisition. Field trips are included. Prerequisites: ELT 255, CIS 160, and ELT 201 or permission of instructor. Five credits: 60 clock hours.

## ELT 276 AUTOMATION CONTROL CIRCUITS

Provides the student with general control terminology, theory and application in the areas of motors, motor control, sensors, and closed loop control theory. Prerequisites: (ELT 255, ELT 144) or ENT 108, or permission of instructor. Five credits: 60 clock hours.

## ELT 277 VIDEO SYSTEMS

Video and sweep sections of video monitors and televisions will be studied. Included will be cathode ray tubes, high and low voltage power supplies, color circuits and the NTSC color system. Prerequisites: ELT 155 or permission of instructor. Five credits: 60 clock hours.

## ELT 278 CET EXAM PREPARATION

Introduction and preparation for the Certified Electronics Technician exam with emphasis on the Associate level exam. Prerequisite: permission of instructor. Five credits: 60 clock hours.

## ENG: ENGLISH COMMUNICATIONS

*Indicates instruction is administered by Developmental Studies Division.

## *ENG 012 DEVELOPMENTAL WRITING II

The purpose of this course is to improve the student's ability to communicate well in writing. This course emphasizes (a) using and spelling words correctly and (b) writing sentences correctly in regard to sentence structure and punctuation. Prerequisite: placement. Two to Five credits.

## *ENG 013 DEVELOPMENTAL WRITING III

The purpose of this course is to improve the student's ability to communicate well in writing. This course emphasizes (a) writing sentences correctly in regard to sentence structure and punctuation and (b) writing effective paragraphs. Prerequisite: placement. Two to Five credits.

## *ENG 014 DEVELOPMENTAL WRITING IV

The purpose of this course is to improve the student's ability to communicate well in writing. This course emphasizes (a) writing effective paragraphs and (b) writing effective essays. Prerequisite: placement. Two to Five credits.

## *ENG 015 BASIC WRITING SKILLS

The purpose of this course is to improve the student's ability to communicate well in writing. This course emphasizes (a) writing effective essays and (b) preparing for the GED Writing Test and college level writing tasks. Prerequisite: placement. Two to Five credits.

## *ENG 095 BASIC COMMUNICATION SKILLS

This is a transition course for students who have a high school diploma or its equivalent but who have a limited background in basic language skills. The course is a survey of basic grammar, punctuation, sentence structure, and paragraph development. Prerequisite: placement. Five credits.

## ENG: ENGLISH (COMPOSITION)

ENG 100 COMPOSITION STYLE AND TECHNIQUE
This course introduces academic writing with an emphasis on writing process, information sources, and organization and development of written assignments for specific purposes and audiences. Students will examine composition techniques, including language fluency, effective diction, and appropriate sentence, paragraph, and essay structure. Grammar review, including mandatory writing lab work on grammar software, is a significant component of the course. Proficiency in essay writing and competence in language skills are required for a passing grade, and students must earn a " C " or better in ENG 100 before they will be admitted to ENG 121. Students must also pass an exit essay with a " C " or better to earn course credit.
Note: ENG 100 is a non-transferable course that carries credit only toward occupational degrees and certificates. Prerequisite: ENG 095 or placement test. Five credits.

## ENG 111 WRITING YOUR LIFE I

This course is designed to encourage participants to write about their own life experiences and to produce a personal life history for themselves and future generations. One to Two credits.

## ENG 112 WRITING YOUR LIFE ॥

This class is designed for participants to continue writing their life experiences and to produce a personal life history for themselves and future generations. One to Two credits.

## ENG 113 WRITING YOUR LIFE III

To continue writing life experiences and to produce a personal life history for participants and future generations. One to Two credits.

## ENG 114 WRITING YOUR LIFE IV

Class time will be spent editing previously written autobiographical stories, printing, learning publishing possibilities and completing the project. One to Two credits.

## ENG 121 ENGLISH COMPOSITION I

This course emphasizes the planning, writing, and revising of compositions and develops critical and logical thinking skills. This course will include a minimum of five (5) compositions, which may include expressive, informative, analytical, evaluative, and persuasive/argumentative writing. Proficiency in essay writing is required for a passing grade, and students must have a " C " or better in ENG 121 before they will be admitted to ENG 122. Prerequisite: ENG 100 or placement test. Five credits.

ENG 122 ENGLISH COMPOSITION II
This course expands and refines the objectives of English Composition I. ENG 122 emphasizes critical and logical thinking, problem definition, research strategies, and writing analytical, evaluative, and/or persuasive papers that incorporate research.
NOTE: This course requires that papers be written with the aid of a computer, so students must have adequate keyboarding skills. Prerequisite: ENG 121. Five credits.

## ENG 221 CREATIVE WRITING I

This course teaches techniques for creative writing. Students explore imaginative uses of language through writing short stories, drama, poetry, and/or literary nonfiction. Prerequisite: Permission of instructor. Five credits.

## ENG 222 CREATIVE WRITING II

This course continues development of written expression in such forms as poetry, fiction, and/or nonfiction writing. Prerequisite: ENG 221 or permission of instructor. Five credits.

## ENG 225 ADVANCED COMPOSITION

This course offers students the opportunity to study the styles of professional writers in order to refine students' writing skills. Students will study advanced techniques in essay and article writing. Prerequisite: ENG 121. Five credits.

## ENG 227 CREATIVE WRITING PROJECTS I

This course provides the student with instruction on how to write creatively by working on individual writing projects in the development of some poetry, short stories, or a novel. Prerequisite: ENG 221 or permission of instructor. Three credits.

## ENG 228 CREATIVE WRITING PROJECTS II

A continuation of ENG 227. Prerequisite: ENG 227 or permission of instructor. Three credits.

## ENG 229 CREATIVE WRITING PROJECTS III

A continuation of Creative Writing Projects II, with the addition of more advanced goals. Prerequisite: ENG 228 or permission of instructor. Three credits.

## ENG 295 INDEPENDENT STUDY IN COMMUNICATION

Independent study provides an opportunity for the serious minded student to engage in intensive study and research on a specified topic under the direction of a faculty member. (This course is repeatable as long as content varies.) Prerequisite: ENG 121, permission of an instructor required. One to Three credits.

## ENGINEERING TECHNOLOGY ENT: ENGINEERING TECHNOLOGY

ENT 100 INTRODUCTION TO TECHNOLOGY
Provides introductory information on safety, computers and the disk operating system. career planning, program courses and time frame of study concerning Engineering and Electronic Technologies; i.e. Architectural/Civil, Drafting/Design, Computer Aided Manufacturing, General Electronics, and Automated Process Technician. SHOULD BE TAKEN FIRST QUARTER OF ENROLLMENT IN EITHER THE ENGINEERING OR ELECTRONIC PROGRAMS. MUST BE COMPLETED PRIOR TO ENROLLMENT IN THIRD QUARTER OF PROGRAM. Prerequisite: None. One credit: 15 clock hours.

## ENT 101 TECHNICAL PRINT READING

A printreading approach to understanding of technical/engineering drawing concepts. coverage will include concept of scales, orthographic projection, section views, auxiliary views, fasteners, pictorials, basic dimensioning and tolerancing, basic symbols and assembly drawings. Prerequisite: None. Three credits: 40 clock hours.

## ENT 102 TECHNICAL DRAWING CONCEPTS

A freehand technical sketch approach to technical drawing, intended to familiarize the student with applications of the basic concepts and techniques of the engineering language. Applications will include orthographic projection, geometric construction, scales, lettering, section and auxiliary views, fasteners, dimensions and tolerance, detail and assembly sketches. Prerequisite: ENT 101, or equivalent course or experience. Three credits: 40 clock hours.

## ENT 103 DRAFTING FUNDAMENTALS I

Initial development of manual drafting skills in the area of drafting tools, equipment and templates, understanding and application of ANSI standards and concepts to detail drawings, application of basic dimensions and tolerances. Prerequisite: ENT 101, ENT 102, and ENT 115 or equivalent courses or experience. Two credits: 30 clock hours.

## ENT 104 DRAFTING FUNDAMENTALS ॥

Continued development of manual drafting skills: application of ANSI standards and concepts to detail drawings utilizing threads and fasteners, auxiliary and section views, applications to pictorial views and assembly views. Prerequisite: ENT 101, 102, 103 and 115 or equivalent courses or experience. Two credits: 30 clock hours.

## ENT 105 BASIC FIELD SURVEY

A study of basic surveying equipment, manual calculations, computer computations, and note forms derived during field survey operations. Proficiency in fundamental survey techniques and the daily care and maintenance of survey equipment will be stressed. Prerequisite: ENT 116. Six credits: 80 clock hours.

## ENT 106 ENGINEERING MATERIALS: CIVIL

A study of basic principles, analysis, design, and application of materials used in civil engineering with an emphasis on soils, concrete, and asphalt. The course will also include the study of soils, concrete, and asphalt testing. Prerequisite: ENT 111 or equivalent. Three credits: 40 clock hours.

## ENT 107 INDUSTRIAL ELECTRICITY I

Basic concepts of electrical circuits, safety, equipment applications and troubleshooting are studied. Prerequisite: ENT 116 or instructor permission. Five credits: 60 clock hours.

## ENT 108 ELECTRONICS FOR ENGINEERING

 TECHNICIANSA study of basic concepts of industrial electronics with an emphasis on circuits. Prerequisite: ENT 107 or instructor permission. Five credits: 60 clock hours.

## ENT 111 ENGINEERING MATERIALS

Materials of industry are studied from the properties and applications viewpoint with emphasis on ASTM Standards and Testing as applied to woods, metals, plastics, and concrete. Prerequisite: ENT 116. Three credits: 40 clock hours.

## ENT 112 MANUFACTURING PROCESSES

A study of manufacturing processes that use metals, plastics, and other common materials. Prerequisite: ENT 116. Four credits: 50 clock hours.

## ENT 113 ARCHITECTURAL PRINTREADING

An introduction to construction document interpretation: standard abbreviations, symbols and notation, methods and techniques used to define and differentiate the different parts of a drawing set. Introduction to architectural lettering styles. Introduction to architectural and civil scales and scale use. Prerequisite: None. Four credits: 50 clock hours.

## ENT 114 INTRODUCTION TO ARCHITECTURAL DRAFTING

An introduction to architectural dratting through development of basic skills in planning, layout and drawing of residential architecture. Students are guided through a series of exercises starting with construction materials and techniques. Introduction to the Uniform Building Code (UBC). Course culminates with a set of residential drawings using pencil on vellum and a word processed code review. Prerequisite: ENT 102, 103, 113 and 115 or equivalent courses or experience. Four credits: 50 clock hours.

## ENT 115 INTRODUCTION TO TECHNICAL MATHEMATICS

A review of basic mathematics operations and applications to practical problems. Emphasizes word problem solutions. Includes fractions, percentages, ratios and proportions, weights and measures, unit conversions, roots and powers, and an introduction to algebra and practical applications. Prerequisite: Qualifying assessment scores. COURSES DOES NOT FULFILL PROGRAM REQUIREMENTS FOR AAS DEGREE PROGRAMS. Five credits: 60 clock hours.

## ENT 116 TECHNICAL MATHEMATICS

Solutions of practical problems through the use of linear equations in one and multiple unknowns, simultaneous and quadratic equations and graphic algebra are studied, along with right and oblique triangle trigonometry as applied to land surveying, physics, static and related engineering technology courses. Prerequisite: Successful completion of ENT 115 or qualifying assessment score in mathematics and algebra skills. If acquired score is less than required, a Technology Division advisor will assist in placement in the proper skill development course. Five credits: 60 clock hours.

## ENT 118 INTRODUCTION TO COMPUTER AIDED DRAFTING

Introduction to computer aided drafting using AutoSketch software. File organization and management and the CAD/CAM ling. Prerequisite: CIS 110 or equivalent course or experience, ENT 101 recommended. Two credits: 30 clock hours.

ENT 109 ENGINEERING SEMINAR I
ENT 119 ENGINEERING SEMINAR II
ENT 129 ENGINEERING SEMINAR III
These seminars will cover current and advanced topics in the engineering market place. Prerequisite: permission of instructor.
ENT 109: One credit: 10 clock hours
ENT 119: Two credits: 20 clock hours
ENT 129: Three credits: 30 clock hours

## ENT 121 INTRODUCTION TO DESCRIPTIVE GEOMETRY

An introduction to descriptive geometry with applications to auxiliary and double auxiliary views. Prerequisite: ENT 101, 102, 103 and 115 or equivalent courses or experience. Two credits: 30 clock hours.

## ENT 122 ENGINEERING GRAPHIC APPLICATIONS

Engineering graphic applications: double auxiliary, and intersection and development applications. Introduction to charts and graphs. Prerequisite: ENT 101, 102, 103, 115 and 121 or equivalent course work or experience. Two credits: 30 clock hours.

## ENT 201 INTRODUCTION TO AUTOCAD I

An introduction to AutoCad: Basic setup: drawing tools, editing tools, text tools, scaling and drawing aids. Using AutoCad to create and edit simple drawings. Prerequisite: ENT 101 and ENT 118 or equivalent course work or experience. Two credits: 30 clock hours.

## ENT 202 INTRODUCTION TO AUTOCAD II

A continuation of ENT 201, Introduction to AutoCad. Continued use of basic setups, drawing and editing tools, plus addition of dimension (DIMVAR use) and the digitizer. Prerequisite: ENT 101, ENT 118, ENT 201 or equivalent course work or experience. Two credits: 30 clock hours.

## ENT 205 ELECTRO/MECHANICAL DESIGN

The study of basic electro/mechanical design drafting practices. Introduces the student to basic electro/mechanical diagrams, (manual and computer generated) and packaging systems. Prerequisite: ENT 102, ENT 201, ENT 107. Five credits: 60 clock hours.

## ENT 206 STATICS

A study of analytical mechanics and comprehension of the underlying principles and their application in the design of mechanisms and static structures. Applications of these principles to design and/or analysis of static structures is studied. Prerequisite: ENT 116 or equivalent. Five credits: 60 clock hours.

## ENT 207 TECHNICAL JOB SEEKING

A study of current skills, interests, and employment search procedures, preparation of resumes and applications will be studied along with how to prepare and present oneself for an interview. Preparation of a current resume will be required. Prerequisite: Second year of program. One credit: 10 clock hours.

## ENT 211 INTERMEDIATE AUTOCAD I

A continuation of ENT 202: continued use of AutoCad basics plus advanced dimensioning and tolerancing, use of hatching to create section views, symbol creation and use of digitizer. Use of blocks and attributes; bill of material generation. Prerequisite: ENT 101, ENT 118, ENT 201, ENT 202 or equivalent course or experience. Two credits: 30 clock hours.

## ENT 212 INTERMEDIATE AUTOCAD II

A continuation of ENT 211: continued use of AutoCad basic and intermediate concepts and techniques with an introduction to 3 dimensional applications. Isometric drawing, surface modeling, solid modeling and presentation graphics. Prerequisite: ENT 101, ENT 118, ENT 201, ENT 202 and ENT 211 or equivalent courses or experience. Two credits: 30 clock hours.

## ENT 215 ENGINEERING PLANNING AND CONTROL

An introductory study of the concepts and applications in the areas of scheduling, estimating, engineering economy. Prerequisite: ENT 116. Two credits: 30 clock hours.

## ENT 216 STATISTICAL PROCESS CONTROL

Basic concepts of SPC relevant to construction, reading and use of control charts will be studied and applied to solve quality problems. Prerequisite: ENT 112 or equivalent. Two credits: 30 clock hours.

ENT 217 FLUID MECHANICS: HYDRAULIC/PNEUMATIC
A study of hydraulic/pneumatic power systems and the applications of these systems in the engineering field. Prerequisites: PHY 111 and PHY 112. Three credits: 40 clock hours.

## ENT 209 INDEPENDENT STUDY IN ENGINEERING TECHNOLOGY I, II, III 229

These courses provide the opportunity to engage in intensive study in the areas of engineering technology that are not covered in scheduled classes or in greater depth than covered in class activities. Studies are under the supervision of a faculty member and are limited as to the credits that may be taken. Independent study courses DO NOT replace required program courses. Prerequisite: Permission of instructor.
ENT 209: One credit: 10 clock hours
ENT 219: Two credits: 20 clock hours
ENT २29: Three credits: 30 clock hours

## ENT 221 STRENGTH OF MATERIALS

The study of properties and their effects relevant to material stress and strain, tension, compression, and shear. Design of beams, columns, thin walled vessels, and riveted and welded joints are studied. Also included are the study of centroids, moments of inertia, shear of beams, shear and moment diagrams, and beam and column design. Prerequisite: ENT 116, and PHY 111. Five credits: 60 clock hours.

## ENT 225 COMPUTER AIDED MANUFACTURING

An introduction to the concepts of Computer Aided Manufacturing including CNC programming and CIM. Prerequisite: ENT 118 and ENT 112. Four credits: 60 clock hours.

## ENT 226 CIVIL HYDRAULICS

A study of open channel flow and hydrology. Urban drainage requirements and the solution of urban drainage problems through the use of design manuals and computer software will be studied. Prerequisite: ENT 106, PHY 111 and PHY 112. Three credits: 40 clock hours.

## ENT 227 ROBOTICS

A basic course emphasizing the components, systems, and applications of industrial robots. Prerequisite: ENT 112 and ELT 276.
Four credits: 60 clock hours.

## ENT 231 ADVANCED AUTOCAD I

A continuation of ENT 211. Application of AutoCad functions such as script files, slide shows, DXF and IGES file format. Scanned images and digitizing drawings. Prerequisite: ENT 101, ENT 118, ENT 201, ENT 202 and ENT 211 or equivalent courses or experience. Two credits: 30 clock hours.

## ENT 232 ADVANCED AUTOCAD II

A continuation of ENT 211. Application of AutoCad through exercises in creating screen menus, tablet menus and pull-down menus with associated icon development. Introduction to concepts and use of Auto routines and the SQL extension using production drawings as a means. Prerequisites: ENT 101, ENT 118, ENT 201, ENT 202 and ENT 211 or equivalent. Two credits: 30 clock hours.

## ENT 235 DRAFTING: ARCHITECTURAL II

A study of multi-family, multi-level frame and timber construction techniques with a review of modular and component applications. A project (team) approach utilizing AutoCad culminates with a set of working construction drawings for a condominium or town house project. Project includes a word processed code and zoning review document. Prerequisite: ENT 114 or equivalent. Four credits: 60 clock hours.

## ENT 236 DRAFTING: STRUCTURAL

The study of manual and computer aided structural drafting practices, enabling the completion of structural details and plans in steel and concrete for commercial and industrial structural systems. Prerequisite: ENT 116, ENT 102, ENT 201, and ENT 106. Four credits: 60 clock hours.

ENT 237 DRAFTING: CIVIL
The study of manual and computer aided topographic drafting principles, interpolation, plotting, and detailing in the areas of open and closed traverses relating to land descriptions and aspects of tract, plat, plot, and site maps. Prerequisite: ENT 201, ENT 102, and ENT 105. Five credits: 60 clock hours.

## ENT 246 MECHANICAL DESIGN: MANUFACTURING

The study of basic mechanical design practices for manufacturing using sketching, CAD, and problem solving techniques. Prerequisite: ENT 101, ENT 116, ENT 118, ENT 221 and PHY 111. Three credits: 40 clock hours.

## ENT 247 MECHANICAL DESIGN: FACILITIES

The study of basic mechanical design practices for facilities using sketching, CAD and problem solving techniques. Prerequisite: ENT 101, ENT 201, ENT 111, ENT 216, and ENT 217. Four credits: 60 clock hours.

ENT 298 ENGINEERING PROBLEMS AND APPLICATIONS
This course provides a practical and realistic application of engineering technology skills. The student will encounter various situations similar to those found in industry and will be required to apply those skills individually and/or as a project team member in solving various engineering problems. Prerequisite: All required courses for quarters one through five (enroll during last or graduation quarter.) Four credits: 60 clock hours.

## ESL: ENGLISH AS A SECOND LANGUAGE

## ESL 009 CONVERSATIONAL ENGLISH AS A SECOND LANGUAGE

This course is designed for adult students with no educational background in spoken English. It is designed for the student to develop listening, speaking, and basic vocabulary skills. Prerequisite: Placement.

## ESL 010 CONVERSATIONAL ENGLISH AS A SECOND LANGUAGE

Continuation of the course designed for adult students with no educational background in spoken English (ESL 009). Prerequisite: Placement or ESL 009.

## ESL 011 SURVIVAL ENGLISH AS A <br> SECOND LANGUAGE I

This course begins a sequence which provides the non-English speaking individual with functional English language skills in listening, speaking, reading, and writing. The present continuous tense is introduced. Prerequisite: Placement.

## ESL 012 SURVIVAL ENGLISH AS A SECOND LANGUAGE II

This course will continue to expand the objectives of ESL 011. The simple present tense is introduced. Prerequisite: ESL 011 or placement.

## ESL 013 SURVIVAL ENGLISH AS A SECOND LANGUAGE III

This course will continue to expand the objectives of ESL 012. The simple future and the simple past tenses are introduced. Prerequisite: ESL 012 or placement.

## ESL 014 SURVIVAL ENGLISH AS A <br> SECOND LANGUAGE IV

This course will continue to expand the objectives of ESL 013. This course offers the student a basic review of the simple present, past, and future tenses. Prerequisite: ESL 013 or placement.

## ESL 015 SURVIVAL ENGLISH AS A SECOND LANGUAGE V

This course will continue to expand the objectives of ESL 014. The past and future continuous tenses are introduced. Prerequisite: ESL 014 or placement.

## ESL 016 SURVIVAL ENGLISH AS A SECOND LANGUAGE VI

This course will continue to expand the objectives of ESL 015. The present perfect tense is introduced. Prerequisite: ESL 015 or placement.

## ESL 017 SURVIVAL ENGLISH AS A SECOND LANGUAGE VII

This course will continue to expand the objectives of ESL 016. The past perfect, the present perfect continuous, and the past perfect continuous tenses are introduced. Prerequisite: ESL 016 or placement.

## ESL 018 SURVIVAL ENGLISH AS A <br> SECOND LANGUAGE VIII

This course will continue to expand the objectives of ESL 017. The passive voice and the subjunctive mood will be introduced. Prerequisite: ESL 017 or placement.

## ESL 019 SURVIVAL ENGLISH AS A SECOND LANGUAGE IX

This course requires the most advanced level of English proficiency. The student will be introduced to the fundamentals of public speaking, reading in the content areas and writing compositions using appropriate grammar and style. Prerequisite: ESL 018 or placement.

## FIS: FIRE SCIENCE

## FIS 100 INTRODUCTION TO FIRE SCIENCE AND SUPPRESSION

Philosophy and history of fire protection; history of loss of life and property by fire; review of municipal fire defenses; study of the organization and function of federal, state, county, and private fire protection agencies; survey of professional fire protection career opportunities. Introduces fire suppression organization; fire suppression equipment; characteristics and behavior of fire; fire hazard properties of ordinary materials; building design and construction; extinguishing agents; basic fire-fighting tactics; public relations. Students will also receive the skills and knowledge necessary for entry level written examinations and oral interview procedures. Five credits: 50 clock hours.

## FIS 102 INTRODUCTION TO FIRE PREVENTION AWARENESS

Students will become acquainted with the important elements of fire prevention and fire safety program. Educational and administrative phases of fire prevention and fire safety programs will be addressed. The importance of good public relations will be emphasized. Three credits: 30 clock hours.

## FIS 104 FIRE COMPANY ORGANIZATION \& PROCEDURE

Students will study fire department organization, the company officer, fire company organization, communications, group dynamics, leadership styles, counseling personnel, and problem solving techniques. Three credits: 30 clock hours.

## FIS 105 FIRE SERVICE TRAINING ACADEMY

The student will demonstrate the knowledge and skill necessary to perform as a recruit in a paid or volunteer fire department as well as the knowledge and skill necessary for Fire Fighter I certification. Thirty-four credits: 420 clock hours.

## FIS 106 FIRE FIGHTING STRATEGY AND TACTICS

Students will study basics of strategy and tactics, fire behavior and its relationship to building construction, pre-fire planning, the incident command system, engine and truck company operations and multicompany operations. Five credits: 50 clock hours.

## FIS 110 FIRE APPARATUS AND PROCEDURES

Students will study driving techniques; construction and operation of pumping engines, water supply, hydraulics, ladder trucks, aerial platforms, apparatus maintenance and specialized equipment. Five credits: 50 clock hours.

## FIS 111 FIRE FIGHTER OCCUPATIONAL SAFETY

Students will learn to recognize those areas of the fire service where accidents frequently occur and how to recognize safety measures which will assist to decrease the hazards associated with operational areas. NFPA 1500 will be covered in depth. Five credits: 50 clock hours.

## FIS 112 FIRE SERVICE PLANNING

Students will develop communication and team building skills. These skills will enable them to plan emergency operations, staffing concepts, and effective station placement. Three credits: 30 clock hours.

## FIS 115 INDUSTRIAL FIRE SAFETY CONCEPTS

Familiarization with various trades in which specific hazards may present complicated and unique fire suppression or rescue problems for the fire fighter. The safety of fire fighters will be stressed at all times. Three credits: 30 clock hours.

## FIS 117 EFFECTIVE FIRE SERVICE PRESENTATIONS

A public speaking course designed to provide students with skills in public speaking, listening skills, and fundamentals in presenting public fire safety education programs. Three credits: 30 clock hours.

## FIS 118 FIRE CAUSE DETERMINATION

Students will acquire the ability to determine the cause of fire (accidental, suspicious and incendiary); types of fire, area and point of origin, method and cause of fire spread, recognition of evidence and preservation of the fire scene. Three credits: 30 clock hours.

## FIS 119 FIRE INSTRUCTOR I

Students will learn the roles and responsibilities of today's Fire Service Instructor. Competencies covered are Oral Communications, Concepts of Learning, Instructional Materials, Instructional Planning, Lesson Plan Development, Instructional Methods, Testing and Evaluation, Training Records and Reports, and the Demonstration of Instructional Abilities. Three credits: 30 clock hours.

## FIS 185 VOLUNTEER FIRE SEMINAR

Provides Fire Service Training on a supplementary and upgrading basis to fire fighters who are members of volunteer fire departments, fire protection districts, or paid members of smaller fire departments. The objective is to orient the training toward the equipment available in the department or district and to stress fire fighting methods appropriate to the equipment and to the district. Six credits: 60 clock hours.

## FIS 186 VOLUNTEER FIRE SEMINAR

Class includes the same type of information as FIS 185. Eight credits: 80 clock hours.

## FIS 187 VOLUNTEER FIRE SEMINAR

Class includes the same type of information as FIS 185. Twelve credits: 120 clock hours.

## FIS 188 VOLUNTEER FIRE SEMINAR

Class includes the same type of information as FIS 185. Sixteen credits: 160 clock hours.

## FIS 190 FIRE SERVICE AND THE LAW

This course is to inform fire service students of civil and criminal liabilities under the law. The course will also cover pensions, Workmen's Compensation, drug testing, union bargaining agreements and other topics. In addition to general legal principles, Colorado laws and revised statutes will be covered. Three credits: 30 clock hours.

## FIS 195 VOLUNTEER FIRE SEMINAR

Provides Fire Service Training on a supplementary and upgrading basis to fire fighters who are members of volunteer fire departments, fire protection districts, or paid members of smaller fire departments. The objective is to orient the training toward the equipment available in the department or district and to stress fire fighting methods appropriate to the equipment and to the district. One-half credit: 5 clock hours.

## FIS 196 VOLUNTEER FIRE SEMINAR

Class includes the same type of information as FIS 195. One credit: 10 clock hours.

## FIS 197 VOLUNTEER FIRE SEMINAR

Class includes the same type of information as FIS 195. Two credits: 20 clock hours.

## FIS 198 VOLUNTEER FIRE SEMINAR

Class includes the same type of information as FIS 195. Three credits: 30 clock hours.

## FIS 199 VOLUNTEER FIRE SEMINAR

Class includes the same type of information as FIS 195. Four credits: 40 clock hours.

## FIS 202 FIRE INSPECTION PRACTICES

Organization and function of the fire prevention organization; inspections, surveying and mapping procedures; recognition of fire hazards, engineering a solution to the hazard, enforcement of the solution, and public relations as affected by fire prevention. Prerequisite: FIS 100. Three credits: 30 clock hours.

## FIS 204 RELATED CODES AND ORDINANCES I

Familiarization and interpretation of national, state and local codes; ordinances and the laws which influence the field of fire prevention. The Uniform Fire Code, Uniform Building Code and Life Safety Code will be reviewed and referred throughout this course. Three credits: 30 clock hours.

## FIS 205 RELATED CODES AND ORDINANCES II

Continuation of FIS 204, emphasizing life safety and fire codes. Prerequisite: FIS 204. Three credits: 30 clock hours.

## FIS 207 CHEMISTRY FOR FIRE PROTECTION

A basic, practical course in chemistry designed specifically for fire fighters. Various materials which fire fighters encounter will be reviewed in open classroom discussion. Five credits: 50 clock hours.

## FIS 208 HAZARDOUS MATERIALS I

Students will acquire knowledge of analyzing an incident, recognizing and identifying hazardous materials, planning the response, implementing the planned response, and evaluating progress of Hazardous Materials Incident at the Awareness and Operations levels. Prerequisite: FIS 207 or equivalent. Three credits: 30 clock hours.

## FIS 209 HAZARDOUS MATERIALS II

Students will acquire knowledge and skills necessary for emergency personnel to effectively and safely manage a hazardous materials emergency at the company officer level. Prerequisite: FIS 208 or equivalent. Three credits: 30 clock hours.

## FIS 212 FIXED FIRE PROTECTION EQUIPMENT

 AND SYSTEMSStudents will study portable fire extinguishing equipment requirements. Sprinkler systems, installation, and maintenance. Special protection systems for various occupancies, including residential sprinklers. Three credits: 30 clock hours.

## FIS 213 FIRE SERVICE SUPERVISION

Students will study fire department organization, Management Philosophies, Leadership Traits, Time Management, Group Dynamics, Communication, Motivation, Counseling, and Conflict Resolution. Three credits: 30 clock hours.

## FIS 214 FIRE DEPARTMENT ADMINISTRATION

Students will study concepts and principles of fire service administration. Areas of study include organizational systems design, risk analysis for fire protection, labor relations, and fire financial management. Three credits: 30 clock hours.

## FIS 218 ARSON INVESTIGATION

The student will acquire information on the national arson problem, fire investigation responsibilities and the conduct of the investigator. Student will acquire the ability to recognize and preserve evidence of arson, understanding of the law as it applies to arson, the process of interviewing witnesses and suspects, arrest and detention procedures, court procedures and proper presentation of testimony will be stressed. Course will cover NFPA 1033, "Standard for Professional Qualifications for Fire Investigator." Three credits: 30 clock hours.

## FIS 230 BUILDING PLANS \& CONSTRUCTION

Students will study various types of building construction, principles of fire resistance, flame spread, and fire and smoke containment. Students will also acquire the knowledge to read and understand blueprints, specifications and schedules. Five credits: 50 clock hours.

## FAMILY AND LIFE EDUCATION

Expectant Families and Positive Parenting and Personal Growth are cosponsored with North Colorado Medical Center.

## FLS: SENIOR

| FLS | 111 | SENIOR SHAPE UP I |
| :--- | :--- | :--- |
| FLS | 112 | SENIOR SHAPE UP II |
| FLS | 113 | SENIOR SHAPE UP III |

Introduces body conditioning to raise fitness levels of older adults. One credit.

## FLS 118 MENTAL JOGGING

Turn on your brain and improve your mental "fitness" with games and thinking experiences. One credit.

## FLS 121 ADVANCED SENIOR SHAPE UP I

FLS 122 ADVANCED SENIOR SHAPE UP II FLS 123 ADVANCED SENIOR SHAPE UP III

A more active exercise class with moderate aerobic activity for older adults. One credit.

## FLS 131 MOVING TOGETHER FOR FITNESS I

FLS 132 MOVING TOGETHER FOR FITNESS II
FLS 133 MOVING TOGETHER FOR FITNESS III
An exercise program for older adults with special needs. One credit.

## FLS 135 CREATIVE MOVEMENT I <br> FLS 136 CREATIVE MOVEMENT II <br> FLS 137 CREATIVE MOVEMENT III

Using the human body as a means of self expression, students explore and experience their own creativity through movement exercises. One credit.

## FLS 151 SENIOR WALK 'N SHAPE UP I <br> FLS 152 SENIOR WALK 'N SHAPE UP II <br> FLS 153 SENIOR WALK ' N SHAPE UP III

Includes the "Shape Up" exercises, floor work and a 30 -minute walk. One credit.

## FLS 179 SELF-ESTEEM:THE MATURE YEARS

Examines how to restore and maintain feelings of self-worth in later years. One credit.

FLS 211 INTERMEDIATE SENIOR SHAPE UP I
FLS 212 INTERMEDIATE SENIOR SHAPE UP II FLS 213 INTERMEDIATE SENIOR SHAPE UP III A continuation of Senior Shape Up to improve fitness levels. One credit.

| FLS | 221 | SUPER SHAPE UP I |
| :--- | :--- | :--- |
| FLS | 222 | SUPER SHAPE UP II |
| FLS | 223 | SUPER SHAPE UP III |

To provide exercises for older adults to develop a high level of fitness including exercises for cardiovascular improvement. One credit.

FLS 231 ADVANCED MOVING TOGETHER FOR FITNESS I
FLS 232 ADVANCED MOVING TOGETHER FOR FITNESS II
FLS 233 ADVANCED MOVING TOGETHER FOR FITNESS III
Provides exercises for continued improvement in strength and flexibility. One credit.

FLS 235 ADVANCED CREATIVE MOVEMENT I
FLS 236 ADVANCED CREATIVE MOVEMENT II
FLS 237 ADVANCED CREATIVE MOVEMENT III
These classes are designed to continue a student's participation in movement exercises at a higher level. One credit.

## FLS 251 ADVANCED WALK 'N SHAPE UP I <br> FLS 252 ADVANCED WALK 'N SHAPE UP II <br> FLS 253 ADVANCED WALK 'N SHAPE UP III

These classes provide high level exercises and brisk walking. One credit.

## FLE: EXPECTANT FAMILIES

## FLE 115 PREPARED CHILDBIRTH

Prepare for the birth of your baby. Group discussions focus on the physical and emotional changes of pregnancy, the labor and birth process, postpartum period, family relationships, the unique role of the father, basic nutrition, and initial newborn care. Time will be spent each class learning and practicing relaxation and breathing techniques including the Lamaze method. Also included is a tour of North Colorado Medical Center's family birth center. Two credits.

## FLE 117 CHILDBIRTH REFRESHER

For parents who previously have completed a comprehensive childbirth education course. Review and practice relaxation and breathing techniques for labor and birth. Discuss choices for childbirth and sibling rivalry. Family birth center tour is included. Prerequisite: childbirth education course. One credit.

## FLE 121 YOUR AMAZING INFANT

Acquaints parents with growth, development, and the normal characteristics of early infancy. Safety and common illnesses will be discussed. Helps parents relax and enjoy the experience of parenting. One-half to One credit.

## FLE 131 EXERCISE FOR PREGNANCY।

Helps women prepare physically for the birth of their baby. Includes stretching, body conditioning, and aerobic exercises designed specifically for pregnant women and new mothers. One credit.

## FLE 132 EXERCISE FOR PREGNANCY II

Helps women prepare physically for the birth of their baby. Includes stretching, body conditioning, and aerobic exercises designed specifically for pregnant women and new mothers. One credit.

## FLE 141 SHAPE UP WITH BABYI

Helps women get back into shape after the birth of their baby and enjoy exercising with their baby at the same time. One credit.

FLE 145 BREASTFEEDING: OFF TO A GOOD START
Designed to prepare women for the experience of breastfeeding. Basics of breastfeeding, pumping and mother-infant relationships will be discussed. One-half to One credit.

## FLF: POSITIVE PARENTING AND PERSONAL GROWTH

## FLF 127 COPING WITH YOUR ACTIVE TODDLER

For parents of one to two and one-half year olds. Discussions concem parental stress and alternatives in discipline; developing a child's selfesteem, language, and motor skills; snacks and finger foods, accidents and poisonings, toilet training, and dependence versus independence. Child care provided for daytime classes. One to Two credits.

## FLF 129 LOSSES IN LIFE

Understanding that loss is an important part of life. Many losses are developmentally necessary in order to realize our fullest potential as self actualizing human beings. One to Three credits.

## FLF 205 SUCCESS THROUGH SELF-TALK

Develop use of affirmations, imagery and positive self-talk to change or improve self-concept and wellness level. One half to One credit.

## FLF <br> CHILDREN'S LITERATURE: DEVELOPING A LOVE OF READING THROUGH LITERATURE

This course will serve as a general introduction to literature form the major genres for children and young adults. Ideas and ways to use literature with children at home and at school to develop a love of reading will be explored. One credit.

## FLF 215 SUICIDE: CHILDREN AND TEENS IN CRISIS

A class for parents and professionals that focuses on the systems designed to address the prevention and intervention in the phenomenon of suicide in children. (First in a series of three classes on suicide.) One credit.

## FLF 228 WOMEN'S SELF-ESTEEM

Provides an overview of the issues that promote or inhibit positive self esteem for women. One credit.

## FLF $237 \quad$ POSITIVE DISCIPLINE

A presentation for parents of approaches toward disciplining the young child or adolescent. One to Three credits.

## FLF 249 EATING DISORDERS AWARENESS WORKSHOP

This workshop will focus on the dynamics of eating disorders, including how an eating disorder is developed, how it is treated and how eating disorders can be prevented. One to Three credits.
Parents and students, please look under Education (EDU) for classes on The Family also.

## AGRICULTURE TECHNOLOGY

## FMT: FARM AND RANCH BUSINESS MANAGEMENT

FMT 101 FARM AND RANCH BUSINESS MANAGEMENT I
The first in a series that is one year or a full business cycle in length. In this course the student will acquire basic knowledge of the personal computer using agriculture software to develop an accurate and realistic set of farm/ranch records. Initial records will be used to
locate problems and set goals and objectives. The initial data gathered during this business cycle will be used in the second and third business cycles. Twenty-Seven credits: 30 hours lecture, 12 farm/ranch instructor visits. Prerequisite: Actively engaged as a farm/ranch operator in Aims Community College District.

## FMT 102 FARM AND RANCH BUSINESS MANAGEMENT II

The second in the series also covers a full business cycle or one year. This course will continue with improvement of agriculture accounting. The student will acquire basic knowledge of the use of spread sheets on the computer to help them with analysis of the data gathered during the previous business cycle. Emphasis will be on determining the cost of production, projections, and monitoring income and expenses throughout the business cycle. Twenty-Seven credits: 30 hours lecture, 12 farm/ranch instructor visits. Prerequisite: FMT 101.

FMT 103 FARM AND RANCH BUSINESS MANAGEMENT III
The third course of the three year business cycle. During this course the student will acquire the skill to further develop computer spread sheets to advance their analysis, projections and marketing skills. Students will be encouraged to enroll in a follow-up Commodity Marketing course. Twenty-Seven credits: 30 hours lecture, 12 farm/ranch instructor visits. Prerequisite: FMT 102.

## FMT 107 AGRICULTURE COMMODITY MARKETING

This course is designed for the producer of agriculture commodities and covers the different methods of marketing agriculture products. Instruction covers how to effectively use the cash and future markets. Six credits: 60 hours lecture. Prerequisite: None.

## FMT 111 AGRICULTURE ACCOUNTING FOR COMPUTER USERSI

The first course in a series designed for the owner/operator of a farm/ranch who presently uses a computer to do their farm/ranch accounting, but want to more full utilize the capabilities of their accounting software. The course covers the following subject areas: (a) Understanding the chart of accounts (b) The balance sheet (c) Understanding debits and credits in transactions (d) Entering your monthly transactions (e) Finding errors in transactions. Six credits: 60 hours lecture. Prerequisite: Own a computer and agricultural àccounting software.

## FMT 112 AGRICULTURE ACCOUNTING FOR COMPUTER USERS II

The second course in a series designed for the owner/operator of a farm/ranch who presently uses a computer to do farm/ranch accounting. This course covers the following subject areas: (a) Generating the income statement reports (b) Generating the balance sheet reports (c) Understanding the income statement (d) Understanding the balance sheet reports. (e) Balance sheet adjustments (f) Allocating income and expense. Six credits: 60 hours lecture. Prerequisite: FMT 111 or Instructor permission.

## FMT 113 AGRICULTURE ACCOUNTING FOR COMPUTER USERS III

The final course in a series designed for the owner/operator of a farm/ranch who presently uses a computer to do farm/ranch accounting. The course covers the following subject areas: (a) Closing out the year: tax purpose; accountant information; estimating tax liabilities (b) End of year accrued reports: adjustments (c) Yearend evaluations (d) New year adjustments. Six credits: 60 hours lecture. Prerequisites: FMT 111 and FMT 112.

## FOREIGN LANGUAGE

NOTE: Students wishing to satisfy a five-semester hour language requirement at the university level need to take a minimum of two quarters of the same foreign language at Aims College.

## FRE: FRENCH

## FRE 101 CONVERSATIONAL FRENCH I

This is the first course in a sequence for beginning students who wish to understand and speak French. The material will include basic vocabulary, grammar, and expressions that are used in daily situations and in travel. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) Three credits.

## FRE 102 CONVERSATIONAL FRENCH II

This is the second course in a sequence for beginning students who wish to understand and speak French. The material will continue to cover basic conversational patterns, expressions, and grammar. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) Prerequisite: FRE 101. Three credits.

## FRE 111 FRENCH LANGUAGEI

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the language. (Course fulfills Humanities requirement.) Five credits.

## FRE 112 FRENCH LANGUAGE II, PART 1

Continues French Language I in the development of functional proficiency in listening, speaking, reading, and writing the language. (Course fulfills Humanities requirement.) Prerequisite: FRE111 or instructor's permission. Five credits.

## FRE 113 FRENCH LANGUAGE II, PART 2

Continues French Language II in the development of functional proficiency in listening, speaking, reading, and writing the language. (Course fulfills Humanities requirement.) Prerequisite: FRE 112 or instructor's permission. Five credits.

## FRE 201 CONVERSATIONAL FRENCH III

This is the third course in a sequence for students who wish to continue their study of understanding and speaking French. The material will include intermediate level vocabulary, grammar, and expressions. (This is an elective course and may not be used to meet Humanities requirements for 2-year degrees.) Prerequisite: FRE 102. Three credits.

## FRE 202 CONVERSATIONAL FRENCH IV

This is the fourth course in a sequence for students who wish to continue their study of understanding and speaking French. The material will continue to cover intermediate level conversational patterns, expressions, and grammar. (This is an elective course and may not be used to meet Humanities requirements for 2 -year degrees.) Prerequisite: FRE 201. Three credits.

## FRE 225 FRENCH FOR THE PROFESSIONAL

This course, designed for professionals, covers specific job related vocabulary, expressions, and grammar. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) One to Three credits.

## GER: GERMAN

## GER 101 CONVERSATIONAL GERMAN I

This is the first course in a sequence for beginning students who wish to understand and speak German. The materials will include basic vocabulary, grammar, and expressions that are used in daily situations and in travel. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) One to Three credits.

## GER 102 CONVERSATIONAL GERMAN II

This is the second course in a sequence for beginning students who wish to understand and speak German. The materials will continue to cover basic conversational patterns, expressions, and grammar. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) Prerequisite: GER 101. One to Three credits.

## GER 111 GERMAN LANGUAGEI

The first course in a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the language. NOTE: The order of the topics and the methodology will vary according to individual texts and instructors. (Course fulfills a Humanities requirement.) Five credits.

## GER 112 GERMAN LANGUAGE II, Part 1

The second course in a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the language. (Course fulfills a Humanities requirement.) Prerequisite: GER 111 or permission of instructor. Five credits.

## GER 113 GERMAN LANGUAGE II, Part 2

A continuation of German Language II, Part 1. The third course in a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the language. (Course fulfills a Humanities requirement.) Prerequisite: GER 112 or permission of instructor. Five credits.

## GER 201 CONVERSATIONAL GERMAN III

This is the third course in a sequence for students who wish to continue their study of understanding and speaking German. The material will include intermediate level vocabulary, grammar, and expressions. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) Prerequisite: GER 102. One to Three credits.

## GER 202 CONVERSATIONAL GERMAN IV

This is the fourth course in a sequence for students who wish to continue their study of understanding and speaking German. The material will continue to cover intermediate level conversational patterns, expressions, and grammar. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) Prerequisite: GER 201. One to Three credits.

## GER 211 GERMAN LANGUAGE III

This course continues German Language I and II in the development of increased functional proficiency in listening, speaking, reading and writing the language. (Course fulfills a Humanities requirement.) Prerequisite: GER 113 or permission of instructor. Five credits.

## GER 212 GERMAN LANGUAGE IV, Part 1

This course continues German Language I II, and III in the development of increased functional proficiency in listening, speaking, reading and writing the language. (Course fulfills a Humanities requirement.) Prerequisite: GER 211 or permission of instructor. Five credits.

## GER 213 GERMAN LANGUAGE IV, Part 2

This course continues German Language IV, Part 1, in the development of increased functional proficiency in listening, speaking, reading and writing the language. (Course fulfills a Humanities requirement.) Prerequisite: GER 212 or permission of instructor. Five credits.

## GER 225 GERMAN FOR THE PROFESSIONAL

This course, designed for professionals, covers specific job related vocabulary, expressions, and grammar. (This is an elective course and may not be used to meet the Humanities requirements for 2-year degrees.) One to Three credits.

## SPA: SPANISH

SPA 101 CONVERSATIONAL SPANISHI
This is the first course in a sequence for beginning students who wish to understand and speak Spanish. The material will include basic vocabulary, grammar, and expressions that are used in daily situations and in travel. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) One to Three credits.

## SPA 102 CONVERSATIONAL SPANISH II

This is the second course in a sequence for beginning students who wish to understand and speak Spanish. The material will continue to cover basic conversational patterns, expressions, and grammar. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) Prerequisite: SPA 101. One to Three credits.

## SPA 109 SPANISH CONVERSATIONAL REVIEW

Designed for students who have been away from the language for a while and wish to review the conversational aspects of the language. Prerequisite: Permission of instructor. One to Three credits.

## SPA 111 SPANISH LANGUAGEI

Begins a sequence dealing with the development of functional proficiency in listening, speaking, reading, and writing the language. (Course fulfills Humanities requirement.) Five credits.

## SPA 112 SPANISH LANGUAGE II, PART 1

Continues Spanish Language I in the development of functional proficiency in listening, speaking, reading, and writing the language. (Course fulfills Humanities requirement.) Prerequisite: SPA 111 or instructor's permission. Five credits.

## SPA 113 SPANISH LANGUAGE II, PART 2

Continues Spanish Language II in the development of functional proficiency in listening, speaking, reading, and writing the language. (Course fulfills Humanities requirement.) Prerequisite: SPA 112 or instructor's permission. Five credits.

## SPA 201 CONVERSATIONAL SPANISH III

This is the third course in a sequence for students who wish to continue their study of understanding and speaking Spanish. The material will include intermediate level vocabulary, grammar, and expressions. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) Prerequisite: SPA 102. One to Three credits.

## SPA 202 CONVERSATIONAL SPANISH IV

This is the fourth course in a sequence for students who wish to continue their study of understanding and speaking Spanish. The material will continue to cover intermediate level conversational patterns, expressions, and grammar. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) Prerequisite: SPA 201. One to Three credits.

## SPA 203 CONVERSATIONAL SPANISH V

This is the fifth course in a sequence for students who wish to continue their study of understanding and speaking Spanish. The material will continue to cover intermediate level conversational patterns, expressions and grammar. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) One to Three credits.

## SPA 211 SPANISH LANGUAGE III

Continues Spanish Language I and II in the development of increased functional proficiency in listening, speaking, reading and writing the language. (Course fulfills a Humanities requirement.) Prerequisite: SPA 113 or instructor's permission. Five credits.

## SPA 212 SPANISH LANGUAGE IV, Part 1

This course continues Spanish Language I, II, and III in the development of increased functional proficiency in listening, speaking, reading and writing the language. Prerequisite: SPA 211 or permission of instructor. Five credits.

## SPA 213 SPANISH LANGUAGE IV, Part 2

This course continues Spanish Language IV, Part 1, in the development of increased functional proficiency in listening, speaking, reading and writing the language. Prerequisite: SPA 212 or permission of instructor. Five credits.

## SPA 225 SPANISH FOR THE PROFESSIONAL

This course, designed for professionals, covers specific job related vocabulary, expressions, and grammar. (This is an elective course and may not be used to meet the Humanities requirements for 2 -year degrees.) One to Three credits.

## SPA 295 SPANISH INDEPENDENT STUDIES

Designed to meet the needs of those students who already have a background in Spanish and who desire to improve their language skills and whose needs are not met by our regular first year Spanish offerings. Prerequisite: permission of instructor. One to Three credits.

## GEO: GEOGRAPHY

## GEO 105 GEOGRAPHY

An introductory course designed to facilitate an understanding of spatial relationships between and among the geographic regions of the world. Included are demographic and cultural (political, economic, and historic) forces related to the physical environments of selected regions. Methods of study include analysis of/and interrelationships between developed and developing regions. Five credits.

## GEO 106 HUMAN GEOGRAPHY

This course is an introduction to geographic perspectives and methods with applications to the study of human activities, such as resource utilization, agricultural practices, settlement patterns, migrations, cultural activities, and industrialization. Special emphasis is placed on spatial distribution, map interpretation, and human impact on the environment. Five credits.

This course introduces the principles of landforms and soil as major elements in man's natural environment. Topics covered include structure and materials of the earth's crust, agents and processes of landscape development, elements of soil science, distribution of landscapes and soil types, and the impact of different landscapes and soil types upon man and his activities. Course may include laboratory experiences. Three to five credits.

## GEO 125 GEOGRAPHY OF COLORADO

This course is a comprehensive survey of the geography of Colorado. Included are both physical and cultural aspects such land forms, weather and climate, natural resources, economic activities, cultural migrations and trends. Regional differences and human impact upon the environment are also included. Five credits.

## GEY: GEOLOGY

## GEY 100 SURVEY OF GEOLOGY

A general study of the characteristics of the past and present physical environment and the geologic forces at work to sculpture the landscape. Credit will not be given for both GEY 100 and GEY 111. Three credits: 20 hours lecture, 20 hours lab.

## GEY 105 GEOLOGY OF NATIONAL PARKS

Empirical study of the basic geology of the national parks. National parks are used as examples to develop an appreciation for the basic principles of physical science and basic concepts of physical and historical geology. A short term paper on a park or monument required. Four credits: 40 hours lecture.

## GEY 111, 121

For programs that require two semesters (1 year) of geology, students should complete both courses. This sequence will transfer to other academic institutions as an aggregate.

## GEY 111 PHYSICAL GEOLOGY

Studies the materials of the earth, its structure, surface features and the geologic processes involved in its development. This course includes laboratory experience. Field trips required. Prerequisite: None. Six credits: 40 hours lecture, 40 hours lab.

## GEY 121 HISTORICAL GEOLOGY

Studies the physical and biological development of the earth through the vast span of geologic time. Emphasizes the investigation and interpretation of sedimentary rocks, the record of ancient environment, fossil life forms, and physical events, all within the framework of shifting crustal plates. Field trips required. Prerequisite: Physical Geology (GEY 111) or permission of instructor. Six credits: 40 hours lecture, 40 hours lab.

## GEY 185 SPECIAL TOPICS IN GEOLOGY

Topics will reflect the special expertise of the faculty and/or the special needs of the students. Prerequisite: Consent of instructor. One to Six credits.

## GOV: DEVELOPMENTAL GOVERNMENT

GOV 014 DEVELOPMENTAL GOVERNMENT IV
The purpose of the course is to increase student knowledge of community, state, and federal government. Emphasis is given to the relationship between individual citizens and the selection and maintenance of government. Prerequisite: placement. Three to Five credits.

## GRT: GRAPHIC TECHNOLOGY

## GRT 101 GRAPHIC TECHNOLOGY I

Students will be given the opportunity to acquire basic knowledge and skills in computer graphics, computer typesetting and page layout, desk-top publishing, layout and paste-up, process camera photography, film stripping, plate-making, and duplicator-sized presswork. The student will perform the above fundamental activities at production quality level. Twenty credits: 250 clock hours.

## GRT 102 GRAPHIC TECHNOLOGY II

Students will be given the opportunity to acquire advanced knowledge and skills in one of two options; press or pre-press. Students in the press option will develop skills in ink and water balance, multi-color printing, press registration techniques, trouble shooting, and job estimating. Students in the pre-press option will develop skills in advanced computer page layout and graphic design, learn more darkroom and stripping techniques. The students will perform these activities listed above at a production quality level. The student will also acquire knowledge and skills in job placement. Prerequisite: GRT 101 or permission of instructor. Twenty credits: 250 clock hours.

## GRT 103 GRAPHIC TECHNOLOGY III

Students will be given the opportunity to further develop the skill acquired in GRT 101 and GRT 102. The student will perfect the quality of their work and increase their production of work. The student will also be given the opportunity to participate in an internship directly related to his/her specialization. Prerequisite: GRT 102 or permission of instructor. Twenty credits: 250 clock hours.

## GRT 104 GRAPHIC TECHNOLOGY IV

Students will be given the opportunity to choose an additional specialization from the Pre-Press option or Press option. Prerequisite: GRT 103 or permission of instructor. Ten credits: 125 clock hours.

## GRT 199 GRAPHIC TECHNOLOGY/SPECIAL NEEDS

Allows the student to work on a few specific objectives in conjunction with the Graphic Technology certificate requirements. The student and the instructor may develop an individual program which is agreeable to both parties. The student must be enrolled in the Graphic Technology program. This course may be repeated. One credits: 10 clock hours.

## GRT 295 GRAPHIC TECHNOLOGY/NDEPENDENT STUDY

This course provides an opportunity for the student to engage in intensive study and research on a specific topic under the direction of a faculty member. Prerequisite: permission of instructor only. Two credits: 20 clock hours.

GRT 296 GRAPHIC TECHNOLOGY/NDEPENDENT STUDY
This course provides an opportunity for the student to engage in intensive study and research on a specific topic under the direction of a faculty member. Prerequisite: permission of instructor only. Three credits: 30 clock hours.

## GRT 297 GRAPHIC TECHNOLOGY/NDEPENDENT STUDY

This course provides an opportunity for the student to engage in intensive study and research on a specific topic under the direction of a faculty member. Prerequisite: permission of instructor only. Five credits: 50 clock hours.

## GRT 299 GRAPHIC TECHNOLOGY PRACTICUM

This course content will be dependent upon the current needs of the students and determined at the time of the course offering. The practicum could involve introduction of, and experience with, the offset printing trade and the new products related to process camera work, press work, etc. This course may be repeated. One credit: 10 clock hours.

## HEN: HEALTH EDUCATION

## HEN 106 RED CROSS STANDARD FIRST AID/CPR

Principles and practices of first aid to give immediate, temporary treatment in case of accident or sudden illness before the service of a physician can be secured. Students will also learn the proper techniques for adult, child and infant CPR. (The students who satisfactorily pass the American Red Cross examination will receive their; Standard First Aid, Adult CPR and Infant CPR cards.) Three credits: 30 clock hours.

## HEN 109 SAFETY/FIRST AID REVIEW

Refresher course covering the American Red Cross Standard handbook for renewal of current card. One-half credit: 10 clock hours.

## HEN 117 NUTRITION \& WEIGHT LOSS

This course utilizes a behavioral/nutritional approach that will enable overweight individuals to lose excess body weight. Permanent weight control will be the main objective of this course.

Nutritional counseling will include:1) Proper nutrition 2) Exchange system of food charting 3) Shopping and reading labels 4) Keeping a nutritional diary 5) Integrating a nutritional food plan into one's daily life.

Behavioral education will include: 1) What to do to lose weight 2) Keeping weight off permanently 3 ) Controlling overeating practices 4) Learning about feelings and how moods affect eating behavior 5) Eating on special occasions/restaurants 6) Stress Management/ relaxation training 7) Assertiveness training 8) Eating Disorders. One credit: 10 clock hours.

## HEN 118 NUTRITION \& WEIGHT LOSS II

Continuation of HEN 117. Further emphasis on nutritional counseling and behavioral education. One credit: 10 clock hours.

## HEN 119 NUTRITION \& WEIGHT LOSS III

Continuation of HEN 118. Further emphasis on nutrition counseling and behavioral education. One credit: 10 clock hours.

## HEN 125 RED CROSS EMERGENCIES RESPONDER

This course will prepare students to learn how to handle many different types of emergencies that can and do occur everyday. It includes life threatening emergencies which call for CPR (Adult) and explains other types of emergencies and prevention techniques. Three credits: 30 clock hours.

## HEN 126 FIRST AID

This course is designed to give students basic First Aid Skills and the ability to perform adult CPR. One credit: 10 clock hours.

## HIS: HISTORY

## HIS 101 WESTERN CIVILIZATION I

Explores the major political, economic, social, diplomatic/military, cultural, and intellectual events and the roles of key personalities that shaped Western civilization from the prehistoric era to 1000 A.D. Five credits.

## HIS 102 WESTERN CIVILIZATION II

Explores the major political, economic, social, diplomatic/military, cultural, and intellectual events and the roles of key personalities that shaped Western civilization from 1000 A.D. to 1800 A.D. Five credits.

## HIS 103 WESTERN CIVILIZATION III

Explores the major political, economic, social, diplomatic/military, cultural, and intellectual events and the roles of key personalities that shaped Western civilization from 1800 A.D. to the present day. Five credits.

## HIS 115 HISTORY OF THE OCCULT, MAGIC \& SUPERSTITION

An historical examination of the beliefs and practices of voodoo, vampirism, witchcraft, hunting magic, snake handling cults,palmistry, tarot cards, I Ching, demonic possession and ESP. Five credits.

## HIS 117 THE CIVIL WAR - A HISTORY

A survey of the history of the Civil War from the causes of the war through approximately Lincoln's assassination and beyond. Five credits.

## HIS 139 WOMEN IN U.S. HISTORY

This course surveys women's changing roles in American history from the colonial period to the present. Special emphasis are placed upon the nature of women's work and the participation of women in the family, church and reform movements. Five credits.

## HIS 140 HISTORY OF WORLD WAR II

Examines the many factors that combined to cause World War II, as well as the most significant effects of the conflict. Five credits.

## HIS 157 ANCIENT EGYPTIAN HISTORY

Provides an overview of our current knowledge concerning the geneses of the fabulous culture and examines the Age of the Great Pyramids, the predynastic culture, unification of Egypt, development of Egyptian mortuary architecture during the first six dynasties and the decline of Pharaonic power. Five credits.

## HIS 201 U.S. HISTORY I

Examines the major political, economic, social, diplomatic/military, cultural, and intellectual events in American History from the first inhabitants through the Civil War/Reconstruction. Five credits.

## HIS 202 U.S. HISTORY II

Examines the major political, economic, social, diplomatic/military, cultural, and intellectual events in American History from Reconstruction to 1945. Five credits.

## HIS 203 U.S. HISTORY III

Examines the major political, economic, social, diplomatic/military, cultural, and intellectual events in American History since 1945. Five credits.

A survey of the history of Christianity from its beginning to the present, including ecclesiastical and doctrinal developments. Emphasizes the interaction of Christianity with the world and the influence each has had on the other. Five credits.

## HIS 225 HISTORY OF COLORADO AND THE ROCKY MOUNTAIN WEST

(Formerly HIS 209) This course presents the story of the people, society, and cultures of Colorado from the 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, and the modern twentieth-century state. Five credits.

## HIS 235 MODERN GERMAN HISTORY

A survey of German history from unification under Bismarck to reunification in 1990 and beyond, including political, economic, social, intellectual, and religious developments. Emphasis is given to the Weimar and Nazi periods. Five credits.

## HIS 246 HISTORY OF MEXICO

(Formerly MAS 161 and MAS 162) This course surveys the major political, economic, social, and cultural developments of Mexico from pre-Columbian times to the present. Five credits.

## HIS 249 HISTORY OF MODERN RUSSIA

(Formerly HIS 108) This course surveys the major political, economic, social, and ideological developments that have shaped modern Russia and the Soviet Union. Five credits.

## HIS 295 INDEPENDENT STUDY IN HISTORY

Provides an opportunity for the serious-minded student to engage in intensive study and research on a specified topic under the direction of a faculty member. Two credits: contact instructor.

## HLH: HEALTH OCCUPATIONS

The following classes are offered upon the request of twelve students or more. (Additional courses could be designed to meet continuing education needs of the community.)

## HLH 128 HEALTH CARE SEMINAR

Designed to provide health care providers with current information on health consumer trends and issues and/or on current health care issues and practices and/or on advances in health care and related disciplines. A series of seminar topics will be selected; each topic will meet one or more of the objectives. Prerequisite: None. Variable credit: 0.5 to 12 credits; 5-120 clock hours.

## HLH 129 SCHOOL HEALTH CLERK

Intended to prepare the learner to assist the school nurse in managing the Health Office and in performing selected duties as framed by Weld County School District 6 policies. Includes American Red Cross Standard First Aid.
Upon successful completion of this course the learner should be able to demonstrate the knowledge, attitudes, and skills necessary to perform as a school health clerk in District 6 schools. Content includes management and maintenance duties within the Health Office, maintenance of health records, determination of ill or injured persons and appropriate actions to be taken, performance of initial health screening tests, appraisal of immunization needs, legal parameters, reports, records, ethical concepts, infection control. Prerequisite: H.S. diploma or G.E.D. Four credits: 40 clock hours.

## HLH 131 MEDICAL TERMINOLOGY

Builds skills in verbal and written communication of medical terms. A basic study of medical words. Includes defining, spelling, pronouncing, and analysis of component parts. Practical use of words developed through audiovisual aids and discussion. Four credits: 40 clock hours.

## HLH 135 GERIATRIC AIDE

Intended to prepare the learner for entry-level employment as an aide in providing nursing care to elderly patients/clients/residents such as might commonly be found in skilled or intermediate care facilities within this community.

Upon completion of this course the learner should be able to demonstrate basic competencies in the 1) performance of personal care skills 2)performance of selected basic nursing skills, 3) provision of privacy, safety, and comfort, 4) structuring of care to provide health maintenance while promoting patient/client/resident independence. Recommended: Read at or above 10th grade level. Be in good health and without medical restrictions on lifting activities. Credits and clock hours TBA.

## HLH 206 IV MEDICATIONS FOR LPNs

Intended for the LPN who is currently IV certified by the State of Colorado. This course includes the additional theory and clinical practice in IV medications that is required by the Colorado Board of Nursing to retain IV certification. Prerequisite: current Colorado nursing license, current IV certification by the State of Colorado, personal professional liability insurance. One and one-half credits: 20 clock hours.

## HLH 207 BASIC IV THERAPY \& MEDICATIONS FOR LPNs

Intended to prepare the LPN for the expanded role in relation to adult IV therapy and IV medications in accordance with the rules and regulations of the Colorado Board of Nursing. Content includes related anatomy, physiology, and pharmacology, basics of fluid and electrolyte balance, selection and use of appropriate equipment, specialized nursing care, regulations, policies, procedures pertinent to IV therapy and IV medications. Also computation, regulation and maintenance of an infusion rate, techniques for venipuncture, and collection of venous blood specimens. Successful clinical experience required to complete course. Prerequisite: current Colorado nursing license, personal professional liability insurance. Five credits: 58 clock hours.

## HUM: HUMANITIES

HUM 105 WORLD MYTHOLOGY
Students are acquainted with myths and legends from many areas of world culture. (This course is transferable to CSU's Vital Connections Program.) Two to Five credits.

## HUM 109 MODERN AMERICAN CULTURE

A study of American thought and the problems of modern culture since the 1920s as reflected in the arts of America. (This course is transferable to the UNC Bound program.) Five credits.

## HUM 121 SURVEY OF HUMANITIES I

Introduces students to the history of ideas in Western cultures through a study of the visual arts, literature, drama, music, and philosophy of early civilizations, Greek and Roman antiquity and Christian eras. Emphasizes connections among the arts, values, and diverse cultures. (This course is a Humanities requirement for all A.A. and A.S. degrees.) Five credits.

HUM 122 SURVEY OF HUMANITIES II
Examines the Medieval, Renaissance, and Baroque periods through a study of the visual arts, literature, music, and philosophy. Compares and contrasts diverse cultural ideas and feminine and masculine viewpoints. (Course fulfills a Humanities requirement.) Note: HUM 121 is not a prerequisite for HUM 122. Five credits.

## HUM 123 SURVEY OF HUMANITIES III

Examines the cultures of the 17th through the 20th centuries by focusing on the interrelatedness of the arts, ideas and history. Considers the influences of industrialism, scientific development and non-European peoples. (Course fulfills a Humanities requirement.) Note: HUM 121 and HUM 122 are not prerequisites for HUM 123. Five credits.

## HUM 151 INTRODUCTION TO THE ART OF FILM

This course promotes an appreciation of film as an art form by exploring relationships between a film's visual and narrative components. Students view, discuss, and critically analyze a variety of motion pictures from technical, historical, and aesthetic perspectives. The course incorporates the vocabulary of film's mechanics (e.g. cinematography, editing, sound, att direction) as well as film's literary strategies (plot structure, character motivation, conflict, closure). Five credits.

## HUM 295 HUMANITIES INDEPENDENT STUDY

Provides an opportunity for the serious-minded student to engage in intensive study and research on a specified topic under the direction of a faculty member. Prerequisite: permission of instructor. One to Three credits.

## MAS 105 INTRODUCTION TO MEXICAN AMERICAN STUDIES

This course is designed to provide the student with the opportunity to study the evolution of a new Mexican-American culture in the New World and to develop an understanding and appreciation of this unique culture in a contemporary setting. Five credits.

## MAS 120 CULTURE OF MEXICO AND SOUTH AMERICA

Examines the social and cultural institutions, as well as the history of Mexico and South America from pre-Colombian time to the present. Emphasis will be placed on the Folkloric aspects of Hispanic culture. Five credits.

## INS: INSURANCE

INS 100 LICENSURE PROPERTY/CASUALTY INSURANCE
Principles of insurance, casualty insurance, legal concepts and regulations and ethics as required by State Division of Insurance for eligibility to test for and receive a Property and Casualty Insurance License. 1.5 credits: 15 clock hours

## INS 101 LICENSURE OF LIFE INSURANCE

Principles of insurance, life insurance, legal concepts and regulations and ethics as required by State Division of Insurance for eligibility to test for and receive a Life Insurance License. 1.5 credits: 15 clock hours.

## INS 102 LICENSURE ACCIDENT/HEALTH PROGRAM

Principles of insurance, accident and health, legal concepts and regulations, and ethics as required by State Division of Insurance for eligibility to test for and receive an Accident and Health Insurance License. 1.5 credits: 15 clock hours.

## INS 105 INTRODUCTION TO CLAIMS

Each person will recognize and appropriately use many terms pertaining to insurance claims handling, demonstrate a basic understanding of how claims are handled, and understand how the role of insurance adjusting relates to the insurance mechanism as a whole. 1.5 credits: 15 clock hours.

## INS 106 INSURANCE PERSONAL RESIDENTIAL PROPERTY

Analysis of the coverage provided by the Homeowners Policy (including Homeowner 2, 3, 4, 6 and 8) and all major endorsements. Comparison and contrast of the Dwelling Fire Policies and Homeowners Policies. Qualifying the risk with specific questions and a checklist for both prospects and renewals. 75 credits: 7.5 clock hours.

## INS 107 INSURING PERSONAL AUTO EXPOSURES

Analysis of the coverage provided by the Persona/Family Auto Policy. Endorsements of the Personal/Family Auto Policy, including No-Fault where applicable. Qualifying the risk with specific questions and a checklist for both prospects and renewals. Analysis of the Personal Umbrella Coverage. What is it and who needs it? . 75 credits: 7.5 clock hours.

## INS 108 INTRODUCTION TO COMMERCIAL CASUALTY INSURANCE

Analysis of Liability, General Liability Insurance, Workers Compensation, and Commercial Auto and Garage Insurance with Endorsements. Qualifying the risk with specific questions and a checklist for both prospects and renewals. .75 credits: 7.5 clock hours.

## INS 109 INTRODUCTION TO COMMERCIAL PROPERTY COVERAGE

The essentials of Commercial Property Insurance. Analysis of the coverage provided by the Commercial Property Policy including buildings and contents, endorsements to the Commercial Property Policy, commercial inland marine coverage, qualifying the risk with specific questions and a checklist for both prospects and renewals. .75 credits: 7.5 clock hours.

## INS 110 AGENCY OPERATIONS

Developing professionalism and professional relationships. Functions of the independent agency, including: relations with companies, relations with customers, automation in the agency. Agency systems, including: applications, policy issuance, binders, certificates of insurance, claims processing renewals, cancellations, billing, and legal obligations. .75 credits: 7.5 clock hours.

## INS 200 PROPERTY AND LIABILITY INSURANCE PRINCIPLES

Basic principles of insurance, introduction to contracts and operations of insurance business. Three credits: 30 clock hours.

## INS 201 PERSONAL INSURANCE

Analysis of personal loss exposures and personal insurance coverages including home, auto, life, and health. Three credits: 30 clock hours.

## INS 202 COMMERCIAL INSURANCE

Commercial coverage including property, business income, inland and ocean marine, crime boiler and machinery, general liability, auto, workers compensation and package policies. 4.5 credits: 45 clock hours.

## LIT: LITERATURE

LIT 115 INTRODUCTION TO LITERATURE
Introduces students to fiction, poetry, and drama. Emphasizes active and responsive reading. (Course fulfills a Humanities requirement.) Five credits.

## LIT 135 TOPICS IN LITERATURE

Introduces students to a variety of literary genres, including fiction, non-fiction, poetry and/or drama. Particular course titles and emphases will vary based on student interest. Course may be taken more than once for elective credit, provided titles are not repeated. One to Five credits.

## LIT 201 MASTERPIECES OF LITERATURE I

Examines significant writings in world literature from the ancients through the Renaissance. Emphasizes careful reading and understanding of the works and their cultural backgrounds. (Course fulfills a Humanities requirement.) Five credits.

## LIT 202 MASTERPIECES OF LITERATURE II

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. (Course fulfills a Humanities requirement.) LIT 201 is not a prerequisite for LIT 202. Five credits.

## LIT 216 THE LITERATURE OF HORROR

Introduces students to the genre of horror fiction. Explores the psychological and cultural dimensions of horror reflected in significant works in the field, particularly the short story, the novel, poetry and film. Five credits.

## LIT 225 INTRO TO SHAKESPEARE

This course explores a selection of works by William Shakespeare. It focuses on careful reading and interpretation of the plays and poems, includes pertinent information about Elizabethan England, and examines formal as well as thematic elements of the selected works. Five credits.

## LIT 235 SCIENCE FICTION

Examines the techniques and themes of science fiction through careful reading and interpretation of works by a variety of writers in the genre. Students examine the genre as it reflects social, political, psychological, and moral views. Five credits.

## LIT 245 LITERATURE OF THE AMERICAN WEST

This course examines works in various genres by writers of the American West. Investigates the dominant themes and social and historical backgrounds as these reflect both the particularity and the universality of the region's experience. Five credits.

## LIT 246 THE LITERATURE OF WOMEN

Uses literature and media to study the variety of experiences encountered by modern women. Helps women to understand not only the difficulties, but also the possibilities of attaining fulfillment beyond coping with life. Five credits.

## LIT 295 INDEPENDENT STUDY IN LITERATURE

Provides an opportunity for the serious-minded student to engage in intensive study and research on a specified topic under the direction of a faculty member. (This course is repeatable as long as content varies.) Prerequisite: ENG 121 and a course in literature or humanities. One to Three credits: contact instructor.

## MAN/MAR: MARKETING/ MANAGEMENT

## MAN 125 TEAMBUILDING

This course examines techniques to develop teamwork. By using teamwork, students will develop decision making skills, solve problems, develop planning skills, and create and maintain work channels so that quality leadership is created through teamwork. Two credits: 20 clock hours.

## MAN 155 TOTAL QUALITY IMPROVEMENT: PRINCIPLES

Students will participate in an environment that will allow them to use concepts to Total Quality Improvement including the principle foundations, goal setting and teambuilding. Three credits: 30 clock hours

MAN 156 TOTAL QUALITY IMPROVEMENT: DECISION MAKING TOOLS \& TECHNIQUES
Students will participate in using a variety of tools and methods for gathering data so that quality decisions will be made. Three credits: 30 clock hours

## MAN 157 TOTAL QUALITY IMPROVEMENT: CUSTOMER FOCUS

Students will participate in learning ways to: recognize who are customers, carry out customer expectations, measure customer satisfaction and reinforce good customer service. Three credits: 30 clock hours.

## MAN 171 MANAGEMENT ACTIVITY I

This course is designed to encourage growth and development through activities in a student or business organization with professional goals. Delta Epsilon Chi is the student organization for Marketing/Management majors. Two credits: 20 clock hours.

## MAN 206 SALES MANAGEMENT

A study of the organizational framework for sales strategy formulation, the administration of sales manpower, and evaluation and control of the sales program. Prerequisite: MAR 111, MAR 216, MAT 110, or permission of instructor. Five credits: 50 clock hours.

## MAN 207 HUMAN RESOURCES MANAGEMENT

This course will present the methods, functions, and techniques of personnel administration. Emphasis is placed on legal and social contexts of personnel issues, job analysis and design, training and evaluation, compensation, and benefit administration, labor/ management issues, and safety, health, and employee assistance programs. Five credits: 50 clock hours.

## MAN 208 SMALL BUSINESS MANAGEMENT

A study of the environment, management policies, marketing and control problems in small business. Emphasizes solving problems, recognizing and evaluating business opportunities. Includes practice in making decisions under conditions of uncertainty and incomplete knowledge. Prerequisite: Marketing/Management core requirements or advisor approval. Five credits: 50 clock hours.

## MAN 212 MANAGEMENT DECISION MAKING

The study of making management decisions with the aid of computer simulations. Illustrates how various combinations of the "marketing mix" change the business outcome. Prerequisite: MAN 208. Five credits: 50 clock hours.

## MAN 226 PRINCIPLES OF MANAGEMENT

A survey of the principles of management. Emphasis will be on the primary functions of planning, organizing, staffing, directing, and controlling with a balance between the behavioral and operational approach. Five credits: 50 clock hours.

## MAN 235 ORGANIZATIONAL BEHAVIOR

Provides an understanding of human behavior, management theory, and leadership as they relate to the student's success in the work environment. Prerequisite: MAN 237 or permission of instructor. Five credits: 50 clock hours.

## MAN 236 LABOR LAW RELATIONS

Gives students an understanding of the various laws that govern employer/employee relationships, unfair labor practices, strikes, boycotts, bargaining units, antitrust, anti-injunction, etc. Five credits: 50 clock hours.

## MAN 237 SUPERVISORY MANAGEMENT I

Assists the potential or newly appointed supervisor in becoming acquainted with the many problems which will confront him or her and offers practical advice for their solution. The experienced supervisor should benefit by a re-examination of his or her position and how it relates to other levels in the organization. Five credits: 50 clock hours.

## MAN 246 BUSINESS ETHICS

Students will examine current problems, practices, and trends of business ethics, including truth in advertising and professional codes of conduct. Two credits: 20 clock hours.

## MAN 247 SUPERVISORY MANAGEMENT II

This course is a continuation of Supervisory Management I. It assists the potential or newly appointed supervisor in becoming acquainted with the many problems which will confront him/her and offers practical advice for their solution. The experienced supervisor should benefit by a re-examination of his/her position and how it relates to other levels in the organization. Prerequisite: MAN 237. Five credits: 50 clock hours.

| MAN | 285 | INDIVIDUAL STUDIES IN MANAGEMENT |
| :--- | :--- | :--- |
| MAN | 286 | INDIVIDUAL STUDIES IN MANAGEMENT |
| MAN | 287 | INDIVIDUAL STUDIES IN MANAGEMENT |

These courses provide an opportunity for students to engage in extensive study and research beyond the stated prerequisites. Prerequisite: MAN 226 and Marketing/Management major or advisor approval. One to Three credits each: contact instructor.

## MAN 291 COOPERATIVE WORK EXPERIENCE <br> MAN 292 COOPERATIVE WORK EXPERIENCE <br> MAN 293 COOPERATIVE WORK EXPERIENCE

Bridges the gap between classroom instruction and work experience for the management-oriented student. Attention is given to specific on-the-job problems encountered by the student. Student will formulate work objectives and attend a weekly one-hour seminar. Employer involved in student evaluation. Other courses may be substituted with the consent of the advisor. Prerequisite: Declared Marketing/Management major, consent of a Niarketing/Management advisor, enrolled in one or more of the Marketing/Management program courses each quarter, employed in an area which is complimentary to degree option. Six credits: 160 clock hours each.

## MAR 105 PRINCIPLES OF ADVERTISING

An introduction to functions of advertising as a merchandising tool. Includes study of copy, media, art work, and production. Five credits: 50 clock hours.

## MAR 111 SALES

The student will learn to develop and deliver effective sales techniques. Topics include product knowledge, consumer buying behavior, and the progression from prospecting to closing the sale. Five credits: 50 clock hours.

## MAR 117 RETAILING

This course is an introductory course which will examine strategies for retail store management. The content will include retail organization, management, merchandising, promotion, control, and customer service. Five credits: 50 clock hours.

## MAR 120 INTRODUCTION TO FASHION MERCHANDISING

The fundamentals of fashion and the basic principles that control fashion movement are studied. The student will also learn how fashion originated and how it is produced and merchandised. Also covered are the interrelationships of the various levels of the fashion industry and careers in the fashion industry. Five credits: 50 clock hours.

## MAR 125 MARKETING RESOURCE SYSTEMS

This course examines the resource systems that influence marketing and related marketing activities. Topics include external planning environment, risk management, business cycles, and international trade. Two credits: 20 clock hours.

## MAR 126 FASHION BUYING

This course examines the buyer's role in retail merchandising, including the concepts and principles of fashion merchandising, operations, the buyer's responsibility, and buying practices and techniques. Four credits: 40 clock hours.

## MAR 127 FASHION EVOLUTION

This course is a study of fashion clothing from Egyptians to present day. This includes understanding the contribution of important eras and their influence upon today's fashion. Three credits: 30 clock hours.

## MAR 185 INDIVIDUAL STUDIES IN MARKETING <br> MAR 186 INDIVIDUAL STUDIES IN MARKETING <br> MAR 187 INDIVIDUAL STUDIES IN MARKETING

These courses provide an opportunity for students to engage in intensive study and research beyond the stated prerequisites. Prerequisite: MAR 216 and Marketing/Management major or advisor approval. One to Three credits each: contact instructor.

## MAR 205 MARKETING/MANAGEMENT SEMINAR

Students will explore contemporary marketing or management problems as they relate to their goals and aspirations. .5 credit hours: 5 clock hours.

## MAR 211 ADVANCED SALES

Develop skills of the professional salesperson through role playing situations and studies of advanced closing techniques. Prerequisite: MAR 111. Five credits: 50 clock hours.

## MAR 216 PRINCIPLES OF MARKETING

Students will analyze theoretical marketing processes and the strategies of product development, pricing, promotion and distribution, and their applications to business and the individual consumer. Five credits: 50 clock hours.

## MAR 225 RETAIL MERCHANDISING

This course examines in detail each of the merchandising activities a buyer of fashion goods might be expected to perform at the retail level. Prerequisite: MAT 110 and MAR 126 or permission of instructor. Five credits: 50 clock hours.

## MAR 226 TEXTILES

Students will study natural and man-made fibers, including characteristics, properties, and uses. The students will also identify various yarn constructions, fabric constructions, dyeing, printing and finishing methods. Five credits: 50 clock hours.

## MAR 238 MARKETING RESEARCH

This course will introduce the principles and practices of marketing research, including research instruments and data collection and interpretation. Prerequisite: MAR 216. Three credits: 30 clock hours

## MAR 245 ANALYSIS OF FASHION CONCEPTS

Students will learn elements and principles of design as they relate to fashion and analyze garments in terms of suitability for various images and body types. Three credits: 30 clock hours.

## MAR 255 REAL ESTATE LICENSE PREPARATION

The student will review information which will be covered by the Colorado Real Estate license examination. This is a review course for students who have completed MAR 257 and MAR 258 but have not completed the state exam. Prerequisite: MAR 257 and MAR 258. Three credits: 30 clock hours.

## MAR 256 REAL ESTATE CLOSING AND TRUST ACCOUNTS

The student will analyze the legal requirements; record keeping responsibilities; establishment and maintenance of trust accounts; and the brokers responsibilities related to closing. Three credits: 30 clock hours.

## MAR 257 REAL ESTATE PRACTICE AND LAW

The student should be able to identify the language of real estate, identify the essential elements of real estate law and principles, and be able to practice real estate under the supervision and training of a manager broker. This course is required for the Colorado Real Estate license exam. Six credits: 60 clock hours.

## MAR 258 COLORADO REAL ESTATE LAW \& COLORADO REAL ESTATE CONTRACTS

Students will categorize and develop a comprehension of Colorado Real Estate laws and Colorado Real Estate contracts. This course is required for the Colorado Real Estate license exam. Three credits: 30 clock hours.

## MAR 259 REAL ESTATE SALES TRAINING

Students will identify and consider skills needed to list and sell real estate and arrange financing for the buyer. Prerequisite: MAR 257 and MAR 258. Three credits: 30 clock hours.

## MAR 265 REAL ESTATE FINANCE

The student will formulate how to counsel buyers and sellers in financing techniques, including sellers financing, the importance of calculations, and disclosures required for the various methods of financing, and do an analysis of necessary documents for financing. Prerequisite: MAR 257. Two credit: 20 clock hours.

## MAR 266 REAL ESTATE APPRAISAL

This course will prepare the student to develop the competencies needed to obtain a Real Estate Appraisal license. Five credits: 50 clock hours.

## MAR 267 ADVANCED REAL ESTATE LAW

Students shall examine the sources of law and the legal system, the law of agency, licensing concerns, limitations of ownerships, evidence of title, notes and security instruments, and current legal concerns. Prerequisite: MAR 257. One credit: 10 clock hours.

## MAR 268 REAL ESTATE LICENSE RENEWAL COURSE

This course is required by the Real Estate Commission for license renewal. The course will cover new laws, commission rules, recent court decisions, changing standards or practice and other areas of concern to the public, commission and industry. Prerequisite: Active or inactive Real Estate Broker or Sales license. One credit: 10 clock hours.

## MAR 275 MARKETING/MANAGEMENT SEMINAR <br> MAR 276 MARKETING/MANAGEMENT SEMINAR MAR 277 MARKETING/MANAGEMENT SEMINAR

Contemporary problems are explored as they relate to students' goals and aspirations. Prerequisite: Marketing/Management major or advisor approval. One to Three credits each: 10 to 30 clock hours.

## MAS: MEXICAN AMERICAN STUDIES

## MAS 105 INTRODUCTION TO MEXICAN AMERICAN STUDIES

This course is designed to provide the student with the opportunity to study the evolution of a new Mexican-American culture in the New World and to develop an understanding and appreciation of this unique culture in a contemporary setting. Five credits.

## MAS 106 PSYCHOLOGY OF THE MEXICAN AMERICAN

Identifies and examines the various psychological traits which make up the unique, and seldom understood, world view of the Mexican American. Includes the psychology of the Mexican American male and female, and related social problems. Five credits.

## MAS 120 CULTURE OF MEXICO AND SOUTH AMERICA

Examines the social and cultural institutions, as well as the history of Mexico and South America from pre-Columbian times to the present. Emphasis will be placed on the Folkloric aspects of Hispanic culture. Five credits.

## MAS 161 EARLY HISTORY OF MEXICO

Studies the important aspects of Indian history and culture in Mexico. Emphasizes the Aztec empire and its cultural contributions. Examines the Spanish conquest and its effects on the Mexican Indian. Five credits.

## MAS 162 INTRODUCTION TO MODERN MEXICO

Studies the cultural and historical events that have shaped Mexico into what it is today. Topics include Mexican-U.S. relations, the Mexican Revolution, contemporary issues such as immigration, industrialization, and population. Five credits.

## MAT: MATHEMATICS

*Indicates instruction is administered by Developmental Studies Division.

## *MAT 012 DEVELOPMENTAL MATHEMATICS II

Provides students, who lack computational skills, with instruction in whole numbers in the arithmetic operations of addition, subtraction, multiplication, and division. The major objectives are to develop computational and arithmetic operational skills in whole numbers to enable the student to enter MAT 013. Prerequisite: placement. Two to Five credits.

## *MAT 013 DEVELOPMENTAL MATHEMATICS III

Provides students, who lack computational skills, with instruction in the operations dealing with fractions. The major objective is to develop computational skills in fractions to enable the student to enter MAT 014. Prerequisite: MAT 012 or placement. Two to Five credits.

## *MAT 014 DEVELOPMENTAL MATHEMATICS IV

Provides students, who lack computational skills, with instruction in decimals, ratios, proportions, and percents. The major objective is to develop computational skills in decimals, ratios, proportions, and percents to enable the student to enter MAT 015. Prerequisite: MAT 013 or placement. Two to Five credits.

## *MAT 015 DEVELOPMENTAL MATH V

Provides students, who lack computational skills, with instruction in graphs, measurement, and introductory algebra. Prepares the student to pass the mathematics portion of the GED test. Prerequisite: MAT 014 or placement. Two to Five credits.

## *MAT 095 INTRODUCTION TO MATHEMATICS

This is a course for students who have a high school diploma or its equivalent but need to review basic computational skills. The topics include order of operations, fractions, decimals, ratios, proportions, percents, an introduction to algebra and basic geometric concepts. The major objective of the course is to provide students with the necessary computational skills to enter beginning algebra. Prerequisite: placement. Five credits.

## *MAT 097 INTRODUCTION TO BEGINNING ALGEBRA

This course allows the student to review concepts in preparation for beginning algebra. The topics include fractions, decimals, percents, integers, order of operations, exponential expression, algebraic expressions and formulas, linear equations, polynomials and basic geometric concepts. Prerequisite: placement. Three credits.

## MAT 100 ELEMENTARY ALGEBRA

## (This course may not be applied to the A.A. or A.S. degree.)

This course includes the study of linear equations, polynomials, factoring rational expressions, quadratic equations, linear systems, inequalities, graphing, and applications. Also included are absolute value equations and inequalities, systems of linear inequalities, and radicals. Prerequisite: A current assessment test is required. Five credits, 50 hours.

## MAT 101 APPLIED MATHEMATICS I

(This course will not satisfy minimum nor elective requirements for the A.A. or A.S. degree. Technology Division)
Reviews many of the basic fundamentals of math as used in everyday life, on the job, at home, in business, and for leisure. Includes fractions, decimals, percentages, measurement, ratio and proportion, equation fundamentals, right angle trigonometry, and metric conversions. The mathematical concepts and problems can be applied by the student to his or her special area of interest. Five credits.

## MAT 105 INTERMEDIATE ALGEBRA

(This course will not apply to the A.A. or A.S. degrees.)
This course approaches problem solving using equations, slope, inequalities systems of equations, polynomials, quadratic equations, rational expressions, rational exponents, radical expressions, graphing, and applications. Also covered will be an introduction to functions, inverse functions, quadratic and quotient inequalities, and an introduction to logarithms. Prerequisite: MAT 100, or a current assessment test. Five credits, 50 hours.

## MAT 110 APPLIED BUSINESS MATHEMATICS

(This course will not satisfy minimum nor elective requirements for the A.A. or A.S. degree. Business Division course)
The objectives of this course are to: (1) provide the student with math skills to enter a job in business; (2) provide the student with a broad introduction into the math and terminology used in different areas of business; and (3) provide the student with the basic math procedures in order to make better use of calculators. Five credits: 50 clock hours.

## MAT 113 COLLEGE PLANE GEOMETRY

(This course will not apply to the A.A. or A.S. degrees.)
For students with little or no background in plane geometry. The student will study some logic and deductive reasoning. Emphasis will be placed on congruent triangles, parallel and perpendicular lines, parallelograms, properties of circles, and similarity of triangles. An introduction to inequalities will be made. If time permits, some constructions and loci will be presented. Prerequisite: MAT 100 or current assessment test. Five credits, 50 hours.

## MAT 121 COLLEGE ALGEBRA

Includes a brief review of intermediate algebra, equations and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear systems, graphing of the conic sections, introduction to sequences and series, permutations and combinations, the binomial theorem, theory of equations and an introduction to matrices and determinants. Prerequisite: MAT 105. One year of high school Geometry or MAT 113 strongly recommended. A current assessment test is required. Six credits, 60 hours.

## MAT 122 COLLEGE TRIGONOMETRY

This is a traditional prerequisite course to the calculus sequence. Topics include trigonometric functions (with graphs and inverse functions), identities and equations, solutions of triangles, complex numbers, vectors and topics in analytic geometry. Prerequisite: 1 year of high school geometry or MAT 113 and MAT 121 or a current assessment test may be required. Five credits, 50 hours.

## MAT 125 SURVEY OF CALCULUS

For business, life science and social science majors. Includes derivatives, integrals, and their applications, with attention restricted to algebraic, exponential and logarithmic functions. Prerequisite: MAT 121 or current assessment test. Five credits, 50 clock hours.

MAT 135 INTRODUCTION TO STATISTICS
Includes data presentation and summarization, introduction to probability concepts and distributions, statistical inference-estimation, hypothesis testing, comparison of populations, correlation and regression. Prerequisite: MAT 105. A current assessment test is required. Five credits, 50 hours.

## MAT 185 SPECIAL TOPICS IN MATHEMATICS

Topics will reflect the special expertise of the faculty and/or the special needs of the students. Prerequisite: Consent of instructor. One to Six credits.

## MAT 190 MATHEMATICS FOR THE LIBERAL ARTS

This course is designed to improve the student's real-world problem solving skills. Topics include sets, logic, probability, data sampling, interest and annuities, geometry, linear programming, and exponential and logarithmic functions. This course has been created for A.A. degree seeking students who plan to enroll in a liberal arts major at the University of Northern Colorado. Prerequisite: MAT 105. A current assessment test is is required. Five credits: 50 hours.

## MAT 201 CALCULUSI

Introduces single variable calculus and analytic geometry. Includes limits, continuity, derivatives, and applications of derivatives as well as indefinite and definite integrals. Prerequisite: MAT 121 and MAT 122 or a current assessment test. Five credits, 50 hours.

## MAT 202 CALCULUS II

Continuation of single variable calculus which will include applications of integrals, exponential and logarithmic functions, trigonometric and hyperbolic functions, and techniques of integration. Prerequisite: MAT 201. Five credits, 50 hours.

## MAT 203 CALCULUS III

Continuation of single variable calculus which will include polar coordinates, analytic geometry, improper integrals, infinite series and vectors in two and three dimensions. Prerequisite: MAT 202. Five credits, 50 hours.

## MAT 215 DISCRETE MATHEMATICS

Designed for computer science students. Includes algorithms, counting, graph theory, logic and finite-state machines. Prerequisite: MAT 125 or MAT 201, and one high-level programming language. Five credits, 50 hours.

## MAT 255 LINEAR ALGEBRA

This course includes an introduction to the theory of vector spaces, linear transformations, matrix representations, eigenvalues, and eigenvectors. Prerequisite: MAT 203 or permission of instructor. Five credits, 50 hours.

## MAT 260 CALCULUS IV

This course 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 applications). Prerequisite: MAT 20. MAT 255 is highly recommended. Five credits, 50 hours.

## MAT 265 DIFFERENTIAL EQUATIONS

The primary emphases in this course are on techniques of problem solving and applications. Topics include first, second, and higher order differential equations, series methods, approximations, systems of differential equations, and Laplace transforms. Prerequisite: MAT 260 and MAT 255. Five credits, 50 hours.

## MAT 295 INDEPENDENT STUDY IN MATHEMATICS

Provides an opportunity for the highly-motivated student to engage in intensive study and research on a specified topic under the direction of a faculty member. The student will be limited as to the number of independent study credits taken per quarter. Prerequisite: previous academic study or experience in mathematics. One to Three credits: contact advisor.

## MCM: SPECIALIZED MANUAL COMMUNICATION

## MCM 212 INTRODUCTION TO SIGNING EXACT ENGLISH

This course introduces Signing Exact English as used in educational settings. Exposure to the deaf culture, mainstreaming, finger spelling, and the Dolch lists will be topics of discussion. Three credits.

## MCM 213 SIGNING EXACT ENGLISH I

This course is a continuation of Introduction to S.E.E. and will consist of weekly reviews of introductory materials combined with practical applications of those skills. New material will cover additional vocabulary from word groups, sign creation, affixes and skill enhancement. Prerequisite: MCM 212 or instructor's permission. Three credits.

MCM 221 INTRODUCTION TO AMERICAN SIGN LANGUAGE
The purpose of this course is to provide the student with an overview of American Sign language (A.S.L.) and Deaf Culture. The student will be introduced to basic sign vocabulary and conversational skills. Three credits.

## MCM 222 AMERICAN SIGN LANGUAGEI

This course is a continuation of MCM 221, and is designed to build the students' expressive skills in American Sign Language, through knowledge of A.S.L. syntax. Prerequisite: MCM 221 or instructor's permission. Three credits.

## MCM 223 AMERICAN SIGN LANGUAGE II

This course focuses on students' receptive skills through in-depth study of American Sign Language syntax, body language, and different signing styles. Prerequisite: MCM 222 or instructor's permission. Three credits.

## MCM 224 AMERICAN SIGN LANGUAGE III

This class is designed to encourage students to become intermediate to advanced signers/receivers of American Sign Language. Prerequisite: MCM 223 or instructor's permission. Three credits.

## MCM 225 VOCABULARY BUILDING

This class will provide vocabulary enrichment for advanced signers, and a general study of the dynamics of both verbal and nonverbal communication. Three credits.

## MCM 226 FINGERSPELLING

This course is designed for students who want to increase or improve their finger spelling production and comprehension. Finger spelling rates, rhythms, patterns, and styles from different conversational perspectives are included in this course. Three credits.

## MUS: MUSIC

## MUS 100 FUNDAMENTALS OF MUSIC THEORY

This course is designed to help beginning music students, or those students with limited background in music theory. The course focuses upon the basic elements of music, including notation, rhythm, scales, key signatures, intervals, and chords. Five credits.

## MUS 101 MUSIC THEORY I

This course reviews music fundamentals, and emphasizes diatonic four-part harmony, analysis, ear training, and keyboard harmony. Prerequisite: MUS 100 or instructor permission. Four credits.

## MUS 102 MUSIC THEORY II

This course emphasizes chromatic four-part harmony, analysis, ear training, and keyboard harmony. Prerequisite: Music Theory I or Instructor permission. Four credits.

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MUS 111 MUSIC EXPRESSIONSI
MUS 112 MUSIC EXPRESSIONS II
MUS 113 MUSIC EXPRESSIONS III
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Provides a variety of musical experiences to stimulate senses, encourages participation and self-expression; provides information on composers, musical styles and history of music and songs. One to Two credits.

## MUS 120 MUSIC APPRECIATION

Covers the basic materials of music, musical forms, media, genres, and musical periods. Emphasizes the development of tools for intelligent listening and appreciation. The course fulfills a humanities requirement. Five credits.

## MUS 121 INTRODUCTION TO MUSIC HISTORY I

Introduction to Music History I 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 fulfills a humanities requirement. Five credits.

## MUS 122 INTRODUCTION TO MUSIC HISTORY II

Continues Introduction to Music History I with a review of the elements of music and a study of music from Early Romantic Period to the present. This course fulfills a humanities requirement. Five credits.

## MUS: PERFORMANCE

| MUS | 131 | CLASS PIANO I |
| :--- | :--- | :--- |
| MUS | 132 | CLASS PIANO II |
| MUS | 133 | CLASS PIANO III |
| MUS | 134 | CLASS PIANO IV |
| MUS | 135 | CLASS PIANO V |
| MUS | 136 | CLASS PIANO VI |
|  |  |  |
| MUS | 131 | CLASS GUITAR I |
| MUS | 132 | CLASS GUITAR II |
| MUS | 133 | CLASS GUITAR III |
| MUS | 134 | CLASS GUITAR IV |
| MUS | 135 | CLASS GUITAR V |
| MUS | 136 | CLASS GUITAR VI |

This course is an application of the fundamentals of music to the (name of performance), plus introduction of basic technique, repertoire, and sight-reading. Evaluation will be on both written and practical skills. Two credits each.

## MUS: PRIVATE INSTRUCTION

| MUS | 141 | APPLIED PIANO I |
| :--- | :--- | :--- |
| MUS | 142 | APPLIED PIANO II |
| MUS | 143 | APPLIED PIANO III |
| MUS | 144 | APPLIED PIANO IV |
| MUS | 145 | APPLIED PIANO V |
| MUS | 146 | APPLIED PIANO VI |
| MUS | 141 | APPLIED GUITAR I |
| MUS | 142 | APPLIED GUITAR II |
| MUS | 143 | APPLIED GUITAR III |
| MUS | 144 | APPLIED GUITAR IV |
| MUS | 145 | APPLIED GUITAR V |
| MUS | 146 | APPLIED GUITAR VI |
|  |  |  |
| MUS | 141 | APPLIED VOICE I |
| MUS | 142 | APPLIED VOICE II |
| MUS | 143 | APPLIED VOICE III |
| MUS | 144 | APPLIED VOICE IV |
| MUS | 145 | APPLIED VOICE V |
| MUS | 146 | APPLIED VOICE VI |

Private instruction consists of one thity minute lesson per week. Participation in a student performance is required at least once each quarter. Two credits each.

## MUS 151 COMMUNITY CHORALE

Community Chorale is open to adult singers of all skill levels and ages and requires no entrance audition. Participants can expect an informal and enjoyable learning environment where techniques of good choral singing will be taught and where they will be exposed to a variety of choral music. Community Chorale, as opposed to Concert Chorale, will be scheduled during evenings in order to better serve the needs of, and be more accessible to the non-traditional student and community members in general. One credit.

## MUS 152 CONCERT CHORALE

Concert Chorale is open to adult singers of all skill levels and ages and requires no entrance audition. Participants can expect an informal and enjoyable learning environment where techniques of good choral singing will be taught and where they will be exposed to a variety of choral music. One credit.

## MUS 155 JAZZ/FUSION/BLUES ENSEMBLE

Jazz/fusion/blues ensemble will provide musical experience and learning in a band/ensemble environment, culminating in successful performance. One credit.

| MUS | 161 | KEYBOARD EXPRESSIONS I |
| :--- | :--- | :--- |
| MUS | 162 | KEYBOARD EXPRESSIONS II |
| MUS | 163 | KEYBOARD EXPRESSIONS III |
|  |  |  |
| MUS | 161 | VOICE EXPRESSIONS I |
| MUS | 162 | VOICE EXPRESSIONS II |
| MUS | 163 | VOICE EXPRESSIONS III |
| MUS | 161 | GUITAR EXPRESSIONS I |
| MUS | 162 | GUITAR EXPRESSIONS II |
| MUS | 163 | GUITAR EXPRESSIONS III |

Private instruction consists of one thirty minute lesson per week. Expand musical skills and enjoy playing/singing different musical styles in an atmosphere that promotes growth and acceptance. Not for music emphasis students. Two credits each.

## MUS 176 MUSIC THEATRE PERFORMANCE

Practical experience in the production of a musical. Students will be taught techniques of singing, acting, and movement as well as additional aspects of live performance of music theatre culminating in a public performance. Three credits.

## MUS 205 RECITAL PERFORMANCE

An opportunity for advanced applied students to perform publicly in a solo recital or half-recital (at least 20 minutes). One to three credits.

## MUS 223 JAZZ-ROCK THEORY/IMPROVISATION

This course utilizes the student's primary instrument, piano, voice, and ear to teach music theory as it applies to improvisation and performing solo over jazz, rock, fusion, and blues music. Two credits.

## MUS 299 MUSIC PRACTICUM

This learning structure facilitates the development of creative talents (an interrelation of motor, affective, and cognitive skills). The particular format and content of each practicum is determined by the musical form the student is working in and the student's level of proficiency. May be repeated at different levels of proficiency. One to three credits: contact department chair.

## PEA: PHYSICAL EDUCATION ACTIVITIES

| PEA | 101 | ARCHERY I |
| :--- | :--- | :--- |
| PEA | 102 | ARCHERY II |
| PEA | 103 | ARCHERY III |

Teaches the techniques and fundamentals of archery. One credit: 20 clock hours.

| PEA | 131 | BOWLING I |
| :--- | :--- | :--- |
| PEA | 132 | BOWLING II |
| PEA | 133 | BOWLING III |

Rules, skills, strategy, and courtesies of individual and team bowling are covered. One credit: 20 clock hours.

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PEA 151 AQUASIZEI
PEA 152 AQUASIZE II
PEA 153 AQUASIZE III
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This unique form of exercise tones and trims with minimal effort and also has therapeutic value. Class is performed in swimming pool. Basic water safety tips are taught. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEA 161 SWIMMING I

Instructs non-swimmers, using the American Red Cross swimming program. Teaches basic strokes of swimming. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEA 162 SWIMMING II <br> PEA 163 SWIMMING III

Incorporates the basic sequence of skills taught in the American Red Cross intermediate and advanced swimmer classifications. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEA | 201 | ARCHERY IV |
| :--- | :--- | :--- |
| PEA | 202 | ARCHERY V |
| PEA | 203 | ARCHERY VI |

These classes improve knowledge of the basic skills learned in PEA 101-103. One credit: 20 clock hours. On and one half credit: 30 clock hours.

PEA 231 BOWLING IV
PEA 232 BOWLING V
PEA 233 BOWLING VI
These classes improve the basic skills, rules, and strategy of bowling. One credit: 20 clock hours.One and one half credit: 30 clock hours.

| PEA | 251 | AQUASIZE IV |
| :--- | :--- | :--- |
| PEA | 252 | AQUASIZE V |
| PEA | 253 | AQUASIZE VI |

Intensity varies as course progresses. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEA | 261 | SWIMMING IV |
| :--- | :--- | :--- |
| PEA | 262 | SWIMMING V |
| PEA | 263 | SWIMMING VI |

Intensity varies as course progresses. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEB: PHYSICAL EDUCATION BALL SPORTS

## PEB 101 BASKETBALLI

An activity class which allows the student to learn and develop the fundamentals of basketball. Class also involves team play. One credit: 20 clock hours.

## PEB 102 BASKETBALL II

Gives students additional training in basketball skills,fundamentals, and team play. One credit: 20 clock hours.

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PEB 104 FLAG FOOTBALLI
PEB 105 FLAG FOOTBALL II
PEB }106\mathrm{ FLAG FOOTBALL III
```

Allows students to participate on a team level. Participants are divided into teams and records are maintained throughout the season. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEB | 107 | GOLFI |
| :--- | :--- | :--- |
| PEB | 108 | GOLF II |
| PEB | 109 | GOLF III |

Develops knowledge of the rules, courtesies, and skills of golf and instills an appreciation of the game. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEB | 115 | WALLYBALL I I |
| :--- | :--- | :--- |
| PEB | 116 | WALLYBALL II |
| PEB | 117 | WALLYBALL III |

Combination of Volleyball and Racquetball skills to play an off-thewall volleyball game. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEB 141 RACQUETBALLI

Teaches the basic movements, skills and rules of racquetball. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEB 142 RACQUETBALL II

Improves player skills and strategies of PEB 141. More individual play will be stressed. One credit: 20 clock hours. One and one half credit: 30 clock hours.

PEB 143 RACQUETBALL III
For students who want to further improve the skills and knowledge of racquetball as covered in Racquetball I and II. One credit: 20 clock hours. One and one half credit: 30 clock hours.

PEB 144 ADVANCED RACQUETBALL
An advanced course that will emphasize more strategy and a variety of difficult shots. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEB | 151 | SOFTBALL I |
| :--- | :--- | :--- |
| PEB | 152 | SOFTBALL II |
| PEB | 153 | SOFTBALL III |

Teaches various skills, techniques, rules, and regulations of softball. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

| PEB | 161 | TENNIS I |
| :--- | :--- | :--- |
| PEB | 162 | TENNIS II |
| PEB | 163 | TENNIS III |

Introduces theory and practice of tennis. Skills taught include serve, forehand and backhand, volleying, footwork, scoring, rules. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

PEB 171 VOLLEYBALLI
PEB 172 VOLLEYBALL II
PEB 173 VOLLEYBALL III
Teaches basic skills of volleyball. Team play is stressed, and some intra-squad competition is provided. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

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PEB 181 COMPETITIVE VOLLEYBALLI
PEB 182 COMPETITIVE VOLLEYBALL II
PEB 183 COMPETITIVE VOLLEYBALL III
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Provides the students with the opportunity to develop skills and strategies for competitive volleyball. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

## PEB 201 BASKETBALL III PEB 202 BASKETBALL IV

Classes further improve the basic skills of basketball, introduces the student to a further awareness of offensive and defensive strategies. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEB 203 INTRAMURAL BASKETBALLI

Basic intramural basketball program ending with a tournament. Emphasis is on teamwork and good sportsmanship. "Course" would not involve the instruction found in a basketball class. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

## PEB 204 INTRAMURAL BASKETBALL II

Gives students a further opportunity to enhance what they experienced in PEB 201. One credit: 20 clock hours. One and onehalf credits: 30 clock hours.

## PEB 204 FLAS FOOTBALL IV <br> PEB 205 FLAG FOOTBALL V PEB 206 FLAG FOOTBALL VI

These classes improve the skills learned in PEB 104-106. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEB | 207 | GOLFIV |
| :--- | :--- | :--- |
| PEB | 208 | GOLF V |
| PEB | 209 | GOLF VI |

These classes improve the techniques of grip, stance, swing and follow-through. Individual play and putting stressed. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEB | 215 | WALLY BALL IV |
| :--- | :--- | :--- |
| PEB | 216 | WALLY BALL V |
| PEB | 217 | WALLY BALL VI |

Players will experience a higher level of skills and strategies. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEB | 251 | SOFTBALL IV |
| :--- | :--- | :--- |
| PEB | 252 | SOFTBALL V |
| PEB | 253 | SOFTBALL VI |

Improves knowledge of the fundamental, skills, rules, and regulations of softball. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEB | 261 | TENNIS IV |
| :--- | :--- | :--- |
| PEB | 262 | TENNIS V |
| PEB | 263 | TENNIS VI |

Improves the player's skills and strategies. More individual play will be stressed. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEB | 271 | VOLLEYBALL IV |
| :--- | :--- | :--- |
| PEB | 272 | VOLLEYBALL V |
| PEB | 273 | VOLLEYBALL VI |

Improvement of skills and strategies. Competitiveness varies as course progresses. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEB 275 INTRAMURAL VOLLEYBALLI

Intramural volleyball classes will emphasize rules, regulations, sportsmanship and teamwork. Class will end with a tournament. The course will not involve teaching as many skills as emphasized in a volleyball class. One credit: 20 clock hours. One and one half credit: 30 clock hours.

PEB 281 COMPETITIVE VOLLEYBALL IV
PEB 282 COMPETITIVE VOLLEYBALL V
PEB 283 COMPETITIVE VOLLEYBALL VI
Provides students the opportunity to continue improvement of skills and strategies of competitive volleyball. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PED: PHYSICAL EDUCATION DANCE

| PED | 101 | CLASSICAL BALLET I |
| :--- | :--- | :--- |
| PED | 102 | CLASSICAL BALLET II |
| PED | 103 | CLASSICAL BALLET III |

Develops poise, grace, agility, and rhythm by learning the classical Cecchette form of ballet. One credit: 20 clock hours. One and onehalf credits: 30 clock hours.

| PED | 111 | AEROBICS I |
| :--- | :--- | :--- |
| PED | 112 | AEROBICS II |
| PED | 113 | AEROBICS III |

Helps students gain cardiovascular efficiency through a variety of dance routines. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

| PED | 117 | BENCH AEROBICS I |
| :--- | :--- | :--- |
| PED | 118 | BENCH AEROBICS II |
| PED | 119 | BENCH AEROBICS III |

Step training class using individual benches to step on and off of while simultaneously performing upper body movements. This low impact/high intensity cardiovascular workout is an excellent fat burning class which also works the legs and gluts. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

| PED | 121 | JAZZ DANCE I |
| :--- | :--- | :--- |
| PED | 122 | JAZZ DANCE II |
| PED | 123 | JAZZ DANCE III |

Introduces students to this indigenous dance form of the United States. Teaches basic jazz techniques, terminology, jazz movement, and routines. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

## PED 126 LOW IMPACT AEROBICS I <br> PED 127 LOW IMPACT AEROBICS II <br> PED 128 LOW IMPACT AEROBICS III

This class is designed to help the student obtain a better understanding of Health \& Fitness through cardiovascular exercise without the normal impact of aerobic activity. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

| PED | 135 | TRI FIT I |
| :--- | :--- | :--- |
| PED | 136 | TRI FIT II |
| PED | 137 | TRI FIT III |

This class works on cardiovascular endurance, muscular toning and flexibility by using low-impact aerobics and resistance wallpulleys at the same time. In addition, other methods are used for variety such as very basic bench aerobics, circuit training, and rubber band toning techniques. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PED 165 BALLROOM DANCINGI <br> PED 166 BALLROOM DANCING II

Students will learn a variety of social dances and various steps and the riythmical aspects of ballroom dance. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PED | 171 | COUNTRY SWING I |
| :--- | :--- | :--- |
| PED | 172 | COUNTRY SWING II |
| PED | 173 | COUNTRY SWING III |

Introduces the many styles and various combinations of steps suitable for Western dance music. Includes instruction in converting combinations of other traditional and fad dance steps to country swing as they become popular. One credit: 20 clock hours.

## PED 174 ADVANCED COUNTRY SWING

This class is especially designed for advanced ievel students. The specific steps to be taught are triple step, two step, waltz, double two step, cowboy cha-cha and advanced turns associated with each rhythm. One credit: 20 clock hours.

PED 201 CLASSICAL BALLET IV
PED 202 CLASSICAL BALLET V
PED 203 CLASSICAL BALLET VI
Increase poise, grace, agility and rhythm. Develops an appreciation of ballet as an art form One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PED 217 BENCH AEROBICS IV <br> PED 218 BENCH AEROBICS V

PED 219 BENCH AEROBICS VI
Intensity varies as course increases. One credit: 20 clock hours. One and one half credit: 30 clock hours.

PED 226 LOW IMPACT AEROBICS IV
PED 227 LOW IMPACT AEROBICS V
PED 228 LOW IMPACT AEROBICS VI
Intensity varies as course increases. One credit: 20 clock hours. One and one half credit: 30 clock hours.

PED 235 TRI FIT IV
PED 236 TRI FIT V
PED 237 TRI FIT VI
Intensity varies as course progresses. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PED 271 COUNTRY SWING IV <br> PED 272 COUNTRY SWING V <br> PED 273 COUNTRY SWING VI

Improves dancer's skills and abilities in country swing dance. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEF: PHYSICAL EDUCATION FITNESS

## PEF 104 AEROBIC CONDITIONINGI <br> PEF 105 AEROBIC CONDITIONING II <br> PEF 106 AEROBIC CONDITIONING III

This class emphasizes increasing cardiovascular endurance through a variety of Aerobic dance activities as well as walking. Muscular toning exercises are included. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEF 108 SELF-DEFENSEI <br> PEF 109 SELF-DEFENSE II

Teaches various skills and techniques of self defense. One credit: 20 clock hours.

## PEF 117 ELASTIC BAND WORKOUT

The purpose and objectives of this course is to enable the student to tone, strengthen and reapportion all body parts with the use of rubber band resistance. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

| PEF | 118 | FAT BURNERS |
| :--- | :--- | :--- |
| PEF | 119 | FAT BURNERS II |
| PEF | 120 | FAT BURNERS III |

This course is designed for overweight individuals who wish to tone and burn fat from the body frame. Students will learn to isolate and tone various muscle groups through continuous activity. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

## PEF 121 SLIMNASTICSI <br> PEF 122 SLIMNASTICS II <br> PEF 123 SLIMNASTICS III

Designed to develop a better figure, firm up the body, increase circulation, and improve coordination. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

## PEF 126 AEROSPACE FITNESS \& PERFORMANCEI

This class will provide an individualized program of exercise, nutrition, and health enrichment for increased performance and prolonged career in aviation. Physiological evaluation in FITPAC lab available at cost of $\$ 15.00$. Two credits: 30 clock hours.

| PEF | 141 | YOGA I |
| :--- | :--- | :--- |
| PEF | 142 | YOGA II |
| PEF | 143 | YOGA III |

Helps students attain physical health, clarity of mind, and spiritual awareness through various exercises. Studies a person's entire being, consisting of body, mind, and spint. One credit: 20 clock hours. One and one-half credit: 30 clock hours.

## PEF 145 BEGINNING FAT BURNERS <br> PEF 146 BEGINNING FAT BURNERS

This is a low intensity level class designed for the beginning exerciser who wants to achieve increased endurance and muscular tone while burning body fat without strenuous movement. One credit: 20 clock hours. One and one-half credit: 30 clock hours.

## PEF 151 EXERCISE \& NUTRITION

This course is designed to provide information of all aspects of physical fitness and to teach each student how to achieve physical fitness on an individualized basis. Many health issues will be presented as well. In addition, the course intends to provide each student with a comfortable and enjoyable experience in a variety of fitness programs according to their personal capabilities. A pre-and post-fitness evaluation will be included. This course is for all ages and fitness levels and will educate and train individuals to pursue, achieve, and maintain good health as part of an everyday lifestyle! Three credits: 40 clock hours.

| PEF | 161 | BODYBUILDING I |
| :--- | :--- | :--- |
| PEF | 162 | BODYBUILDING II |
| PEF | 163 | BODYBUILDING III |

PEF 163 BODYBUILDING III
To attain maximum potential in muscular and overall body definition and size through progressive resistant training and diet. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

## PEF 171 KUNG FUI

Emphasis: Tai Chi Chuan I China's oldest martial art form will be introduced, stressing the traditional basics of body alignment, relaxation, and the cultivation of health. Classroom discussion will include practical Internal Boxing theory for the beginner.

Emphasis: Shaolin Temple Boxing I The basic concepts of Chinese boxing will be taught with the purpose of developing a foundation for robust health in the beginning students. In addition, an appreciation of the traditional Chinese view of martial arts will be encouraged.

Emphasis: Power Building. This class will stress the development of health and strength through the Chinese method of internal training. Long-term benefits will be emphasized. One credit: 20 clock hours. One and one-half credit: 30 clock hours.

## PEF 172 KUNG FU II

Emphasis: Tai Chi Chuan II. This class will build on the basics introduced in Tai Chi Chuan I. In addition, martial theory peculiar to Tai Chi Chuan will be introduced.

Emphasis: Shaolin Temple Boxing II. The basic concepts of Chinese Boxing will be taught concerning the development of strength and power in the beginning student. Both Internal and External strength will be discussed in relationship to practical application. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

| PEF | 175 | MARTIAL ARTS I |
| :--- | :--- | :--- |
| PEF | 176 | MARTIAL ARTS II |
| PEF | 177 | MARTIAL ARTS III |

To promote physical fitness through various methods of martial arts conditioning and to provide students with a basic understanding of weaponless self-defense methods. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

Emphasis in ANSHINKAI-DO (JAPANESE). Anshinkai-Do is a blending of Japanese and Okinawan karate systems. Anshinkai-Do places the emphasis on self-defense and the perfection and understanding of kata's. Anshinkai-Do is a traditional karate system, not a sport style.

Emphasis in KEMPO. Shim Pu-Kai Kempo is a Sino-Japanese martial art focused on a scientific approach to self defense rooted in traditional oriental combative methodology. Course based on sequential levels of training which advance students from novice to expert status with its non sport or non competition approach to instruction. Students learn a balance of hand and foot technique which promote of practical self-defense application and life long participation in the art.

Emphasis in TAEKWONDO. Taekwondo is a form of weaponless self-defense that originated in Korea. It is a hard style, known for many standing and flying kicking techniques.

## PEF 178 ADVANCED MARTIAL ARTS

Advanced Martial Arts is an activities course directed toward the further advancement of skills and knowledge of those individuals who have had previous training equivalent to the green belt level, or higher, in a karate like discipline. One credit: 20 clock hours

## PEF 181 ADULT FITNESS I

The student will be instructed in activities which are in fulfillment with his/her individual exercise prescription. A variety of activities will be introduced as an appropriate means of attaining physical fitness. Periodic evaluations will be necessary for prescription purposes. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

## PEF 186 YOGA MEDITATION

Students will be taught to sit in a variety of positions and to hold themselves in those positions for ten minute periods, where with the aid of the teacher's verbal guidance they may direct their concentration into an awareness of internal phenomenon associated with breath, glandular secretions, cardiovascular circulation, and neural transmission occurring within their bodies. One credit: 20 clock hours. One and one-half credits: 30 clock hours.

## PEF 194 BODY SCULPTING। <br> PEF 195 BODY SCULPTING II PEF 196 BODY SCULPTING III

This class is designed to strengthen and tone all major muscles of the body with isolated muscular exercise using a variety of resistance apparatus for better results. One credit: 20 clock hours. One and onehalf credits: 30 clock hours.

## PEF 197 INDIAN MARTIAL ARTS

Emphasis: Kalaripayit/Silambam I. The evolutionary importance of Kalaripayit/Silambam as the "worlds oldest martial discipline" will be explored through the traditional study of footwork and strategy. A beginning student can expect to gain stamina, agility, and lightness in his physical movement. One credit: 20 clock hours. One and one-half credit: 30 clock hours.

## PEF 204 AEROBIC CONDITIONING IV <br> PEF 205 AEROBIC CONDITIONING V PEF 206 AEROBIC CONDITIONING VI <br> Intensity varies as course progresses. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEF | 218 | FAT BURNERS IV |
| :--- | :--- | :--- |
| PEF | 219 | FAT BURNERS V |
| PEF | 220 | FAT BURNERS VI |

Intensity varies as course progresses. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEF 260 BODY BUILDING POSING I

This class is designed to teach students how to pose for competition in body building or for fun and personal tone, strength and overall body balance. Improves posture and overall muscular fitness. Includes putting a routine to music. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PEF 261 BODY BUILDING IV <br> PEF 262 BODY BUILDING V <br> PEF 263 BODY BUILDING VI

Intensity varies as course progresses. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEF | 275 | MARTIAL ARTS IV |
| :--- | :--- | :--- |
| PEF | 276 | MARTIAL ARTS V |
| PEF | 277 | MARTIAL ARTS VI |

Students learn the advanced forms of kicking, punching, and blocking. One credit: 20 clock hours. One and one half credit: 30 clock hours.

| PEF | 294 | BODY SCULPTING IV |
| :--- | :--- | :--- |
| PEF | 295 | BODY SCULPTING V |
| PEF | 295 | BODY SCULPTING VI |

Intensity varies as course progresses. One credit: 20 clock hours. One and one half credit: 30 clock hours.

## PHI: PHILOSOPHY

## PHI 111 INTRODUCTION TO PHILOSOPHY

Introduces significant human questions and emphasizes understanding the meaning and methods of philosophy. Includes the human condition, knowledge, freedom, history, ethics, the future, and religion. (Course fulfills a Humanities requirement.) Five credits.

## PHI 112 ETHICS

Examines human life, experience, and thought in order to discover and develop the principles and values of pursuing a more fulfilled existence. Theories designed to justify ethical judgements are applied to a selection of contemporary and social issues. (Course fulfills a Humanities requirement.) Five credits.

PHI 113 LOGIC
Studies effective thinking using language-oriented logic. Provides tools and develops skills for creative and critical thinking. Emphasizes the development of decision-making and problem-solving skills. (Course fulfills a Humanities requirement.) Five credits.

## PHI 115 COMPARATIVE RELIGIONS

This course introduces students to the similarities and differences among concepts predominant in the major world religions. Included in this study will be a comparison of the sociological and philosophical similarities and differences between major world faiths and the other world faiths. Five credits.

## PHI 116 EASTERN TRADITIONS

A study of the great traditions of philosophy and religion within Eastern cultures, mainly of India, China, and Japan. (This course is transferable to the UNC Bound Program.) Five credits.

## PHI 205 TOPICS IN PHILOSOPHY

Encourages students who have special interests in philosophy to pursue them in depth. Readings will be selected by instructors as appropriate to the topic. Course may be taken more than once for elective credit provided topics are not repeated. Five credits.

## PHY: PHYSICS

PHY 101 APPLIED PHYSICSI
(This course will not satisfy minimum nor elective requirements for the A.A. or A.S. degree, Technology)

Introduces the student to the principles of technology as it applies to the scientific concepts and laws of mechanics. Practical applications of these concepts and laws are stressed. Involves lecture and discussion on theory. No lab time is required. Five credits.

## PHY 105 CONCEPTUAL PHYSICS

Studies mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. This course includes laboratory experience. Prerequisite: MAT 100 or equivalent. Five credits: 40 hours lecture, 20 hours lab.

## PHY 106 LABORATORY TECHNIQUES IN PHYSICS

An experiential study of selected laws of physics using standard laboratory equipment. Emphasis will be placed on solving problems using the scientific approach. One to Three credits.

## PHYSICS: ALGEBRA BASED I, II, III

An introductory sequence of courses for students in preprofessional disciplines. It is recommended that this sequence be transferred to other academic institutions as an aggregate.

## PHY 111 PHYSICS: ALGEBRA-BASED I

Studies mechanics including the concepts of statics, kinematics, momentum, work and energy. This course includes laboratory experience. Corequisite: College Trigonometry (MAT 122) or permission of instructor. Five credits: 40 hours lecture, 20 hours lab.

## PHY 112 PHYSICS: ALGEBRA-BASED II

A continuation of PHY 111. Studies the concepts of heat, light, waves, optics and energy transformations. This course includes laboratory experience. Prerequisite: PHY 111. Five credits: 40 hours lecture, 20 hours lab.

## PHY 113 PHYSICS: ALGEBRA-BASED III

A continuation of PHY 112. Studies the concepts of electricity, magnetism, modern physics, special relativity, quantum phenomena and radioactivity. This course includes laboratory experience. Prerequisite: PHY 112. Five credits: 40 hours lecture, 20 hours lab per week.

## PHY 185 SPECIAL TOPICS IN PHYSICS

Topics will reflect the special expertise of the faculty and/or the special needs of the students. Prerequisite: Consent of instructor. One to Six credits.

## PHYSICS: CALCULUS BASED I, III, III

This sequence of courses provides a thorough understanding of basic physics for students majoring in engineering, physical science, or related disciplines. The student will acquire a working knowledge of fundamental laws and principles in preparation for advanced study. It is recommended that this sequence be transferred to other academic institutions as an aggregate.

## PHY 211 PHYSICS: CALCULUS-BASED I

An analytical and comprehensive treatment of mechanics (not mechanical waves), including basics of relativistic mechanics. A research paper or project may be required. This course includes laboratory experience. Prerequisite: MAT 122, MAT 201 and MAT 202 (or MAT 202 may be taken concurrently.), and instructor's signature. Five credits: 40 hours lecture, 30 hours lab.

## PHY 212 PHYSICS: CALCULUS-BASED II

A continuation of PHY 211. An analytical and comprehensive treatment of mechanical wave and wave motion. Sound, light, and energy transformation also included. A research paper or project may be required. This course includes laboratory experience. Prerequisite: MAT 203 (or MAT 203 may be taken concurrently), and PHY 211, and instructor's signature. Five credits: 40 hours lecture, 30 hours lab.

## PHY 213 PHYSICS: CALCULUS-BASED III

A continuation of PHY 212. An analytical and comprehensive treatment of thermodynamics, electricity and magnetism. A research paper or project may be required. This course includes laboratory experience. Prerequisite: MAT 203 and PHY 212. (or MAT 203 may be taken concurrently), and instructor's signature. Five credits: 40 hours lecture, 30 hours lab.

## PHY 295 INDEPENDENT STUDY IN PHYSICS

Provides an opportunity for the highly-motivated student to engage in intensive study and research on a specified topic under the direction of a faculty member. The student will be limited as to the number of independent study credits taken per quarter. Prerequisite: previous academic study or experience in physics. One to Three credits: contact advisor.

## POS: POLITICAL SCIENCE

## POS 105 INTRODUCTION TO POLITICAL SCIENCE

(Formerly POS 100) Introduces the student to the field of political science by examining the state, elements of government, the political process, political ideologies, and international relations. Five credits.

## POS 111 AMERICAN GOVERNMENT

Includes the background of the U.S. Constitution; the philosophy of American government; general principles of the Constitution; federalism; civil liberties; public opinion and citizen participation; political parties, interest groups, and the electoral process; and the structure and functions of the national government. Five credits.

## POS 118 STATE AND LOCAL GOVERNMENTS

This course is a study of the structure and function of state, county, and municipal governments including their relations with each other and with national government. Colorado government and politics are emphasized. Five credits.

## POS 205 INTERNATIONAL RELATIONS

This course examines relationships among modern nation-states. Topics include diplomacy, nationalism, ideologies, power and influence, conflict and cooperation, the role of non-state actors, and theoretical attempts to understand international behavior. Five credits.

## POS 208 COMPARATIVE FOREIGN GOVERNMENT

This course is a comparison of the basic features of selected developed and developing countries. Topics include ideologies, political parties, interest groups, and governmental institutions. Five credits.

## PSY: PSYCHOLOGY

## PSY 101 GENERAL PSYCHOLOGYI

Scientific study of behavior including motivation, emotion, sexuality, physiological psychology, stress and coping, research methods, consciousness, sensation, perception, learning, and memory. Prerequisite: $85+$ on reading assessment. Five credits.

## PSY 102 GENERAL PSYCHOLOGY II

Scientific study of behavior including cognition, language, intelligence, psychological assessment, personality, abnormal psychology, therapy, life span development and social psychology. Prerequisite: $85+$ on reading assessment. Five credits.

## PSY 106 HUMAN RELATIONS

This course emphasizes the development and practice of effective interpersonal communication skills on and off the job. Three credits.

## PSY 109 INTRODUCTION TO CAREER PLANNING

This course helps students recognize their career potential by clarifying abilities, interests, and values; and helps students with job information, vocational planning, and decision making. Three credits.

## PSY 111 BASIC HUMAN POTENTIAL SEMINAR

A personal growth workshop based on the self-actualization principles of psychologists Abraham Maslow and Herbert Otto. The activities of this course are designed to help people tap their potential for becoming more self-determining, self-motivating, self-affirming, and understanding of others. Three credits.

## PSY 112 ADVANCED HUMAN POTENTIAL SEMINAR

The advanced semir,ar is designed to further the participant's identification of his or her personal resources and potentialities and to explore their use in setting and meeting life goals. Methods for resolving personal conflict, setting long-range goals, and life-style planning are developed. Prerequisite: PSY 111. Three credits.

## PSY 118 PSYCHOLOGY OF ADULTHOOD

Explores the psychological, social, and physiological issues of adulthood and aging, from a life span perspective and as a framework for viewing the adult years. Three credits.

## PSY 119 PSYCHOLOGY OF SUCCESS

A course designed to help students learn what resources are available for success in college and life. Topics include: study skills, decision making, goal setting, motivation and planning. One credit:

## PSY 120 PSYCHOLOGY OF LEADERSHIP AND MANAGEMENT

This course is designed to provide students with an overview of organizational leadership and management from a psychological perspective. Students will be introduced to such concepts as: the relationship between leadership and management, the psychology of individual and group change, the leading-learning styles of leadership, the use of conflict resolution and problem solving in organizations and the situational management style. Five credits.

## PSY 138 BIOFEEDBACK AND STRESS MANAGEMENT

A survey of coping and preventive skills and techniques for dealing with the effects of stress and anxiety. The successful transfer of these skills and techniques to real-life situations is enhanced by supplementing classroom presentations with regular lab work utilizing biofeedback. Four credits: three hours lecture, two hours lab.

## PSY 147 DEALING WITH STRESS

This course identifies the physiological, emotional, and behavioral aspects of stress. Techniques of stress reduction and management are explored and applied. Two or Three credits.

## PSY 148 ISSUES IN CRITICAL INCIDENT DEBRIEFING PROCEDURES

Methods and techniques for helping survivors and professionals cope with extreme crises like airplane accidents, floods, homicide, suicide, etc. One half to Three credits.

## PSY 177 CAREER AND LIFE PLANNING

A study of personal awareness, career exploration/research, skills identification, decision making, time management, and stress management as it relates to careers and long term life decisions. Time is divided between classroom instruction and lab activities. This class cannot be used in addition to PSY 109 as an A.A. elective. Five credits.

## PSY 205 PSYCHOLOGY OF WOMEN

An examination of new roles and identities for women with emphasis on changes of traditional attitudes toward women, both personal and societal. Three credits.

## PSY 209 PSYCHOLOGY OF PREJUDICE

A study of the underlying causes of prejudice and how prejudicial behavior is learned, continued, and diminished. Three credits.

## PSY 217 GROUP COUNSELING

Study and practice of theories and techniques of group counseling. Five credits.

## PSY 219 RESISTANT CLIENT

Therapeutic approaches for working with difficult clients in alcohol and drug treatment centers. Two or Three credits.

## PSY 225 ADVANCED COUNSELING

The emphasis of the course is on a multimodal approach to the development of counseling skills such as attending, assessment, lifestyle analysis, pacing, empathy, reframing, and problem solving skills. Prerequisite: PSY 261. Four credits.

## PSY 227 DEATH \& DYING: A HOLISTIC PERSPECTIVE

To acquaint participants with new research, alternate approaches, psychological literature on death and dying. Three credits.

## PSY 229 INTRODUCTION TO ADDICTIVE BEHAVIORS

This course presents the subject of addictive behavior and its effect on individuals, families and society. Five credits.

## PSY 232 PSYCHOLOGY OF DREAMS

An exploration of the literature in the field. Coverage will include theory and technique and current sleep research with a major goal of understanding the process of dreaming. Three credits.

## PSY 235 DEVELOPMENTAL PSYCHOLOGY

A survey of the entire human life span from conception through senescence. A study of the major themes in human development; cognitive, physical, social, perceptual, emotional, personality, language, and moral development. Also covers adult developmental tasks and crisis periods. Five credits.

## PSY 237 ASSERTIVENESS TRAINING

Study and practice in asserting individual needs and feelings. Three credits.

## PSY 239 PSYCHOLOGY OF ADOLESCENCE

An investigation of the psychological, social, physiological development of individuals between puberty and young adulthood. Special problems and deviation from normal development will also be treated. Five credits.

## PSY 241 HEALTH PSYCHOLOGY AND BIOFEEDBACK I

An introduction to the principles and applications of biofeedback in health, education, and psychology. There will be utilization and demonstration of temperature training, EMG, EEG, and GSR. Five credits.

## PSY 244 BIOFEEDBACK AND CARDIOVASCULAR HEALTH

Focuses on the biofeedback procedure for blood pressure reduction developed at the Biofeedback and Psychophysiology Center of the Menninger Foundation, Topeka, Kansas. Class topics include the principles and techniques of biofeedback training, the physiology of hypertension and its causes, the role of stress management, diet, exercise, life style and medications in blood pressure management. Five credits: four hours lecture, two lab sessions each week.

## PSY 247 FAMILY DYNAMICS OF SUBSTANCE ABUSE

Examines the dynamics of families of substance abusers and methods for effective intervention. Three to Four credits.

## PSY 248 CHILD PSYCHOLOGY

A study of the normal child's emotional, physical, cognitive, social, and moral development from infancy through adolescence. Five credits.

## PSY 249 ABNORMAL PSYCHOLOGY

A study of abnormal behavior found in humans. Such disorders as organic mental, schizophrenic, paranoid, anxiety, dissociative, and psychosexual disorders will be considered for causes, symptoms, characteristics, treatment, and prevention. Prerequisite: PSY 101. Five credits.

## PSY 256 DOMESTIC VIOLENCE COUNSELING

Focuses on understanding domestic violence perpetrators and therapeutic techniques. Four to Five credits.

## PSY 261 THEORY AND PRACTICE OF COUNSELING

Students are introduced to basic concepts and techniques of behavior, gestalt, cognitive, Adlerian, client centered, transactional analysis, and psychoanalytic therapies. Five credits.

## PSY 265 PSYCHOLOGY OF PERSONALITY

This course examines structure, function, and development of personality. Major theories of personality are considered. The impact of family, culture, and stress are viewed in their relationship to personality. Three to Five credits.

## PSY 267 FIELD EXPERIENCE A

Students learn basic counseling skills for working with addictive persons by helping professional therapists in various alcohol and substance abuse treatment centers. Three to Ten credits.

## PSY 268 FIELD EXPERIENCE B

Continuation of PSY 267. Three to Ten credits.

## PSY 269 FIELD EXPERIENCE C

Continuation of PSY 268. Three to Ten credits.

## PSY 276 HUMAN SEXUALITY

A survey of human sexual functioning with emphasis on psychological, cultural, and biological components. Topics covered include; sexual variation, sexual identity, personal development and fulfillment, and social and ethical aspects of sex. Three credits.

## PSY 278 PSYCHOLOGY OF CRIMINAL BEHAVIOR

Analysis of the personality structure of criminals and the study of effective rehabilitation techniques. Three credits.

## PSY 279 PSYCHOLOGICAL ASPECTS OF ABUSE

 IN RELATIONSHIPSThis course introduces the issues of abuse in relationships from the perspective of the victim, the perpetrator and society. Three credits.

## PSY 287 CLIENT RECORDS MANAGEMENT

Students interested in chemical/alcohol counselor I certification will learn Colorado state laws, counter methods and client records documentation in this course. Three credits.

## PSY 288 BASIC THERAPEUTIC SKILLS

Experimental clinical skill practice, crisis intervention techniques and an overview of substance abuse are presented in this course. This course is for persons seeking chemical/alcohol counselur certification. Four credits.

## PSY 295 INDEPENDENT STUDY IN PSYCHOLOGY

Provides an opportunity for the serious-minded student to engage in intensive study and research on a specified topic under the direction of a faculty member. One to Three credits: contact instructor.

PSY 297 PSYCHOLOGY OF SUBSTANCE ABUSE/YOUNG ADULTS/ADULT CRIMINALS
Will evaluate some psychological effects and influence of substance abuse on young adults and adults. How all aspects of one's life and environment are effected. A detailed treatment approach. Three credits.

## REA: READING

"This course will not satisfy minimum nor elective requirements for the A.A. or A.S. degree.

## *REA 012 DEVELOPMENTAL READING II

To provide the student with instruction in word attack, skills, vocabulary development and comprehension. Primary purposes are to give the student a basic introduction to general reading skills and to prepare the student for REA 013. Prerequisite: placement. Two to Five credits.
*REA 013 DEVELOPMENTAL READING III
To provide the student with instruction in structural analysis, vocabulary development, and comprehension, through practice in general and content area reading materials. Primary purposes are to improve the student's reading level, to expand the variety of reading skills a student uses, and to prepare the student for REA 014. Prerequisite: REA 012 or placement. Two to Five credits.

## *REA 014 DEVELOPMENTAL READING IV

To provide the student with additional instruction in vocabulary development, structural analysis, comprehension, through practice in general and content area reading materials. Primary purposes are to improve the student's reading level, and to expand the variety of reading skills the student uses. Prerequisite: REA 013 or placement. Two to Five credits.

## *REA 015 DEVELOPMENTAL READING V

This course provides an additional opportunity for the student who has completed the work at the REA 014 level, but who is not quite ready to advance to GED or College Skills classes, to receive additional instruction in vocabulary development, structural analysis, and comprehension. Includes instruction in general and content area reading materials. Primary purposes are to improve the students' reading level and to expand the variety of reading skills the student uses. Prerequisite: REA 014 or placement. Two to Five credits.

## *REA 092 VOCABULARY EXPLORATION

 (INDEPENDENT STUDY)Highlights of the course include: intensive words-in-context approach, practice and reinforcement, and essential words focus. Prerequisite: Placement. Three credits.

## *REA 094 LITERATURE READING

To provide a basic introduction to reading in the content field of literature. Major objectives are to familiarize students with the content vocabulary in literature, and to prepare students to pass the literature reading section of the GED test. Prerequisite: Placement. Two to Five credits.

## REA 100 INTRODUCTION TO COLLEGE READING

To provide instruction in literal, inferential, und critical reading skills that are necessary for success in college-level reading. Prerequisite: Placement. Five credits.

## REA 101 MASTERING COLLEGE READING

To provide advanced instruction to increase the student's ability to comprehend college-level texts. Emphasis will be placed on critical and inferential reading skills through longer passages. Prerequisite: Placement. Five credits.

REA 103 VOCABULARY SKILLS (INDEPENDENT STUDY)
Helps students master strategies for becoming independent leamers of vocabulary that is relevant to continuing academic work. Prerequisite: Placement. Three credits.

## REA 104 SPELLING SKILLS (INDEPENDENT STUDY)

To provide fundamental information and varying strategies to best master common spelling rules and exceptions to same while working with word lists developed by the student in conjunction with the teacher. Prerequisite: Placement. Two credits.

## REA 111 BECOMING A MASTER STUDENT

The purpose of this course is to provide a comprehensive approach to study utilized by successful students. Areas of emphasis include reading and understanding textbook material, outlining and notetaking, with understanding of test taking techniques, memory devices, and time management skills. An examination of personal patterns and goals is an integral of the course content. Prerequisite: Placement. Five credits.

## REA 197 READING SPEED AND EFFICIENCY (INDEPENDENT STUDY)

This course helps the student increase her/his knowledge of literal, critical, and affective comprehension skills while learning the use of several reading speeds. Prerequisite: Placement. Five credits.

## SCI: SCIENCE

*Indicates instruction is administered by Developmental Studies Division.

## *SCI 014 DEVELOPMENTAL SCIENCE IV

The primary purposes of the course are: to teach basic scientific facts and ideas; to develop reading comprehension and vocabulary mastery in the content area of science; to introduce students to earth science and life science; and to provide a systematic survey of basic science. Prerequisite: placement. Three to Five credits.

## *SCI 015 DEVELOPMENTAL SCIENCE V

The primary purposes of the course are: to teach basic facts and ideas; to continue the development of reading comprehension and vocabulary mastery through the study of basic sciences; to introduce students to the study of physical science, and to continue to provide a systematic survey of basic science. Prerequisite: placement. Three to Five credits.

## *SCI 095 NATURAL SCIENCE READING

Provides a basic introduction in the content field of the natural sciences. Major objectives are to familiarize students with the content vocabulary in this area and to prepare them to apply comprehension skills of reading appropriate to the area of the natural science adequate to allow them to pass the reading comprehension section of the GED test. Prerequisite: placement. Two to Five credits.

INTRODUCTION TO PRINCIPLES OF SOLAR ENERGY
Topics include solar geometry, heat transfer; active, passive and hybrid systems; general structural heat loss, transfer mediums, cost, and legislation. A presentation of several systems and collectors will be available through field trips. Three credits.

## SCI 106 SOLAR SYSTEM SIZING

Theory and calculations will be presented regarding heat loss, collector efficiency, heat gain, distribution, and sizing. Heat storage systems and solar systems also will be analyzed. Prerequisite: SCl 105 or permission of instructor. Three credits.

## SCI 115 PASSIVE SOLAR DESIGN

The following topics will be included in this course: elementary thermodynamics, fundamentals of solar heating, factors determining effectiveness and efficiency, design characteristics, a selection of applications and aesthetic realities. Three credits.

## SCI 185 SPECIAL TOPICS IN SCIENCE

Topics will reflect the special expertise of the faculty and/or the special needs of the students. Prerequisite: Consent of instructor. One to Six credits.

## SCI 230 SCIENTIFIC WRITING

Topics include use of scientific literature and library resources, the general aspect of a scientific paper, the title, preparation of tables and illustrations and procedures regarding materials and methods. A section covering results, discussion and acknowledgments also will be included. Prerequisite: ENG 121or equivalent. Three credits.

## SOC: SOCIOLOGY

*Indicates instruction is administered by Developmental Studies Division.

## *SSS 095 SOCIAL SCIENCE READING

Provides a basic introduction to reading in the content field of social science. Major objectives are to familiarize students with the content vocabulary in this area, and to prepare them to apply comprehension skills of reading appropriate to the area of social science adequate to allow them to pass the reading comprehension sections of the GED test. Prerequisite: Placement. Two to Five credits.

## SOC 101 INTRODUCTION TO SOCIOLOGY I

Examines the basic concepts, theories, and principles of sociology, as well as human cultures, social groups, and the social issues of age, gender, class and race. Five credits.

## SOC 102 INTRODUCTION TO SOCIOLOGY II

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. Five credits.

## SOC 205 SOCIOLOGY OF MARRIAGE AND FAMILY

This course will help develop an understanding of marriage, family and kinship. It examines the family as an institution and how social, cultural, and personal factors influence family relations. The stability and diversity of the family will be explored, along with current trends and some alternative life styles. Five credits.

## SOC 207 SOCIOLOGY OF WORK AND LEISURE

Analysis of the changing relationship between work and leisure (non-work). As we enter the post-industrial/high tech society, our quest for quality of life may be affected by new occupations, new opportunities, and non-work patterns of behavior. Three credits.

## SOC 210 SOCIOLOGY OF AGING

To introduce the student to issues relating to social gerontology. The students will acquire an understanding of the social, environmental, physical and psychological aspects that influence the lives of older individuals. Information will be introduced through lectures, class discussion, films, group activities, and presentations from community resources. Five credits.

## SOC 215 CONTEMPORARY SOCIAL PROBLEMS

This course explores current social issues that result in societal problems. It focuses on such issues as civil liberties, gender discrimination, substance abuse, crime, poverty, and social change. Five credits.

## SOC 218 SOCIOLOGY OF MINORITIES

This course explores the variety of intergroup relations; race, nationality, ethnicity, income, and other minority classifications. Patterns of prejudice, discrimination, and possible solutions to these issues will be examined. Five credits.

## SOC 219 GENERIC SOCIAL WORK

Basic elements of social work will be presented in this class, including the various tasks of Social Workers, including short-term focused brief therapy, mental health, aging and community organizations. Five credits.

## SOC 235 SOCIOLOGY OF EDUCATION

A study of the relationship of social and educational systems in American society. We will explore the performance of the American educational system in fulfilling the promise of opportunity and in providing assess for upward mobility. Three credits.

## SOC 295 INDEPENDENT STUDY IN SOCIOLOGY

Provides an opportunity for the serious-minded student to engage in intensive study and research on a specified topic under the direction of a qualified faculty member. One to Three credits: contact instructor.

## SPE: SPEECH

## SPE 115 PRINCIPLES OF SPEECH COMMUNICATION

A course combining the basic theory of speech communication with public speech performance skills. Emphasizes speech delivery, preparation, organization, support, and audience analysis. Five credits.

## SPE 117 ORAL INTERPRETATION

This course is designed to introduce students to the theory and practice of analyzing and reading aloud good literature. Performance experience includes the genres of prose, poetry, and storytelling in both individual and group settings. Five credits.

## SPE 119 INTRODUCTION TO SEMANTICS

Introductory study of how persons respond to word functions in the English language and other symbols. Students not only look at words and things, but also at the human behavior that results from using various types of symbols in different ways. Five credits.

## SPE 125 INTERPERSONAL COMMUNICATION

This course is an examination of communication involved in interpersonal relationships occurring in family, social, and career situations. Relevant concepts include self-concept, perception, listening, nonverbal communication, and conflict negotiation. One to Five credits.

## SPE 216 ADVANCED PUBLIC SPEAKING

Continuation of SPE 115 with emphasis on longer in-depth speeches using informative and persuasive techniques. Class includes extemporaneous, impromptu, manuscript, special occasion speeches and group decision making. Prerequisite: SPE 115. Five credits.

SPE 221 PROFESSIONAL ORAL COMMUNICATION
This course focuses on professional speaking skills and situations such as presentations, speaker analysis, interviewing and listening and helps students improve their oral communication skills through practice in a variety of professional speaking situations. Five credits.

SPE 225 ORGANIZATIONAL COMMUNICATION
This course is a study of human communications systems and patterns in business and organizational setting. Topics include exploration of leadership strategies; effective managerial communication skills with peers, superiors, and subordinates; and organizational communication environments, networks, and goals. Prerequisite: SPE 115 or instructor's permission. Five credits.

## SPE 299 SPEECH PRACTICUM

Provides an opportunity for the serious-minded student to develop speaking skills under the direction of a faculty member. May be repeated at different levels of proficiency. Prerequisite: SPE 115 and permission of instructor. One to three credits.

## SPP: SPECIAL PROGRAMS

## DST 025 BILINGUAL CITIZENSHIP

Designed to prepare students to successfully pass the test to obtain United States citizenship. Local, state, and national government functions and procedures will be emphasized. When the student is ready, an application packet issued by the Immigration and Naturalization Department will be given to the student to apply for citizenship. Spanish instruction will be provided for those who need it.

## DST 065 BILINGUAL DRIVER'S EDUCATION

Designed to prepare students to understand and pass the driver's license oral or written examination. If the student cannot read or write, emphasis is given to the verbal understanding of signs, rules, and state laws. Spanish instruction will be provided for those who need it.

## DST 092 ORIENTATION TO GED

Includes orientation for students in the content areas that are tested in the GED exam. Informs students of the eligibility and requirements pertaining to the GED test, and introduces the students to test taking techniques. Prerequisite: Placement.

## STA: STATISTICS

STA 185 SPECIAL TOPICS IN STATISTICS
Topics will reflect the special expertise of the faculty and/or the special needs of the students. Prerequisite: Consent of instructor. One to Six credits.

## STA 201 STATISTICS FOR BUSINESS, SCIENCE, AND SOCIAL SCIENCE I

Emphasizes concepts and applications of selected topics from descriptive and inferential statistics. Includes organization of data, computation and interpretation of descriptive measures, linear correlation and regression, simple aspects of probability, the normal and binomial distributions, and sampling distributions. Students will be introduced to the use of computers in organizing and analyzing data for statistical analysis. Prerequisite: a current assessment test is required. Five credits, 50 hours.

## STA 202 STATISTICS FOR BUSINESS, SCIENCE, AND SOCIAL SCIENCE II

Emphasizes concepts and applications of inferential statistics including hypothesis testing and estimation using $\mathrm{z}, \mathrm{t}$, chi-square and F distributions. Tests and estimates for means, proportions, variance and standard deviation will be used. One way analysis of variance, correlation and regression analysis, selected nonparametric statistics, and selected business statistics topics will also be covered. Computers will be used as an aid in organizing and analyzing data. Prerequisite: STA 201 or MAT 135 or permission of instructor. Five credits, 50 hours.

## STA 205 STATISTICAL ANALYSIS USING COMPUTERS

This course provides an introduction to computer packages which can be used for statistical analysis. Applications in statistics will include selected topics in probability, descriptive, and inferential statistics, such as, simulation of probability experiments, organization and analysis of data, hypothesis testing, correlation, and estimation. Prerequisite: MAT 135 or STA 201 or permission of the instructor. Two to Three credits.

## TEM: EMERGENCY MEDICAL SERVICES

## TEM 100 INTRODUCTION TO EMERGENCY CARE

Provides the student with certification in CPR by the AHA along with instruction on common medical and trauma emergencies. The student will learn how to access the EMS system, recognize medical and trauma emergencies, and give basic treatment until advanced medical help arrives. Two credits: 23 clock hours.

## TEM 105 EMERGENCY MEDICAL TECHNICIAN

Instruction in recognition and treatment for patients of medical and trauma emergencies. Included is anatomy/physiology, terminology, control of accident scene, safe and efficient transport, reporting and record keeping, medical equipment and its use, legal aspects of emergency care, and cardiopulmonary resuscitation (CPR). Strong emphasis on practical application of skills. Prerequisite: First Responder advised as prerequisite, but not required. Twelve credits: 160 clock hours.

## TEM 106 FIRST RESPONDER

Designed to teach skills to those who will be first on the scene of an accident or medical illness. Recognition and treatment of medical and trauma patients along with use of pertinent equipment for stabilization until advanced help arrives. Certification in CPR. Strongly recommended before taking an EMT course. Four credits: 47 clock hours.

## TEM 107 EMERGENCY MEDICAL TECHNICIAN INTERMEDIATE

Instruction in recognition and treatment in advanced procedures for patients of medical and trauma emergencies. Includes shockfluid therapy, cardiology/defibrillation, pharmacology/drug therapy, advanced respiratory assessment and management, ACLS, megacode, and a variety of other topics. Prerequisite: Current Colorado EMT-B certification, physician advisor, contact EMS department for additional requirements. Fourteen credits: 195 clock hours.

## TEM 108 EMT REFRESHER

Updating and renewing skills for recertifying as an EMT-B. Condensed EMT-Basic class with strong emphasis on cognitive application and skills performance. Four credits: 47 clock hours.

## TEM 109 EMT REFRESHER SEMINAR

This class is geared for EMT-B's interested in continuing medical education applied toward recertification of the EMT-B certificate. Hours can be accumulated to recertify without taking entire EMT Refresher course. One credit: 10 clock hours.

## TEM 115 EMERGENCY MEDICAL DISPATCH

Specifically designed for dispatchers and includes information on medical dispatch to rescuers, medical information dissemination to the public, and communication skills. Three credits: 30 clock hours.

## TEM 116 EMT IV-MAST

Cognitive and practical information on indications for, use of, and precautions of IV-MAST use. Anatomy and physiology background suggested. This class is only for current state certified medical personnel. Continued medical education and skills use required. Prerequisites: Physician advisor's signature, current EMT-B state certification or above, liability insurance required. Two credits: 39 clock hours.

## TEM 126 INTRO TO ADVANCED LIFE SUPPORT

Designed to enhance patient management skills by exploring the pathophysiology of common medical and trauma problems. The student will be able to take a more active role with existing ALS agencies. This class offers advanced skills in assessment, trauma and medical problems, "hands on" experience, pharmacological and cardiac intervention, and much more. Prerequisites: Current EMT - B certificate. Three credits: 30 clock hours.

## TEM 127 CARDIOPULMONARY RESUSCITATION (CPR)

Designed to qualify the student for basic rescuer certification by the American Heart Association. Covers basic CPR and emergency cardiac care in both theory and practice. Includes one and two rescuer CPR, infant and child CPR, and choking. One credit: 10 clock hours.

## TEM 128 CPR INSTRUCTOR

Designed to qualify the student for Basic Life Support instructor certificate issued by the American Heart Association. Covers basic life support techniques and teaching methods necessary to instruct CPR. Also includes manikin maintenance and cleaning. Prerequisites: Current AHA CPR "Course C" certificate. One credit: 14 clock hours.

## TEM 129 CPR INSTRIUCTOR TRAINER

Qualifies the student to train and certify CPR instructors for the American Heart Association. Strong emphasis on teaching methods and teaching aids. Prerequisites: Current AHA CPR instructor card. One credit: 10 clock hours.

TEM 131 EKG-BASIC
A very basic class designed for the student who has a desire to learn how to read and interpret EKG's. Prerequisite: Current EMT-B certification, or higher. Four credits: 40 clock hours.

## TEM 132 EKG-DEFIB

Designed for the student who needs to learn cardiac defibrillation. Strong emphasis on indications for, use of, and precautions of defibrillation. Prerequisites: Current EMT-B certification, TEM 131, Physician advisor signature. One credit: 10 clock hours.

## TEM 135 ADVANCED CARDIAC LIFE SUPPORT (ACLS)

Theory and skills for those needing to provide advanced cardiac care. Topics include: acid base balance, drug therapy, airway management, rhythm recognition, defibrillation and general cardiac care. Prerequisites: EMT-P level certification or above, current CPR card. Others may attend class but will be unable to gain state ACLS certification. Two credits: 20 clock hours.

## TEM 136 PRE-HOSPITAL TRAUMA LIFE SUPPORT (PHTLS)

A class designed to teach rescuers the most updated information in trauma assessment along with skills to enhance patient care. Rapid assessment and treatment emphasized. One and one-half credits: 14 clock hours.

TEM 137 EMERGENCY RESPONSE TO SPORTS INJURIES
Designed primarily for coaches but open to all. Includes recognition, assessment and treatment of most emergent sports injuries, common medical emergencies, accessing EMS, and rehabilitation. One credit: 12 clock hours.

## TEM 138 HEART SAVER CPR

American Heart Association certification in one rescuer CPR and choking. For those who want a quick CPR class with strong emphasis on skills performance. One-half credit: 6 clock hours.

## TEM 139 TOT SAVER CPR

American Heart Association certification specializing in CPR and choking maneuver for the infant and child. This class is skills and practice oriented. One half credit: 6 clock hours.

## TEM 145 CPR REFRESHER

Designed to recertify students in basic CPR by the AHA. Prerequisites: Current CPR card. One-half credit: 5 clock hours.

## TEM 146 FIRST RESPONDER REFRESHER

Updating and renewing skills for recertifying as a First Responder. Two credits: 23 clock hours.

## TEM 147 CAREER DEVELOPMENT

Provides students with general and specific skills needed for employment in the EMS field. Class includes: work ethics, application procedures, resume writing, interview skills, stress management, interpersonal skills and EMS employers panel. Three credits: 30 clock hours.

## TEM 151 BASIC TRAUMA LIFE SUPPORT/BTLS

This course is designed to teach the skills and knowledge needed to recognize, assess and treattransport victims of trauma. This class helps build on the EMT-B skills and focuses primarily on trauma. Prerequisites: EMT-B Certification. One and one half credits: 19 clock hours.

## TEM 152 BASIC TRAUMA LIFE SUPPORT ADVANCED

This course is designed to teach advanced knowledge and skills to recognize, assess, and perform critical advanced life support skills for the victim of trauma. Prerequisites: EMT-P, R.N., or M.D. One and one half credits: 19 clock hours.

## TEM 185 EMS SEMINARS

This class covers a variety of EMS topics structured for the First Responder, EMT, and Paramedic. Can be used for continuing medical education credit. One-half credit: 5 clock hours.

## TEM 186 EMS SEMINARS

Class includes a variety of EMS topics for all provider levels. One credit: 10 clock hours.

## TEM 187 EMS SEMINARS

Class includes a variety of EMS topics for all provider levels. Two credits: 20 clock hours.

## TEM 188 EMS SEMINARS

Class includes a variety of EMS topics for all provider levels. Three credits: 30 clock hours.

## TEM 189 EMS SEMINARS

Class includes a variety of EMS topics for all provider levels. Four credits: 40 clock hours.

## TEM 195 CONTINUING MEDICAL EDUCATION

Geared specifically for fire departments or special groups, this class includes continuing medical education which can be used for state recertification at various provider levels. This class emphasizes both theory and skills. One-half credit: 5 clock hours.

## TEM 196 CONTINUING MEDICAL EDUCATION

Class includes ongoing education for state recertification. One credit: 10 clock hours.

TEM 197 CONTINUING MEDICAL EDUCATION
Class includes ongoing education for state recertification. Two credits: 20 clock hours.

## TEM 198 CONTINUING MEDICAL EDUCATION

Class includes ongoing education for state recertification. Three credits: 30 clock hours.

## TEM 199 CONTINUING MEDICAL EDUCATION

Class includes ongoing education for state recertification. Four credits: 40 clock hours.

## TEM 205 PEDIATRIC ADVANCED LIFE SUPPORT

Includes recognition and treatment of shock, advanced airway management, IV access in pediatrics, and rhythm interpretation and treatment. Prerequisite: Paramedic, Nurse, PA, MD, DO with current CPR card. Two credits: 20 clock hours.

## TEM 206 MEDICAL TERMINOLOGY

Includes terminology which directly relates to the emergency medical field. Includes common root words, prefixes, suffixes, along with word meanings, spellings and grammatical use. One credit: 10 clock hours.

## TEM 207 STREET SURVIVAL

Involves general knowledge in communications, safety, scene control, weapons, gangs, protection of responding crews, and managing stress. One credit: 10 hours.

## TEM 208 LAW IN EMS

Includes review of current EMS laws, legislation and practice. Reviews what you can and cannot do, what you need to know regarding everyday work situations, covers how to protect yourself, your patients and your employees/employer. Two credits: 20 clock hours.

## TEM 209 ETHICS IN EMS

Review and discuss ethics as related to the medical profession and specifically the EMS field. One credit: 10 clock hours.

## TEM 215 COMMUNICATIONS IN EMS

Includes report writing and documentation of all medical/scene information consistent with state guidelines and practices. Emphasis on accuracy, adequacy and legal considerations. Introduces use of accepted abbreviations, medical terminology and communication skills. Prerequisite: First Responder, EMT-B, EMT-I, EMT-P, Nurse, PA. Two credits: 20 clock hours.

## TEM 225 PEDIATRIC ADVANCED LIFE

## SUPPORT-RECERTIFICATION

Includes changes in CPR for infants and children with remainder of class dedicated to the skills and knowledge associated with the treatment of Pediatric respiratory distress and circulatory failure. Prerequisite: EMT-P, RN, PA, MD or DO with current PALS certificate and current CPR card. One-half credit: 6 hours.

## TEM 235 ADVANCED CARDIAC LIFE SUPPORT RECERTIFICATION

Includes current advance technique updates with rest of class dedicated to skills and knowledge associated with the treatment of cardiac abnormalities and sudden death. Prerequisite: EMT-P, RN, PA MD or DO with current ACLS certificate and current CPR card. One-half credit: 6 hours.

## THE: THEATRE

## THE 101 ACTINGI

An introduction to basic principles of acting and dramatic production, development of characterization skills, and familiarity with dramatic literature. Four credits.

## THE 116 SCREEN ACTING I <br> THE 117 SCREEN ACTING II <br> THE 118 SCREEN ACTING III

These courses teach the differences between stage acting, and screen (video) acting, and all the how to's involved in that area. Development of characterization skills, increased understanding of human behavior and relationships, and imaginative encounters with one's self, build confidence and improve audition/interview abilities. Three credits each: 40 clock hours each.

## THE 211 DEVELOPMENT OF THEATREI

Surveys the history and evolution of the theatre from Ancient Greece to the Renaissance, emphasizing all aspects of the art form from period values to analysis of dramatic literature and performance. (This course fulfills a Humanities requirement.) Five credits.

## THE 212 DEVELOPMENT OF THEATRE II

Surveys the history and evolution of drama from the Renaissance to the present, emphasizing all aspects of the art form from period values to the analysis of dramatic literature and performance. (This course fulfills a Humanities requirement.) THE 211 is not a prerequisite for THE 212. Five credits.

## THE 299 THEATRE PRACTICUM

This learning structure facilitates the development of creative talents (an interrelation of motor, affective, and cognitive skills). The particular format and content of each practicum is determined by the theatrical form in which the student is working and the student's level of proficiency. May be repeated at different levels of proficiency. One to three credits: contact department chair.

## WLT: WELDING TECHNOLOGY

## WLT 100 BEGINNING WELDING

This course will introduce the student to the basic welding processes. It will have an emphasis on safety and a knowledge of the welding processes. Upon completion of this course, the student will have a basic understanding of oxy-acetylene and arc welding. Two credits: 30 clock hours.

## WLT 105 BASIC OXY/ACET WELDING

Students will receive training in the safe and correct procedure for using oxy-acetylene equipment. Students also will receive instruction on welding mild steel material using fillet and butt welds. Four credits: 60 clock hours.

## WLT 106 ADVANCED OXY/ACET WELDING

Training will be given in out-of-position welding of mild steel and instruction on brazing and oxy-acetylene cutting. Four credits: 60 clock hours.

## WLT 107 BASIC SHIELDED METAL ARC WELDING

Students will receive training in safe and correct procedures for using arc welding equipment. Instruction will be given using common types of electrodes on various types of joints in all positions. Four credits: 60 clock hours.

## WLT 108 ADVANCED SHIELDED METAL ARC WELDING

Training will be given using E-7018 electrodes on various types of fillet welds on heavy plate. These welds will be made in the horizontal, vertical, and overhead positions. Four credits: 60 clock hours.

## WLT 109 BASIC GAS METAL ARC WELDING

Students will receive training in the correct and safe way to operate gas metal arc welding equipment. They will weld common fillet welds on various gauges of material using .035 diameter solid wire. Four credits: 60 clock hours.

## WLT 115 ADVANCED GAS METAL ARC WELDING

Students will weld beveled butt joints in all positions using . 035 solid wire. They also will receive training using flux cored wire. Four credits: 60 clock hours.

## WLT 116 FARM AND RANCH WELDING

To introduce farmers and ranchers to the repair welding field. Demonstrations of Hardfacing, Cast Iron welding, Oxy-acet Safety, Oxy-Acet welding, Oxy-Acet cutting, Brazing, Soldering, Electric Arc welding with stick and continuous feed electrodes, and new equipment. Two credits: 20 clock hours.

## WLT 121 CALCULATOR LAYOUT TECHNIQUES FOR MATERIALS

To introduce the participant to the basic layout tools and techniques, including the use of a calculator to compute angles and lengths. Three credits: 30 clock hours.

## WLT 122 SAFETY AWARENESS IN METAL JOINING TECHNOLOGY

This course will introduce the student to safety concerns in the metal joining trade and impart the skills that are necessary to implement a safety awareness program. Three credits: 30 clock hours.

## WLT 123 MODERN METAL JOINING PROCESSES

This course will introduce the student to the theory and application of current welding processes. The student will learn how to apply this knowledge to increase the percent of certainty when trying to choose the correct welding process for a specific application. Five credits: 50 clock hours.

## WLT 124 FUNDAMENTALS OF WELDING METALLURGY

This course is designed to give the student a basic understanding of the metallurgy involved in welding and the skill to apply this knowledge to the development of sound welding techniques. Five credits: 50 clock hours.

## WLT 125 AMERICAN WELDING SOCIETY WELDING \& TESTING SYMBOLS WITH BLUEPRINT REVIEW

This course is designed to give the student a fundamental understanding of AWS Welding Symbols and Blueprint reading. The ability to apply these fundamentals to the interpretation of actual prints used in Industry is stressed. Five credits: 50 clock hours.

WLT 126 WELDING INSPECTION AND QUALITY CONTROL
This course is designed to give the student a working knowledge of the codes, requirements and procedures used in the inspection of welds and the control of quality. This course is also an excellent starting point for individuals interested in becoming Certified Welding Inspectors. Five credits: 50 clock hours.

## WLT 127 PRINCIPLES OF WELDMENT DESIGN

This course is designed to give the student a basic knowledge of the theory used to design welded components and structures and the skill necessary to distinguish between good and bad designs. Five credits: 50 clock hours.

## WLT 128 PRINCIPLES OF COST ESTIMATING FOR WELDING

This course will give the student a basic knowledge of the elements and formulas used in estimating welding costs. The student will demonstrate his skills by estimating costs on simulated projects. Three credits: 30 clock hours.

## WLT 141 OXY/ACET WELDING

Students will be given training and skill development in the use of oxy-acet welding equipment including fusion welding, brazing and cutting. Twelve credits: 150 clock hours.

## WLT 142 SHIELDED METAL ARC I

Students will be given training and skill development in shielded metal arc welding. Welding will be in all positions on $3 / 16^{\prime \prime}$ mild steel using various electrodes. Twelve credits: 150 clock hours.

## WLT 143 SHIELDED METAL ARC II

Students will be given training on multiple pass fillet welds in all positions using E-6010 and E-7018 electrodes. Twelve credits: 150 clock hours.

## WLT 144 SPECIALIZED WELDING I

This course is designed to meet the needs of students who would benefit from a specialized program. Objectives will be agreed upon by the instructor, program supervisor and the student. Twelve credits: 150 clock hours.

## WLT 151 WELDING TECHNOLOGY I

Students will be given training and skill development in the use of oxy-acetylene welding, basic shielded metal arc welding, shop safety, and basic metal and electrode identification. Oxy-acetylene will include fusion welding, brazing, and cutting. Arc welding will include work in all positions of welding using various electrodes and common joints. Twenty-Four credits: 300 clock hours.

## WLT 152 WELDING TECHNOLOGY II

Students will be working with the shielded metal arc process on fillet and beveled butt welds using E-6010 and E-7018 electrodes on heavy plate in all positions. Instruction also will be given in basic blueprint reading and welding symbols. Prerequisite: WLT 151 or instructor permission. Twenty-Four credits: 300 clock hours.

## WLT 153 WELDING TECHNOLOGY III

Training will be given on uphill pipe welding using the SMAW process. Pipe will be welded in 5 and 6 G positions. Instruction also will be given in the GMAW process. Students will work on light and heavy material using both solid and cored wire in a variety of positions. Students will learn basic layout tools and techniques for their use. Prerequisite: WLT 152 or instructor permission. TwentyFour credits: 300 clock hours.

## WLT 199 WELDING SPECIALTIES

This course is designed for in-service students. It will provide upgrading skills to persons who are actually involved in the field of welding. Objectives will be agreed upon by the instructor, program supervisor and the student. One credit: 10 clock hours.

## WLT 204 WELDING PROBLEMS I

Designed to meet the needs of students who would benefit from a specialized program. Objectives will be agreed upon by the instructor, program supervisor, and the student. Four credits: 60 clock hours.

## WLT 205 WELDING PROBLEMS II

This course is designed to meet the needs of students who would benefit from a specialized program. Objectives will be agreed upon by the instructor, program supervisor and the student. Normally used as advanced study beyond WLT 204. Four credits: 60 clock hours.

## WLT 206 WELDING PROBLEMS III

This course is designed to meet the needs of students who would benefit from a specialized program. Objectives will be agreed upon by the instructor, program supervisor and the student. Normally used as advanced study beyond WLT 205. Four credits: 60 clock hours.

## WLT 236 SPECIAL WELDING PROBLEMS I

This course is designed to meet the needs of students who would benefit from a specialized program. Objectives will be agreed upon by the instructor, program supervisor, and student. Twenty-Four credits: 300 clock hours.

## WLT 237 SPECIAL WELDING PROBLEMS II

This course is designed to meet the needs of students who would benefit from a specialized program. Objectives will be agreed upon by the instructor, program supervisor and the student. Normally used as advanced study for WLT 236 . Twenty-Four credits: 300 clock hours.

## WLT 241 SHIELDED METAL ARC III

Students will be given instruction in the welding of beveled butt joints with an open root using E-6010 and E7018. Basic blueprint reading and weld symbols will also be covered. Twelve credits: 150 clock hours.

## WLT 242 PIPE WELDING

Instruction will be given on uphill pipe welding using the SMAW process. Pipe will be welded in the 5 and 6G positions using E-6010 and E-7018 electrodes. Twelve credits: 150 clock hours.

## WLT 243 GAS METAL ARC WELDING

Students will learn to operate and perform basic trouble shooting on GMAW equipment. Welding will be done on a variety of metal thicknesses with solid and flux core wire. Twelve credits: 150 clock hours.

## WLT 244 SPECIALIZED WELDING II

This course is designed to meet the needs of students who would benefit from a specialized program. Objectives will be agreed upon by the instructor, program supervisor and the student. Normally used as advanced study beyond WLT 144. Twelve credits: 150 clock hours.

## WLT 251 WELDING FABRICATION

This course is designed to provide basic knowledge in the areas of layout, fabrication tools and equipment, and assembly of welding structures. Actual hands-on work will be provided. Prerequisite: WLT 151 and WLT 152, or permission of instructor. Twenty-Four credits: 300 clock hours.

## XRT: RADIOLOGIC TECHNOLOGY

XRT 100 INTRODUCTION TO RADIOLOGIC TECHNOLOGY
Prerequisite course required for program application. Provides an avenue for assessing the student's program entry level skills. Introduces the student to the role of radiography in health care delivery. Emphasis will be placed on department organization, ethics and medicolegal issues, professional communications and conduct, radiology terminology, general and radiation safety, Universal precautions, radiographic positioning, and radiographic exposure. Prerequisite:Entry level assessment scores for Radiologic Technology. Five credits: 30 hours lecture, 30 hours lab.

## XRT 101 RADIOGRAPHIC POSITIONING I

Designed to ensure that students gain the ability and confidence they need to perform the radiographic examinations they will be expected to handle in the clinical setting; fundamentals of positioning, positioning nomenclature, positioning of the thoracic contents, abdomen and contents, and distal upper and lower extremities. Prerequisite: XRT 100, majors only. Four credits: 20 hours lecture, 30 hours lab.

## XRT 102 RADIOGRAPHIC POSITIONING II

A continuation of XRT 101. Consideration will be given to the structure and positioning of the upper and lower extremities, shoulder and pelvic girdles, lumbar and thoracic spines. Prerequisite: XRT 101, majors only. Four credits: 20 hours lecture, 30 hours lab.

## XRT 103 RADIOGRAPHIC POSITIONING III

A continuation of XRT 101 and XRT 102. Emphasis on the structure and positioning of cranium, cervical spine, distal spine, special views of the spine and pelvis, bony thorax, sinuses, facial bones and cranium. Prerequisite: XRT 101, XRT 102, majors only. Four credits: 20 hours lecture, 30 hours lab.

## XRT 104 RADIOGRAPHIC POSITIONING IV

A continuation of XRT 101, XRT 102, and XRT 103. Emphasis on sinuses, facial bones, and special positions of the cranium. Prerequisite: XRT 101, XRT 102, and XRT 103, majors only. Four credits: 20 hours lecture, 30 hours lab.

## XRT 105 PROCEDURES IN PATIENT CARE

Designed to ensure that students gain the ability and confidence to perform proper body mechanics, universal precaution techniques, vital signs assessment, CPR, contrast media and drug preparation and administration, venipuncture, and routine and emergency patient care. Aspects of medico-legal issues, professional ethics, communication methods, professionalism, and death and dying will be discussed. Prerequisite: XRT 100 . Five credits: 30 hours lecture, 30 hours lab.

## XRT 111 CLINICAL EXPERIENCE

The student in the clinical setting will perform radiographic procedures under the direct supervision of a qualified radiologic technologist or radiologist. Unsatisfactory clinical performance will result in the student being terminated from the curriculum. Only full time radiologic technology students are permitted to participate in this course. Prerequisite: XRT 100. Majors only. Three credits: Approximately 60 contact hours.

## XRT 112 CLINICAL EXPERIENCE II

Continuation of supervised clinical education under the direct supervision of a qualified radiologic technologist. Correlates skills from academic courses. Prerequisite: XRT 101, XRT 105, XRT 111, majors only. Eight credits: Approximately 160 contact hours.

## XRT 113 CLINICAL EXPERIENCE III

Continuation of supervised clinical education under the direct supervision of a qualified radiologic technologist. Correlates skills from academic courses. Prerequisite: XRT 112, majors only. Eight credits: Approximately 160 contact hours.

## XRT 114 CLINICAL EXPERIENCE IV

Continuation of supervised clinical education under the direct supervision of a qualified radiologic technologist. Correlates skills from academic courses. Prerequisite: XRT 113, majors only. Fourteen credits: Approximately 240 clinical hours and 20 lecture hours.

## XRT 118 RADIATION PROTECTION \& BIOLOGY

Designed to ensure that the student has an understanding of the effects of ionizing radiation in biologic systems, and the public right to minimal radiation exposure. Prerequisite: Permission of instructor Three credits: 30 hours lecture.

## XRT 121 RADIOGRAPHIC EXPOSURE I

Introduces the student to the theory of radiographic prime factors, factors influencing exposure values, attenuating and restricting devices, technique charts and their application. Provides the student with guided experiences in the laboratory setting to reinforce the theory material. Prerequisite: Majors only. Four credits: 30 hours lecture, 15 hours lab.

## XRT 122 RADIOGRAPHIC EXPOSURE II

Continuation of XRT 121 with emphasis on application of theory. Prerequisite: XRT 121, XRT majors only. Three credits: 20 hours lecture, 15 hours lab.

## XRT 205 RADIOGRAPHIC SPECIAL PROCEDURES

Acquaints the student with the theory, equipment, and methodology of selected special procedures. Prerequisite: Permission of instructor, or XRT 104. Three credits: 30 hours lecture.

XRT 206 RADIOGRAPHIC PATHOLOGY
Gives the student a basic understanding of the definition and types of selected diseases common to radiography. Consideration will be given to common illnesses of the body systems and their effects on the production of a diagnostic radiograph. Prerequisite: Permission of instructor, XRT 101, XRT 102, XRT 103, 121 \& 122. Three credits: 30 hours lecture.

## XRT 211 CLINICAL EXPERIENCE V

The student in the clinical setting will perform radiographic procedures under the direct supervision of a technologist or radiologist. Unsatisfactory clinical performance will result in the student being terminated from the curriculum. Only full-time radiologic technology students are permitted to participate in the course. Prerequisite: XRT 114, majors only. Eight credits: Approximately 240 contact hours.

## XRT 212 CLINICAL EXPERIENCE VI

Continuation of XRT 211. Correlates skills from previous classes. Prerequisite: XRT 211, majors only. Eight credits: Approximately 240 contact hours.

## XRT 213 CLINICAL EXPERIENCE VII

Continuation of XRT 212. Prerequisite: XRT 212, majors only. Ten credits: Approximately 240 clinical hours and 20 lecture hours

## XRT 214 CLINICAL EXPERIENCE VIII

Continuation of XRT 213. Prerequisite: XRT 213, majors only. Ten credits: Approximately 240 clinical hours and 20 lecture hours.

## XRT 215 REGISTRY REVIEW

Designed to consolidate the basic fundamental technical information recommended for student radiographers preparing to sit for National Registry Examination. Prerequisite: 2nd year radiography student or graduate. One credit: 10 hours lecture.

## XRT 221 X-RAY PHYSICS

Imparts an understanding of basic $x$-ray physics, includes: unit of measurement, mechanics, structure of matter, electrostatics, magnetism, electrodynamics, and electromagnetism. Prerequisite: permission of instructor. Five credits: 50 hours lecture.

## XRT 225 RADIOGRAPHIC QUALITY ASSURANCE

Designed to provide the student with an introduction to the evaluation of radiographic systems to assure consistency in the production of quality images. The components involved in the radiography system will be identified. Tests and procedures to evaluate these components will be discussed. State and federal impacts will be described. Prerequisite: XRT majors only or permission of instructor or XRT 221. Three credits: 30 hours lecture.

## XRT 226 RADIOGRAPHIC EQUIPMENT AND IMAGING

A study of image intensification, recording media, special imaging techniques, $x$-ray circuit and $x$-ray tubes. Prerequisite: Permission of instructor, OR XRT 221. Four credits: 40 hours lecture.

## XRT 227 COMPUTERS IN MEDICINE

Designed to make the student aware of the various uses of computers in imaging. Prerequisite: Permission of instructor or XRT 221. Two credits: 20 hours lecture.

## XRT 231 RADIOLOGICAL SCIENCES

Designed to give students an over-all review of courses and clinical work in the Radiography Program. Prerequisite: 8th Quarter radiography student or graduate. Three credits: 30 hours lecture.

## XRT 235 RADIOGRAPHIC COMPUTERS

Designed to address basic computer terminology with orientation to computerized imaging. Prerequisite: None. One credit: 10 hours lecture.

## XRT 236 CROSS SECTIONAL ANATOMY OF CT IMAGES

Designed to orient the student to the aspects of cross-sectional anatomy in relation to conventional radiographic anatomy. Prerequisite: None. One credit: 10 hours lecture.

## XRT 237 WHY ULTRASOUND?

Introduces sonographic cross-sectional anatomy vs. flat AP or PA $x$-ray anatomy. Comparison of $x$-ray to ultrasound appearances of similar studies. Prerequisite: None. One credit: 10 hours lecture.

## XRT 238 MAMMOGRAPHY

Introduces the concepts of mammography imaging to include positioning and technique. Prerequisite: None. One credit: 10 hours lecture.

## XRT 289 to <br> XRT 298 CLINICAL ACTIVITY

Designed to provide radiographic clinical experience for students with prior clinical involvement. Prerequisite: previous radiographic clinical expenience. One to Ten credits: approximately $30-300$ contact hours.


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RUTH SLOMER (Developmental Studies) ..... 1970
DR. ANN ARON (Business) ..... 1978
R. ARTHUR GIESICK (Technology) ..... 1970
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# Aims Community College Foundation, Inc. AWARDS FOR EXCELLENCE 

The Aims Community College Foundation pays special tribute to several outstanding faculty members each year for excellence in teaching. The following individuals have been awarded the prestigious Award for Excellence Bell and presented a cash gift. The program is made possible through donations from regional businesses.

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Olivia Montes
Juanita McCloy
Mary Vigil
Vera Benavidez
Maria Velasquez
Roth Gomez
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Era Berg
Janet Krause
Les Race
Karen H. Soutar
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Mellie Brand
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(To be given in May of 1994)
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Vic Nottingham, 1992
Julianne Haefeli, 1993

## AIMS COMMUNITY COLLEGE FACULTY

ABBOTT, JANE
(Division Chair - West Campus)(Communications \& Humanities)B.A., Pierce College; M.A., University of Denver; GraduateCertificate in Women's Studies, Colorado State University;Advanced Graduate Study, University of Denver, ColoradoState University1989
ACKERMAN, ALAN H.
(Chemistry and Biology)
B.A., Clark University, Massachusetts; Ph.D.,Massachusetts Institute of Technology.1986
ARON, ANN
(Division Director, Business)
B.S., University of Nebraska; M.A., University of NorthernColorado; Ed. D., University of Northern Colorado; Advancedgraduate studies, University of Colorado, Colorado StateUniversity.1978
BANTIN, FREDERICK
(Electronics Technology)B.A., University of Nebraska-Omaha; Electronic TechnologyInstitute, Inc., Denver, Graduate study, University of NorthernColorado; 12 years industrial experience.1981
BAY, MARVIN L.
(Aviation Technology, Department Chair)B.S., Colorado State University; M.A., University of NorthernColorado; Advanced graduate study, University of NorthernColorado; Eight years industrial experience.1970
BECK, ROBERT
(Electronics Technology, Department Chair)Two years electronics school, U.S. Navy; 15 yearsindustrial experience.1980
BEECHER, SUSAN MK
(Criminal Justice and Associate Police Academy Director)
Certified Legal Assistant. 17 years paralegalexperience. A.A.S. and A.A., Aims Community College1989
BENAVIDEZ, E. C. "VERA"
(Developmental Studies, South Campus)
B.A., Metropolitan State College; M.A., University of NorthernColorado; Winner of Award for Excellence, AmnestyProgram Team. Advanced graduate study, Universityof Northern Colorado.1984
BENESCH, BARBARA
(Division Chair - South Campus, Business)B.S., Colorado State University; M.E., Colorado StateUniversity.1984

## BJORNEBY, WALTER J.

(Aviation Technology)
B.A., University of Maryland. 34 years military and industrial experience

## BOAN, RANDALL P.

(Math/Science/Computer)
B.A., University of Northern Colorado; M.S. University of Northern Colorado; Four years consulting experience.

## BRODA, ALYSAN

(Chair, Visual \& Performing Arts)
(Chair, Speech)
(Communications \& Humanities)
B.A., William Paterson College, New Jersey; M.A., William Paterson College, New Jersey; Advanced graduate study, Colorado State University and University of Northern Colorado.

BROTEMARKLE, (VANTINE) DIANE L. (Humanities Chair) (Communications \& Humanities)
B.A., University of Wyoming; M.A., University of Wyoming; Ph. D., University of Denver. Aims Foundation Fellow, 1984; NEH Fellow, Harvard, 1987. CEH Board of Directors 1991-1995.

## BUTLER, DONALD E.

(Communications \& Humanities)
B.A., Brigham Young University; M.A., Brigham Young University.

## BUXMAN, BETTY J.

## (Accounting)

A.A., Aims Community College; B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced graduate study UNC. 1992 Faculty Senate selection, excellence in teaching award. Eight years business experience.

## CHRISTENSON, MAXINE GROSS

(Marketing/Management)
B.S., University of Wisconsin, M.S., University of Wisconsin; Advanced graduate study, University of Northern Colorado, five years business experience

## CLAY, DOUGLAS G.

(Chair, Computer Science)
B.S., Purdue University, Indiana; M.A., Lesley College, Massachusetts; Advanced Graduate Study, Florida International University, University of Northern Colorado.

## COLTON, KERRY L.

(Accounting)
B.A., University of Northem Colorado; M.S., University of Northern Colorado; Advanced Graduate Study, Colorado
State University

COOPER, SAM
(Physics and Computer Science)
A.A., Aims Community College; B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced graduate study, Colorado State University.

## COURSON, RONALD

(Chairman, Division of Behavioral and Social Sciences, South Campus)
B.A., Cornell College; M.A., Drake University

## CRIBELLI, SUSAN

(Division Director, Communications \& Humanities) B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced Graduate Study, University of Northern Colorado.

## CROSS, EUGENE (GENE)

(Electronics Technology)
B.S.E.E., University of Pittsburgh; Graduate study, University of Northern Colorado and Colorado State University; 20 years industrial experience.

## CULLINS, BILL

(Engineering Technology)
B.S., Tarleton State University, Texas; Graduate study University of Northern Colorado and Angelo State University; Certified Manufacturing Engineer (CMFGE).

## DARLING, DONALD W.

## (Engineering Technology)

A.A., Foothill College, California; B.A., University of Northern Colorado; M.A., University of Northern Colorado; Graduate study, Colorado State University; 15 years industrial experience.

## DAVISSON, SUE E.

(Director, Counseling/Assessment Center) B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced graduate study, Kephart Clinic; Ed.S., University of Northern Colorado.

## DEWITT, ROGER A.

(Chairman, Division of Behavioral and Social Sciences, West Campus)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; 1991 Student Award for Excellence in Teaching

## DRISKILL, MARSHA J.

(Mathematics; Coordinator, Aims/UNC Math Program)
B.S., University of Kansas; M.A., University of Northern Colorado 1990

## DUNCAN, DIANA

(Department Chair, Radiologic Technology)
Radiologic Technology Certificate, Weld County General
Hospital; Registered Technologist (American Registry of Radiologic Technology); Ten years clinical experience. B.S., Colorado State University

## DUNN, RICHARD

## (Farm \& Ranch Business Management)

B.S. Colorado State University; M.S. Colorado State University; Graduate Study, Colorado State University; 20 years business experience.

## EDWARDS, J. PHIL

(Computer Science and Physical Science; Division Chair, Math/Science/Computer, West Campus)
B.A., University of Northern Colorado; M.A., University of Northem Colorado; Advanced Graduate Study, Colorado State University, American University/Commonwealth Institute. 1986

## EDWARDS, MARTHANNE

(Accounting)
B.A., University of Minnesota; M.S., Colorado State University; Advanced graduate study University of Northern Colorado Ten years business experience.

## EVANS, LUCILLE

## (Radiologic Technology)

Radiologic Technology Certificate, Weld County General Hospital; Registered Technologist (American Registry of Radiologic Technology); Six years of clinical experience.

## FAJARDO, JOSEPH S.

(Chair, Anthropology; Spanish)
B.A., University of Denver; M.A., University of Colorado; M.A., University of Northern Colorado; Advanced graduate study, University of Colorado. 1992 Student Award for Excellence in Teaching.

## FISHER, CHUCK

(Communications \& Humanities)
B.A., University of Southern California; M.A., University of Northern Colorado; Advanced graduate study, UNC, Educational Technology

## FORD, LORI

(Graphic Technology)
Certificate, Graphic Technology, Aims Community College; Seven years industrial experience.

## FRANEY, JAY

(Department Chair, Fire Science)
A.A.S. Fire and Safety Technology, Carl Sandburg College; AAS-Fire Service Technology, Fire Protection, Aims Community College; $२ 2$ years public fire suppression, administration and training experience, nine years post-secondary teaching experience.

## FREESE, JASPER (Jay)

(Engineering Technology)
B.S.C.E., Worchester Polytechnic Institute; M.S.C.E., University of Southern California; Colorado Registered Professional engineer and land surveyor; 30 years professional and business experience.

## GEARHEART, SUSAN

(Criminal Justice)
B.A., University of Northern Colorado; Graduate Study, University of Northern Colorado.

GIESICK, R. ARTHUR

(Division Director, Technology)
B.A., University of Northern Colorado; Nationally certified as an Engineering Technician by N.I.C.E.T.; Graduate study, Colorado State University, University of Northern Colorado; 26 years industrial and military experience.

## GODDARD, JERRY F.

## (General Business)

A.A., Graceland College, lowa; A.B., University of Northem

Colorado; M.A., Colorado State University; advanced graduate study, University of Northerm Colorado, Leslie College, Colorado State University; four years business experience.

## GOMEZ, RUTH

## (Developmental Studies)

M.A., University of Northern Colorado, Advanced

Graduate Study, University of Northern Colorado; Winner of
Award for Excellence, Amnesty Program Team

## GORDON, FRANK J.

(Chair, Department of Political Science) B.A., University of Colorado; M.A., University of Colorado; Ph.D., University of Colorado-Boulder; Postdoctoral research at Harvard University, West Berlin, Hannover, Goettingen, Marburg University-West Germany.

1967-70; 1982

## GOSCH, PHYLLIS

(Chair, Developmental Studies, Reading)
B.A., State University College of New York at Fredonia;
M.A., State University College of New York at Buffalo

## GREEN, JUDITH

(Psychology/Biofeedback)
B.A., University of Chicago; M.A., University of lowa; Ph.D., Union Graduate School, Ohio. Certified
Biofeedback Therapist.

## GRIFFIN, THOMAS J.

(Math/Science/Computers, West Campus)
B.S., Kansas State University; M.S., Kansas State University;

Six years professional experience1993

## HALL, CATHERINE

(Computer Information Systems)
A.A.S., Aims Community College; B.S., Moorhead State College, Minnesota; M.S., University of New Mexico; Five years business experience. Aims Foundation Fellow, 1985. 1982

## HAMBLIN, KATHERINE

(Director, Early Childhood Education Center)
B.S., Colorado State University; M.A., University of Northem Colorado; State Certified Child Care Center Director, Six years experience in child care services. Aims Foundation Fellow, 1984.

HARDGRAVE, BILLY D.
(Counseling)
A.A., Pensacola Junior College, B.A., University of West Florida, M.A. and Ed.D., University of Northern Colorado. 1989

HARRIS, DONALD T.
(Chemistry)
B.S., Western Kentucky State University; M.A., Western Kentucky State University; Advanced graduate study, University of Northern Colorado (ABD). Aims Foundation Fellow, 1983.

HEEN, SAMUEL K.
(Chairman, Department of Physical Education)
B.A., Colorado State University; M.Ed., Colorado State

University; Advanced graduate study, University of Northern Colorado.

HERGENRETER, PAT
(Department Chair, Auto Body)
Three years study; Colorado State University, Vocational Education Credential, 16 years industrial experience.

## HILLS, NANCY <br> (Emergency Medical Services)

B.A. University of Northem Colorado; six years CPR coordinator/instructor - Aims; five years
Emergency Cardiac Care Board, State of Colorado
HUNT, GARY L.
(Department Chair, Engineering Technology)
B.S.E.E., Northem Arizona University; M.S.E.E., Colorado State University; Seven years industrial experience.

## JOHNSON, MARYJANE

(Chair, Department of History)
A.A. Aims Community College; B.A., University of Northern

Colorado; M.A., University of Northern Colorado.

## JOKERST, JAMES C.

(Psychology)
B.A., University of Arizona; M.A., University of Northern Colorado; Ph.D., University of Northern Colorado. Aims Foundation Fellow, 1982.

## KARST, GERALD L.

(Chair, Department of Sociology)
B.A., University of Northem Colorado; M. Ed., Colorado State University; Advanced graduate study, University of Northern Colorado.

## KELSEY, LOYAL L.

(Aviation Technology)
B.A., University of Northem Colorado; M.A., Central Michigan

State University. 32 years military and industrial experience. 1988

## KELSEY, MICHAEL L.

(Chair, Department of Geography/Economics)
B.S., Salisbury State University, Maryland; M.A., University Northem Colorado; Ph.D., Kent State University. Eleven years corporate and independent business experience

## KING, DEBRA

(Department Chair, Graphic Technology)
Certificate, Graphic Communications, Mankato Area Vocational
Technical Institute; Seven years industrial experience.
KLINE, GINA(Aviation Technology)A.A.S., Aims Community College; B.A., University of NorthernColorado, Six years Industrial experience.1987
KNUDSON, DEBRA
(Radiologic Technology)
X-Ray Certificate from Presbyterian Hospital School ofRadiology; Registered with American Registry of RadiologicTechnologists; Seven years clinical experience.1982
KUSHNER, JON
(Department Chair, Emergency Medical Services)
Lakeland Community College, Paramedic Degree. Ten years teaching experience; 20 years clinical experience. ..... 1994
LANE, E. KEITH
(Mathematics)B.S., West Texas State University; M.S., West Texas StateUniversity.1968
LEE, JOHN
(Lead Instructor, Fire Science)
A.A.S. Fire Science Technology, San Antonio College; 15 years public fire suppression, and administration ..... 1993
LEUSINK, JUDITH P.
(General Business)
B.S., Colorado State University; Graduate study, University ofNorthern Colorado; Five years business experience.1993 Faculty Senate Award for Excellence in Teaching 1971
LORENSON, M. RUTH
(Professor, Health Occupations)
Nursing Diploma, University of Oklahoma; B.S.N., University ofColorado; M.A., University of Northern Colorado; Ed.D., Universityof Northern Colorado. Ten years nursing experience.1971
LOVELESS, RUBY
(Computer Information Systems)
B.S., Colorado State University; Six years businessexperience.1981
MANUEL, TRUDI C.
(General Business) B.S., University of Colorado; M.A., University of Northern Colorado; Ten years business and industry experience. ..... 1985
MARQUEZ, MAXINE F.
(General Business)
B.A., University of Northern Colorado; M.A., Colorado StateUniversity. Aims Foundation Fellow, 1983.1974
MARTIN, PAUL
(General Business)
B.A., McNesse State University, Louisiana; M.A., University ofNorthern Colorado; Advanced graduate study, University ofNorthern Colorado; 12 years business experience.1981

## MARTZ, NANCY SUE

## (Communications \& Humanities)

B.A., University of Northern lowa; M.S.T., Wisconsin State University; Advanced graduate study, University of Northern Colorado, Colorado State University, Naropa Institute. 1969

## MAST, MARY K.

(Assistant Professor, Emergency Medical Services) Diploma, University of Wyoming, School of Nursing; Advanced Cardiac Life Support and Pediatric Advanced Life Support Instructor and Affiliate Faculty; Eight years teaching experience; 22 years clinical experience.

## MAXFIELD, BARBARA

## (Developmental Studies)

B.A., Colorado State University; B.S., Colorado State University; M.A., University of Northern Colorado. Aims
Foundation Fellow, 1985; Winner of Award for Excellence, Amnesty Program Team

## MEIER, DONNA L.

(Professor, Criminal Justice)
B.S., Colorado State University; J.D., University of Colorado

Law School.

## MONTHEI, CAROL E.

(Division Chair - West Campus, Business)
B.S., Drake University; M.Ed., Colorado State University;

Ph.D., Colorado State University1991

MUSIL, SUSAN
(Coordinator, Business Lab)
B.A., University of Northern Colorado

## MYERS, CHARLES E., II

(Department Chair, Criminal Justice, Police Academy Director)
B.A., California State University-Fresno; M.A., University
of Northern Colorado.1982

## NEET, KENNETH

(Accounting)
B.A., Point Loma College, California; Seven years business experience. Aims Foundation Fellow, 1986.

ORT, MICHAEL
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## PARK, ANTHONY

(Communications \& Humanities)
B.A., Colorado State University; M. A., Colorado State University; Advanced Graduate Study, Colorado State University. 1993 Student Selection for Excellence in Teaching 1988

PARR, REX A.
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B.S. Wesleyan College, Ohio; M.A., Webster University, Illinois;

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(Visual \& Performing Arts)
(Communications \& Humanities)
B.M., Utah State; M.M., Illinois State University;

Doctoral studies in music, University of Northern Colorado. 1991

## RACE, LES

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B.A., M.A., Western State College; Post M.A., UNC.

1993 Team Award for Excellence in Teaching.

## REIERSTAD, KEITH B.

(Division Chair - South Campus)<br>(Communications \& Humanities)<br>B.A., English, Wesleyan University; M.A./Ph. D., English, University of Pennsylvania

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## ROBINSON, KAREN

(Mathematics, Science and Computers)
B.S., Colorado State University; M.S., Colorado State University.

```
ROY, NANCY
(Communications \& Humanities)
B.S., University of Wisconsin, LaCrosse; M.A., University of Northern Colorado.1993
```


## RUNGE, TEDD

(Visual \& Performing Arts)
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B.S., Moorhead State University, Minnesota; Vocational

Education Certificate, Colorado State University; Five years
industrial experience.

## SCHWARTZ, EDGAR H.

## (Welding Technology)

Quality Management Certificate; 15 years
industrial experience

## SCHWARTZ, PATRICIA (TRISH)

(Physical Education)
B.S. Physical Education, Colorado State University, 1984
M.S. Exercise Physiology, Colorado State University, 19861991

## SCOTT, LINDA

## (General Business)

B.S.E., North East Missouri State University; M.A. University of

Northern Colorado. Aims Foundation Fellow, 1983. 1982

## SHELLENBERGER, ROBERT

$$
\begin{aligned}
& \text { (Chair, Department of Psychology) } \\
& \text { B.A., Bluffton College, Ohio; B.D., Vanderbilt University, } \\
& \text { Tennessee; M.A., Northwestern University; Ph.D., Northwestern } \\
& \text { University. Aims Foundation Fellow, 1985. 1993 Division } \\
& \text { Directors Selection for Excellence in Teaching. }
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B.A., Miami University, Oxford, Ohio; M.A., Ball State, Muncie,

Indiana. 1993 Team Award for Excellence in Teaching.
1989

## SOWDER, GLEN E.

(Agriculture Technology)
A.A., Northeastern Junior College, Colorado; B.S., Colorado State University; M.E., Colorado State University; Graduate study, University of Northern Colorado. Aims Foundation Fellow, 1983.

## SPECKETER, JANET A.

(Radiologic Technology)
Radiologic Technology Certificate, Rock Island Franciscan Hospital; Registered Technologist (American Registry of Radiologic Technology); 12 years of clinical experience.

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## STEPHENSON, THELMA J.

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1976
STEVENS, CLAUDIA B.
(Marketing/Management)B.A., University of Northern Colorado; graduate study,University of Northern Colorado; Ten years businessexperience.1985
SULLIVAN, ROBERT
(Reading Lab Chair, Developmental Studies) B.S., Wisconsin State University; M.S., University of Wisconsin-Platteville; Additional graduate coursework, University of Northern Colorado; 20 years higher education administrative experience. ..... 1992
SUMMERS, MAURINE
(Early Childhood Education)B.A., University of Northern Colorado; M.Ed., Colorado StateUniversity; Advanced graduate study, Pacific Oaks College,California; University of Northern Colorado; Seven yearsexperience in child care services. Aims FoundationFellowship, 1986.1972
TARNASKY, RALPH F.
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TAYLOR, VAL W.
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TERRAZAS, ARTHUR
(Developmental Studies)A.A., Aims Community College; B.A., University of NorthemColorado; M.A., University of Northern Colorado.1973
TURNER, JOHN T.
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## APPLICATION FOR ADMISSION

Admissions and Records, P.O. Box 69
Aims Community College
(5401 W. 20th Street) Greeley, CO 80632 (303)330-8008
PLEASE PRINT
No Fee Required
(5401 W. 20

OFFICE USE ONLY

INA L.OA LOE Prev: App. Date
Other Last Names Used Previously at Aims:
Expected Year/Qtr of Enrollment:
19—— Fall Winter
Spring
Summer

First
Middle


Home Campus (where you will register): $\square$ Greeley - Ft. Lupton - Loveland Senior Adult Ed.

TUITION CLASSIFICATION
All information must be completed for in-state tuition classification purposes
(See Schedule of Classes for rates).
6. Place of employment past 12 months:

AS THEY APPLY TO YOU:
-1am 22 or older, (or)

- OR

I am under 22 and married, (or)
I am under 22 and emancipated (attach proof of emancipation)
ANSWER ALL QUESTIONS BELOW

1. Continuous residence in Colorado:

Less than one year
More than one year
2. Filed Colorado income tax:
3. Colorado Driver's License:
4. Colorado car registration:
5. Colorado voter registration:

ANSWER ALL QUESTIONS BELOW AS THEY APPLY TO YOUR PARENT OR GUARDIAN
APPLY TO YOUR PARENT OR GUARDIAN

I am under 22 and unmarried


OFFICE USE ONLY

| LEGAL NAME - Last | First | Middle |
| :---: | :---: | :---: |
| Other Last Names Used Previously at Aims: |  |  |


|  | $\overline{\text { DATE OF BIRTH-Month, Day, Year }} \overline{-} \overline{\text { Age }}$ (If under 16, contact the Admission \& Records Office prior to admission.) | Home Campus (where you will register): Greeley Ft. Lupton Loveland <br> Senior Adult Ed. |
| :---: | :---: | :---: |



If you are a male born after Dec. 31, 1959, are you registered with the Selective Service?

- Yes
$\square$ No


## TUITION CLASSIFICATION

All information must be completed for in-state tuition classification purposes
(See Schedule of Classes for rates).




PLEASE PRINT
No Fee Required


If you are a male born after Dec. 31, 1959, are you registered with the Selective Service?
$\square$ Yes
$\square$ No

## TUITION CLASSIFICATION

All information must be completed for in-state tuition classification purposes
(See Schedule of Classes for rates).

- ITam 22 or older, (or)
- OR-

I am under 22 and married, (or)
$\square 1$ am under 22 and emancipated
I am under 22 and unmarried

- No
- No
$\square$ No
- No
(attach proof of emancipation)
ANSWER ALL QUESTIONS BELOW
AS THEY APPLY TO YOU:

1. Continuous residence in Colorado:

Less than one yea

- More than one year

2. Filed Colorado income tax:

Only last year
Last two years or more
Last two years or more
Last two years or more
Last two years or more
ANSWER ALL QUESTIONS BELOW AS THEY APPLY TO YOUR PARENT OR GUARDIAN
3. Colorado Driver's License:

Only last year
Only last year
Only last year

County

-     - 

Y N E U

In-District (01)

Out-District

Out-State

Foreign
(04)
(need separate app)
6. Place of employment past 12 months:
Name City Phone

## EDUCATION PLANS AT AIMS (mark one):

A.A. - Associate of Arts - Liberal Arts major. Emphasis (optional): $\qquad$ AA:

- A.S. - Associate of Science - Liberal Arts major. Emphasis (optional): $\qquad$ AS:
AAS:
CERT:
- Occupational Certificate - Specific major:
$\qquad$
- G.E.D. - General Educational Development (Colorado High School Equivalency Diploma)
- Professional development/skills upgrade: $\qquad$
Field of Study
- Undecided - I would like assistance from the Counseling Center for career education planning: Yes No
- Personal interest/none of the above.

PRIOR EDUCATION (mark all that apply):

- Attended Aims Courses previously:

College transfer* or graduate (show name and location of last college attended): If graduate show:
$\qquad$
*If you intend to transfer in credit, submit transcripts with request for evaluation.

- High School graduate $\qquad$
- Received G.E.D. certificate (General Educational Development) instead of High School diploma $\qquad$ 9999(03/1)
- Current High School Student in grade $\qquad$ (9-12) Expected Graduation date Mo. $/$ Yr.
at
Name of High School
- Withdrew from school (Non High School graduate). Show highest grade completed $\qquad$ (1-11)


## EDUCATION PLANS AFTER CURRENT PROGRAM (mark one):



I certify that to the best of my knowledge the information furnished on this form is true and complete.

## IMMUNIZATION

Aims Community College does not require (but strongly encourages) immunization for measles or other diseases prior to admission. Students are urged to consult their personal health providers regarding potential health risks.


[^0]:    Cover:
    "Aerial View" by Tedd Runge.
    Photographs by Robert Waltman.

