## MSI Separator Sheet


$1987-1988$


AIMS COMMUNITY COLLEGE

CATALOG1987-88

## AIMS COMMUNITY COLLEGE

## AVIATION TECHNOLOGY

Catalog Addendum
1987-88

PROGRAM ADVISORS: Marvin Bay, Gina Kline
PROGRAM LENGTH: The Aviation Technology program consists of a Certificate program and an Associate of Applied Science degree program.

## Certificate:

Requires three (3) quarters (57 credit hours) for completion.

## Associate of Applied Science Degree:

General Aviation Pilot Option
Requires six (6) quarters (102 credit hours) for completion.
Pilot Entry Program (PEP) Option
Requires seven (7) quarters (113 credit hours) for completion.
Total credits and/or courses required for the Associate of Applied Science Degree may be reduced if the student has prior flying experience and/or course work from an accredited college, university, or other approved institution. Students who wish to transfer, for credit, prior education or flying experience must formally request a review of their records or transcripts by contacting an Aims Community College Aviation advisor. The advisor will determine the number transfer credits applicable toward the AAS degree.

## POTENTIAL OPPORTUNITIES:

General Aviation Program (Certificate)
The program is designed to qualify the student for immediate entry into employment as a pilot. With additional experience, there are opportunities available as flight instructors, corporate flying, charter work, and with some commercial airlines.

## General Aviation Program Option (Associate of Applied Science)

The program is designed to qualify the student for immediate entry into employment as a pilot. With additional experience, there are opportunities available as flight instructors, corporate flying, charter work, and with some commercial airlines.

For employment purposes, students are encouraged to consider the AAS degree rather than the certificate program. The degree program requires an additional 10 credits hours in aviation core courses, 10 credit hours in aviation electives, and 25 credit hours in general education courses. The certificate program is minimum for entry-level employment; however, the AAS degree, with the additional requirements, may improve an individual's career opportunities.

## Pilot Entry Program Option (Associate of Applied Science)

The Pilot Entry Program (PEP) offered in cooperation with Eastern Airlines is designed to train pilots who will be eligible for employment in the commuter airlines system. It is anticipated that after two years of successful commuter airlines flying the student would be qualified to move to a major airline as flight positions become available. Completion of the PEP program DOES NOT GUARANTEE that the graduate will be employed by any airline, however, the possibility of employment is enhanced because of the affiliation of Aims Community College aviation program with Eastern Airlines.

## PROGRAM REQUIREMENTS:

Students pursuing the Occupational Certificate or Associate of Applied Science Degree in Aviation Technology must complete the Aims Community College preassessment examination prior to program enrollment. If qualifying scores are not attained, program advisors will require remedial or special courses for correction of scholastic or other deficiencies. In addition, students must pass the required flight physical examination prior to the completion of the first quarter of enrollment.

The acceptance and continuation criteria for the PEP program for both beginners and those with prior education and training is contained on page 4 and 5, Pilot Entry Program Evaluation Gates.

The acceptance criteria for students already in aviation training or those with commercial license is contained on page 6, Student Acceptance Breakdown.

## GENERAL INFORMATION:

Tuition information for Aims Community College is contained in the 1987-88 Catalog, page 7. In addition to the regular tuition, there are fees for rental of aircraft for flight labs and for flight simulators. Aims Community College does not own or operate its own aircraft for flight training. All actual flight time is contracted out to approved private aviation schools. Page 7 contains information on fees for the flight simulators, and page 8 contains fee schedules for the following:

Private Pilot Certificate
FAA Approved Commercial Pilot Certificate
FAA Approved Multi-Engine Rating Course
IRF Part-135 Preparation Course
Students wishing to enter the PEP program may make application after completion of one quarter of aviation classes. This application also requires an additional fee, which is listed on page 7.

Financial Aid requirements for the Aviation Technology program is contained on page 9.

Individuals who qualify for benefits under the United States Veterans Administration will be required to attend the flight lab portion of the training with a VA and Aims Community College approved flight school. For additional information, contact an Aviation Technology advisor.

The Aviation Department is located in Room 577 of Ed Beaty Hall. Additional information is available by calling 330-8008, Ext-378.

AVIATION TECHNOLOGY ADVISORY COMMITTEE

Robert Anderson
Private Pilot
David Droegemuller
Commercial Pilot
Commuter Airlines

Dr. Roy Shore
FAA Medical Examiner Pilot

John D. Warrender
Corporate Pilot

Edward Beegles
Pilot/Mechanic

George Hopper
Commercial Pilot
Flight Instructor
Earnest Kampe
Commercial Pilot
Flight Instructor

## PILOT ENTRY PROGRAM EVALUATION GATES

Entry Gates: 2.5 GPA
Solo Flight
Current FAA First Class Medical
Interview
High School Diploma or GED

Gate 1 -- At the end of the third quarter

1. Average academic grade of 2.5 .
2. Current fAA First Class Medical.
3. Interview by both the college and Eastern Campus Coordinator.
4. Completion of his/her private pilot's license and license received.
5. Evaluation by flight instructor.
6. Interaction with other students and teachers during the year.

Gate 2 -- At the end of the fifth quarter

1. Average academic grade of 2.5 .
2. Instrument rating received.
3. Evaluation by flight instructor.
4. Interaction with other students and teachers during the year.
5. Evaluation by college and Eastern Coordinator.

Gate 3 -- At the end of the sixth quarter

1. Average academic grade of 2.5
2. Current FAA First Class Medical completed. (Must get new one; not the same one used in the first gate.)
3. Commercial license requirements completed and license received.
4. Evaluation by flight instructor.
5. Interaction with other students and teachers during the quarter.
6. Evaluation/interview with college and Eastern Coordinator.

Gate 4 -- At the end of the program

1. Average academic grade of 2.5 .
2. Flight Engineer Written taken and passed.
3. Multi-engine training completed and rating received.
4. All minimum flight hour requirements completed.
a. 200 hours of actual flight time ( 10 must be in multi-engine).
b. 40 hours of single engine simulator time.
c. 10 ours of multi-engine simulator time.
5. Part 135 check-ride completed (check-ride to Part 135 standards).
6. Evaluation by flight instructor.
7. Interaction with other students and teachers during the year.
8. Interview with college and Eastern Coordinator.
9. Current FAA First Class Medical.
10. Degree

Gate 5 -- At the end of the first year with the Commuter/Regional Airline

1. Evaluation by Chief Pilot for company the student will be flying for
2. Interaction with other pilots.
3. Interview with Eastern representative.

Gate 6 -- End of the second year with the Commuter/Regional Airline

1. Evaluation by Chief Pilot for company the student is flying for
2. Interaction with other pilots.
3. Interview with Eastern representative.

STUDENT ACCEPTANCE BREAKDOWN

This acceptance procedure has been developed to give students already in the aviation training or with a commercial license a chance to enter the program. It does not matter what their background is, there are still certain courses they must take and certain flight training requirements they must meet before we can recommend them to the commuter/regional industry. The following are general guidelines. Each student will be handled on an individual basis.

I Written Tests
A. Must pass a department test for private, instrument, commercial

II Flight Training
A. Fifty (50) hours of simulator training--to include Part 135 type simulator check ride.
B. Refresher time as required to enable applicant to pass a Part 135 type multi-engine check ride.

## Academics

AVT: Aviation Economics<br>Flight Physiology<br>Instrument Flight Simulator II<br>Instrument Flight Simulator III<br>Advanced Flight Simulator<br>Flight Engineer--Systems<br>Flight Engineer---Power Plant<br>Airline Management

The above items are listed as a three quarter minimum. All other academic courses that are required and not transferable will, of course, have to be taken.

LAB FEES

## Certificate Program

AVT 105 Private Flight Simulator
AVT 111 Instrument Flight Simulator I
AVT 211 Commercial Flight Simulator II
AVT 212 Instrument Flight Simulator II
AVT 213 Advanced Instrument Simulator II
AVT 226 Multi-Engine Simulator
AVT 227 Multi-Engine Simulator
AVT 228 Multi-Engine Simulator Refresher I
AVT 229 Multi-Engine Simulator Refresher II
\$ 3/qtr.
3/qtr.
3/qtr.
6/qtr.
5/qtr. 180/qtr. $100 /$ gtr . 75/qtr.

50/qtr.

## Associate of Applied Science Degree

| AVT 105 | Private Flight Simulator | $\$ 3 / \mathrm{qtr}$. |
| :--- | :--- | :---: |
| AVT 111 | Instrument Flight Simulator I | $3 / \mathrm{qtr}$. |
| AVT 211 | Commercial Flight Simulator II | $3 / \mathrm{qtr}$. |
| AVT 212 | Instrument Flight Simulator II | $6 / \mathrm{qtr}$. |
| AVT 213 | Advanced Instrument Simulator II | $5 / \mathrm{qtr}$. |
| AVT 226 Multi-Engine Simulator | $180 / \mathrm{qtr}$. |  |
| AVT 227 Multi-Engine Simulator | $100 / \mathrm{qtr}$. |  |
| AVT 228 Multi-Engine Simulator Refresher I | $75 / \mathrm{qtr}$. |  |
| AVT 229 Multi-Engine Simulator Refresher II | $50 / \mathrm{qtr}$. |  |

COST ESTIMATE FOR FLIGHT LABS
Associate of Applied Science Degree

FAA APPROVED PRIVATE PILOT CERTIFICATION COURSE

| CESSNA 152 | 45.hrs. @ $\$ 32.00$ per hr. | $\$ 1,440.00$ |
| :--- | :--- | ---: |
| DUAL INSTRUCTION | 20.hrs. @ $\$ 15.00$ per hr. | 300.00 |
| PRE \& POST BRIEFINGS | $14.5 \mathrm{hrs}$. | 217.50 |
|  |  | $\$ 1,957.50$ |
| CREDIT FOR AIMS FLIGHT LABS (PVT I \& II) | $=242.00$ |  |

\$ $1,715.50$

FAA APPROVED COMMERCIAL PILOT CERTIFICATION COURSE (Includes Instrument Rating)

CESSNA 152
CESSNA 172
CESSNA 172 RG
DUAL INSTRUCTION
PRE \& POST BRIEFINGS
$120 . \mathrm{hrs}$. @ $\$ 32.00$ per hr.
$40 . \mathrm{hrs}$. @ $\$ 45.00$ per hr.
$13 . \mathrm{hrs}$. @ $\$ 60.00$ per hr.
68.hrs. @ \$20.00 per hr.
17.hrs.
\$ 3, 8440.00

$$
2,160.00
$$

$$
780.00
$$

$$
1,360.00
$$

340.00
$\$, 480.00$
$-550.00$
\$ 7,930.00

## FAA APPROVED MULTI-ENGINE RATING COURSE

| CESSNA 310 | 12.hrs. @ $\$ 116.00$ per hr. | $\$ 1,392.00$ |
| :--- | :---: | ---: |
| DUAL INSTRUCTION | $12 . \mathrm{hrs}$. @ $\$ 20.00$ per hr. | 240.00 |
| PRE \& POST BRIEFINGS | $4 . \mathrm{hrs}$. |  |
|  |  | $\$ 1,712.00$ |
| CREDIT FOR AIMS FLIGHT LAB (MULTI) |  |  |

IFR PART 135 PREPARATION COURSE (Estimated)
CESSNA 310
10. hrs. @ \$116.00 per hr.
\$ 1, 160.00
DUAL INSTRUCTION
10.hrs. @ $\$ 20.00$ per hr.
200.00

CHECK RIDES (4 @ \$100)
FAA FIRST CLASS MEDICAL EXAMINATION (5 @ \$50)

TOTAL ESTIMATED COST OF PILOT ENTRY PROGRAM FLIGHT TIME
\$13,257.50*

* These are cost estimates.


## FINANCIAL AID ASSISTANCE REQUIREMENTS

1. Students must be enrolled in the AAS degree program. Funding is not available in the one (1) year certificate program.
2. Students holding a private pilot's license should give a copy of the license to the Financial Aid Office before submitting loan applications.
3. Budgets will be increased to a maximum of $\$ 6,000$ per academic year (fall through spring) to include the cost of flight training. The $\$ 6,000$ figure will be prorated for periods of enrollment that are less than a full academic year, and or for less than full-time enrollment.
4. Direct and indirect college budgets will remain the same as for any other Aims Community College financial aid student. In other words, budgets for tuition, fees, books (direct costs) and living expenses are not increased.
5. Federal and State aid, with the exception of loans, will be made available to cover college costs less flight costs on a first come, first served basis as funds exist at the time of the award. Students must be eligible for Federal and State aid to receive consideration of funding.
6. Flight training costs (approximately $\$ 6,000$ per year) are to be funded with private funds or a combination of the two loan programs available at Aims Community College.
7. Students must meet all regular Federal and State financial aid eligibility criteria. See financial aid eligibility requirements form.
AIMS COMMUNITY COLLEGE - Aviation Technology
GENERAL AVIATION PILOT OPTION
Qtr. Hrs.
QUARTER \#l AVT 100 Aviation Seminar ..... 2
AVT 108 Private Ground School ..... 6
AVT 101 Private Flight Lab I ..... 3
AVT 105 Private Flight Simulator ..... 314
QUARTER \#2 AVT 102 Private Flight Lab II ..... 3
EAS 106 Meteorology ..... 4
PEF 126 Aerospace Fitness and Performance I ..... 2
AVT 106 Aviation Economics ..... 514
QUARTER \#3 AVT 103 Commercial Flight Lab I ..... 5
AVT 109 Instrument Ground School ..... 6
AVT 111 Instrument Flight Simulator I ..... 3
PHY 120 Fundamentals of Physics ..... 519
QUARTER \#4 AVT 104 Commercial Flight Lab II ..... 5
AV'T 211 Instrument Flight Simulator II Part A ..... 3
SPE 115 Principles of Speech Communications ..... (5)(or)
SPE 110 Communication Concepts (5) ..... 5
ENG 121 English Composition I ..... 510
AIMS COMMUNITY COLLEGE - Aviation Technology
QUARTER \#5 AVT 106 Commercial Ground School ..... 5
AVT 216 Instrument Flight Lab ..... 5
AVT 212 Instrument Flight Simulator II Part B ..... 3
AVT ... Aviation Elective ..... 5
QUARTER \#6 AVT 217 Commercial Flight Lab III ..... 5
AVT 214 Advanced Flight Simulator ..... 5
CSC 100 The Computer and Society ..... 4
AVT ... Aviation Elective ..... 5
MINIMUM REQUIRED PROGRAM CREDIT HOURS ..... 67
MINIMUM REQUIRED ELECTIVE CREDIT HOURS ..... 10
MINIMUM GENERAL EDUCATION CREDIT HOURS ..... 25
MINIMUM CREDITS REQUIRED FOR A.A.S. DEGREE ..... 102

## PILOT ENTRY PROGRAM OPTION <br> Eastern Airlines Coordinator - Walter Bjorneby

Qtr. Hrs.

QUARTER \#1 AVT 100 Aviation Seminar 2
AVT 108 Private Ground School 6
AVT 101 Private Flight Lab I 3
AVT 105 Private Flight Simulator $\quad 3$ 14

QUARTER \#2 AVT 102 Private Flight Lab II 3
EAS 106 Meteorology 4
AVT 106 Aviation Economics 5
PEF 126 Aerospace Fitness and Performance I 2
14

QUARTER \#3 AVT 103 Commercial Flight Lab I 5
AVT 109 Instrument. Ground School 6
AVT 111 Instrument Flight Simulator I 3
PHY 120 Fundamentals of Physics 5

QUARTER \#4 AVT 104 Commercial Flight Lab II 5
AVT 211 Instrument Flight Simulator II Part A 3
SPE 115 Principles of Speech Communications (5)
(or)
SPE 110 Communication Concepts (5) 5
ENG 121 English Composition I5
AIMS COMMUNITY COLLEGE - Aviation Technology
QUARTER \#5 AVT 206 Commercial Ground School ..... 5
AVT 216 Instrument Flight Lab ..... 5
AVT 212 Instrument Flight Simulator II - Part B ..... 3
AVT 235 Flight Engineer: Systems ..... 6
QUARTER \#6 AVT 217 Commercial Flight Lab III ..... 5
AVT 214 Advanced Flight Simulator ..... 5
AVT 236 Flight Engineer: Power Plant ..... 616
QUARTER \#7 AVT 225 Multi-engine Flight Lab ..... 4
AVT 215 Airline Management ..... 5
CSC 100 The Computer and Society ..... 413
MINIMUM REQUIRED PROGRAM CREDIT HOURS ..... 88
MINIMUM REQUIRED ELECTIVE CREDIT HOURS ..... 0
MINIMUM GENERAL EDUCATION CREDIT HOURS ..... 25
MINIMUM CREDITS REQUIRED FOR A.A.S. DEGREE ..... 11313

## AIMS COMMUNITY COLLEGE - Aviation Technology <br> GENERAL AVIATION PILOT CERTIFICATE

Qtr. Hrs.
QUARTER \#l AVT 100 Aviation Seminar ..... 2
AVT 108 Private Ground School ..... 6
AVT 101 Private Flight Lab I ..... 3
AVT 102 Private Flight Lab II ..... 3
AVT 105 Private Flight Simulator ..... 317
QUARTER \#2 AVT 109 Instrument Ground School ..... 6
AVT $1 l l$ Instrument Flight Simulator I ..... 3
AVT 103 Commercial Flight Lab I ..... 5
AVT 104 Commercial Flight Lab II ..... 519
QUARTER \#3 AVT 206 Commercial Ground School ..... 5
AVT 213 Instrument Flight Simulator II ..... 6
AVT 216 Instrument Flight Lab ..... 5
AVT 217 Commercial Flight Lab III ..... 521
MINIMUM REQUIRED PROGRAM CREDIT HOURS ..... 57
MINIMIM REQUIRED ELECTIVE CREDIT HOURS ..... 0
MINIMUM GENERAL EDUCATION CREDIT HOURS ..... 0
MINIMUM CREDITS REQUIRED FOR CERTIFICATE ..... 57

COURSE DESCRIPTIONS

## AVT 100 AVIATION SEMINAR

A general study of the aviation field which included the theory of flight, history of aviation, radio communication, aviation in today's economy, and aviation careers. For students who wish to become commercial pilots.

Prerequisites: None
Two credits: 20 clock hours

## AVT 101 PRIVATE FLIGHT LAB I

Designed for completion of first solo flight and additional training before cross country flight.

Prerequisites: Recommend concurrent enrollment in AVT 108 and AVT 105
Three credits: 30 clock hours

## AVT 102 PRIVATE FLIGHT LAB II

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 have the necessary skill and knowledge to pass a phase I flight check.

Prerequisites: AVT 102 or private pilot license
Five credits: 70 clock hours

## AVT 103 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 have the necessary skill and knowledge to pass a Phase I flight check.

Prerequisites: AVT 102 or private pilot license
Five credits: 70 clock hours

## AVT 104 COMMERCIAL FLIGHT LAB II

Continuation of AVT 103 with a greater emphasis on cross country flying. The student must complete the solo, night, and cross country requirements for FAA instrument rating during this lab. Upon successful completion of the course, the student will have the necessary skill and knowledge to pass a phase II flight check.

Prerequisites: AVT 103 or permission of instructor
Five credits: 70 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.

Prerequisites: Recommend concurrent enrollment in AVT 108
Three credits: 30 clock hours

## AVT 106 AVIATION ECONOMICS

A general study of the economic basis of commercial aviation intended to impart an understanding of the requirements necessary for successful operation of an air transportation business.

Prerequisites: None
Five credits: 50 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.

Prerequisites: None
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 navigation and radio navigation, airman's information manual, medical factors of flight, and review for FAA test.

Prerequisites: None
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 the FAA instrument test. Upon successful completion of the course, the student should be able to pass the FAA Instrument Test.

Prerequisites: AVT 108, private license, 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 studied.

Prerequisites: AVT 105 or permission of instructor
Three credits: 30 clock hours

## AVT 119 CONVENTIONAL GEAR TRANSITION LAB

Includes orientation to tail wheel aircraft including principles of "P" factor and torque. Upon successful completion of the course, the student will be able to solo a tail wheel aircraft.

Prerequisites: None
Two credits: 20 clock hours

## AVT 202 INSTRUMENT SIMULATOR REFRESHER

Course is designed to assist the instrument rated pilot in maintaining current status for IFR flight.

Prerequisites: Instrument rating or permission of instructor
One credit: 10 clock hours

## AVT 206 COMMERCIAL GROUND SCHOOL

Includes a review of commercial flying and FAR Part 135. Upon successful completion of the course, the student should be able to pass the FAA Commercial Written Test.

Prerequisites: AVT 108, private license, or permission of instructor
Five credits: 50 clock hours

## AVT 207 BASIC GROUND INSTRUCTOR

Fundamentals of instructor of ground theory. The students practice class room presentations which examine all flight subjects.

Prerequisites: Permission of instructor
Two credits: 20 clock hours

## AVT 208 ADVANCED GROUND INSTRUCTOR

Students practice classroom presentations of advanced theory, advanced meteorology, weight balance, and transport-type aircraft.

Prerequisites: Permission of instructor
Two credits: 20 clock hours

AVT 209 INSTRUMENT GROUND INSTRUCTOR
Instruments and systems, instrument flight charts, IFR regulations, and instrument instructing techniques will be studied.

Prerequisites: 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. This course is designed to refine instrument flying skills.

Prerequisites: AVT 105 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 be expected to fly an instrument proficiency check-ride at the end of the course.

Prerequisites: AVT 211
Three credits: 30 clock hours

## AVT 213 INSTRUMENT FLIGHT SIMULATOR II

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 be expected to fly an instrument proficiency check-ride at end of course.

Prerequisites: AVT 105 or permission of instructor
Six credits: 60 clock hours

## AVT 214 ADVANCED INSTRUMENT SIMULATOR

Designed to refine instrument flying skills and to complete instrument simulator training for FAA instrument rating.

Prerequisites: AVT 111 or permission of instructor
Five credits: 50 clock hours

## AVT 215 AIRLINE MANAGEMENT

A general study of management and marketing aspects of airline operations.
Prerequisites: None
Five credits: 50 clock hours

## AVT 216 INSTRUMENT FLIGHT LAB

Includes necessary flight instruction to qualify the student to receive the FAA instrument rating. Upon successful completion of the course, the student will have the necessary skill and knowledge to pass the FAA instrument check ride.

Prerequisites: AVT 104 or permission of instructor
Five credits: 70 clock hours

## AVT 217 COMMERCIAL FLIGHT LAB III

The final lab in preparation for the commercial license. Upon successful completion of the course, the student will have the necessary knowledge to pass the FAA commercial flight check.

Prerequisites: Concurrent enrollment in AVT 216 or permission of instructor
Five credits: 70 clock hours

## AVT 218 CERTIFIED FLIGHT INSTRUCTOR

Theory and practice of instructional methods; fundamentals of instruction and preparing a lesson plan. A review of flight maneuvers. Upon successful completion of the course, the student will be able to pass the FAA CFI check ride.

Prerequisites: Commercial pilot license or permission of instructor
Five credits: 70 clock hours

## AVT 219 INSTRUMENT FLIGHT INSTRUCTOR

Theory and practice of teaching basic attitude instrument flying, instrument flight planning, and instructional techniques. Upon successful completion of the course, the student will be able to pass the FAA IFI check.

Prerequisites: Commercial pilot license or permission of instructor
Three credits: 30 clock hours

## AVT 221 INSTRUMENT PROFICIENCY CHECK I

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 INSTRUMENT PROFICIENCY CHECK II

The 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, orien- tation and familiarization, emergency situations. Upon successful completion of the course, the student will have the necessary skill and knowledge to pass the multi-engine check ride.

Prerequisites: Commercial pilot license or permission of instructor Four credits: 40 clock hours

## AVT 226 MULTI-ENGINE SIMULATOR

Designed to prepare the student for multi-engine instruction in aircraft or to provide a comprehensive review for multi-engine rated pilots.

Prerequisites: Permission of instructor
Three credits: 30 clock hours

## AVT 227 MULTI-ENGINE INSTRUMENT SIMULATOR

Designed to give the student additional skill in instrument flight with a complex airplane and to develop instrument and emergency skills to a high level.

Prerequisites: AVT 226 or permission of instructor
Two credits: 20 clock hours

## AVT 228 MULTI-ENGINE SIMULATOR REFRESHER I

Designed to keep the pilot proficient in instrument procedures.
Prerequisites: Permission of instructor
One credit: 10 clock hours

## AVT 229 MULTI-ENGINE SIMULATOR REFRESHER II

Designed to keep the pilot proficient in instrument procedures.
Prerequisites: 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. First of two courses preparing the student for the FAA Flight Engineer written examination.

Prerequisites: Instrument ratings or permission of instructor
Six credits: 60 clock hours

## AVT 236 FLIGHT ENGINEER - POWERPLANT

Course covers background and theory necessary to impart understanding of aircraft powerplants. Second of two courses preparing the student for the FAA Flight Engineer written examination.

Prerequisites: AVT 235, Instrument ratings or permission of instructor Six credits: 60 clock hours

# AIMS COMMUNITY COLLEGE 

## 1987-88 CATALOG

## Established 1967

## A College Serving North-Central Colorado

GREELEY CAMPUS<br>5401 W. 20th Street<br>P.O. Box 69<br>Greeley, Colorado 80632<br>Telephone (303) 330-8008<br>AIMS SOUTH CAMPUS<br>260 College Avenue<br>P.O. Box 949<br>Fort Lupton, Colorado 80621<br>Telephone Fort Lupton 857-4022<br>Greeley 352-4664<br>Denver 659-2243<br>LOVELAND CAMPUS<br>310 N. Railroad Avenue<br>Loveland, Colorado 80537<br>Telephone Loveland 667-4611

MAY 1987

## A LETTER

$\underset{\text { PRESIDENT }}{\text { FROM }}$
It gives me considerable pride college
introduce you to Aims Community Catalog. introduce you to Alum of our 1987-88 catalog
through the med and This guide outlines what contains specific
programs as well what we of len regarding our programs relating to the as other useful information many photographs as college in general. The many introduce you to our included in this catalog introduce and the fine campus, our training facilities, aims. This people who attend and work important and informative is the single most important an college, and I document we publish at this familiar with its encourage Aims Community in Colorado. In addition
community college
 were recenve the needs of individuals
better serve area of Weld and Latimer colum enrollment we give strive to and wind controlled college large in terms institution, and four locally tina on er public colleges and classroom and people-oriente college is one of only four from most laboratories, shop our grounds well-
basis. basis. Community College is ards to set us apery equip our repair and our more attuned to local
Aims here Colorado. This distinction ability to our building institution we maintaining a neighborly atm universities in possible for us as a locally -con we concentrate on 1 know that it will
 Invite you campuses. be a decision that you will affordable.
 and our service is certainly

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## ACADEMIC CALENDAR 1987-1988

## SUMMER QUARTER, 1987 <br> (Four-Day Week)



## FALL QUARTER, 1987

September 17-18, 1987 Early Registration for Returning Students
September 21-22, 1987
Registration for New and Walk-in Students
September 24, 1987
Classes Begin
October 26-30, 1987
Midterm Week
November 13, 1987
Staff Development Day (No Classes)
November 25-27, 1987 Thanksgiving Holiday (College Closed)
December 9-10, 1987
Evaluation Days
December 11, 1987
Graduation/End of Quarter
December 21-25, 1987
Christmas Holiday (College Closed)
December 31, 1987, January 1, 1988 New Year's Holiday (College Closed)

WINTER QUARTER, 1988

| January 4, 1988 | Registration |
| :---: | :---: |
| January 6, 1988 | ...... Classes Begin |
| January 29, 1988 | Staff Development Day (No Classes) |
| February 8-12, 1988 | Midterm Week |
| March 16-17, 1988 | Evaluation Days |
| March 18, 1988 | Graduation/End of Quarter |
| March 21-25, 1988 | Spring Break |

SPRING QUARTER, 1988

March 30, 1988 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . Classes Begin
May 2-6, 1988
Midterm Week
May 30, 1988
Memorial Day (College Closed)
June 8-9, 1988
Evaluation Days


## GENERAL INFORMATION

## 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 years from 900 students in 1967, to over 14,000 credit students annually in 1986.

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 and Westview Classroom Building in the fall of 1984.

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.

To meet the needs of Aims students living in the Loveland/Berthoud area, classes are offered through the cooperation and facilities of Thompson Valley School District R2-J. A new facility, the Loveland Center, opened in the fall of 1986 to meet the needs of students in our service area of Larimer County.

## 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 four year colleges or universities;
2. Occupational education to help prepare students for initial employment or for advancement in specific vocational fields;
3. 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;
4. Developmental education for those not prepared for college level study to achieve a higher level of educational attainment;
5. Counseling and guidance services to enable students to more clearly define their educational goals; and
6. 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.

## EDUCATIONAL 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, sex, 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, sex, national origin, or handicap should contact the Affirmative Action Officer, Associate Dean of the College Robert Rangel.

## THE FOUNDATION

The Aims Community College Foundation was established during the 1979-1980 academic year to provide financial and other support for the college and its activities beyond those which are available through normal institutional funding sources. Because of the continuous limitations on such routine sources, the college has been obliged to rely increasingly upon private and corporate donor support.

Foundation activities are moderated by a board of directors selected from various segments of the business and professional community. Current members of the Foundation Board are: Stephanie Arries, Treasurer; Kelsey Carlson; George R. Conger, Aims Representative; Tom Cowan; Mike Geile, Vice President; Wes Goehring, President; Conrad J. Greicar; Margaret Houtchens; Norman Noe; Louis C. Rieker; Dennis White; Kenneth Whitney; Jerry Winters.

## CATALOG CHANGES

Aims Community College reserves the right, whenever it judges it is necessary or advisable to do so, 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.

## SMOKING POLICY

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


## DEGREES AND CERTIFICATES

1987-88

## ASSOCIATE of APPLIED SCIENCE (A.A.S.) DEGREE AND CERTIFICATE PROGRAMS

## ASSOCIATE OF ARTS (A.A.) DEGREE Liberal Arts Major with Emphasis in:

| AAS | Accounting | 2 YR | AA | Elementary Education | 2 YR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAS | Agriculture Technology | 2 YR | AA | Humanistic Psychology | 2 YR |
| CERT | Agriculture Technology | 4 QT | AA | Paraprofessional Counseling | 2 YR |
| CERT | Drafting | 3 QT | AA | Biofeedback | 2 YR |
| CERT | Auto Body Refinishing | 3 QT | AA | Criminal Justice | 2 YR |
| CERT | Auto Body Repair | 3 QT | AA | Governmental Career | 2 YR |
| AAS | Auto Body Repair | 2 QT | AA | Prelaw | 2 YR |
| CERT | Auto Mechanics | 3 QT | AA | Political Science | 2 YR |
| AAS | Auto Mechanics | 2 YR | AA | Social Science | 2 YR |
| CERT | Aviation | 4 QT | AA | Communications Media | 2 YR |
| AAS | Aviation | 2 YR | AA | Design \& Visual Communications | 2 YR |
| CERT | Biofeedback | 4 QT | AA | Fine Arts | 2 YR |
| AAS | Building Trades | 2 YR |  |  |  |
| CERT | Building Trades | 3 QT |  |  |  |
| AAS | Business Information Systems | 2 YR |  |  |  |
| AAS | Criminal Justice | 2 YR |  |  |  |
| CERT | Child Care | 3 QT |  |  |  |
| AAS | Child Care | 2 YR | ASSOCIATE OF SCIENCE (A.S.) DEGREE |  |  |
| AAS | Electronics | 2 YR |  |  |  |
| CERT | Emergency Medical Technician | 1 QT | Liberal Arts Major with Emphasis in: |  |  |
| AAS | Engineering Technology | 2 YR |  |  |  |
|  | Architectural Option |  | AS | Agriculture Transfer | 2 YR |
|  | Civil Option |  | AS | Agriculture Transfer | $2 \mathrm{YR}$ |
|  | Computer Aided Manufacturing Option |  | AS | Chemistry | $\begin{aligned} & 2 \mathrm{YR} \\ & 2 \mathrm{YR} \end{aligned}$ |
|  | Mechanical Option |  | AS | Chemical Testing Technology |  |
| AAS | Fire Service Technology | 2 YR | AS | Computer/Information Systems | 2 YR |
|  | Fire Protection Option |  | AS | Uife Scien | $2 \mathrm{YR}$ |
|  | Fire Science Option |  | AS | Life Sciences |  |
| CERT | Fire Service Training Academy | 1 QT | AS | Mathematics |  |
| CERT | Volunteer Fire Fighter Training | 4 QT | AS | Pre-Health Profession | 2 YR |
| AAS | Graphics Technology | 2 YR |  |  |  |
|  | Artistic Option |  |  |  |  |
|  | Typesetting Option |  |  |  |  |
|  | Photographic Option |  |  |  |  |
|  | Mechanical Option |  |  |  |  |
| CERT | Graphics Technology | 3 QT |  |  |  |
|  | Artistic Option |  |  |  |  |
|  | Typesetting Option |  |  |  |  |
|  | Photographic Option |  |  |  |  |
|  | Mechanical Option |  |  |  |  |
| CERT | Farm and Ranch Business Management | 3 YR |  |  |  |
| AAS | Mid Management | 2 YR |  |  |  |
|  | Fashion Merchandising Option |  |  |  |  |
|  | Industrial/ Institutional Option |  |  |  |  |
|  | Sales Option |  |  |  |  |
|  | Small Business Option |  |  |  |  |
| CERT | Nurse Aid | 1 QT |  |  |  |
| CERT | Office Clerk | 4 QT |  |  |  |
| AAS | Radiology | 2 YR |  |  |  |
| CERT | Real Estate | 3 QT |  |  |  |
| AAS | Secretary-Business | 2 YR |  |  |  |
| AAS | Secretary-Legal | 2 YR |  |  |  |
| AAS | Welding Technology | 1 YR |  |  |  |
| CERT | Welding Technology | 3 QT |  |  |  |
| CERT | Young Farmer | 1 YR |  |  |  |



## STUDENT SERVICES

## ADMISSIONS POLICY

Aims Community College has an "open door" policy and will not deny admission to any district resident because of financial need as determined by the student Financial Aid Office. No admission fee or entrance examination is required as a condition for admission. Admission does not assure acceptance of an individual student in a particular course or program. Some students may be requested to enroll in special courses for correction of scholastic or other deficiencies.

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.

The College will admit students 16 years of age or older who are not enrolled in a regular program of kindergarten through grade twelve who the College determines can profit from the instruction for which they enroll. Students who are currently enrolled in high school and have reached the senior grade level may be allowed to enroll for advanced placement, if permission is obtained from their respective high schools. Concurrently enrolled high school students should contact the Admissions Office well in advance of anticipated enrollment.

## APPLICATION FOR ADMISSION

Anyone interested in attending Aims Community College should submit an application form which is available in Colorado high schools or in the Aims Admissions Office. In addition to the completed form, students should submit one of the following to the Admissions Office:

- A high school transcript indicating graduation.
- GED test scores, if the student earned a high school Equivalency Certificate.
- College transcripts are required for transfer students pursuing a degree program.


## PREASSESSMENT

New and returning students are responsible for making arrangements at the College Assessment Center to meet the preassessment requirement prior to conferring with an advisor and prior to registration.

The preassessment requirement may be met in one of the following ways:

1. By taking the Aims Community College preassessment tests in reading, writing, and mathematics.
2. By establishing proof of successful previous college experience at an accredited college ( 2.0 grade point average with transfer college classes in English and mathematics).
3. By having ACT scores of 20 in English, mathematics and in the composite.
4. By having minimum SAT scores of 500 in the verbal and mathematics areas.

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

## TRANSFER TRANSCRIPT EVALUATION

Official transcripts covering a student's previous secondary and college education, submitted to the college as part of the admissions 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.

Transcripts, documented military experience, and testing scores of approved programs are evaluated in accordance with college policy, and 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.


## ADMISSION REQUIREMENTS FOR INTERNATIONAL (FOREIGN) STUDENTS

1. Submit application for admission. A $\$ 50.00$ non-refundable processing fee must accompany the application for admission before the application can be considered.
2. Submit English proficiency results from the Test of English as a Foreign Language (TOEFL) or English Language School (ELS). To be considered for admission to Aims Community College, international students must have a minimum score of 500 on the TOEFL or have completed an Intensive English program at a certified ELS center. All international students admitted are required to take the college preassessment 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(1-20).
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 (I-20). Questions regarding the admission of international students should be forwarded to the Admissions Office.

## 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 Information Center or Admissions and Records.

## REGISTRATION

After completing the admissions, orientation, and preassessment 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 faculty advisor (see academic information section).
3. Apply for financial aid (if desired).
4. Complete the course registration process as described in the schedule of classes.
5. Obtain billing of tuition and fees.
6. Pay tuition and fees by 10 th class day of the quarter (8th day of summer quarter). For classes beginning after the first full week of the quarter, complete payment of tuition and fees by $20 \%$ of class schedule. 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.

## 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) with the instructor's signed approval on the add/drop/withdrawal form. 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 and division chair have 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 after 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 with instructor approval. After $60 \%$ of the class meetings, neither the student nor the faculty can process a standard withdrawal for a W grade (see grade policy section regarding WF and WP).

## HOW TO ADD, DROP, WITHDRAW

1. Fill out add/drop/withdraw form from Admissions and Records, General Services Building Room 202.
2. Obtain instructor's approval and signature.
3. Submit form to Admissions and Records.

## 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 registration adjustments 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.

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."


## TUITION AND FEES

Tuition charges at Aims Community College are dependent upon the student's residency status:
Full-time Students: (12-20 credit hours)
In-State, *In-District residents: $\qquad$ $\$ 180.00$ per quarter
In-State, Out-of-District residents: $\$ 300.00$ per quarter
Out-of-State residents: $\$ 900.00$ per quarter

Part-time Students: (1-11 credit hours)
In-State, *In-District residents:
$\$ 15.00$ per credit hour
In-State, Out-of-District residents: $\$ 25.00$ per credit hour
Out-of-State residents: $\$ 75.00$ per credit hour

Surcharge: (Over 20 credit hours)
In-State, ${ }^{\text {* In-District residents: }}$
$\$ 12.00$ per credit hour
In-State, Out-of-District residents: $\$ 20.00$ per credit hour
Out-of-State residents: . . . . . . . . . . . . . . . . . . . . . $\$ 60.00$ per credit hour
*In-District refers to the Aims Comunity College Tax District.
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 decision must be submitted by the eighth day of the quarter.
ALL TUITION AND FEE CHARGES ARE SUBJECT TO CHANGE BY THE AIMS JUNIOR COLLEGE DISTRICT BOARD OF TRUSTEES AS CIRCUMSTANCES MAY REQUIRE, WITHOUT NOTICE.

## STUDENT INSURANCE FEES

Each full-time student ( 12 credit hours or more) is assessed a mandatory fee of $\$ 4.00$ per quarter for accident insurance coverage. This insurance is nonmandatory for part-time students ( 11 credit hours or less) but is available at $\$ 4.50$ per quarter.

## FINANCIAL OBLIGATIONS OF STUDENTS

The financial obligations of students to the college, such as payments for books and fees, are due and payable on specific dates or at the time the obligations are incurred. The student registration process is not complete until fees are paid. Students will not be allowed to register, graduate, or receive transcripts of courses completed unless all financial obligations to the college have been met.

## STUDENT RECORDS, TRANSCRIPTS, REQUESTS FOR INFORMATION

## 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, sex, 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 earned, 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 twoyear 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 indentifiable information contained therein, other than items designated as public information, without the written consent of the student.

## 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. All accounts with Aims College must be settled 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.

Addresses are considered personally identifiable information 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.

## STUDENT FINANCIAL AID

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 all the Financial Aid programs are available in the Financial Aid Office, General Services Building, Room 201.

## ELIGIBILITY

Most financial aid is awarded to students on the basis of NEED. In determining NEED in a consistent way for all aid candidates, Aims Community College requires all financial aid applicants to submit the ACT Family Financial Statement to the ACT program in Iowa City, Iowa. The ACT Family Financial Statement and information about financial aid may be obtained from the high school guidance counselors and/or the Financial Aid Office at Aims Community College.

Complete program eligibility guidelines are listed in the Financial Aid Handbook and in the ACT Application Packet. Contact Finacial Aid 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. Family Financial Statement (FFS) of the American College

Testing program (ACT) and Pell 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 preassessment procedures listed in this catalog. The following dates will be the deadlines for submitting applications for guaranteed processing:
 January 31

Students are advised that the availability of aid funds is limited.
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 Financial Aid Office will accept applications after the deadline dates, but awards will depend on the availability of funds at the time.)


ESTIMATED ACADEMIC YEAR BUDGETS (9 MONTHS)

Single Resident (Weld County)
Tuition \& Fees. . . . . . . . . \$ 552.00
Room \& Board . . . . . . . . . 2970.00
Books \& Supplies . . . . . . . . 248.00
Personal Expenses ....... 954.00
Transportation ........... 531.00
$\$ 5255.00$
Single Resident Out of Weld County District
Add $\$ 932.00$ to above Resident Budget.
Married Resident/NonResident
Add $\$ 2412.00$ to above budgets.
These budgets are current as of the publication date. Check with the Financial Aid Office for most recent estimates.

# STUDENT FINANCIAL ASSISTANCE PROGRAMS 

## LOANS

## CARL D. PERKINSNATIONAL DIRECT STUDENT LOANS (NDSL):

Undergraduate students may borrow up to $\$ 9,000$ during their undergraduate career. Total loans for the first two years of school may not exceed $\$ 4,500$. Repayment of the NDSL begins nine months after the student ceases to be a half-time ( 6 hours) student. NDSL funds are to be repaid at a minimum of $\$ 30$ per month. The period of repayment cannot exceed ten years. The NDSL has cancellation provisions. Information regarding cancellation may be obtained from the Financial Aid Office. Interest rate is $5 \%$. Principal and interest payments are deferrable during periods of at least part-time study. ACT application required.

## COLORADO GUARANTEED STUDENT LOANS (CGSL)

Undergraduate dependent students may borrow up to $\$ 2,625$ per academic year, but not more than $\$ 17,500$ during their undergraduate career. The interest on a CGSL is $8 \%$ simple interest. ACT application required.

## PLUS LOANS

Undergraduate independent students or parents of dependent students who do not qualify for a CGSL may borrow up to $\$ 4,000$ per academic year. Interest is currently at $12 \%$ and repayment begins within 60 days of the disbursement of the loan.

## GRANTS

PELL GRANT:
Available to all eligible undergraduate students. All Pell Grant awards are preliminary and may be adjusted, depending upon place of residence while attending the college, number of class hours carried, and the final payment schedule developed by the Office of Education. The Financial Aid Office must have all copies of the Pell Eligibility Report Forms and all required documentation on hand before payment can be made. All financial aid applicants must establish their eligibility for this program before other aid can be awarded. ACT or Pell application required.

## SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT (SEOG):

Available to demonstrated "needy" undergraduate students. Allocated after all other sources of aid are awarded and the applicant still has unmet need. ACT application required.

## COLORADO STATE GRANT (CSG):

State funds made available to Colorado resident undergraduate students with financial needs. Awards vary from $\$ 100$ to $\$ 2,000$, depending upon the financial need of individual students and the amount of funds allocated to the College by the State of Colorado. Recipients must be residents of Colorado. ACT application required.

## COLORADO STUDENT INCENTIVE GRANT (CSIG):

Grants of up to $\$ 2,500$ are made to substantially needy students. Recipients must be undergraduate residents of Colorado. The actual amount of each award is dependent upon the individual student's need and available funds. Funds are allocated to the college in 50\% Federal and $50 \%$ State monies. ACT application required.

## STUDENT EMPLOYMENT

FEDERAL COLLEGE WORK-STUDY PROGRAM:
Allocations from college work-study programs are made to demonstrated needy undergraduate students. Wages are paid on the basis of an hour's pay for an hour's work. Students may not earn over the maximum authorized earning figure, as allocated by the Financial Aid office. ACT application required.

## COLORADO NEED WORK-STUDY PROGRAM:

Allocations from coliege work-study programs are made to financially needy undergraduate students. Wages are paid on the basis of an hour's pay for an hour's work. Students may not earn over the maximum authorized earning figure, as allocated by the Financial Aid Office. ACT application required.

## COLORADO NO-NEED WORK-STUDY PROGRAM:

Allocations from the Colorado No-Need Work-Study Program can be made to students who do not have financial need. Students who show financial need are not eligible 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 authorized earning figure, as allocated by the Financial Aid Office. Applications for Colorado No-Need Work-study are available in the Office of Financial Aid.

## AIMS TUITION GRANTS

Aims tuition grants are available to in-district students whose financial status is defined as low income by the Financial Aid Office guidelines. Grants are made to cover the costs of tuition. Students approved for tuition grants are required to apply for a Pell Grant if they are enrolled as at least half-time students.

A senior citizen's tuition grant is available for residents of the Aims Community College taxing district who are 60 years of age or older. This grant is applicable only in credit courses on a space available basis.

Tuition grants do not apply to self-supporting courses, including Continuing Education Workshops and Community Non-credit Courses.
Tuition grants do not cover lab fees, books and student insurance.

## SCHOLARSHIPS

## AIMS PROGRAM OF SCHOLARS:

Two-year tuition scholarships are available for at least one graduating senior from each high school within the Aims Junior College District (greater Weld County). Local high school counselors or the Aims Financial Aid Office will furnish further information.

## COLORADO MERIT SCHOLARSHIP PROGRAM:

Awards are made to recognize outstanding achievements of Colorado resident undergraduate students in both academic and talent areas. Applications are made to the Financial Aid Office; award recipients are selected by the Financial Aid Director only if two letters of recommendation and a copy of most current academic transcript accompany the regular Colorado Merit Scholarship application. Colorado high school students should contact the Financial Aid Office regarding these scholarships. Colorado Merit Scholarship Program is an undergraduate program funded by the Colorado General Assembly.

## ROY L. SMITH MEMORIAL FUND AWARD:

Annually, two scholarships from an $\$ 8,000$ bequest from Mrs. Roy L. Smith are awarded to one freshman and one sophomore auto mechanics major. The auto mechanics staff selects the recipients.

## DR. EDWARD BEATY MEMORIAL FUND:

The Beaty family and friends dedicated the fund to the memory of Dr. Edward Beaty, the first president of Aims Community College. Further information may be obtained from the Financial Aid Office.

## FACULTY ASSOCIATION SCHOLARSHIP:

Two scholarships are awarded annually from the Aims Community College Faculty Association. Preference is given to students who demonstrate high scholarship and intend to pursue the A.A., A.S., or A.A.S. degree. The Scholarships Committee of the Aims Faculty Association will determine the recipients of the scholarships by June 1 of each year.

## VETERANS BENEFITS

The Financial Aid/Veterans Affairs Office helps the Veterans Administration implement the provisions of the various programs of benefit to veterans or eligible relatives of veterans under benefits of Chapter 32, 34, 35, 106, and Title 38, United States Code.

Veterans who are eligible for Veterans Benefits should contact the Veterans Affairs Office, preferably six 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 Affairs Office during registration for each quarter they are enrolled. Failure to do so will result in termination of enrollment certification to the VA.

| CHAPTER $34-$ MONTHLY RATES |  |  |  |  |  | - GI BILL |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| COURSE LOAD | NO | $\mathbf{1}$ | $\mathbf{2}$ | EA. ADD. |  |  |
|  | DEPS. | DEP. | DEPS. | DEP. |  |  |
| Full time (12 credit hours) | $\$ 376$ | $\$ 448$ | $\$ 510$ | $\$ 32$ |  |  |
| Three-Fourths Time <br> (9-11 credit hours) | 283 | 336 | 383 | 24 |  |  |
| Half Time <br> (6-8 credit hours) | 188 | 224 | 255 | 17 |  |  |

CHAPTER 32 - MAXIMUM MONTHLY RATES - VEAP
Full Time ( 12 credit hrs.) ..... $\$ 300$
Three-Fourths Time ( $9-11$ credit hrs.) ..... 225
Half Time ( $6-8$ credit hrs.) ..... 150
CHAPTER 106 - MONTHLY RATES - SELECTED RESERVE
Full Time ( 12 credit hrs.) ..... $\$ 140$
Three-Fourths Time ( $9-11$ credit hrs.) ..... 105
Half Time ( $6-8$ credit hrs.) ..... 70

Students who are receiving VA benefits must report any change in their study program or training status immediately. Failure to do so may result in overpayments which the student must pay back to the Veterans Administration.

If a veteran student has previously attended an institution of higher learning, the VA requires that the student provide the Admissions Office with a copy of the transcript or transcripts reflecting any post-secondary educational course work for the purpose of determining whether or not transfer credit can be allowed in the veteran's program of study.


## 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 assitance 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 instate tuition charges each quarter. Assitance 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 Business Office at the time of registration.

## FINANCIAL AID SATISFACTORY PROGRESS

All Aims Community College students who receive Federal or State Aid, Guaranteed Student Loan, plus loans and/or Veterans assistance are required to:
A. Enroll each quarter for the minimum number of credit hours determined by enrollment status in classes that are within the
student's degree or certificate program.

1. Full-time enrollment $=12$ credit hours per quarter
2. Three-quarter time enrollment $=9$ credit hours per quarter
3. Half-time enrollment $=6$ credit hours per quarter
B. Maintain satisfactory academic progress each quarter while receiving aid.
C. Seek and receive advising from his/her area of emphasis.

## MEASUREABLE SATISFACTORY ACADEMIC PROGRESS

A. All students, both full and part-time, are expected to make satisfactory academic progress with the Grade Point Average (GPA) and number of credit hours completed each quarter being used as the basis for determining standards of progress. A standard $0-4.00$ scale is used to determine academic progress:
1st Quarter in attendance: 1.75 quarter GPA 2nd Quarter in attendance: 1.90 quarter GPA cumulative GPA 3rd Quarter in attendance: 2.00 quarter GPA and cumulative GPA
B. Full-time students must complete a minimum of 12 credit hours after each quarter of enrollment.
C. Three-quarter time students must complete a minimum of 9 credit hours after each quarter of enrollment.
D. Half-time students must complete a minimum of 6 credit hours after each quarter of enrollment.
E. Courses which receive the following passing grades shall be considered as credits completed

1. " A " through " D " grades ( D grade will not meet passing requirements or graduation requirements in some programs).
2. "S" (passing with credit)
$F$. The following shall not be considered as credits completed:
3. "F" grades
4. "W", "W-P", "W-F" withdrawals
5. "U" unsatisfactory grades
6. "I" incomplete
7. "NC" no credits
G. Students receiving scholarship funding must maintain a 3.00 GPA each quarter.

## REVIEW PROCEDURE

Following each quarter the GPA and number of credit hours completed by each aid student will be reviewed in the Financial Aid Office.

## FINANCIAL AID PROBATION

A. In the event that a student fails to meet the measurable satisfactory academic progress criteria in a particular quarter, the student will be placed on financial aid probation.

1. A student on probation may receive assistance for the following quarter in which he/she enrolls, but must maintain satisfactory 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 will remain until student has achieved the required number of hours as outlined in table \#1.

1. Financial aid suspension means the termination of all financial assistance.

## APPEAL OF FINANCIAL AID SUSPENSION

Once "unsatisfactory progress" has been determined, the student's recourse is:
A. A student will indicate in writing (use financial aid appeal form) to the Financial Aid Committee (a) the reasons why he/she did
not achieve satisfactory academic progress, and (b) reasons 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 student will be advised, in writing, of the Committee's decision
C. A student wishing to appeal the decision of the Financial Aid Committee, may do so in writing, to the Dean of Student Personnel Services.
D. A student will be granted an appeal only once after being placed on financial aid suspension. If suspension occurs again the student may not appeal again.

## CONDITIONS OF REINSTATEMENT

A. To be reinstated a student must:

Option I - Appeal approved by Financial Aid Committee.
Option II - With his/her own funds complete 12 credit hours with a GPA 2.00 .
At that time a student may reapply, in writing, for financial aid to be reinstated for the following quarters in which he/she will enroll.
B. Students reinstated will receive financial aid, but they will remain on financial aid probation.
C. A student placed on suspension may be reinstated only once.
D. Incompletes that result in a student being placed on Probation/Suspension will be reviewed by the Director of Financial Aid.

## LIMIT ON STUDENT AID ASSISTANCE

A. No full-time student will receive aid for more than 8 quarters. However, the 8 quarter limit may be appealed if remedial course work is required, or if other unusual circumstances require aid beyond 8 quarters.


## TABLE \#1

FULL-TIME ENROLLMENT STATUS $=12+$ credit hours each quarter
HOURS COMPLETED EACH QUARTER

1. .12
2. ..... 24
3. ..... 36
4. ..... 48
5. ..... 60
6. ..... 72
7. ..... 84
8. ..... 96
THREE-QUARTER TIME ENROLLMENT STATUS = 9 to 11 credit hours each quarter
NUMBER OF QUARTERS HOURS COMPLETED
EACH QUARTER
9. .....  9
10. ..... 18
11. ..... 27
12. ..... 36
13. ..... 45
14. ..... 54
15. ..... 63
16. ..... 72
17. ..... 81
18. ..... 90
19. ..... 99
HALF-TIME ENROLLMENT STATUS $=6$ to 8 credit hours each quarter
NUMBER OF QUARTERS HOURS COMPLETED EACH QUARTER
20. .....  .6
21. ..... 12
22. ..... 18
23. ..... 24
24. ..... 30
25. ..... 36
26. ..... 42
27. ..... 48
28. ..... 54
29. ..... 60
30. ..... 66
31. ..... 72
32. ..... 78
14 ..... 84
33. ..... 90
34. ..... 96

## ACADEMIC INFORMATION

## DEGREES AND CERTIFICATES AWARDED

ASSOCIATE OF ARTS (A.A.) ASSOCIATE OF SCIENCE (A.S.) ASSOCIATE OF APPLIED SCIENCE (A.A.S.) CERTIFICATE IN OCCUPATIONAL EDUCATION

A student who has earned an associate or higher academic degree from an accredited institution is normally ineligible to receive an associate degree from Aims Community College in an identical or closely related discipline or program. The appropriate dean may waive this restriction when a waiver would be in the best educational interest of the student.

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 responsibilites which 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 and Associate of Science degrees.
2. Those non-occupational courses specifically designed to meet Associate of Applied Science degree requirements.
3. Other courses which the College's Academic Council identifies as falling within the overall general education definition.

## DEGREES AND CERTIFICATES AWARDED

Students may earn more than one degree or certificate at Aims Community College as long as all course requirements for each degree or certificate are satisfied. However, a student who has earned an Associate of Science degree at Aims Community College who wishes also to receive an Associate of Arts degree will be required to complete an additional twenty hours of coursework in Communications, Humanities, Behavioral Science and/or Social Science.

## ASSOCIATE OF ARTS (A.A)

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

The Associate of Arts (A.A.) degree or the Associate of Science (A.S.) degree is awarded to a 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. The student who is pursuing a particular major at a four-year institution may wish to select a particular area of emphasis within these degrees.

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 most 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 institution and program into which he or she wishes to transfer.

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

1. Ninety-six quarter hours credit in approved course work. Fortyfive quarter hours of this total must be in general education courses. Particular program requirements are outlined in this catalog under the section on the School of Arts and Sciences.
2. A minimum cumulative grade point average of $2.0(\mathrm{a}$ " C " average) in the A.A. or A.S. degree program curriculum.
3. Twenty-four of the last thirty-six quarter hours of course work prior to graduation must be taken in residence at Aims Community College.
4. Most courses numbered 100 and above are applicable toward these degrees.
5. Occupational courses are accepted toward the requirements of these degrees only upon the approval of the Dean of Arts and Sciences or his designee. This approval is given only when the courses are appropriate to the educational objectives of the student. Blanket approval is granted for those courses recommended as electives within the various areas of emphasis.
6. A faculty advisor in the field of study must sign the application for graduation. For A.S. degrees, the Division Chair must also sign the application. Transfer contract degrees require the signature of the Dean of Arts \& Sciences on the graduation application.

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

The Associate of Applied Science (A.A.S.) degree is awarded to a student who successfully completes a program designed exclusively to prepare the student for immediate employment in a full-time skilled and/or paraprofessional occupation. Each of the College's A.A.S. degree programs is in a specified occupational field.

Although some college credits within these programs are accepted for transfer by particular four-year colleges and universities, occupational courses are not specifically designed to facilitate transfer. The student who anticipates transferring is encouraged to check carefully the requirements of the institution and program into which he or she might desire to transfer.

The following are general requirements for the A.A.S. degree:

1. A minimum of ninety quarter hours in approved course work. Since each A.A.S. program is designed for a specified occupational field, the minimum requirements will vary with the particular program. Eighteen quarter hours of the total must be in general education courses. Course requirements for the various
A.A.S. degree programs are outlined in this catalog within the School of Occupational Education section.
2. A minimum cumulative grade point average of $2.0(\mathrm{a}$ " C " average) in the particular A.A.S. degree program curriculum.
3. Twenty-four of the last thirty-six quarter hours of course work prior to graduation must be taken in residence at Aims Community College.
4. Normally, only courses numbered 100 or above are applicable toward this degree.
5. Courses used as electives in meeting degree requirements and taken in addition to specified courses in a particular program are accepted toward the requirements of this degree only upon the approval of the appropriate program official. This approval is given only when appropriate to the educational objectives of the student.
6. A faculty advisor in the field of study must sign the application for graduation.

## 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 th Certificate in Occupational Education:

1. A minimum cumulative grade point average of 2.0 (a " C " average) in the particular certificate program curriculum.
2. A minimum of one-half ( $50 \%$ ) of a program's course work 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 offical. 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.

## 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, 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 Records Office or the Counseling Center.

Twenty-four of the student's last thirty-six quarter hours of course work prior to graduation must be taken in residence at Aims Community College.

Students must make application for graduation by the end of the second full week of classes in the anticipated quarter of graduation. Graduation applications are available from the Records Office. Completed graduation applications with the faculty advisor's signature (plus the Division Chair's signature for A.S. Degree, and the Dean of Arts \& Science's signature for Transfer Contract) must be returned to the Records Office where final evaluations will be made. 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 declaration of intent to graduate.

A student who has a break in enrollment in the college and/or 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 coursework 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 reenroll 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 program or degree or waive any course prerequisite or corequisite.

## ADVISING

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 make contact with an admission's counselor in the Counseling Information Center who will direct them to the appropriate staff for advising. A faculty advisor becomes conversant with the student's background, aptitudes, and educational objectives, and takes a personal interest in the student's education and welfare. 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; and
3. Make an appointment with an advisor when problems arise in the student's program, or if class changes are necessary.
4. File appropriate advisor and program change forms with Admissions and Records.
Arts and Sciences Students, taking 7 or more credits during a quarter, have declared a degree program, or who have accumulated 18 credits towards a degree, must have an advisor.
Occupational Students, full-time or part-time, must have an occupational faculty advisor. Additionally, all students who take one occupational course or more, must have approval from the occupational faculty.
Developmental Studies Students, full-time or part-time, must have a faculty advisor.
Undecided Students may secure an advisor in the Counseling Information Center.


## TRANSFER CREDIT

Aims Community College gives college credit, according to its policy, for College Level Examination Program (CLEP), specific education experience in the armed forces, and courses completed at other collegiate institutions. The College reserves the right to examine all credits to determine obsolescence of content. In the event that course work is found to be obsolete, the student may be required to update the credit. 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 institutions, and are applicable to their program of choice. Students who wish to take advantage of this service must formally request a review of their individual files by contacting the Aims Admissions Office. The Registrar will determine the number and nature of transfer credits applicable toward a degree or certificate.

## 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.

## 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. Written permission must be obtained from the
appropriate instructional dean if a student's course load exceeds twentyfour credit hours of occupational education training courses or twenty credit hours of arts and sciences courses.

## COURSE NUMBERING

0-99 Precollege level courses not designed for transfer to other institutions. These courses do not count for college credit and are not used in 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.

Students listed on the class roster during the first eight class days of the quarter who are identified by the instructor as no-shows during that time, are subject to disenrollment from the class without prior notice.

## AUDITING OF COURSES

Any person may elect to enroll in a noncredit course on an audit basis if space is available. Such individuals will pay the regular tuition assessed for courses taken under this option. Those enrolled in noncredit courses need not take examinations.

## 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 Committe. A student may not repeat a course in which he has 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.

B Indicates that the student has demonstrated aboveaverage 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-thanacceptable 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."

1
F Indicates that the student has failed to achieve the objectives of the course.

0
P PASSING: Indicates a successful challenge to a course. none
S SATISFACTORY: For designated courses, indicates achievement of the course objectives at a passing level. none

U UNSATISFACTORY: For designated courses, indicates failure to achieve course objectives.
none
W WITHDRAWAL: Indicates withdrawal from the course. May be student or faculty initiated through $60 \%$ of the course. Signatures of instructor or advisor is required on withdraw form.
WP WITHDRAWAL - PASSING: Indicates that at the time of withdrawal the student was passing the course. Instructor initiated after 60\% of quarter and up to final examination.

WF WITHDRAWAL - FAILING: Indicates that at the time of withdrawal the student was failing the course. Instructor initiated after $60 \%$ of quarter and up to final examination.

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.

NC NO CREDIT: Available only in below-100 and noncredit courses none

AU AUDIT: Available only in non-credit courses. none

## ACADEMIC STANDARDS

Academic progress is measured by both the cumulative and the quarter grade point average. All students, both full and part-time, are expected to make satisfactory academic progress with the GPA being used as the basis for determining minimum standards of progress. The following 4.0 scale is used to determine academic progress:

1st Quarter in attendance: 1.75 GPA
2nd Quarter in attendance: 1.9 GPA
3rd and Subsequent Quarters: 2.0 cumulative GPA
Any student who does not maintain an appropriate GPA will be subject to Academic Probation. Academic Probation is a formal and official warning to the student that reassessment should be made of his/her study habits, class loads, or program selection. Each quarter the Academic Standards Committee will review the academic performance of each student who falls into one of the following categories:

1. Has achieved less than a 1.75 GPA the first quarter.
2. Has achieved less than a 1.9 cumulative GPA through the second quarter.
3. Has achieved less than a 2.0 cumulative GPA through the third quarter and each subsequent quarter thereafter.
4. Withdraws (after 8 day) and/or receives an "F" grade in $25 \%$ or more of the credit hours in which registered.
Following its review, the Academic Standards Committee may implement one or a combination of the following actions: (A written copy of the committee's action will be retained in the student's file, provided to the student, and to the appropriate third parties.)
5. Academic Warning (referred to advisor and/or counselor for assistance).
6. Academic Probation (written notification).
7. Referral for Basic Skill Development and/or Remedial Course Work.
8. Advise a Program Change.

Students who are placed on academic probation for one quarter and continue to make less than satisfactory progress or fail to improve their GPA standing above the probationary level will be called before the Academic Standards Committee for an Academic Suspension Hearing. The findings of the Academic Standards Committee will determine whether or not the student will be allowed to continue course work or will be placed on Academic Suspension. Academic Suspension is for one academic quarter. A student placed on Academic Suspension may apply for readmission to the college after the suspension period. A student may appeal, according to College procedure, any action of the Academic Standards Committee.


## 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.

## HONORS

Full-time students who complete at least 12 degree hours of credit 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.

## SUPPLEMENTAL SERVICES

The Supplemental Services program provides assistance to all students needing "extra help" with any vocational or academic course at Aims. Our tutoring staff is prepared to help students with specific problems in individual courses in addition to helping students strengthen their skills in reading, studying, writing, spelling, and basic mathematics. Instructor referrals and completion of course prerequisites are required in order to receive tutoring.

Computer programs for review of English, mathematics and other basic subjects are also available in the Micro Lab adjacent to the Supplemental Services Center (Horizon Hall, Rooms 302-304.) Ask for assistance if you are not sure which computer program you need.

Physically handicapped students needing special materials or accommodations should contact any of the office personnel in Supplemental Services prior to registration so that appropriate arrangements can be made with instructors. We can be reached during the day at extensions 248,388 , or 496 .

## MEDIA SERVICES/ TELECOMMUNICATION/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.

The production areas of this department include: Graphics, Photography, Audio and Video.

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 slidetape programs. Original graphic slides can also be produced.

Audio production is done in a four-track audio recording/production studio which includes both a "Network" Sound Effects and Production Music library. Original narration, sound tracks, and pulsing for slidetape 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

and pre-production services, production and post-production editing. Internships are available for qualified students seeking further television production experience. Telecommunications also co-ordinates 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 approximately $75 \%$ of the main campus classrooms and a 1500 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.

## AUDIO-VISUAL EQUIPMENT CENTER

The Audio-Visual Equipment Center provides preventative maintenance and repair service for the College's instructional equipment. The Center also has designed the media delivery systems which provide students and staff better access to learning media for both group and individualized instruction. Instruction is given to any person who requires assistance in the operation of audio and visual equipment with which he or she is not familiar. The Audio-Visual Equipment Center functions in close harmony with the Media
Services/Telecommunications Center to ensure the availability of compatable equipment in sufficient quantity.

An Office Equipment Service Center is contained within the AV Department for support of school equipment. All office equipment such as typewriters, print copiers, mimeograph, and calculators are processed through this facility for preventive maintenance and service.



## LIBRARY

The Library stores and circulates about 40,000 print materials (books, magazines) and nonprint materials (records, audio cassettes, slides). The library subscrbes to over 400 periodicals (magazines, journals, newspapers). Students can check out materials by providing their Social Security Number.

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.

AV equipment 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 for that quarter. Handy phone numbers: Ext. 227 for renewals and questions about overdue materials; Ext. 326 for AV equipment information; Ext. 237 for the library director.

## ASSESSMENT CENTER

The Assessment Center provides the following services:

1. Preassessment: Upon application for admission to the college, new students are preassessed in reading, writing, 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. Diagnostic Assessment: Upon identified need, the student is provided with diagnostic assessment, and evaluation in cognitive, affective, and perceptual-motor domains to determine his or her learning characteristics. This information is utilized by the student, the advisor, and the instructors to assist the student in a chosen course of studies at Aims Community College.

## COUNSELING INFORMATION CENTER

(Sue Davisson, Director Counseling Services; Charlotte Rodriquez, Counselor; Dr. Margaret Morelli, Vocational Counselor; Bill Hardgrave, Career Counselor; Arwilda Harrington, Secretary)

The Counseling Information Center (CIC) consists of the Advising and Career Resource Centers which are located in the General Services Building. The Advising Center provides all students with an opportunity for assistance in making more objective and adequate decisions relative to vocational and educational plans. Advising is provided specifically to students who are undecided in their program choice or who are planning on transferring to another institution. 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. The Advising Center provides a setting in which students may discuss in confidence with a qualified professional counselor any problems which may be important to them. The Career Resource Center provides active, wideranging and unique services and programs.

Our emphasis is placed in helping all students with any problems that interfere with achieving success at the College. Since these 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 Vocational planning
2. Career planning
3. Advising orientation
4. Test evaluation (interest, aptitude and personality)
5. Referral services about school and community resources
6. Workshops
7. On-going women's and men's problem-solving and support groups

## SPECIAL INSTRUCTIONAL PROGRAMS

## DEVELOPMENTAL STUDIES

The Developmental Studies Division exists to provide educational options for students. An initial assessment of academic skills is required to provide the students with courses that are best suited to their educational goals. Students have an opportunity to acquire or raise their level of skills in the areas of math, reading, writing, and basic oral language development to the level necessary to pass the General Education Development (GED) examination and/or to benefit from certificate or degree programs.

## TELECOURSES

Telecourses combine vivid, engrossing television programs with related reading assignments, seminars, discussions and/or written assignments, depending on the class. Aims Community College offers a number of these courses through its on-campus telecommunications system, through Greeley Cablevision, and through cooperation with KRMA-TV, Channel 6, Denver's Public Television Station. Information on which courses will be offered during a particular term is printed in the College's quarterly schedule or is available via the Telecourse Hotline.

## CONTINUING EDUCATION

The Office of Continuing Education provides workshops and seminars for both personal and professional development. Outreach classes in Loveland, Berthoud, Eaton, Ault and other neighboring communities are also provided through the collaborative efforts of the Divisions and the Office of Continuing Education. The new Loveland Center was opened in the Fall of 1986 to service the needs of Larimer County residents.

In a similar manner, the Office of Continuing Education develops and coordinates the College for Kids summer program initiated in 1982.

Emphasis is placed on serving community needs and developing new offerings, such as: scheduling classes on the weekend and workshops for adults returning to school.

## COMMUNITY SPECIAL PROJECTS

BUILDING BETTER BOARDS FOR COMMUNITY ORGANIZATIONS

The Building Better Boards for Community Organizations (BBB) project began in 1981 under the auspices of the American Association of Community and Junior Colleges and is designed to strengthen the skills for citizen boards of non-profit organizations.

Aims Community College was selected as one of 148 participating colleges in the nation. The Office of Continuing Education offers board development workshops on various topics.

## 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 interest. 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, and others.
Examples of classes which may be offered are conversational Spanish, conversational German, microcomputers, community pottery, wordprocessing, community guitar, social dance, and community photography.

## "COLLEGE FOR KIDS"

"College for Kids," developed by Aims Community College in 1982, is a community outreach program offering summer enrichment classes for children. Courses are specifically designed for children and include a wide variety of subjects. Examples of course offerings are: LOGO for the Young Child, Introduction to Biofeedback, Soccer, Television Workshop, Aviation, and Creative Writing.


## STUDENT ADVISORY BOARD-(A.S.A.C.C.)

The Student Advisory Board develops and coordinates a diversified activities program that includes a variety of social, cultural, intellectual, physical, and career-related programs. Student initiated activities complement the educational aspects of college life, and they are an important part of the college experience. The staff of the College believes that such activities aid in the total development of students so that they may lead more meaningful, productive and balanced lives.
The Advisory Board assists student groups by chartering and working with student organizations that meet the varied interests of particular segments of the college community. The Board recognizes that student clubs which focus upon specific areas of interest are a valuable service to students especially if they emphasize programs of a professional, philosophical or occupational nature. Participation upon the Student Advisory Board is particulary encouraged for those students who are
active with clubs. Seats on the Board often are assigned to those who come from chartered campus organizations. A method employed by the Board to encourage participation places significant weight upon such involvement when the Board is asked for financial assistance for club projects.

Board members participate in the decision-making processes of the College. Members represent student opinions and give input on matters relating to student life both to the College President and the Governing Board of the institution. In this dimension of their involvement, Board members are given an opportunity to develop leadership skills through managing the affairs of the Student Advisory Board as well as serving as spokespersons for the Board.

The Student Advisory Board also assists in the operation of a student publication and a television program that features news, sports, entertainment, and other information about events at Aims Community College.

The current Aims Community College Chartered Clubs are: VICA - Vocational and Industrial Clubs of America
PBL - Phi Beta Lambda
DEC - Mid-Management Club
AIDD - American Institute of Drafting and Design
APRS - Aims Program Radiography Students


## MISCELLANEOUS INFORMATION

## STUDENT CODE 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 the 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 invited guests, and does not cause injury to persons or damage to property. Any such interference, damage, or threat to persons or property will not be tolerated. In situations warranting such action, the College President may summarily
suspend all persons involved in a violation of these standards, pending final disposition of the case by the appropriate body. Peaceful assembly is defined as the purposeful gathering on campus, either within or outside campus buildings, of two or more persons whose conduct is peaceful. Students are encouraged to hold informal discussion groups anywhere on campus and are obligated to live up to the standard of conduct adopted by the College.

Student groups planning organized meetings or demonstrations are to give notice to the College administration at least 24 hours in advance of the activity.

## 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.

## PLACEMENT SERVICES

Aims Community College provides a student placement service. The placement service aids students in securing full-time employment upon graduation. The College also cooperates with local businesses to assist students in securing part-time employment while attending school. An effort is made to place students in job fields which relate to their college programs. Placement information may be obtained from the Placement Office in Ed Beaty Hall, Room 579.

## 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.

## PARKING

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

## FOOD SERVICE

The Campus Kitchen I cafeteria is located west of the General Services Building.

Campus Kitchen II, a snack bar, lounge and recreation area, is in the

Emergency Services Academy at the north side of the Greeley campus.
Food and snack vending machines are located in buildings throughout the Greeley campus.

## BOOKSTORE

The Aims College Bookstore, located in the General Studies Building, is a institutionally owned facility operated for the convenience of the students of the College. Students may purchase textbooks, supplies, and softgoods during posted hours.

Textbooks are also available for purchase at the South Campus, Fort Lupton, and for Loveland-Berthoud classes in the Loveland Center.

## HEALTH SERVICES

Aims Community College provides Health Services in the Trades and Industry Building, Room 106. The Health Service Office is staffed and directed by a professional registered nurse.

Health Services Office provides the following services: first aid and emergency care; treatment for minor illnesses; health education and counseling; vision and hearing tests; and referrals to appropriate agencies.

Handicapped Parking Permits are issued from the Health Services Office.

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

Students are urged to report all health problems to the nurse.

## EARLY CHILDHOOD EDUCATION CENTER

Aims Community College offers, for a nominal fee, an Early Childhood Education Center. The Center is a training station for adult students enrolled in the Child Care Services Program and is staffed by a qualified 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 half-day ( 3 hour) sessions Monday through Thursday.

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.

## 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 facilites 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.



## SCHOOL OF ARTS AND SCIENCES

Arts and Sciences offerings are intended to serve a variety of student needs. Students may find support for their Occupational Education programs in these offerings; they may be enrolled to earn a two-year arts or science degree; or a student may be preparing for a baccalaureate program at a four-year institution to which he or she plans to transfer. In addition, these offerings may serve the special educational interests of the community.

Students in Occupational Education programs may enroll in Arts and Sciences courses to meet the specific requirements of a particular occupational curriculum and to select desired elective courses.

Students who earn the Associate of Arts degree or the Associate of Science degree will meet most requirements for transfer to a four-year institution. These students are encouraged to fulfill elective requirements by taking courses which relate directly to a career or academic major at another school.

For the student who desires to begin work towards a particular major while at Aims Community College, the Arts and Sciences instructional divisions have developed "areas of emphasis." Some of these are described within this section of the catalog.

The Arts and Sciences program provides adult and evening courses as part of its regular instruction. The curriculum consists of arts and sciences course work, vocational-technical and related instruction, and self-interest courses. The wide variety of instruction allows people of all ages to complete college work, acquire new skills, improve existing skills, and pursue special interests.

## ASSOCIATE DEGREES

Included within the Arts and Sciences program are two degree options, the Associate of Arts (A.A.) degree and the Associate of Science (A.S.) degree.

## ALTERNATIVE ASSOCIATE DEGREE PROGRAM (TRANSFER DEGREE CONTRACT)

Students who plan to transfer to a particular four-year college or university need not follow the degree requirements listed. They may instead substitute the first two-year's requirements of the four-year institution to which they will transfer. The Associate of Arts degree or the Associate of Science degree will be granted by Aims Community College if the student has earned 96 quarter hours of credit and has met, as nearly as possible, the requirements of the four-year institution by taking equivalent courses at Aims.
Students interested in this alternative plan should contact their faculty advisors for help in developing a "transfer degree contract" to be followed by the student. This contract must be approved by the Dean of Arts and Sciences. A new contract must be developed if there is a break in enrollment as described under "Effective Catalog."

## AEROSPACE STUDIES

In cooperation with the University of Northern Colorado (UNC), Aims Community College offers students the opportunity to enroll in the first two years of the Air Force Reserve Officer Training Corps (AFROTC) program. Students enroll through Aims and attend classes at UNC.

Candidates are educated to assume duties as Air Force Second Lieutenants upon graduation from UNC. AFROTC graduates normally go on active duty with the United States Air Force soon after completion of AFROTC. Initial assignments may include flight training for pilots and navigators, missile training, or other technical or management training depending on the individual's assignment.

For additional information, contact the AFROTC chairperson, University of Northern Colorado.

## MEXICAN AMERICAN STUDIES

A Mexican American Studies (MAS) curriculum exists within the School of Arts and Sciences. MAS courses are listed in the course descriptions section of the catalog. Contact the program coordinator for specific information regarding MAS course offerings.


## 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

Students seeking the Associate of Arts degree must earn minimum credits in the following subject areas:

## Credits

Communications
Humanities ..... 15
Behavioral and Social Science ..... 15
Mathematics and Science ..... 15
Physical Education ..... 5
Electives ..... $\frac{31}{96}$ ..... 96
Total
ASSOCIATE OF ARTS (A.A.) DEGREE
CREDITS
Total Minimum Requirements:5COMMUNICATIONSCON 102 Introduction to WritingAs the result of a placement test, the studentmay be required to take Fundamentals of Com-position, CON 101, for elective credit (fivecredits) or a remedial course for no collegecredit.Proficiency in essay writing is required for apassing grade.Students are encouraged to take the abovecourses within the first two quarters of theirdegree program.Select one from the following courses:5
SPE 115 Speech Communications ..... 5
SPE 116 Public Speaking ..... 3-5
SPE 118 Interpersonal Communications5
Select one from the following courses:
5
CON 103 The Research Paper
5
CON 109 Creative Writing ..... 5

| LIT | 105 | Introduction to Literature | 5 |
| :--- | :--- | :--- | ---: |
| LIT | 107 | Introduction to Nonfiction | $2-5$ |
| LIT | 108 | Literature's Famous Lovers | $2-5$ |
| LIT | 109 | War and Peace in Literature | 5 |
| LIT | 115 | Introduction to Fiction | 5 |
| LIT | 205 | The American West | 5 |
| LIT | 206 | Shakespeare: Representative Plays | 5 |
| LIT | 215 | Science Fiction | 5 |
| LIT | 217 | Women in Literature and Media | 5 |
| SPA | 111 | Beginning Spanish I | 5 |
| COM | 112 | Introduction to Mass Media | 5 |
| COM | 113 | Introduction to Radio Broadcasting | 5 |
| COM | 114 | Introduction to Television Broadcasting | 5 |
| SPE | 119 | Introduction to Semantics | 3 |
| SPE | 125 | Word Power: Advanced Vocabulary | 2 |
| SPE | 200 | Organizational Communication | 5 |

Total Credits for A.A. Degree

## HUMANITIES

Select one from the following courses: 5
HUM 100 Introduction to the Humanities 5
HUM 101 Introduction to the Greek and Roman period 5
Select two from the following courses: 10
HUM 102 Introduction to the Middle Ages
and Renaissance Period
HUM 103 Introduction to Modern Period to World War II 5
HUM 104 Cities and Human Values5
HUM 105 World Mythology ..... 3-5
HUM 106 Introduction to World Religions ..... 3-5
HUM 107 Introduction to the Art of Film ..... 5
HUM 108 Eastern Philosophy ..... 5
HUM 109 Modern American Culture ..... 5
HUM 115 Popular Culture ..... 5
ART 100 Art Appreciation5
LIT 206 Shakespeare: Representative Plays ..... 5
MAS 120 Culture of Mexico and South America ..... 5
MUS 100 Music Appreciation ..... 5
PHI 105 Introduction to Philosophy ..... 5
PHI 106 Introduction to Modern Philosophy ..... 5
PH1 107 Introduction to Logic ..... 5
PHI 108 Introduction to Modern Ethics ..... 5
PHI 205 Topics in Philosophy ..... 5
THE 100 Introduction to Theatre Arts ..... 5
Total Credits for A.A. Degree5555?
BEHAVIORAL AND SOCIAL SCIENCES
Select one from the following courses:
PSY 101 General Psychology I5
SOC 101 Introduction to Sociology ..... 5
Select from two of the following five areas: ..... 10
ANTHROPOLOGY
ANT 101 Introduction to Anthropology ..... 5
ECONOMICS
ECO 100 Introduction to Economics ..... 5
ECO 201 Principles of Economics - Macroeconomics ..... 5
ECO 202 Principles of Economics - Microeconomics ..... 5
HISTORY
HIS 101 Introduction to History: Ancient Civilization ..... 5
HIS 102 Introduction to History: Traditional Civilization ..... 5
HIS 103 Introduction to History: Modernization of Man ..... 5
HIS 105

| HIS | 106 | History of the United States <br> from 1865-1945 (Myth and Reality <br> in America's Past) |  |
| :--- | :--- | :--- | :--- |
| HIS | 107 | History of the United States <br> Since 1945 (Hiroshima to Watergate) | 5 |
| HIS | 108 | Modern Russian Civilization |  |
| HIS | 209 | History of Colorado and the <br> Rocky Mountain West |  |
| HIS | 215 | History of Christianity |  |
| MAS | 161 | Aztec Civilization |  |
| MAS | 162 | Introduction to Modern Mexico | 5 |
| POLITICAL SCIENCE | 5 |  |  |
| POS | 100 | Introduction to Political Science |  |
| POS | 101 | American Government |  |
| POS | 118 | State and Local Governments |  |
| POS | 205 | International Relations |  |
| POS | 208 | Comparative Foreign Government | 5 |
| GEOGRAPHY | 5 |  |  |
| GEO | 105 | World Geography | 5 |

Total Credits for A.A. Degree

## CREDITS

## 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

CREDITS

## MATHEMATICS AND SCIENCE

While planning their academic programs, advisors and students should give maximum attention to prerequisites and corequisites as stated in this catalog
NOTE: A single course may be used to meet only one requirement.

## CATEGORY I

Select from the following courses:
minimum of 4
Any course having the prefix CSC, MAT, or STA except CSC 100 and CSC 105 and as indicated below.

## CATEGORY II

Select from the following courses:
minimum of 3
Any course having the prefix AST, BIO, CHE, EAS, GEY, PHY, or SCI except as indicated below.

## CATEGORY III

Select from the following courses:
8 or less as appropriate
Any course having the prefix AST, BIO, CHE, CSC, EAS, GEY, MAT, PHY, SCI, or STA except as indicated below.

The following courses may not be used towards the Mathematics and Science requirements for the A.A. degree: MAT 100, MAT 101, MAT 102, MAT 110, MAT 111, MAT 112, MAT 120, PHY 101, SCI 230 and any courses numbered below 100 .

The student planning to transfer to a specific four-year school should work carefully with an advisor and the catalog of the school of transfer.
The University of Northern Colorado (UNC) Mathematics Skills requirement can be met by completing one of the following: MAT 110, $121,122,130,131,132,161,162,163,262$.
Students transferring to Colorado State University (CSU) or any other four-year institution should be aware of the specific requirements of that institution.

Minimum of 15


## AREAS OF EMPHASIS-A.A.

The curricula described in the following sections are designed to assist those students who are pursuing particular majors at a four-year institution or particular careers. The A.A. degree 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.

## BEHAVIORAL AND SOCIAL SCIENCE DIVISION

## 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
CON 102 Introduction to Writing 5
SPE 116 Public Speaking 5
CON 103 The Research Paper 5
HUMANITIES
ART 100 Art Appreciation 5
See A.A. degree requirements 10
BEHAVIORAL AND SOCIAL SCIENCE
ECO 201 Principles of Economics: Macro ..... 5
GEO 105 World Geography ..... 5
See A.A. degree requirements ..... 5
PHYSICAL EDUCATIONSee A.A. degree requirements5
MATHEMATICS AND SCIENCE ..... 15
MAT 121 Beginning Algebra ..... 5
BIO 101 Biology Concepts ..... 5
EAS 105 Earth Science ..... 5
ELECTIVES ..... 31
PHY 120 Fundamentals of Physics ..... 5
POS 101 American Government ..... 5
HIS 105 History of the United States ..... 5
MUS 105 Fundamentals of Music ..... 5

Select 11 additional credits with help of an advisor. UNC requires a Liberal Arts major, or an Interdisciplinary major for those in the Elementary Education program. This work may be started with elective credits.
Total Credits for Area of Emphasis

## HUMANISTIC PSYCHOLOGY EMPHASIS

Recommended degree requirements for area of emphasis:
COMMUNICATIONS15See A.A. degree requirements15See A.A. degree requirements15PSY 101 General Psychology I5
10
See A.A. degree requirementsSee A.A. degree requirements
15
MATHEMATICS AND SCIENCE29
lectivesSee A.A. degree requirements
3
PSY 107 Transactional Analysis
3
PSY 111 Basic Human Potential Seminar
3
PSY 115 Humanistic Psychology
5
Beginning Counseling
PSY 241 Biofeedback I: Biofeedback \& thePsychology of Health (Principles)5
PSY 248 Child Psychology SOC 105 Cociology of Mar ..... 5
SOC 105 Sociology of Marriage and the Family ..... 5
Select from the following courses:
PSY 242 Biofeedback II ..... 4
PSY 206 Psychology of Women ..... 3
SOC 115 Sociology of Education ..... 3
SOC 117 Sociology of Leisure ..... 35
Total Credits for Area of Emphasis ..... 97-98155

## PARAPROFESSIONAL COUNSELING EMPHASIS

Recommended degree requirements for area of emphasis:

## COMMUNICATIONS

See A.A. degree requirements HUMANITIES

See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCE
PSY 101 General Psychology 1 5
See A.A. degree requirements 10
PHYSICAL EDUCATION
See A.A. degree requirements
MATHEMATICS AND SCIENCE
See A.A. degree requirements

## Electives

PSY 111 Basic Human Potential Seminar 3
PSY 131 Beginning Counseling 5
PSY 138 Biofeedback and Stress Management 4
PSY 221 Abnormal Psychology 5
PSY 225 Advanced Counseling 5
PSY 241 Biofeedback 1: Biofeedback \& the
Psychology of Health (Principles) 5
PSY 248 Child Psychology 5
Total Credits for Area of Emphasis


## BIOFEEDBACK EMPHASIS

Recommended degree requirements for area of emphasis:

## CREDITS

## COMMUNICATIONS <br> See A.A. degree requirements HUMANITIES <br> See A.A. degree requirements <br> BEHAVIORAL AND SOCIAL SCIENCE <br> $\begin{array}{lll}\text { PSY } & 101 & \text { General Psychology } 1 \\ & & \text { See A.A. degree requirements }\end{array}$ <br> PHYSICAL EDUCATION <br> $\begin{array}{lll}\text { BIO } & 211 & \text { Human Anatomy and Physiology I } \\ \text { BIO } & 212 & \text { Human Anatomy and Physiology II }\end{array}$ <br> BIO 213 Human Anatomy and Physiology III <br> Electives <br> $\begin{array}{llll}\text { PSY } & 131 & \text { Beginning Counseling } & 5\end{array}$ <br> PSY 138 Biofeedback and Stress Management 4 <br> PSY 225 Advanced Counseling 5 <br> PSY 241 Biofeedback I: Biofeedback \& the <br> Psychology of Health (Principles) <br> PSY 242 Biofeedback II <br> PSY 244 Biofeedback and Hypertension <br> Electives <br> Total Credits for Area of Emphasis <br> CERTIFICATE PROGRAM IN CLINICAL BIOFEEDBACK

5

5
4

Program Description: Clinical Biofeedback is a relatively new approach to the prevention and treatment of psychophysiologic disorders. As the profession develops, job opportunities will be available in hospitals, mental health centers, corporations, schools, and private clinics.

Upon successful completion of the program, the graduate will receive a certificate of completion from the Aims Biofeedback Institute.
Successful completion of this training program prepares the clinician to take the national certification examination administered either by the Biofeedback Certification Institute of America or the American Association of Biofeedback Clinicians.

Program Admission: Trainees are admitted only after the following requirements are met.

1. A.A.S. or A.A. degree from Aims Community college with an emphasis in Biofeedback, B.A. or B.S. degree in a health related field, or the equivalent transcripted higher education coursework in a health field.
2. Completion of the following courses at Aims Community College or their equivalent at other colleges:

| BIO | 211 | Anatomy and Physiology I | 5 |
| :--- | :--- | :--- | :--- |
| BIO | 212 | Anatomy and Physiology II | 5 |
| BIO | 213 | Anatomy and Physiology III | 5 |
| PSY | 131 | Beginning Counseling | 5 |
| PSY | 221 | Abnormal Psychology | 5 |
| PSY | 225 | Advanced Counseling | 5 |

3. Completion of the following classes at Aims Community College with a grade of " $A$ " or " $B$ ":

PSY 138 Biofeedback \& Stress Management
PSY 241 Biofeedback I 5
PSY 244 Biofeedback and Hypertension 5
4. Pass an examination interview by the Admissions Committee of the Aims Biofeedback Institute. The interviewee will be asked to simulate a counseling session.

## CERTIFICATE PROGRAM

CREDITS
Certificate Requirements:
Fall Quarter
PSY 243 Biofeedback III: Clinical Procedures 6
PSY 251 Biofeedback and Psychotherapy 6
Winter Quarter
PSY 267 Biofeedback IV: Practicum 12
Spring Quarter
PSY 268 Biofeedback V: Practicum 12
Total Credits for Certificate:


## 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/or advising on career or transfer possibilities, contact the Criminal Justice Department.

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 SCIENCE
See A.A. degree requirements


Total Credits for Area of Emphasis

## 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 law by criminal justice courses. The Political Science Department will be pleased to assist prelaw students.

## POLITICAL SCIENCE EMPHASIS

This emphasis leads graduates directly or 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
BEHAVIORAL AND SOCIAL SCIENCE
HIS 103 Introduction to History: Modernization of Man

Select one of the following courses:
PSY 101 General Psychology 1
SOC 101 Introduction to Sociology 5
Select one of the following courses:
ECO 100 Introduction to Economics 5
ECO 201 Principles of Economics - Macroeconomics 5
PHYSICAL EDUCATION
See A.A. degree requirements
MATHEMATICS AND SCIENCE
See A.A. degree requirements
Electives ..... 25
5
HIS 106 History of the United States from 1865-1945
(Myth and Reality in America's Past) ..... 5
POS 100 Introduction to Political Science ..... 5
POS 101 American Government ..... 5
POS 118 State and Local Governments ..... 5
Select one of the following courses: ..... 5
HIS 107 History of the United States Since 1945 (Hiroshima to Watergate) ..... 5
POS 205 International Relations ..... 5
POS 208 Comparative Foreign Government ..... 5
Remaining hours selected as desired1-4
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

 15See A.A. degree requirements

## HUMANITIES

See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCE

| ECO | 201 | Principles of Economics - Macroeconomics | 5 |
| :--- | :--- | :--- | :--- |
| GEO | 105 | World Geography |  |
| HIS | 107 | History of the United States Since 1945 <br> (Hiroshima to Watergate) | 5 |
| PSY | 101 | General Psychology I |  |
| POS | 101 | American Government |  |
| POS | 118 | State and Local Governments <br> SOC | 101 | | Introduction to Sociology |
| :--- |
| Consult with an advisor to determine which of these |

PHYSICAL EDUCATION
See A.A. degree requirements
MATHEMATICS AND SCIENCE
See A.A. degree requirements
Electives
Total Credits for Area of Emphasis 96



FAMILY AND LIFE EDUCATION

John Turner, M.A.
Division Chair
Behavioral \& Social Science
Aims Community College

Mellie Brand, M.A.
Program Director
Aims Community College
North Colorado Medical Center

## STAFF COORDINATORS

Sally Eastwood, M.A.-Active Families
Kathleen Stevens, R.N.-Expectant Families
Susan Wanner, M.A.-Senior Education Program

## ADMINISTRATIVE ASSISTANTS

Geni Spalding

## COMMUNICATIONS AND HUMANITIES DIVISION

## COMMUNICATIONS MEDIA EMPHASIS

This emphasis in Communications is for students who wish to transfer to a four-year college for a major in this area, or for students who wish to complete two years of college and go 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. Preassessment in reading and writing is a requirement before registering in this major emphasis.

## Recommended degree requirements for area of emphasis:

COMMUNICATIONS ..... 15
CREDITS
CON 102 Introduction to Writing ..... 5
COM 112 Introduction to Mass Media ..... 5
SPE 116 Public Speaking ..... 5
HUMANITIES ..... 15
HUM 100 Introduction to Humanities ..... 5
Select two other Humanities courses from:
HUM 109 Modern American Culture ..... 5
HUM 115 Popular Culture ..... 5
THE 100 Introduction to Drama ..... 5
MUS 100 Music Appreciation ..... 5
ART 100 Art Appreciation ..... 5
BEHAVIORAL AND SOCIAL SCIENCE ..... 15See A.A. degree requirementsMATHEMATICS AND SCIENCE15
See A.A. degree requirementsPHYSICAL EDUCATION5
See A.A. degree requirements
Electives31
COM 113 Introduction to Radio Broadcasting ..... 5
COM 114 Introduction to Television Broadcasting ..... 5
COM 115 Introduction to Television Broadcasting II ..... 5
COM 118 Introduction to Audio Production ..... 5
COM 291 TV Field Production Lab I (6 hours) ..... 3
COM 298 Broadcast Internship (10 hours) ..... 5
COM 299 Communications Practicum ..... 1-3
Total Credits for Area Emphasis


## DESIGN AND VISUAL COMMUNICATION EMPHASIS

Recommended degree requirements for area of emphasis:

## CREDITS

## COMMUNICATIONS <br> See A.A. degree requirements

## HUMANITIES

ART 100 Art Appreciation ..... 5
MUS 100 Music Appreciation ..... 5
THE 100 Introduction to Drama ..... 5
See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCE15
See A.A. degree requirements
PHYSICAL EDUCATION5See A.A. degree requirements
MATHEMATICS AND SCIENCE15See A.A. degree requirements
Electives31

Select from the following courses, with advisor approval:
(These are required prerequisites in most college art and design programs.)
AAD 101 Fundamentals of Art \& Design I ..... 5
AAD 102 Fundamentals of Art \& Design 11 ..... 5
AAD 131 Drawing I ..... 3
AAD 132 Drawing II ..... 3
ART 111 Art History I ..... 5
ART 112 Art History II ..... 5
ART 113 Art History III ..... 5
Select from the following studio design courses,
with advisory approval:3
AAD 128 Computer Graphics I ..... 3
AAD 129 Computer Graphics II ..... 3

| AAD 201 | Survey of Fashion Design | 3 |
| :--- | :--- | :--- |
| AAD 221 | Graphic Design I | 3 |
| AAD 222 | Graphic Design II | 3 |
| AAD 223 | Graphic Design III | 3 |
| AAD 225 | Calligraphy | 3 |
| AAD 231 | Figure Drawing I | 3 |
| AAD 232 | Figure Drawing II | 3 |
| AAD 235 | Graphic Illustration | 3 |
| AAD 241 | Photography I | 3 |
| AAD 242 | Photography II | 3 |
| AAD 243 | Photography III | 3 |
| AAD 244 | Photography IV | 3 |
| AAD 245 | Photojournalism | 3 |
| AAD 251 | Interior Design I | 3 |
| AAD 252 | Interior Design II | 3 |
| AAD 253 | Interior Design III | 3 |
| ARS 243 | Water Media I | 3 |
| ARS 244 | Water Media II | 3 |

Total Credits for Area of Emphasis


## FINE ARTS EMPHASIS

The Fine Arts Emphasis may be directed toward teacher preparation. Two options are available to the student: Art, or Music and 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 Music and Theatre electives listed.

Recommended degree requirements for area of emphasis:
CREDITS

## COMMUNICATIONS

See A.A. degree requirements
HUMANITIES

ART 100 Art Appreciation
MUS 100 Music Appreciation ..... 5
THE 100 Introduction to Theatre Arts ..... 5
See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCE ..... 15
See A.A. degree requirements ..... 5
See A.A. degree requirements
MATHEMATICS AND SCIENCE ..... 15
See A.A. degree requirements
Electives - Art31

Select from the following courses with advisor approval:
(These are required prerequisites in most college art and design programs.)

| AAD 101 | Fundamentals of Art \& Design I | 5 |
| :--- | :--- | :--- |
| AAD 102 | Fundamentals of Art \& Design II | 5 |
| AAD 131 | Drawing I | 3 |
| AAD 132 | Drawing II | 3 |
| ART 111 | Art History I | 5 |
| ART 112 | Art History II | 5 |
| ART 1113 | Art History III | 5 |

Select from the following studio art courses, with advisor approval:

| AAD | 225 | Calligraphy | 3 |
| :--- | :--- | :--- | :--- |
| AAD | 231 | Figure Drawing I | 3 |
| AAD | 232 | Figure Drawing II | 3 |
| ARS | 100 | Textile Crafts \& Design | 3 |
| ARS | 125 | Handbuilt Clay I | 3 |
| ARS | 126 | Handbuilt Clay II | 3 |
| ARS | 127 | Handbuilt Clay III | 3 |
| ARS | 131 | Stained Glass I | 3 |
| ARS | 241 | Painting I | 3 |
| ARS | 242 | Painting II | 3 |
| ARS | 243 | Water Media I | 3 |
| ARS | 244 | Water Media II | 3 |
| ARS | 251 | Sculpture I | 3 |
| ARS | 252 | Sculpture II | 3 |
| ARS | 261 | Jewelry and Metalwork I | 3 |
| ARS | 262 | Jewelry and Metalwork II | 3 |
| ARS | 271 | Pottery and Ceramic Design I | 3 |
| ARS | 272 | Pottery and Ceramic Design II | 3 |
| ARS | 273 | Pottery and Ceramic Design III | 3 |
| ARS | 274 | Pottery and Ceramic Design IV | 3 |
| ARS | 281 | Weaving I | 3 |
| ARS | 282 | Weaving II | 3 |

Total Credits for Area of Emphasis

## Electives - Music and Theatre

Select from the following courses, with advisor approval:

| MUP 131 | Piano I | 2 |
| :--- | :--- | :--- |
| MUP 132 | Piano II | 2 |
| MUP 133 | Piano III | 2 |
| MUP 134 | Piano IV | 2 |
| MUP 135 | Piano V | 2 |
| MUP 136 | Piano VI | 2 |
| MUP 151 | Voice I | 2 |
| MUP 152 | Voice II | 2 |
| MUP 153 | Voice III | 2 |
| MUP 154 | Voice IV | 2 |
| MUP 171 | Classical Guitar I | 2 |
| MUP 172 | Classical Guitar II | 2 |
| MUP 173 | Classical Guitar III | 2 |
| MUP 251 | Voice V | 2 |


| MUS | 105 | Fundamentals of Music |
| :---: | :---: | :---: |
| MUS | 106 | Music Theory |
| MUS | 220 | Children's Music |
| THE | 100 | Introduction to Drama |
| THE | 116 | Screen Acting I |
| THE | 117 | Screen Acting II |
| THE | 118 | Screen Acting Ill |
| THE | 299 | Theatre Practicum <br> (Prospective theatre majors should take part in a minimum of 4 productions in which credit is given through the theatre "practicum".) |

Total Credits for Area of Emphasis


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

Students seeking the Associate of Science degree must earn minimum credits in the following subject areas.

CREDITS

## Communications

Humanities 15
Behavioral and Social Science 15
Physical Education5

Mathematics and Science 35
Electives
Total

## ALTERNATIVE ASSOCIATE OF SCIENCE DEGREE

The requirements in Behavioral and Social Science, Communications, Humanities and Physical Education may vary depending upon the fouryear institution the student plans to attend. Students must consult an advisor to obtain approval of these requirements.

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

Total Minimum Requirements:

COMMUNICATIONS
CON 102 Introduction to Writing 5
As a result of a placement test, the student may be required to take Fundamentals of Composition, CON 101, for elective credit (five credits) or a remedial course for no college credit.
Proficiency in essay writing is required for a passing grade.
Students are encouraged to take the above courses within the first two quarters of their degree program.

| Select one from the following courses: |  |  |  |
| :---: | :---: | :---: | :---: |
| SPE | 115 | Speech Communications | 5 |
| SPE | 116 | Public Speaking | 3-5 |
| SPE | 118 | Interpersonal Communications | 5 |
| Select one from the following courses: |  |  |  |
| CON | 103 | Research Paper | 5 |
| CON | 109 | Creative Writing | 5 |
| CON | 202 | Advanced Composition | 5 |
| LIT | 105 | Introduction to Literature | 5 |
| LIT | 107 | Introduction to Nonfiction | 2-5 |
| LIT | 108 | Literature's Famous Lovers | 2-5 |
| LIT | 109 | War and Peace in Literature | 5 |
| LIT | 115 | Introduction to Fiction | 5 |
| LIT | 205 | The American West | 5 |
| LIT | 206 | Shakespeare: Representative Plays | 5 |
| LIT | 215 | Science Fiction | 5 |
| LIT | 217 | Women in Literature and Media | 5 |
| COM | 112 | Introduction to Mass Media | 5 |
| COM | 113 | Introduction to Radio Broadcasting | 5 |
| COM | 114 | Introduction to Television Broadcasting | 5 |
| SPA | 111 | Beginning Spanish I | 5 |
| SPE | 119 | Introduction to Semantics | 3 |
| SPE | 125 | Word Power: Advanced Vocabulary | 2 |
| SPE | 200 | Organizational Communication | 5 |

Total Credits for A.S. Degree

## HUMANITIES

Select one of the following courses:
Shakespeare: Representative Plays5
Women in Literature and Media ..... 5
Introduction to Radio Broadcasting ..... 5SPA 111 Beginning Spanish I52Total Credits for A.S. Degree

## CREDITS

CREDITS

| HUM 100 | Introduction to the Humanities |
| :--- | :--- | :---: |
| HUM 101 | Introduction to the |
| Greek and Roman Period | 5 |

Select two from the following courses:
HUM 102 Introduction to the Middle Ages and Renaissance Period
HUM 103 Introduction to Modern Period to World War II ..... 5
HUM 104 Cities and Human Values ..... 5
HUM 105 World Mythology ..... 3-5
HUM 106 Introduction to World Religions ..... 3-5
HUM 107 Introduction to the Art of Film ..... 5
Eastern Philosophy ..... 5
HUM 109 Modern American Culture ..... 5
HUM 115 Popular Culture ..... 5
ART 100 Art Appreciation ..... 5
LIT 206 Shakespeare: Representative Plays ..... 5
MAS 120 Culture of Mexico and South America ..... 5
MUS 100 Music Appreciation ..... 5
PHI 105 Introduction to Philosophy ..... 5
PHI 106 Introduction to Modern Philosophy ..... 5

PHI 107 Introduction to Logic 5
$\square$s
$\square$
$\square$
$\square$
$\square$
$\square$5
$\square$

| PHI | 108 | Introduction to Modern Ethics | 5 |
| :--- | :---: | :--- | :--- |
| PHI | 205 | Topics in Philosophy | 5 |
| THE | 100 | Introduction to Drama | 5 |

THE 100 Introduction to Drama

## CREDITS

Select one from the following courses:

SOC 101 Introduction to Sociology
Select from two of the following five areas:

## ANTHROPOLOGY

ANT 101 Introduction to Anthropology

## ECONOMICS

ECO 100 Introduction to Economics 5
ECO 201 Principles of Economics - Macroeconomics 5
ECO 202 Principles of Economics - Microeconomics 5

## HISTORY

HIS 101 Introduction to History:
Ancient Civilization

| HIS 102 | Introduction to History: <br> Traditional Civilization | 5 |
| :--- | :--- | :--- |


| HIS $103 \quad$Introduction to History: <br> Modernization of Man | 5 |
| :---: | :---: |

HIS 105 History of the United States to 1877
(Myth and Reality in America's Past)
HIS 106 History of the United States from 1865-1945 (Myth and Reality in America's Past)
HIS 107 History of the United States Since 1945 (Hiroshima to Watergate)
HIS 108 Modern Russian Civilization 5
HIS 209 History of Colorado and the Rocky Mountain West
HIS 215 History of Christianity 5

MAS 161 Aztec Civilization 5
MAS 162 Introduction to Modern Mexico 5
POLITICAL SCIENCE
POS 100 Introduction to Political Science 5
POS 101 American Government 5
POS 118 State and Local Governments 5
POS 205 International Relations 5
POS 208 Comparative Foreign Government 5

## GEOGRAPHY

GEO 105 World Geography
5
Total Credits for A.S. Degree

## PHYSICAL EDUCATION

A minimum of five, separate credits 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 who have fulfilled their physical education requirements 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.S. degree. Students who desire a physical education waiver must contact the Director of Admissions.

Total Credits for A.S. Degree
CREDITS

## MATHEMATICS AND SCIENCE

(Note: Students pursuing an Associate of Science degree must see an advisor in the Mathematics and Science Division to help them plan their academic programs. Furthermore, all degree plans must be approved by the Division Chairman of Mathematics and Science.)

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 35 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.

Mathematics Competency: This requirement can be fulfilled by successfully completing one of the following:
a. MAT 130 Mathematics for Decision Making
b. MAT 131 College Algebra
c. any MAT course numbered greater than 131 (except MAT 295)
d. any math course approved by the Division Chair as the equivalent of one of the above
Science competency: This requirement can be fulfilled by successfully completing an approved three quarter sequence of a laboratory associated course with one of the following prefixes: BIO, CHE, GEY or PHY.

Courses taken to fulfill the above mathematics and science competency requirements may be included in the minimum credit hours necessary for this degree.

The degree requirements may be met by completing:

1. A minimum of 35 credits selected from approved courses with the following prefixes: AST, BIO, CHE, EAS, GEY, PHY, SCI. Competency in mathematics must be demonstrated.
2. A minimum of 45 credits selected from approved courses with the following prefixes: AST, BIO, CHE, CSC, EAS, GEY, MAT, PHY, SCI, STA.
3. An alternative plan for the Associate of Science degree. This series of courses must be approved by an advisor.
(NOTE: The following courses may not be used towards the mathematics and science requirements for the A.S. degree: MAT 100, MAT 101, MAT 102, MAT 110, MAT 111, MAT 112, MAT 120, PHY 101, SCI 230 and any courses numbered below 100.)
Total Credits for the A.S. Degree



## AREAS OF EMPHASIS-A.S.

## MATHEMATICS AND SCIENCE DIVISION

The Mathematics and Science Division is committed to making available quality offerings for the non-science oriented enrollee and the student in need of background improvement, as well as community service programs. The Division also offers more formal freshman and sophomore course work for those students who wish to begin work toward a typical major in biological sciences, chemistry, engineering, computer science, or mathematics. Preparatory course work also is offered in many preprofessional programs that are based upon the lifescience and health-science disciplines. Students may enjoy opportunities to conduct experiments in an open laboratory environment with professional faculty. Tutors are available for supplemental and reinforcement modes of instruction.

Areas of Emphasis: The Mathematics and Science Division offers students the option of an area of emphasis in the following disciplines: Agriculture, Chemistry, Chemical Testing Technology, Computer/Information Science, Pre-Engineering, Mathematics, PreHealth Professions, and Life Sciences. The courses listed under each emphasis are guidelines to help students identify which courses are the most applicable to their chosen area of interest. This would apply both to students who will terminate their education after earning an A.S. degree and to students who are planning to transfer these courses into a Bachelor's program at the college or university of their choice. It is ultimately the student's responsibility to be informed about the course requirements particular to the Bachelor's program that the student intends to pursue.

A student planning to major in the sciences and/or mathematics or pursue a majority of course work in these disciplines should consult with a faculty advisor in the division at the earliest opportunity in order to plan a program that is appropriate to his or her needs.

The curriculum should be planned to complete one or more of the following:

1. Strengthen and/or broaden the student's background in one or more disciplines relative to individual needs.
2. Satisfy the general requirements for the A.A. or Alternative A.A. degree.
3. Satisfy the specific requirements for the A.S. or Alternative A.S. degree.
4. Satisfy the specific requirements for an area of emphasis in the Mathematics and Science Division. This is in conjunction with the A.S. degree.

If Option 4 is selected, it should be noted that the general 96 credit hour requirement for the A.S. degree is not altered; therefore, several additional credit hours of course work may be necessary.

Enrollees who choose to complete the general requirements for the A.A. degree or want to investigate certain disciplines may select studies of a more general nature. Appropriate courses are offered in biology, physics, chemistry, earth sciences, computer science, and mathematics.

Typical areas of study: These are typical course offerings which may be followed by students wishing to transfer to a four-year college, complete an area of emphasis in the division, or strengthen and broaden their academic background. Many variations are possible within most patterns.

## AGRICULTURE EMPHASIS

The Agriculture Emphasis has been designed to transfer to Colorado State University. Interested students are advised to discuss this emphasis with the Aims agriculture faculty (Technical Division).

## Degree Requirements:

| BIO | 112 | College Biology II <br> OR | CREDITS |
| :--- | :--- | :--- | :---: |
| BIO | 113 | College Biology III <br> CHE 101 | General Chemistry I |
| CHE | 102 | General Chemistry II | 5 |
| CHE | 103 | General Chemistry III | 5 |
| SPE | 116 | Public Speaking | 5 |
| PSY | 101 | General Psychology I | 5 |
|  | $\quad$ or |  |  |
| SOC | 101 | General Sociology | 5 |
| ECO | 201 | Principles of Economics: Macroeconomics | 5 |
| MAT | 131 | College Algebra | 5 |
| CON | 102 | Introduction to Writing | 5 |
| ECO | 115 | Agriculture Economics | 5 |
| AGR | 178 | General Crops Science | 5 |
| AGR | 179 | Introduction to Animal Science | 5 |
| PED |  | Physical Education | 5 |
| HUM | 100 | Introduction to the Humanities | 5 |
| CSC | 201 | Programming in FORTRAN 77 | 3 |

Select a minimum of 24 quarter hours from the following,
with advisor approval:
AGR 215 Introduction to Soil Science 5
AGR 216 Feeds and Feeding 5
AGR 217 Livestock Selection 3
AGR 218 Farm and Ranch Management 5
ACC 101 Principles of Accounting I 5
ACC 102 Principles of Accounting II 5
MGT 101 Sales 5
MGT 207 Human Resources Management 5

BUS 100 Introduction to Business 5
ECO 202 Principles of Economics: Microeconomics 5
Total credits must equal 96 minimum.
ACC 101 and ACC 102 must both be taken if credit for Principles of Accounting I on CSU's semester schedule is to be met.

## CHEMISTRY EMPHASIS

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 101, 102, 103
MAT 131, 132
MAT 161
General Chemistry I, II, III College Algebra, Trigonometry Calculus with Analytic Geometry I
(each) 5
(each) 5
5

Electives (as appropriate)
TERMINAL COURSE BLOCK:
CHE 201, 202, 203 Organic Chemistry I, II, III (each) 5
MAT 162, 163, 262 Calculus with Analytic Geometry II,
III, IV
(each) 5
PHY 201, 202, 203
General Physics I, II, III
(each) 5
CSC 201
Programming in FORTRAN 77
Highly Recommended:
SCI 230
Scientific Writing
Additional requirements and electives as appropriate.
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

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 couse of study is also designed for transfer to four-year colleges and universities. Therefore, appropriate social science, humanities, and physical education requirements must be fulfilled. Consult faculty advisor for details.

## INITIAL COURSE BLOCK:

## Required:

CHE 101, 102, 103
CHE 115, 116
MAT 131
CSC 101

HEN 106
CON 102

General Chemistry I, II, III Chemical Technology I (each) 5 (each) 1 5
College Algebra

Introduction to Programming in the BASIC Language
Safety and First Aid3

Introduction to Writing 5

## Recommended:

GEY 111
PHY 151, 152, 153

MAT 161
BIO 101

## TERMINAL COURSE BLOCK:

Required:
CHE 201, 202, 203
CHE 215, 216
CHE 225, 226
Organic Chemistry I, II, III
(each) 5

CHE 235, 236
Chemical Technology II
(each) 1
(each) 1
(each) 1
Recommended:
CHE 205
CHE 230
CHE 245
CHE 295

STA 200 or 201
CSC 201
BIO 216

CHE $120 \quad$ Fundamentals of Organic Chemistry 5
Physical Geology
Introduction to College
Physics I, II, III
(each) 5
Calculus with Analytic Geometry
Biology Concepts

## CHEMICAL TESTING TECHNOLOGY ADVISORY COMMITTEE

| Bill Beard | Larry Scott |
| :--- | :--- |
| U.S. Department of | Triple S. Labs |
| Agriculture |  |
|  | Chris Sheats |
| Anthony Herold | Chemical Engineering |
| United Agri Products | Consultant |

Ed Lee
Monfort of Colorado



## COMPUTER/INFORMATION SCIENCE <br> EMPHASIS

This area of emphasis has flexible program requirements to meet a variety of student needs. Several options are available, each structured to accommodate specific interests and abilities. All options are designed for transfer to institutions which grant appropriate baccalaureate degrees.

## OPTION I COMPUTER PROGRAMMING

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:
CREDITS

MAT 130
CSC 100

CSC 141, 142, 143
CSC 101

CSC 102
CSC 111
CSC 121
CSC 201
CSC 211, 212
STA 201, 202

SCI 230
BIS 121
BIS 122

Mathematics for Decision Making Computer and Society OR
Microcomputer Managed Applications (each)2
Introduction to Programming in the BASIC Language
Advanced BASIC ..... 3-4
Structured Program Design ..... 3
Programming in Pascal ..... 5
Programming in FORTRAN 77 ..... 5

Information Systems I, II
Statistics for Business, Science and Social Science I, II

Scientific Writing

Additional requirements and electives as appropriate.4
(each) 53

5
4
(each) 5

5
5

## OPTION II INFORMATION SCIENCE

Students who desire a career in the rapidly expanding fields of computer systems, design, management of information, or providing data for business decision making may elect this curriculum. Substantial mathematics and statistics courses are included.

## Recommended Courses:

CREDITS
MAT $130 \quad$ Mathematics for Decision Making 5
MAT $160 \quad$ Calculus for Decision Making 5
CSC 101 Introduction to Programming in the BASIC
CSC 102
CSC 111
CSC 121
CSC 141, 142, 143
CSC 201
CSC 211, 212
STA 201, 202, 203

SCI 230
BIS 121
BIS 122 Introduction to Programming in the BASIC
Language

Advanced BASIC ..... 3-4

Structured Program Design
3

Programming in Pascal 5
Microcomputer Managed Applications (each) 2
Programming in FORTRAN 775
Information Systems I, II (each) 5
Statistics for Business, Science, and
Social Science, I, II, III
(each) 5
Scientific Writing
Structured COBOL Programming 5
Advanced COBOL Programming 5

Additional requirements and electives as appropriate.

## OPTION III COMPUTER SCIENCE

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

## Recommended Courses:

CREDITS
MAT 131
College Algebra
MAT 132 College Trigonometry 5
CSC 101

CSC 102
CSC 111
CSC 121
CSC 201
CSC 221, 222
MAT $161,162,163$

MAT 261
STA 201, 202

SCI 230
Additional requirements and electives as appropriate.

## PRE-ENGINEERING

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 131, 132 College Algebra, Trigonometry (each) 5
MAT $161,162,163$

CSC 121
CSC 201
CHE 101, 102

in the BASIC Language

Advanced BASIC

Structured Program Design

Programming in Pascal 5
Programming in FORTRAN 775
Computer Science I, II (each) 5
Calculus with Analytic Geometry, I, II, III
(each) 5
Linear Algebra 5
Statistics for Business, Science, and Social Science I, II
(each) 5
Scientific Writing

## TERMINAL COURSE BLOCK:

STA 201, 202
Statistics for Business, Science and Social Science, I, II
General Physics I, II, III
Linear Algebra
(each) 5
Calculus with Analytic Geometry IV
Elementary Differential Equations
$\qquad$

## TERMINAL COURSE BLOCK:

$\begin{array}{rrr}\text { BIO 211, 212, } 213 & \begin{array}{r}\text { Human Anatomy and } \\ \text { Physiology I, II, III }\end{array}\end{array}$
BIO 216
STA 201, 202
Introduction to Microbiology 5
Statistics for Business, Science, and Social Science I, II
(each) 5

Highly Recommended: SCI 230

Scientific Writing
3
Additional requirements and electives as appropriate.


## PRE-HEALTH PROFESSION EMPHASIS

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 physical therapy, veterinary medicine, and dentistry. Some fields require modified programs and such should be planned with the assistance of an advisor.

## INITIAL COURSE BLOCK:

BIO 111, 112, 113 College Biology I, II, III (each) 5
CHE 101, 102, 103 General Chemistry I, II, III (each) 5
PHY 151, 152, 153 Introduction to College

STA 201
Physics I, II, III
(each) 5

5
TERMINAL COURSE BLOCK:

| BIO 211, 212, 213 | Human Anatomy and <br>  <br>  <br> Physiology I, II, III | (each) 5 |
| :--- | :--- | ---: |
| BIO 216 | Introduction to Microbiology | 5 |
| CHE 201, 202, 203 | Organic Chemistry I, II, III | (each) 5 |
| Highly Recommended: |  |  |
| SCI 230 | Scientific Writing | 3 |

Additional requirements and electives as appropriate.


## DEVELOPMENTAL STUDIES

The Developmental Studies Division exists to provide educational options for students. An initial assessment of academic skills is required in order to provide the student with courses that are best suited to her/his educational goals. Students have an opportunity to acquire or improve their skills in the areas of math, reading, writing, and basic oral language development to the required level necessary to pass the General Education Development (GED) examination, and/or to benefit from certificate or degree programs.

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 will 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. Foreign students wishing to take this curriculum must have their visa cleared by the Office of Admissions and Records.

## APRENDER INGLES COMO SEGUNA LENGUA

Estas clases son principalmente para estudiantes que quieren aprender o mejorar su habilidad en inglés. Énfasis en la ensênanza de las clases será en desarollar habilidades orales (de conversación) que son relacionades al estudiante, tal como educación al consumidor, el empleo, la escuela, y la comunidad.

La matriculación de estudiantes del extranjero que desean tomar estas clases debe de ser aprobada por al oficina de admisión.

Aunque el énfasis de estas clases será en que el estudiante obtenga habilidad oral (de conversacion), lectura y escritura principante será enseñada junto con la ensennanza oral. Como parte de las clases, los estudiantes participarán en excurciones cuando el instructor vea la necesidad.

## DEVELOPMENTAL EDUCATION

Developmental courses include a sequence of skill development classes in reading, language, and/or mathematics. They are content-oriented courses designed to prepare students for the GED or for remedial-level 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 arithmetic, language, reading comprehension, 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 certificate is equivalent to the high school diploma and is accepted by most employers and schools of higher education. The GED certificate often provides increased opportunities for future education.

These courses are designed to give students who have a GED, high school diploma, or their equivalency, preparation in reading, the language arts, and math. They also prepare the student with social science skills necessary for them to meet their personal, vocational, and/or academic needs on a college level.

## FUNDAMENTAL STUDIES

Remedial courses are designed for the college student who needs to improve basic skills in reading, language, and/or mathematics before attempting entry-level college courses.

## DEVELOPMENTAL STUDIES CURRICULUM

A student will be placed into the courses indicated by preassessment in language, reading, and/or mathematics. The student will continue through the sequence of courses in one or more of the skill areas until such time as the student has met his or her self-improvement goals, passed the GED examination, or acquired the skill competencies to do entry-level college work.
Language:Possible Course Hours
English as a Second Language (ESL) ..... 5-36
Developmental Language ..... 9
Remedial Language ..... 10-16
Mathematics:
Developmental Mathematics ..... 20
Remedial Mathematics ..... 5-20
Reading:
Developmental Reading ..... 20
Remedial Reading ..... 9-24


## 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 include individual tutoring, are available to assist students in successfully completing their courses. Handicapped students also can receive special assistance if needed.

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 18 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.

## OCCUPATIONAL EDUCATION ADVISORY COUNCIL

Lynn Brown, Chair Director of Professional/ Technical Services North Colorado Medical Center

Paul Gaiser, Dean, Occupational Education
Aims Community College

Judy Griego
EODS Director
Division of Human Resources Greeley

Rolland Higgins
Higgins Sentry Hardware Greeley

Paul Housley
Training Department
Eastman Kodak Company Windsor

Bob Johnson, Senior Vice-President Trust Officer
United Bank of Greeley

Kathi Kline
Resource and Development
Manager
Hewlett-Packard

Dale Majors, President
Majors' Welding Supply Greeley

Diane Schwenke
Director of Economic Development
Greeley Area Chamber of Commerce

Kent Stauffer
Director of Training and Education
State Farm Insurance Companies Greeley

## JOB PLACEMENT

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 Job Placement Office is located in Ed Beaty Hall. 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.


## BUSINESS DIVISION PROGRAMS

Students enrolling in Business Division programs will gain the knowledge and skills required for entry into a variety of related occupations. Courses are also offered to enable persons currently employed to improve their skills.

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, provides business instructors, instructional media, reference materials, and machines to assist business students.

## ACCOUNTING <br> ACCOUNTING

(two-year A.A.S. degree)

## BUSINESS INFORMATION SYSTEMS business information systems (two-year A.A.S. degree)

GENERAL BUSINESS
$\begin{array}{lr}\text { BUSINESS SECRETARY } & \text { (two-year A.A.S. degree) } \\ \text { LEGAL SECRETARY } & \text { (two-year A.A.S. degree) } \\ \text { OFFICE CLERICAL } & \text { (one-year certificate) }\end{array}$

## MID-MANAGEMENT

MID-MANAGEMENT
(two-year A.A.S. degree)
FASHION MERCHANDISING OPTION
INDUSTRIAL/INSTITUTIONAL MANAGEMENT OPTION
SALES OPTION
SMALL BUSINESS MANAGEMENT OPTION
REAL ESTATE FOR
COLORADO LICENSING (no degree awarded)


## 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.

## DEGREE PROGRAM

## CREDITS

## Degree Requirements:

ACC 101 Principles of Accounting 1 5
ACC 102 Principles of Accounting II 5
ACC 103 Principles of Accounting III 5
ACC 105 Payroll Accounting 3
ACC 196 Accounting Practicum 1
ACC 197 Computerized Practicum 1
ACC 201 Intermediate Accounting I 5
ACC 202 Intermediate Accounting II 5
ACC 205 Accounting Systems 5
ACC 206 Cost Accounting 5
ACC 207 Financial Management 5
ACC 208 Electronic Spreadsheets/ACC 2
ACC 299 Computerized Practicum/HP 1
BIS 110 Introduction to Data Processing 5
BUS 125 Adding and Calculating Machines 2
BUS 142 Intermediate Communications 5
BUS 143 Advanced Communications 3
BUS 200 Business Law 5
MAT 110 Applied Business Mathematics 5
Select one from the following courses: 5
BUS 100 Introduction to Business 5
PSY 145 Human Relations at Work 5
Select two from the following courses: $3-8$
$\begin{array}{lll}\text { ACC } & 121 \text { Income Tax Accounting I } 5\end{array}$
ACC 122 Income Tax Accounting II 3
ACC 209 Electronic Spreadsheet Applications for Cost Accounting

2
ACC 215 Electronic Spreadsheet Applications for Finance
ACC 216 Advanced Electronic Spreadsheets/ACC 2
ACC 297 Advanced Computerized Practicum 2
ACC 298 Accounting Practicum II 1
$\begin{array}{ll}\text { Electives (selected with advisor's approval) } & 10-15\end{array}$
Total Credits for A.A.S. Degree

## ACCOUNTING ADVISORY COMMITTEE

Chuck Anderson
Anderson \& Whitney

Dr. Franklin Cordell
Professional Outreach Associates
Arlin Disselkoen
Greeley National Bank

Dennis DeCamp
Hewlett-Packard

John Ewert
United Bank of Greeley
Linda Kadlecek
Kosmicki \& Company
Allen McConnell
University of Northern Colorado
Chuck Martin
Monfort Packing Company

## BUSINESS INFORMATION SYSTEMS

(Cathy Hall, Ruby Loveless, Thelma Stephenson)
Potential Opportunities: The program is designed to prepare students for employment in three major areas: computer operations, computer programming, and systems analysis and design.

Logical reasoning, problem-solving ability, perseverance, and inquisitiveness are definite assets for students. Jobs which relate to these areas would include: computer programmer, systems administrator, computer operator, computer scheduler, resource librarian, systems analyst, operations manager, programming manager, and data processing manager.
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.

## DEGREE PROGRAM

## CREDITS

Degree Requirements:
ACC 101 Principles of Accounting I 5
ACC 102 Principles of Accounting II 5
$\begin{array}{llll}\text { ACC } & 103 & \text { Principles of Accounting III } & 5\end{array}$
ACC 299 Computerized Practicum/HP 1
BIS 110 Introduction to Data Processing 5
BIS 111 Computer Concepts I 5
BIS 112 Computer Concepts II 5
BIS 116 Business BASIC Programming 5
BIS 117 Computer Operations 5
BIS 121 Structured COBOL Programming 5
BIS 122 Advanced Structured COBOL 5
BIS 205 Assembler Language Programming 5
BIS $206 \quad \begin{gathered}\text { New Issues and Developments in } \\ \text { Data Processing }\end{gathered}$
BIS 211 Structured Systems Analysis 5
BUS 142 Intermediate Communications 5
BUS 143 Advanced Communications 3
MAT 110 Applied Business Mathematics 5
Select one with advisor approval:
BIS 107 Problem Solving Using Numters 5
BIS 126 Report Program Generator II (RPG II) 5
BIS 127 PL/ 1 Programming Language I 5
BIS 135 Micro Assembly Language 5
BIS 145 IBM PC Symphony and D Base III 5
BIS 201 C Programming Language 5
BIS 207 Program Maintenance and JCL 5
BIS 212 Systems Analysis II

Select one from the following courses:
5
BUS 100 Introduction to Business
PSY 145 Human Relations at Work
Electives (selected with advisor approval)
Total credits for A.A.S. Degree


## BUSINESS INFORMATION SYSTEMS ADVISORY COMMITTEE

Richard Boggs
Aims Community College

Marilyn Jenkins
Hewlett-Packard
Donn Ruby
Weld County
Duane Nelson
School District 6
Vicki Wright
Monfort of Colorado

## GENERAL BUSINESS

(Ann Aron, Bobbi Benesch, Lucille Eckhardt, Jerry Goddard, Gale Heiman, Judy Leusink, Maxine Marquez, Paul Martin, Trudi Montoya, Trulene Page, Linda Scott)

Potential Opportunities: The programs are designed for persons interested in gaining basic skills and knowledge for positions as a clerk bookkeeper; a secretary in a business, education, or government office; or a legal secretary in a law office, savings and loan, real estate, or insurance office with maintenance and custody of legal records.

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.

## BUSINESS SECRETARY

## DEGREE PROGRAM

|  |  |  | CREDITS |
| :--- | :--- | :--- | :--- |
| Degree Requirements: | 74 |  |  |
| BUS | 100 | Introduction to Business | 5 |
| BUS | 102 | Typewriting II | 4 |
| BUS | 103 | Typewriting III | 4 |
| BUS | 104 | Typewriting IV | 4 |
| BUS | 107 | Office Procedures | 5 |
| BUS | 110 | Introduction to Word/Information |  |
|  | Processing |  |  |

Electives (selected with advisor approval)
Total Credits for A.A.S. Degree

## OFFICE CLERICAL <br> CERTIFICATE PROGRAM



## GENERAL BUSINESS ADVISORY COMMITTEE

| Carol Bailey | JoAnne Hilzer |
| :---: | :---: |
| National Board of Chiropractic Examiners | Platte Valley High School |
|  |  |
|  | Pat Morimoto |
| Iris Bergum | University of Northern Colorado |
| State Farm Insurance Companies |  |
|  | Claudia Reich |
| Kate Campbell | Kosmicki and Company |
| Union Colony Bank |  |
|  | Sherry White |
| Joanna Christensen | John Dent Law Office |
| Greeley West High School |  |

## MID-MANAGEMENT

(Jim Adams, Claudia Boehm, Maxine Christenson, Elmer Kiekhaefer)
Program Length: Usually six quarters for Associate of Applied
Science degree program. The degree will be awarded in Mid-
Management, with curriculum options available, such as: Fashion

Merchandising, Industrial/Institutional Management, Sales, and Small Business Management. Usually two quarters are needed for courses offered in real estate toward completion of the Colorado Real Estate Agent license or the Colorado Real Estate Broker license. No degree is offered in real estate.

A student seeking an Associate of Applied Science degree in MidManagement must consult with a Mid-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 Mid-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.

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.

## MID-MANAGEMENT DEGREE PROGRAM

CREDITS
Degree Core Requirements:
BUS 142 Intermediate Communications 5
BUS 143 Advanced Communications
MAT 110 Applied Business Math 5
MGT 101 Sales 5
MGT 207 Human Resource Management 5
MGT 211 Principles of Marketing 5
MGT 215 Principles of Management 5
MGT 291 Personal Adjustment to Business 6
MGT 292 Personal Adjustment to Business 6
PSY 145 Human Relations at Work 5

## FASHION MERCHANDISING OPTION

Degree Option Requirements:BUS 121 College Bookkeeping I42
MGT 105 Principles of Advertising ..... 5MGT 120 Introduction to Fashion Merchandising
5
MGT 127 Language of Clothing Language of Clothing ..... 5
MGT 208 Small Business Management ..... 5
MGT 225 Fashion Retail Merchandising ..... 5
MGT 226 Fashion Textiles ..... 5
MGT 227 Merchandising Fashion Accessories ..... 3
MGT 228 Careers in Fashion Merchandising ..... 1
MGT 245 Analysis of Fashion Concepts ..... 3
Electives (selected with advisor approval) ..... 7
Total Credits for A.A.S. Degree99
CREDITS

## INDUSTRIAL/INSTITUTIONAL MANAGEMENT OPTION

CREDITS
Degree Option Requirements:
BIS 105 Computers for Small Business 5
BUS 121 College Bookkeeping 1 5
BUS 200 Business Law 5
MGT 235 Organizational Environment 5
MGT 236 Labor Law Relations 5
MGT 237 Supervisory Management 5
MGT 239 Purchasing 5
MGT 293 Personal Adjustment to Business 6
Electives (selected with advisor approval)
Total Credits for A.A.S. Degree


SALES MANAGEMENT OPTION

## CREDITS

Degree Option Requirements:
BIS 105 Computers for Small Business 5
BUS 200 Business Law 5
MGT 102 Advanced Sales 5
MGT 105 Principles of Advertising 5
MGT 171 Management Activity I 2
MGT 206 Sales Management 5
MGT 235 Organizational Environment 5
MGT 238 Marketing Research 4
MGT 293 Personal Adjustment to Business 6
Electives (selected with advisor approval)
Total Credits for A.A.S. Degree
SMALL BUSINESS MANAGEMENT OPTION
CREDITS42
BIS 105 Computers for Small Business ..... 5
BUS 121 College Bookkeeping I ..... 5
BUS 200 Business Law ..... 5
MGT 105 Principles of Advertising ..... 5
MGT 171 Management Activity I ..... 2
MGT 208 Small Business Management ..... 5
MGT 212 Management Decision Making ..... 5
MGT 238 Marketing Research ..... 4
MGT 293 Personal Adjustment to Business ..... 6
Electives (selected with advisor approval) ..... 7
Total Credits for A.A.S. Degree ..... 99

## REAL ESTATE

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

| RES | 106 | Real Estate Practice and Law |  |
| :--- | :--- | :--- | :--- |
| RES | 115 | Colorado Real Estate Law and <br> Colorado Real Estate Contracts | 6 |
|  |  | 3 |  |

## Elective/Support Courses

RES 103 Real Estate License Preparation 3
RES 104 Real Estate Closing and Trust Accounts3
RES 205 Real Estate Finance ..... 2
RES 207 Advanced Real Estate Law ..... 1

Courses offered toward completion of the Colorado Real Estate Broker license:
RES 104 Real Estate Closing and Trust Accounts ..... 3
RES 106 Real Estate Practice and Law ..... 6
RES 115 Colorado Real Estate Law and Colorado Real Estate Contracts ..... 3
RES 205 Real Estate Finance ..... 2
RES 207 Advanced Real Estate Law ..... 1
Elective/Support Courses
RES 103 Real Estate License Preparation ..... 3
MID-MANAGEMENT ADVISORY COMMITTEE

Richard Erwin
Better Business Bureau

Rolland Higgins Higgins Sentry Hardware

Phillip Lunsford
Wendy's Restaurant

Bill May
Greeley Central High School

Dave McCollough Joslins

Sharon Snyder Conditioning Spa

## REAL ESTATE ADVISORY COMMITTEE

Sandra Bodie
Greeley Real Estate, Inc.

Carol Campbell
Century 21
Campbell \& Associates

Richard Gazlay
Cornerstone Management

Paul Haugen
Scott Realty Company

Jack Weber
McComb Realty


## PUBLIC SERVICE DIVISION PROGRAMS

The Public Service Division, in addition to the programs listed, has the capability to work individually or collectively with employers to offer 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.

Registration Requirement: All students taking a course or courses in a Public Service Divison 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

(two-year A.A.S. degree)

## A. A. DEGREE WITH EMPHASIS <br> IN CRIMINAL JUSTICE/JUSTICOLOGY (see page 27)

BASIC PEACE OFFICER ACADEMY
FIRE SERVICE TECHNOLOGY (two-year A.A.S. degree) OPTION: FIRE PROTECTION TECHNOLOGY FIRE SCIENCE TECHNOLOGY

## FIRE SERVICE TRAINING ACADEMY

 (one-quarter certificate)VOLUNTEER FIRE SERVICE TRAINING
(certificate)
EMERGENCY MEDICAL TECHNICIAN (certificate) RADIOLOGIC TECHNOLOGY (two-year A.A.S. degree) OTHER HEALTH SERVICES

## CRIMINAL JUSTICE

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

Program Description: This program is structured for the individual seeking either pre-service or in-service education and training. This program is vitally concerned with both practice and theory in the conviction that neither can stand alone. Sound practice demands sound theory, while advances in knowledge grow out of the realities of practice.

Criminal Justice/Justicology is an interdisciplinary field that draws on the knowledge and methods of a large number of disciplines, including psychology, sociology, political science, and history. 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: Although an in-depth study of career placement has not been completed, many graduates find positions with various federal, state and local criminal justice agencies. Occupations within these agencies might include the border patrol, corrections/detentions officer, police officer, etc.

Registration Requirement: All students taking a course or courses in a Public Service Divison program must have an appropriate Public Service Division program advisor's signature on the course registration before registering. However, students do not have to be Criminal Justice majors to enroll in Criminal Justice classes.

## DEGREE PROGRAM

## Degree Requirements:

## CREDITS

CRIMINAL JUSTICE CORE
CRJ 110 Introduction to Criminal Justice 3
CRJ 111 The Police Function 3
CRJ 112 The Judicial Function 3
CRJ 113 The Correctional Function 3
CRJ 114 Community and the Justice System 3
CRJ 201 Criminal Law 3
CRJ 202 Constitutional Law I 3
CRJ 203 Constitutional Law II 3
CRJ 248 Criminology 3
CRJ 249 Discretionary Justice 3
CRJ 255 Criminal Justice Internship 3
COMMUNICATIONS AND HUMANITIES 20
CON 102 Introduction to Writing 5
BUS 141 Introduction to Communications 5
BUS 142 Intermediate Communications 5
Select one of the following courses:
HUM 100 Introduction to Humanities 5
HUM 101 Introduction to the Greek \& Roman Period 5
PHI 105 Introduction to Philosophy 5
PHI 107 Introduction to Logic 5
BEHAVIORAL AND SOCIAL SCIENCES
20
Select four from any of the following courses:
ANT 101 Introduction to Anthropology 5
ECO 100 Introduction to Economics 5
GEO 105 World Georgraphy 5
HIS 106 History of the U.S. from 1865-1945 5
MAS 162 Introduction to Modern Mexico 5
POS 101 American Government 5
POS 118 State and Local Government 5
PSY 101 General Psychology I
PSY 221 Abnormal Psychology

SOC 101 Introduction to Sociology
RECOMMENDED ELECTIVES
Select electives after consulting with a Criminal Justice Advisor.
Total Credits for A.A.S. Degree

## BASIC PEACE OFFICER ACADEMY

Program Length: Twelve to thirteen weeks; eight hours per day/five days per week.

Program Description: A unique aspect of Criminal Justice at Aims College is the Peace Officer Basic Academy program. Success in the Academy leads to a "certificate of completion" and 35 college credits, most of which apply to the A.A.S. degree program in Criminal Justice.
The Peace Officer Basic Academy offers an excellent opportunity for individuals desiring "certifiability" as peace officers. REMEMBER, only the State of Colorado Peace Officers Standards and Training (POST) Board may grant certification as a Peace Officer.

The Aims College Regional Peace Officer Basic Academy follows the curriculum of basic law enforcement training established by the Colorado Peace Officers Standards and Training Board and is reviewed/approved by the State of Colorado.

Program Objective: Knowing subject matter academically does not guarantee that one will be a professional peace officer. But it should guarantee that the individual does not start exploring "as new" an approach discarded by others long ago.

An education, even in a so-called practical or professional field such as law enforcement, cannot really prescribe what an individual should do. It may, however, suggest the following:

1. What not to do.
2. What has been done before.
3. Where to look when one has questions about what one is doing now.
4. How to think clearly, act well in one's work, and appreciate life.

This Academy emphasizes the acquisition of knowledge of how to apply the principles of law enforcement correctly and sufficient physical fitness to perform with vigor and enthusiasm.

Potential Opportunities: Although an in-depth study of career placement has not been completed, career opportunities appear good since our Academy graduates have been found to be excellent peace officers who are worth employing.

Registration Requirement: Must consult with the Academy Director prior to receiving the necessary application packet.

## CRIMINAL JUSTICE ADVISORY COMMITTEE

Undersheriff Rick Dill Weld County Sheriff's Office

Bruce Luedeman
Department of Public Safety
U.N.C.

Stan Peek
District Attorney's Office
Weld County
Philip L. Reichel, Professor
Department of Sociology
U.N.C.

Capt. Philip R. Wilson Larimer County Sheriff's
Department

Officer Susan Kinsman
Greeley Police Department

Chief George R. Ward
Fort Lupton Police Department
Chief Dick Evans
Evans Police Department

## FIRE SERVICE TECHNOLOGY DEGREE PROGRAM

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

Potential Opportunities: The protection of life and property from fire is the primary function of a firefighter. With today's sophisticated techniques, training, and equipment, however, modern firefighters 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 a prerequisite. 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 (firefighting) 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 a Public Service Divison program must have an appropriate Public Service Division program advisor's signature on the course registration before registering.


## FIRE PROTECTION TECHNOLOGY OPTION

## Degree Requirements:

CON 101 Fundamentals of Composition
5
CSC 100 The Computer and Society

| FIS | 100 | Introduction to Fire Science and Suppression | 3 |
| :--- | :--- | :--- | :--- |
| FIS | 104 | Fire Company Organization and Procedure | 3 |
| FIS | 108 | Fire Hydraulics | 3 |
| FIS | 111 | Fire Fighter Occupational Safety | 3 |
| FIS | 113 | Fire Inspector I | 3 |
| FIS | 115 | Introduction to Industrial Trades | 3 |
| FIS | 117 | Effective Fire Service Presentations | 5 |
| FIS | 190 | Administration of Justice and Court Procedures | 3 |
| FIS | 202 | Fundamentals of Fire Prevention | 3 |
| FIS | 203 | Uniform Building and Fire Codes | 5 |
| FIS | 205 | Life Safety Codes | 3 |
| FIS | 207 | Applied Chemistry for Firefighters | 5 |
| FIS | 208 | Hazardous Materials I | 3 |
| FIS | 209 | Hazardous Materials II | 3 |
| FIS | 212 | Fixed Fire Protection Equipment \& Systems | 3 |
| FIS | 213 | Fire Service Supervision | 3 |
| FIS | 218 | Fire Investigation | 3 |
| FIS | 230 | Building Construction for the Fire Service | 3 |
| MAT | 101 | Applied Math I | 5 |
| PHY | 120 | Fundamentals of Physics | 5 |
| PSY | 111 | Basic Human Potential Seminar | 5 |
| SOC | 101 | Introduction to Sociology | 3 |
| Recommended Electives: | 5 |  |  |
| BUS | 101 | Beginning Typewriting | 5 |
| FIS | 112 | Fire Service Planning | 5 |
| FIS | 119 | Fire Service Instructor I | 5 |
| HEN | 106 | Safety and First Aid | 3 |
| TEM | 105 | Emergency Medical Technician | 3 |
| POS | 101 | American Government | 3 |
| POS | 118 | State and Local Governments | 3 |
| PSY | 107 | Transactional Analysis | 3 |

Note: Five credit hours of elective credit hours allowed for a student who has been certified by the State of Colorado at the Firefighter One Level.

Total Credits for A.A.S. Degree

## FIRE SCIENCE TECHNOLOGY OPTION

Degree Requirements:
CON 101 Fundamentals of Composition
CSC 100 The Computer and Society 4
FIS 100 Introduction to Fire Science and Suppression 3
FIS 104 Fire Company Organization and Procedure 3
FIS 106 Fire Fighting Tactics and Strategy 5
FIS 108 Fire Hydraulics 3
FIS 110 Fire Apparatus and Equipment 3
FIS 111 Fire Fighter Occupational Safety 3
FIS 113 Fire Inspector I 3
FIS 115 Introduction to Industrial Trades 3
FIS 117 Effective Fire Service Presentations 5
FIS 206 Rescue Practices 3
FIS 207 Applied Chemistry for Firefighters 5
FIS 208 Hazardous Materials I 3
FIS 209 Hazardous Materials II 3
FIS 213 Fire Service Supervision 3
FIS 218 Fire Investigation 3
FIS 230 Building Construction for the Fire Service3
MAT 101 Applied Math I ..... 5
Fundamentals of Physics ..... 5
PSY 111 Basic Human Potential Seminar ..... 3
SOC 101 Introduction to Sociology ..... 5

## Recommended Electives:

BUS 101 Beginning Typewriting 4

FIS 112 Fire Service Planning 3
FIS 119 Fire Service Instructor I 3
HEN 106 Safety and First Aid 3
TEM 105 Emergency Medical Technician 9
POS 101 American Government 5
POS 118 State and Local Government 5
PSY 107 Transactional Analysis 3
Total Credits for A.A.S. Degree

## VOLUNTEER FIREFIGHTER TRAINING

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

The Volunteer Firefighter Training Program is designed to provide theory and practical training for volunteer firefighters and those who wish to become volunteer firefighters.

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

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.
Certificate Program Credits
Certificate requirements:
A total of 24 credit hours from the following list of classes must be completed:

| FIS | 196 | Volunteer Fire Seminar | 1 |
| :--- | :--- | :--- | :--- |
| FIS | 197 | Volunteer Fire Seminar | 2 |
| FIS | 198 | Volunteer Fire Seminar | 3 |
| FIS | 199 | Volunteer Fire Seminar | 4 |
| TEM | 106 | First Responder | 4 |
| TEM | 127 | Cardiopulmonary Resuscitation | 1 |
| TEM | 128 | C.P.R. Instructor | 1 |
| TEM | 196 | Firefighter First Aid | 1 |

The above classes must include the following requirements:

BASIC FIREFIGHTING TRAINING
Regular Department Training (Maximum 1 credit)
Firefighter I Certification or
Firefighter I Theory (Maximum 1 credit)
Firefighter II Certification (Maximum I credit)
Fire Safety
Initial Fire Attack
Driver Training
Fire and Rescue Field Days
Other Basic Firefighting topics approved by advisor

Student must also pass a Basic Firefighting knowledge and skills competency exam.

Credits

## EMERGENCY MEDICAL TRAINING

First Responder
Emergency Medical Technician
C.P.R.
C.P.R. Instructor

Other E.M.S. topics approved by advisor

FIRE COMMAND AND ADMINISTRATION TRAINING
Rural Firefighting Tactics
On Scene Coordination
Fire Officer Training
Firefighter III Certification (Maximum 1 credit)
Other Fire Command topics approved by advisor
HAZARDOUS MATERIALS TRAINING
Basic Hazardous Materials
Other Hazardous Materials Topics approved by advisor
SPECIALIZED FIREFIGHTER TRAINING
Dive Rescue
Ice Rescue
Trench Rescue
Farm Accident Rescue
Extrication
Fire Prevention
Other Specialized Firefighter Topics approved by advisor
FIREFIGHTER ELECTIVES
To be selected from any above topics


## FIRE SERVICE TRAINING ACADEMY

Program Length: Usually 8 weeks for Certificate in Occupational Education program. Twenty-five credit hours required ( 320 clock hours)

The Fire Service Training Academy is a training program which meets eight (8) hours per day, five (5) days per week. It is designed for the recruits/cadets who are in need of basic job entry skills and knowledge. The State of Colorado Firefighter I examinations are given prior to academy graduation.

Potential Opportunities: Entry level employment in this field is frequently difficult to obtain. This course is designed to provide entry level knowledge and skills to firefighter recruits/cadets, or the student who may be seeking a career in the fire service.

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.

# CERTIFICATE PROGRAM 

| Certificate Requirements: | 25 |  |
| :--- | :---: | :---: |
| FIS 105 Fire Service Training Academy | 25 |  |
| Total Credits for Certificate | $\mathbf{2 5}$ |  |

FIRE SERVICE TECHNOLOGY VOLUNTEER FIRE SERVICE TRAINING CERTIFICATE
FIRE SERVICE TRAINING ACADEMY ADVISORY COMMITTEE

Bill Bailey
Aims Community College

Dave Bierwiler
Longmont Rural Fire Protection District

Gene Chantler
Poudre Fire Authority

Bob Claypool
Community Representative

Don Cummins
Aims Community College
South Campus

Verne Einspahr
Aims Community College

Paul Gaiser
Aims Community College

Dave Goodale
Aims Community College

Willard (Will) Martin Greeley Fire Department

Rex Mauch
State Farm Insurance

Dan Peck
Aims Community College

Robert Starman
Loveland Fire Department

Duane Stauffer
Kodak of Colorado

Greg Thompson
Part-Time Instructor

Gerald Ward Berthoud Fire Department

CERTIFICATE PROGRAM

Certificate Requirements:<br>TEM 105 Emergency Medical Technician 12

Total Credits for Certificate

# CERTIFICATE RENEWAL PROGRAM 

## CREDITS

Certificate Renewal Requirements:
TEM 108 EMT Refresher
4
Total Credits for Certificate Renewal

## EMERGENCY MEDICAL TECHNICIAN ADVISORY COMMITTEE

Dave Bressler, EMT-P
Weld County Ambulance Service
Fort Lupton Fire Department

Gary Sandau, First Resp.
LaSalle Fire Department

James Seery, R.N.
Eastman Kodak Company
Colorado Division

Jerry Wones, EMT-P
Weld County Ambulance Service

Frank R. Purdie, M.D.
North Colorado Medical Center

## RADIOLOGIC TECHNOLOGY

Program Length: Usually eight quarters for Associate of Applied Science degree program, starting in the fall quarter only.

Entrance Requirements: This program starts in the fall quarter ONLY. Entry is highly competitive and early application is recommended. A separate program application for the fall quarter classes must be submitted by the end of May prior to the term the student expects to begin the program. Prerequisites for program acceptance are necessary. Contact program faculty for entrance specifics as soon as possible prior to application deadline.

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: Courses listed in this program are subject to change. Students can verify the course offerings from the program director.

| DEGREE PROGRAM |  |
| :---: | :---: |
| Degree Requirements: | CREDITS |
| First Year |  |
| Fall Quarter | 10 |
| XRT 100 Introduction to Radiologic Technology | 2 |
| XRT 101 Radiographic Postioning I | 4 |
| XRT 105 Patient Care | 2 |
| XRT 111 Clinical Experience I | 2 |
| Winter Quarter 16 |  |
| XRT 102 Radiographic Positioning II | 4 |
| XRT 112 Clinical Experience II | 5 |
| XRT 118 Radiation Protection \& Biology | 3 |
| XRT 121 Radiographic Exposure 1 | 4 |
| Spring Quarter |  |
| XRT 103 Radiographic Positioning III | 4 |
| XRT 113 Clinical Experience III | 5 |
| XRT 122 Radiographic Exposure II | 3 |
| Summer Quarter |  |
| XRT 104 Radiographic Positioning IV | 4 |
| XRT 114 Clinical Experience IV | 10 |
| Total Credits for First Year |  |
|  | CREDITS |
| Second Year |  |
| Fall Quarter |  |
| XRT 205 Special Procedures/Pathology | 2 |
| XRT 211 Clinical Experience V | 8 |
| XRT 221 X-ray Physics I | 4 |
| Winter Quarter |  |
| XRT 212 Clinical Experience VI | 8 |
| XRT 222 X-ray Physics II | 3 |
| XRT 225 Radiographic Quality Assurance | 2 |
| Spring Quarter |  |
| XRT 207 Radiographic Imaging | 2 |
| XRT 213 Clinical Experience VII | 10 |
| XRT 218 Computers in Medicine | 2 |
| Summer Quarter |  |
| XRT 214 Clinical Experience VIII | 10 |
| Total Credits for Second Year 51 |  |
| General Education Requirements |  |
| BIO 120 Basic Human Anatomy \& Physiology (to be taken First Year, Fall Quarter) | 5 |
| SPE 118 Interpersonal Communications | 5 |
| PSY 101 General Psychology | 5 |
| CON 102 Introduction to Writing | 5 |

Total Credits for A.A.S. Degree

## RADIOLOGIC TECHNOLOGY ADVISORY COMMITTEE

Raelene Bisgard, R.T.
Department of Radiology
North Colorado Medical Center
Robert Hamm, M.D.
McKee Medical Center

Greg Messmer, R.T. (R)
McKee Medical Center

Sandra Pool, R.T. (R)
Department of Radiology
Poudre Valley Hospital

Glenn Hewitt, M.D.
Department of Radiology North Colorado Medical Center

Dennis Isaacson, R.T.
Chief Technologist
Poudre Valley Hospital

Jon Lapp, R.T.
Administrative Teehnologist
North Colorado Medical Center

Beth Post, R.T. (R)
Department of Radiology North Colorado Medical Center

Debby Rogers, R.T. (R)
Greeley X-ray Group

Elizabeth Fegley, R.T.
Department of Radiology
Poudre Valley Hospital


## TECHNICAL DIVISION PROGRAMS

The Technical Division, in addition to the programs listed, has the capability to work individually or collectively with employers to offer inservice 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.

## General Program Requirements:

Students enrolling in Technical 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-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. All students enrolling in Technical Division courses MUST be advised and have registration forms signed by a Technical Division program advisor.
5. Students enrolling in designated Technical Division programs SHOULD complete preassessment evaluation (in College Assessment Center) prior to enrollment. Additional placement or diagnostic evaluations may be required before acceptance into a specific program.
6. Students lacking essential skills or background may obtain required knowledge through preparatory classes within the College. (See a program advisor.)

## General Education Requirements:

All A.A.S. degree programs require a minimum of 18 credit hours of general education. The curriculum for each program has these classes designated. Program advisors will assist in course selection. The student must take a minimum of one advisor approved course in each of the following disciplines:

1. Mathematics/Science
2. Behavioral/Social Science
3. Communications/Humanities

The Technical Division offers the following programs:

## AGRICULTURE TECHNOLOGY

Sales and Service Option
Production Option

AGRICULTURE TRANSFER PROGRAM (see page 34)
(two-year A.A.S. degree or four-quarter certificate)
(two-year A.S.degree)

FARM \& RANCH BUSINESS MANAGEMENT (no degree awarded) YOUNG FARMER PROGRAM (no degree awarded)
(two-year A.A.S. degree or three quarter certificate)
(two-year A.A.S. degree) (three-quarter certificate) (two-year A.A.S. degree)

ENGINEERING TECHNOLOGY
Architectural Option
Civil Option
Mechanical Option
Computer Aided Manufacturing Option
Registration Requirement: All students taking a course in a Technical Division program must have an appropriate Technical Division program advisor's signature on the course registration form before registering.


## AGRICULTURE TECHNOLOGY

Program Advisor: Glen Sowder
Program Length: Usually four quarters for Certificate in Occupational Education program or six quarters for Associate in Applied Science degree program.

Potential Opportunities: The program is designed to prepare students for job entry level employment. The Salcs and Service Option will provide an employable background in the following:
A. Agriculture Cooperatives
B. Agriculture Chemical Services
C. Agriculture Management Trainee
D. Non-farm agriculture businesses

The Production Agriculture Option will provide an employable background in the following:
A. Farm and Ranch Management
B. Livestock Production
C. Field Crop Production

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

## DEGREE PROGRAM

Degree Requirements:

## CREDITS

General Education
The following courses will fulfill the general education requirements. Other general education courses may be accepted with department approval.

Communication and Arts
CON 101 Fundamentals of Composition Mathematics and Science
minimum 8
CHE 100 Fundamentals of Chemistry
Select one from the following:
CSC 100 The Computer and Society
CSC 101 Introduction to Programming in
the Basic Language
Behavioral and Social Science minimum 5
PSY 101 General Psychology I
SOC 101 Introduction to Sociology
ECO 201 Principles of Economics: Macroeconomics
ECO 202 Principles of Economics: Microeconomics
PHI 107 Introduction to Logic

## Agriculture Core Courses

SALES AND SERVICE OPTION
PRODUCTION AGRICULTURE OPTION
AGR 111 Introduction to Agribusiness 5
AGR 115 Agriculture/Natural Resource Economics 5
MAT 101 Applied Mathematics 5
OR
MAT 110 Applied Business Mathematics
BUS 100 Introduction to Business
MGT 101 Sales (Sales and Service option only) 5

|  |  | Agriculture on-the-Job Training 1 OR | 10 |
| :---: | :---: | :---: | :---: |
| AGR | 136 | Agriculture on-the-Job Training <br> AND | (5) |
| AGR | 137 | Agriculture on-the-Job Training | (5) |
| AGR | 235 | Agriculture on-the-Job Training II OR | 10 |
| AGR | 236 | Agriculture on-the-Job Training <br> AND | (5) |
| AGR | 237 | Agriculture on-the-Job Training OR | (5) |
| FMT | 101 | Farm and Ranch Business Management I | 22 |
| The On-The-Job training may be waived if the student can show satisfactory evidence of work experience in the area of the option. If the On-The-Job training is waived, the student MUST complete 20 credits of study related to their option area and with the approval of their advisor. |  |  |  |

Agriculture Electives
SALES AND SERVICE OPTION ..... 41
PRODUCTION AGRICULTURE OPTION ..... 46
Select a minimum of 25 credits from the following:
AGR 125 Agriculture Pesticides ..... 5
AGR 178 General Crop Science ..... 5
AGR 179 Introduction to Animal Science ..... 5
AGR 215 Introduction to Soils and Fertilization ..... 5
AGR 216 Feeds and Feeding ..... 5
AGR 217 Livestock Selection ..... 3
AGR 218 Farm and Ranch Management ..... 5
AGR 205 Marketing for Farmers ..... 3

The balance of the agriculture elective credits may be selected from the following:

Six (6) agricultural credits may be earned by completion of approved Young Farmer programs.
Twenty-two (22) agricultural credits may be earned by successful completion of FMT 102, Farm \& Ranch Business Management II

| WLT | 105 | Basic Oxy/Acet Welding | 4 |
| :--- | :--- | :--- | :--- |
| WLT | 106 | Advanced Oxy/Acet Welding | 4 |
| WLT | 107 | Basic Shielded 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 | 204 | Welding Problems I | 4 |
| AMT | 106 | Tune-up | 4 |
| AMT | 107 | Advanced Engine Tune-up | 4 |
| AMT | 207 | Intro to Diesel Engine | 6 |

## CREDITS

EMPLOYEE COMMUNICATIONS
AGS 130 Cooperative Organizations ..... 3
AGS 132 Agribusiness Telephone Communications ..... 3
FERTILIZER AND AG CHEMICALS
AGS 141 Fertilizer ..... 3
AGS 142 Ag Chemicals ..... 3
AGS 143 Lawn and Garden Center Sales ..... 3
AGS 144 Corn Production ..... 3
AGS 145 Anhydrous Ammonia Safety ..... 3
AGS 146 Irrigation ..... 3
FEED AND ANIMAL HEALTH
AGS 151 Feed ..... 3
AGS 152 Animal Health ..... 3
AGS 153 Beef Production--Cow/Calf Program ..... 3
AGS 154 Beef Production--Growing \&
Finishing Program ..... 3
AGS 155 Swine Production ..... 3
AGS 156 Sheep Production ..... 3
AGS 157 Dairy Production ..... 3
PETROLEUM, TBA AND LPG
AGS 161 Petroleum ..... 3
AGS 162 Service Station Sales ..... 3
AGS 163 On-the-Farm Sales and Services ..... 3
AGS 164 Selling Tires, Batteries \& Accessories ..... 3
AGS 165 LP Gas Handling \& Storage ..... 3
AGS 166 LP Carburetion ..... 3
grain handling
AGS 173 Physical Grain Handling ..... 3
SALES TRAINING
AGS 182 Farm Store Management ..... 3
Total Credits for A.A.S. Degree ..... 109
CERTIFICATE PROGRAM
CREDITS
Certificate Requirements: ..... 60
AGR 111 Introduction to Agribusiness ..... 3
AGR 115 Agriculture/Natural Resources Economics ..... 5
AGR 178 General Crop Science ..... 5
AGR 179 Introduction to Animal Science ..... 5
AGR 218 Farm \& Ranch Management ..... 5
MGT 101 Sales ..... 5
BUS 100 Introduction to Business ..... 5
AGR 135 Agriculture On-the-Job Training I ..... 10

17 credits to be selected from AGR, AGS Home Study courses and/or Trades \& Industry courses as approved by an Agriculture Advisor.
Total Credits for Certificate

## AGRICULTURE HOME STUDY ELECTIVES

MANAGEMENT DEVELOPMENT

| AGS | 100 | Introduction to Business | 3 |
| :--- | :--- | :--- | :--- |
| AGS | 101 | Introduction to Agribusiness Management | 3 |
| AGS | 102 | Agricultural Economics | 3 |
| AGS | 103 | Personnel Management | 3 |
| AGS | 104 | Cooperative Management by Objectives | 3 |
| AGS | 105 | Positive Performance Appraisal | 3 |
| AGS | 106 | Employee Selection and Interviewing | 3 |
| ACCOUNTING/OFFICE MANAGEMENT |  |  |  |
| AGS | 122 | How Money Works in Agribusiness | 3 |
| AGS | 123 | Marketing Through Hedging | 3 |

## AGRICULTURE ADVISORY COMMITTEE

| Stewart Cooper | Phil Leffler |
| :--- | :--- |
| Farmer | Farm Credit Service |
| Greeley, CO | Greeley, CO |
| Fred Gibbs | Steve Mendell |
| B \& G Irrigation | Agland, Inc. |
| Greeley, CO | Eaton, CO |

Alan Hergert
Farmer
Greeley, CO

Dennis Hoshiko
Farmer
Greeley, CO
Frank Johnson
Farmer
Greeley, CO
Dr. Jerome Lawler
Veterinarian
Eaton, CO

Ron Miller
Soil Conservation Service
Greeley, CO
Chuck Paul
Lowell Paul Dairy
Greeley, CO
Ron Preston
Vocational Agriculture Instructor
Eaton, CO
Elmer Rothman
Agronomist
Greeley, CO

## 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 will have some flexibility as a minimum of 15 meetings is required, and the fiscal year runs from July 1 to June 30 of each year.

For additional information on Young Farmer programs, please contact Technical Division, extension 286.

## FARM AND RANCH BUSINESS MANAGEMENT

## Program Advisor: Merle Brockshus

Farm and Ranch Business Management is a systematic program built into a three year course of study and training. The course is designed for farmers and ranchers who are actively engaged in farming and/or ranching. The program involves 40 hours of classroom instruction per year along with 12 farm/ranch visits per year. Individual instruction on the use of the personal computer with agricultural software (to maintain farm/ranch records) is given during farm/ranch visits.

Students are enrolled as a farm/ranch unit (two people) in the program. If requested, a Certificate of Completion will be given upon successful completion of the three one-year courses (FMT 101, FMT 102, and FMT 103).

Farm and Ranch Business Management II (FMT 102) may be used as 22 elective hours toward the Agriculture Technology degree with advisor approval.

For additional information on program costs (special fee is charged rather than standard tuition rates), credits, content, and enrollment periods, please contact the Technical Division office, extension 286.


## AVIATION TECHNOLOGY

Program Advisor: Marvin Bay
Program Length: Usually three quarters for completion of Certificate in Occupational Education program or six quarters for Associate of Applied Science degree program. May be shorter if student is eligible to receive credit for previous flying experience.

Potential Opportunities: 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 are opportunities available in corporate flying, charter work, and the airlines.

Program Requirements: Many of the courses in the aviation program have prerequisites that must be met prior to class admittance. See course descriptions for specific requirements.

All students pursuing a degree in Aviation Technology should complete the preassessment evaluation (at College Assessment Center) prior to program enrollment.

General Information: Additional charges are made for rental of aircraft for flight labs. Aims Community College does not own aircraft but makes arrangements for flight training. (See course descriptions for flight labs.) The Aviation Department will have information detailing the flying expense of the courses-call extension 286 or 378.

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

With approval of the Aviation Department, credit for previous flying experience may be awarded as follows:

## FAA license

Private Pilot License:

Instrument Rating:

Aims Courses

| AVT | 101 | Private Flight Lab I |
| :--- | :--- | :--- |
| AVT | 102 | Private Flight Lab II |
| AVT | 105 | Aviation Seminar |
| AVT | 108 | Private Ground School |
| AVT | 109 | Private Flight Simulator |
| AVT | 117 | Commercial Flight Lab I |
| AVT | 118 | Commercial Flight Lab Il |
| AVT | 205 | Instrument Ground School |
| AVT | 212 | Instrument Flight Simulator |
| AVT | 213 | Adv Instrument Simulator |
| AVT | 216 | Instrument Flight Lab |


| Commercial Pilot |  |  |
| :--- | :--- | :--- | :--- |
| License: | AVT 206 | Commercial Ground School |
|  | AVT 211 | Commercial Flight Simulator <br> Commercial Flight Lab III |
| Certified Flight <br> Instructor: | AVT 218 | Certified Flight Instructor |
| Instrument Flight <br> Instructor: <br> Multi-Engine Rating: | AVT 225 | Multi-Engine Transition Lab |
| Basic Ground <br> Instructor: | AVT 207 | Basic Ground Instructor |
| Advanced Ground <br> Instructor: | AVT 208 | Advanced Ground Instructor |
| Instrument Ground <br> Instructor: | AVT 209 | Instrument Ground Instructor |

## DEGREE PROGRAM

| Degree Requirements: | CRED |  |
| :--- | :--- | ---: |
| Classroom |  | 2 |
| AVT | 105 | Aviation Seminar |
| AVT | 108 | Private Ground School |
| AVT | 205 | Instrument Ground School |
| AVT | 206 | Commercial Ground School |
| Flight (conducted at airport) | 6 |  |
| AVT | 101 | Private Flight Lab I |
| AVT | 102 | Private Flight Lab II |

17AVT 109 Private Flight Simulator

AVT 211 Instrument Flight Simulator I 3
AVT 212 Instrument Flight Simulator II 6
AVT 213 Advanced Instrument Simulator 5
General Education 18
CSC $101 \quad \begin{aligned} & \text { Introduction to Programming in } \\ & \text { the BASIC Language }\end{aligned}$
CON 102 Introduction to Writing 5
EAS 106 Introduction to Meteorology 4
PSY 101 General Psychology I 5
Select one of the following courses:
REA 107 Speed Reading Improvement 5
SPE 115 Speech Communications 5
SPE 116 Public Speaking 3-5
Select two of the following courses: 10
MAT 121 Beginning Algebra 5
MAT 122 Intermediate Algebra 5
MAT 131 College Algebra 5
MAT 132 College Trigonometry 5
Select one of the following courses: 5
PHY 120 Fundamentals of Physics 5
PHY 151 Introductory College Physics: Mechanics 5
$\begin{array}{ll}\text { Total Required Courses } & \mathbf{9 8 - 1 0 0}\end{array}$
Electives (select with advisor approval) 0-4
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 | 5 |
| :--- | :--- | :--- | :--- |
| AVT | 219 | Instrument Flight Instructor | 3 |
| AVT | 225 | Multi-Engine Transition Lab | 4 |
| AVT | 226 | Multi-Engine Simulator | 3 |
| AVT | 227 | Multi-Engine Instrument Simulator | 2 |
| AVT | 228 | Multi-Engine Simulator Refresher I | 1 |
| AVT | 229 | Multi-Engine Simulator Refresher II | 1 |

Other advisor approved courses may be used to meet this requirement.
Total Credits for A.A.S. Degree

## CERTIFICATE PROGRAM

| Certificate Requirements: | CREDITS |
| :--- | ---: |
| Classroom | 19 |

Classroom
AVT 105 Aviation Seminar 2
AVT 108 Private Ground School 6
AVT 205 Instrument Ground School 6
AVT 206 Commercial Ground School 5
Flight (conducted at airport) 26
AVT 101 Private Flight Lab I 3
AVT 102 Private Flight Lab II 3
AVT 117 Commerical Flight Lab 1 5
AVT 118 Commercial Flight Lab II 5
AVT 216 Instrument Flight Lab 5
AVT 217 Commercial Flight Lab III 5
Flight Simulator
AVT 109 Private Flight Simulator 3
AVT 211 Instrument Flight Simulator I 3
AVT 212 Instrument Flight Simulator II 6
Total Credits For Certificate

## AVIATION TECHNOLOGY ADVISORY COMMITTEE

| Robert Anderson | Ernest Kampe |
| :--- | :--- |
| Greeley National Bank And |  |
| Airport Board | Kampe Aviation |
| Edward Beegles | Roy Shore, M.D. |
| P.O.E. Aircraft | FAA Medical Examiner |
| George Hopper | John Warrender |
| FAA Designated Pilot Examiner | Corporate Pilot |

Bud Johnson
United Airlines

## ELECTRONICS TECHNOLOGY

Program Advisors: Bill Adamson, Fred Bantin, Bob Beck, Gene Cross, Ralph Green

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 preassessment examinations in the areas of reading, writing, math and algebra. If qualifying scores are not attained, program advisors will determine the remedial courses that will be required to gain admittance to the program.

The A.A.S. degree in Electronics Technology requires a demonstrated proficiency in composition. This may be accomplished by SUCCESSFULLY completing (CON 101) Fundamentals of Composition or QUALIFYING performance on the preassessment examination.

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.

## TESTING CENTER:

Aims Community College is an authorized testing center for NARTE and ETA.
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 Technical Division program must have an appropriate Technical Division program advisor's signature on the course registration form before registering.

## DEGREE PROGRAM

## Degree Requirements:

## First Year

Fall Quarter
CREDITS

ELT 141 Introduction to Electronics (or Evening classes): ELT 150 DC Fundamentals I
ELT 151 DC Fundamentals II
(5)

ELT 106 Applied Physics: Mechanical
SPE 115 Speech Communications

ELT 142 AC/DC Circuit Analysis (or Evening classes):

$$
\text { ELT } 152 \text { AC Fundamentals } 1
$$

ELT 153 AC Fundamentals II
ELT 107 Applied Physics: Heat-Light-Sound
ECO 201 Principles of Economics:
Macroeconomics (recommended) OR

10
CSC 101 Introduction to Programming in the BASIC Language ..... 4
ELT 144 Digital Fundamentals I ..... 5
Total Credits for First Year ..... 60
Second Year
CREDITS
ELT 201 Digital Fundamentals II ..... 519
ELT 271 Electronic Communications I ..... 5
ELT 255 Linear ICs and Sensors ..... 5
CSC 102 Advanced BASIC OR ..... 3-4
CSC 121 Programming in Pascal ..... 5
Winter Quarter ..... 16
ELT 202 Microprocessors I ..... 5
ELT 272 Electronic Communications II ..... 5
ELT 266 Electronic Design and Fabrication ..... 5
BET 207 Technical Job Seeking ..... 1
Spring Quarter ..... 15
ELT 268 Practical Solid State Troubleshooting ..... 5
Electives:
Select a minimum of 10 credit hours with advisor approval: ..... 10
Recommended Courses:
ELT 203 Microprocessors Il ..... 5
ELT 273 Electronic Communications III ..... 5
ELT 276 Fundamentals of Robotics ..... 5
ELT 275 Integrated Circuit Fabrication and Techniques ..... 5
Total Credits Second Year50
Total Credits for A.A.S. Degree ..... 110

## ELECTRONICS TECHNOLOGY ADVISORY COMMITTEE

ECO 202 Principles of Economics: Microeconomics
Spring Quarter
ELT 143 Circuits \& Applications

ELT 155 Solid State Circuits II

| William Spicer | James Becker |
| :--- | :--- |
| Hewlett-Packard | Hewlett-Packard |
| Fort Collins Division | Fort Collins Division |

Tom Henderson
Hewlett-Packard
Greeley Division

Ken Ketels
Hewlett-Packard
Greeley Division
Rick Petersen
Woodward Governor, Inc.

Lowell Shatraw
Eastman Kodak Company
Colorado Division

Don Way
IBM

## Clarence Laber

Hewlett-Packard
Loveland Division
James Becker
Fort Collins Division



## DRAFTING

Manual and computer aided drafting 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 Technelogy 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.
Drafting courses are also available to students enrolled in the Area Vocational School. These courses are offered during regular college hours to all students of the Aims Junior College District. Students interested in these courses should contact their high school principal or counselors for details and the possibilities for enrollment.
ALL drafting students are ENCOURAGED to join the local Aims Community College Chapter of AIDD (American Institute of Design and Drafting) to enhance their professional development.

## DRAFTING TECHNOLOGY

## Program Advisor:Don Darling

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. Urban Plan Drafting
4. Solar Technology Planning and Drafting
5. Engineering and Architectural Related Technologies

Program Requirements: Good eyesight, hand dexterity, and a sense of size 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 AIDD (American Institute of Design and Drafting).
The student may add electives to the certificate program with advisor approval.
Registration Requirement: All students taking a course or courses in a Technical Division program must have an appropriate Technical Division program advisor's signature on the course registration form before registering.

## CERTIFICATE PROGRAM

Certificate Requirements: CREDITS
Fall Quarter18
BET 105 Applied Technical Mathematics ..... 7
BET 100 Introduction to Engineering Technology ..... 1
BET 101 Drafting Fundamentals I ..... 6
MET 101 Engineering Materials ..... 4
Winter Quarter ..... 15
BET 102 Drafting Fundamentals II ..... 6
BET 201 Introduction to CAD ..... 4
BET 207 Technical Job Seeking ..... 1
Technical Elective ..... minimum 4
Spring Quarter15
6
BET 103 Drafting III: Engineering Graphics ..... 4
Technical Elective

Minimum Credit Hours Required for Certificate

## ENGINEERING TECHNOLOGY

Program Advisors: Bill Cullins, Don Darling, Jay Freese, Art Giesick
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 or mechanical 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 preassessment examinations in the areas of reading, writing, math, and algebra. If QUALIFYING SCORES are NOT attained, program advisors will determine the remedial courses required to gain admittance to the program.

Many Engineering Technology courses have prerequisites that MUST be met prior to class admittance. See AET, BET, CAM, CET, and MET 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: Architectural, Civil, Computer Aided Manufacturing, or Mechanical Technology. A student may receive a degree in more than one option providing ALL degree requirements are met for EACH degree option.

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

General Education Requirements: The following courses will fulfill the general education requirements. Other general education courses may be accepted with department approval.

## COMMUNICATION AND ARTS

CON 101 Fundamentals of Composition - REQUIRED
Take one of the following:

| SPE | 115 | Speech Communications |
| :--- | :--- | :--- |
| SPE | 116 | Public Speaking |
| SPE | 118 | Interpersonal Communications |
| SPE | 200 | Organizational Communications |

## MATHEMATICS AND SCIENCE

Take one of the following:

| CSC | 100 | The Computer and Society |
| :--- | :--- | :--- |
| CSC | 101 | Introduction to Programming in the Basic <br>  <br> CSC |
| 121 | Language |  |
| MAT | 123 | Collegramming in Pascal |
| MAT | 131 | College Algebra |
| MAT | 132 | College Trigonometry |

BEHAVIORAL AND SOCIAL SCIENCE
Take one of the following:
ECO 201 Principles of Economics: Macroeconomics
ECO 202 Principles of Economics: Microeconomics
PHI 107 Introduction to Logic
PSY 101 General Psychology I
PSY 111 Basic Human Seminar


## DEGREE PROGRAM ARCHITECTURAL OPTION (AET)

## CREDITS

Degree Requirements:
First Year
Fall Quarter ..... 20
AET 100 Intro to Arch History \& Technology ..... 2
BET 100 Intro to Engineering Technology ..... 1
BET 101 Drafting Fundamentals I ..... 6
BET 105 Applied Technical Mathematics ..... 7
MET 101 Engineering Materials ..... 4
Winter Quarter ..... 20
AET 105 Contract Drawing Interpretation ..... 4
BET 102 Drafting Fundamentals II ..... 6
BET 106 Applied Physics: Statics/Dynamics ..... 5
CON 101 Fundamentals of Composition ..... 5
Spring Quarter20
AET 103 Drafting III: Architecture ..... 6
BET 103 Drafting 111 Engineering Graphics ..... 6
BET 107 Applied Physics: Heat/Fluids ..... 5
General Education (PSY 111 suggested) ..... 3
Second Year
Fall Quarter
CET 201 Drafting IV: Structural4
AET 201 Drafting IV: Architectural ..... 6
BET 201 Introduction to CAD ..... 4
BET 206 Statics ..... 5
Winter Quarter ..... 17
AET 202 Drafting V: Architectural ..... 6
BET 207 Technical Job Seeking ..... 1
CET 202 Drafting V: Civil ..... 5
General Education and/or Technical Elective ..... minimum 5
Spring Quarter16
AET 203 Drafting VI: Architectural ..... 4
AET 208 Applied Engineering Problems: Architecture ..... 4
BET 204 Industrial Relations ..... 3
General Education and/or Technical Elective ..... minimum 5
Minimum Required Program Credit Hours ..... 94
Minimum Required Elective Credit hours ..... 0
Minimum General Education Credit hours ..... 18
Minimum Credits Required for A.A.S. Degree ..... 112
DEGREE PROGRAM CIVIL OPTION (CET)
CREDITS
Degree Requirements:
First Year
Fall Quarter ..... 19
BET 100 Intro to Engineering Technology ..... 1
BET 101 Drafting I ..... 6
BET 105 Applied Technical Mathematics ..... 7
General Education (Speech elective suggested) ..... 5
Winter Quarter19
BET 102 Drafting Fundamentals II ..... 6
BET 106 Applied Physics: Statics/Dynamics ..... 5
CON 101 Fundamentals of Composition ..... 5
General Education or Technical Electiveminimum 3

Spring Quarter
BET 103 Drafting III: Engineering Graphics
BET 107 Applied Physics: Heat/Fluids
CET 105 Basic Field Survey

Second Year
Fall Quarter
CET 201 Drafting IV: Structural 4
BET 206 Statics 5
BET 201 Introduction to CAD 4
General Education (Science and math elective suggested)
Winter Quarter
BET 207 Technical Job Seeking
BET 215 Engineering Planning \& Control
CET 216 Civil Hydraulics
CET 202 Drafting V: Civil
MET 201 Strength of Materials I
Spring Quarter
CET 208 Applied Engineering Problems: Civil
CET 203 Applied Civil Design
MET 204 Strength of Materials II
BET 204 Industrial Relations
Minimum Required Program Credit hours
Minimum Required Elective Credit hours
Minimum General Education Credit hours
Minimum Credits Required for A.A.S. Degree

## DEGREE PROGRAM MECHANICAL OPTION (MET)

Degree Requirements:

## First Year

Fall Quarter
BET 100 Intro to Engineering Technology
BET 101 Drafting I
BET 105 Applied Technical Mathematics
MET 101 Engineering Materials
Winter Quarter
BET 102 Drafting Fundamentals II
BET 106 Applied Physics: Statics/Dynamics
MET 102 Manufacturing Process
CON 101 Fundamentals of Composition
Spring Quarter
BET 103 Drafting III: Engineering Graphics
BET 107 Applied Physics: Heat/Fluids
BET 201 Introduction to CAD
General Education (Speech elective suggested)

Second Year
Fall Quarter
CET 201 Drafting IV: Structural 5
BET 206 Statics 5
MET 216 Applied Fluid Mechanics 3
General Education and/or Technical Elective
Winter Quarter
BET 207 Technical Job Seeking
BET 215 Engineering Planning \& Control
MET 201 Strength of Materials I
MET 202 Mechanical Design: Manufacturing
General Education and/or Technical Elective 19
minimum 5

1
4
3
3
minimum 5
minimum 4

## CREDITS

| Spring Quarter |  |  |
| :--- | :--- | :--- |
| MET | 208 | Applied Engineering Problems: Mechanical |
| MET | 204 | Strength of Materials II | 4

General Education and/or Technical Elective minimum 3
Minimum Required Program Credit hours 84
Minimum Required Elective Credit hours 4
Minimum General Education Credit hours 18
Minimum Credits Required for A.A.S. Degree 106


## COMPUTER AIDED MANUFACTURING TECHNOLOGY OPTION (CAM)

## Degree Requirements:

First Year
Fall Quarter

| BET | 100 | Intro to Engineering Technology | 1 |
| :--- | :--- | :--- | :--- |
| CAM | 101 | Technical Drawing Concepts | 6 |
| BET | 105 | Applied Technical Mathematics | 7 |
| MET | 101 | Engineering Materials | 4 |

Winter Quarter
BET 106 Applied Physics: Statics/Dynamics 5
MET 102 Manufacturing Processes 3
CAM 105 Industrial Electricity 3
CON 101 Fundamentals of Composition 5
Spring Quarter
BET 107 Applied Physics: Heat/Fluids 5
CAM 106 Electronics for Engineering 1 5
General Education (speech elective suggested) 5 Technical Elective

## Second Year

Fall Quarter
BET 201 Introduction to CAD 4
MET 216 Applied Fluid Mechanics 3
CAM 205 Computer Aided Manufacturing 4
CAM 206 Electronics for Engineering Technicians II 5
General Education and/or Technical Elective minimum 3
Winter Quarter
BET 207 Technical Job Seeking 1
BET 215 Engineering Planning \& Control 4
CAM 207 Introduction to Robotics 3
MET 202 Mechanical Design: Manufacturing 3
General Education and or Technical Elective minimum 5
$\begin{array}{ll}\text { Spring Quarter } \\ \text { CAM } 208 \quad \text { Applied Engineering Problems: Manufacturing } & 4\end{array}$
BET 204 Industrial Relations 3
General Education or Technical Elective
minimum 5
Minimum Required Program Credit hours 73
Minimum Required Elective Credit hours 8
Minimum General Education Credit hours 18
Minimum Credits Required for A.A.S. Degree 99

## ARCHITECTURAL AND ENGINEERING ADVISORY COMMITTEE

Tom Cope
Nelson Engineers Greeley, CO

Chuck Dayton
Hewlett Packard
Greeley Division

Bill Hange
Traffic Manager
City of Greeley

Bruce Meyer
Meyer-Adams Architects
Greeley, CO
Mike Preston
Engineering \& Construction
Consultant
Greeley, CO

Hazel Stephens
Freese Engineering
Greeley, CO
Sharon Wake
McRae \& Short (Engineers) Greeley, CO


## TRADES AND INDUSTRY DIVISION PROGRAMS

The Trades and Industry Division is committed to helping students acquire job required skills through demonstration and hands-on practice. We also are committed to providing advanced training for students who already are working in a trade.

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

The Trades and Industry Division offers the following programs:

## AUTO BODY REFINISHING (Occupational Certificate)

## AUTO BODY REPAIR TECHNOLOGY

(A.A.S degree or Occupational Certificate)
(A.A.S degree or Occupational Certificate)
(A.A.S degree or Occupational Certificate)

## CHILD CARE SERVICES

(two-year A.A.S. degree or one-year Occupational Certificate)

## GRAPHIC TECHNOLOGY

WELDING TECHNOLOGY
(A.A.S. degree or Occupational Certificate)
(A.A.S. degree or Occupational Certificate)

## AUTO BODY REFINISHING

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

Potential Opportunities: This is a specialized, three quarter certificate program to help develop the knowledge and skill 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 possibly 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.
Registration Requirement: All students taking a course or courses in a Trades and Industry Division program must have an appropriate Trades and Industry Division program advisor's signature on the course registration before registering. The advisors for the Auto Body program are: Ben Bitterman, Carl Guilliams, Mike Geist, or Jim Hein, Division Chairman.

| CERTIFICATE PROGRAM |  |  |
| :--- | ---: | ---: |
| Certificate Requirements: | CREDITS |  |
| Fall Quarter |  | 12 |
| ABF 151 Auto Refinish I | 12 |  |
| Winter Quarter <br> ABF 152 Auto Refinish II |  | 12 |
| Spring Quarter <br> ABF 153 Auto Refinish III |  |  |
| Total Credits for Certificate | 12 |  |

## AUTO BODY REPAIR

Program Length: 900 clock hours ( 72 credits) for Certificate in Occupational Education program or 1090 clock hours ( 72 credits plus 18 credits for general education) for Associate in Applied Science degree program.

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 skill 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 and brazing 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.

At the beginning of winter 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.

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 six certificate requirements will earn a Certificate in Occupational Education. When possible, courses will be scheduled so that the student may take one course per quarter for 12 credits or two courses per quarter for 24 credits.

To earn an Associate of Applied Science degree, the student must complete the certificate requirements and at least 18 credit hours of general education courses. Students in Trades and Industry are encouraged to take the recommended general education courses when possible. With the consent of the student's advisor, other courses may be selected to fulfill the general education requirements.

Registration Requirement: All students taking a course or courses in a Trades and Industry Division program must have an appropriate Trades and Industry Division program advisor's signature on the course registration before registering. The advisors for the Auto Body area area: Ben Bitterman, Carl Guilliams, Mike Geist, or Jim Hein, Division Chairman.

## CERTIFICATE PROGRAM

## Certificate Requirements:

CREDITS
Fall Quarter
ABR 141 Auto Body Repair I
ABR 241 Auto Body Repair IV
12

Winter Quarter
ABR 142 Auto Body Repair II
12
ABR 242 Auto Body Repair V 12

## Spring Quarter

ABR 143 Auto Body Repair III 12
ABR 243 Auto Body Repair VI
Total Credits for Certificate

## DEGREE PROGRAM

Degree Requirements:
Completion of all certificate requirements plus
recommended general education courses.

## CREDITS

## Certificate Requirements:

Recommended General Education Courses: ..... 19
COS 115 Applied Communications ..... 3
ECO 105 Organizations and Institutions ..... 3
HEN 106 Safety and First Aid ..... 3
MAT 101 Applied Mathematics I ..... 5
PHY 101 Applied Physics I ..... 5
Total Credits for A.A.S. Degree ..... 91
Support Courses
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 222 Auto Body Rebuilding II ..... 4
ABR 223 Auto Body Rebuilding III ..... 4
AUTO BODY REFINISHING AUTO BODY REPAIR ADVISORY COMMITTEE

| Kermit Bailey | Rondo Sherman <br> R.B.I. |
| :--- | :--- |
| High Tech Auto Body |  |



## AUTOMOTIVE MECHANICS TECHNOLOGY

Program Length: 900 clock hours ( 72 credits) for Certificate in Occupational Education program or 1090 clock hours $(72$ credits plus 18 credits of general education) for Associate in Applied Science degree program. Students have the option of completing the program in one year (six hours per day) or two years (three hours per day).

Potential Opportunities: The program will prepare the student for entry into the automotive field at the advance apprentice level. To achieve this, the student will receive instruction and practical experience in both mock-ups and live work. The student can prepare to enter the automotive service field as a general automobile mechanic or become a specialist in one or more of the following areas: automotive diagnostician, brake specialist, wheel alignment specialist, tune-up specialist, automotive transmission specialist, or air conditioning specialist.

The modern automobile is a complex piece of machinery that requires a technician who knows how to repair it, and who knows why and how it operates so that $\mathrm{s} /$ he can diagnose problems quickly and accurately.

We offer a refesher course to help prepare a mechanic for the certification tests. 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 six certificate requirements will earn a Certificate in Occupational Education. When possible, courses will be scheduled so that the student may take one course per quarter for 12 credits or two courses per quarter for 24 credits.

To earn an Associate of Applied Science degree, the student must
complete the certificate requirements and at least 18 credit hours of general education courses. Students in Trades and Industry are encouraged to take the recommended general education courses when possible. With the consent of the student's advisor, other courses may be selected to fulfill the general education requirements.

Registration Requirement: All students taking a course or courses in a Trades and Industry Division program must have an appropriate Trades and Industry Division program advisor's signature on the course registration before registering. The advisors for the Auto Mechanics program are: George Moore, George Edel, Dennis Schossow, or Jim Hein, Division Chairman.

## CERTIFICATE PROGRAM

## Certificate Requirements:

## CREDITS

## Fall Quarter

AMT 131 Brakes, Transmissions and Final Drives A 12
AMT 231 Automotive Engines A
12
Winter Quarter
AMT 133 Fuel Systems and Tune-up A
AMT 232 Electrical A
Spring Quarter
AMT 132 Steering and Suspension Systems A 12
AMT 234 Automatic Transmission and Air Conditioning A

Total Credits for Certificate
72

## DEGREE PROGRAM

## Degree Requirements:

Completion of all certificate requirements plus recommended general education courses.

## Certificate Requirements:

Recommended General Education Courses 19
COS 115 Applied Communications 3
ECO 105 Organizations and Institutions 3
HEN 106 Safety and First Aid 3
MAT 101 Applied Mathematics I 5
PHY 101 Applied Physics I 5
Total Credits for A.A.S. Degree

## Support Courses

| 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 136 | Emission Control | 5 |
| AMT 199 | Special Needs/Auto Mechanics | 1 |
| AMT 207 | Introduction to Diesel Engine | 6 |
| AMT 208 | Diesel Engine Repair I | 12 |
| AMT 209 | Diesel Engine Repair II | 12 |
| AMT 233 | Air Conditioning and Comfort Controls | 5 |

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 136 Emission Control 5
Special Needs/Auto Mechanics
AMT 208 Diesel Engine Repair I 12
AMT 209 Diesel Engine Repair II 12
AMT 233 Air Conditioning and Comfort Controls 5

AMT 262 Automotive Electronics 6
AMT 266 Automotive Electronics and Computer Systems 12

## AUTOMOTIVE MECHANICS TECHNOLOGY ADVISORY COMMITTEE

\(\left.\left.$$
\begin{array}{ll}\text { William Crabtree } & \text { Oliver Swanson } \\
\text { Weld County Garage } & \text { AAA Transmissions }\end{array}
$$\right\} \begin{array}{l}Thomas Troudt <br>

Markley Imports\end{array}\right\}\)| Merry Park Loftus |
| :--- |
| Co's Chrysler BMW |

Franz Rook
Stanley Lincoln/Mercury

## BUILDING CONSTRUCTION

Program Length: 1050 clock hours ( 84 credits) for Certificate in Occupational Education program or 1230 clock hours ( 84 credits plus 18 credits of general education) for the Associate of Applied Science degree program.

Potential Opportunities: This program is designed for students in all areas of residential construction. These include framing, exterior and interior finish, cabinet construction; concrete and masonry also are major areas of training. Experience in dry wall, paint, and stain is provided.

The program is designed to provide the skills and knowledge needed to enter the construction field at an advanced level.

A few basic tools will be required for the program, such as a hammer, combination square, 16 foot tape measure, tool pouch, utility knife, 1/32 and $3 / 32$ nail sets, and a pencil.

For those already employed in the construction field on a full time basis, Aims offers the Building Construction Work Experience program in the evening. This program requires six quarters for completion.

Program Requirements: Completion of the six certificate requirements will earn a Certificate in Occupational Education. When possible, courses will be scheduled so that the student may take one course per quarter for 14 credits or two courses per quarter for 28 credits.

To earn an Associate of Applied Science degree, the student must complete the certificate requirements and at least 18 credit hours of general education courses. With the consent of the student's advisor, other courses may be selected to fulfill the general education requirements.

Registration Requirement: All students taking a course or courses in a Trades and Industry Division program must have an appropriate Trades and Industry Division program advisor's signature on the course registration before registration can be completed. The advisors for the Building Construction area are: Bill Roberts, Gary Martin, or Jim Hein, Division Chairman.

## CERTIFICATE PROGRAM <br> Certificate Requirements:

 CREDITSFall Quarter
BCS 105 Building Construction I
28

BCS 205 Building Construction II
Winter Quarter ..... 28
BCS 106 Building Construction III ..... 14
BCS 206 Building Construction IV ..... 14
Spring Quarter ..... 28
BCS 107 Building Construction V ..... 14
BCS 207 Building Construction VI ..... 14
Total Credits for Certificate ..... 84
DEGREE PROGRAM
Degree Requirements:Completion of all certificate requirements plusrecommended general education courses.
Certificate Requirements: ..... 84
Recommended General Education Courses: ..... 19 ..... 3
ECO 105 Organizations and Institutions ..... 3
HEN 106 Safety and First Aid ..... 3
MAT 101 Applied Mathematics ..... 5
PHY 101 Applied Physics ITotal Credits for A.A.S. Degree
Support Courses:
BCS 102 Basic Cabinetry ..... 4
BCS 104 Cabinetry II ..... 4
BCS 125 Blueprint Reading ..... 3
BCS 199 Building Construction Special Needs ..... 1
BCS 225 Construction Estimating I ..... 3
BCS 226 Construction Estimating II3
BCS 227 Building Contracts ..... 3
BCS 236 Cabinet Making TheoryBCS 237 Building Codes
BCS 115 Building Construction I B ..... 14
(Equivalent to BCS-105)
BCS 116 Building Construction III B ..... 14
(Equivalent to $\mathrm{BCS}-106$ )
BCS 117 Building Construction V B ..... 14
(Equivalent to BCS-107)
BCS 215 Building Construction II B ..... 14
(Equivalent to BCS-205)
BCS 216 Building Construction IV B ..... 14
(Equivalent to BCS-206)BCS 217 Building Construction VI B14BUILDING CONSTRUCTIONADVISORY COMMITTEE

| Tom Cowan | Mike Shoulders |
| :--- | :--- |
| Best Way Paving | Cornerstone Builders <br> Incorporated |
| Marvin Davis |  |
| Wedgewood Homes | David Stookesberry <br> Economy Lumber |

Dennis Gibson

Gibson Construction

Royal Henry
Self-employed

Jim Taylor
Taylor Construction

Tony Tieman
Mountain States Lumber \& Building Material Dealers Association


## CHILD CARE SERVICES

## CERTIFICATE PROGRAM PRESCHOOL GROUP LEADER

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

Potential Opportunities: The rapid increase of services 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, coupled with the economic need for parents to seek part or full-day child care outside their home, has created specialized fields for working with young children and their families. The demand for quality child care in centers which promote educational goals replaces the traditional role of baby-sitter with a number of professional job titles in the exciting, growing field of Early Childhood Education.

The program is designed to prepare students for group leader positions in private preschools, small and large day care centers, nursery schools, child development centers, Head Start and Follow Through programs and summer day camps. In most cases, work experience is required in addition to courses listed.

Prerequisites: A physical examination will be required of each student who initially enrolls in practice teaching courses. Any student working with children in a child care facility will submit a dated report of a satisfactory tuberculin test or chest x-ray to the director of the center.

Registration Requirement: All students taking a course or courses in a Trades and Industry Division program must have an appropriate Trades and Industry Division program advisor's signature on the course registration before registering. The advisors for the Child Care Services area are: Kathy Vasa, Maurine Summers, or Jim Hein, Division Chairman.

CREDITS
Certificate Requirements:
CCS 100 Introduction to Early Childhood Education 2
CCS 131 Practice Teaching I: Observations 4
CCS 132 Practice Teaching II: Lab 6
CCS 133 Practice Teaching III: Lab 5
CCS 142 Activities for Early Childhood Education II 3
CCS 151 Nutrition for Young Children 3
CCS 161 Child Growth and Development 3
CON 101 Fundamentals of Composition 5
COS 115 Applied Communication 3
HEN 106 Safety and First Aid 3
PSY 101 General Psychology 5
-OR-
PSY 248 Child Psychology 5
Elective
Total Credits for Certificate

## DEGREE PROGRAM

## CHILD CARE SERVICES

Program Length: 1130 clock hours ( 97 credits), usually six quarters for an Associate of Applied Science degree

Potential Opportunities: The rapid increase of services 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 child care outside their home, has created specialized fields for working with young children and their families. The demand for quality child care in centers which promote educational goals replaces the traditional role of baby-sitter with a number of career options in the exciting, growing field of Early Childhood Education.

The program is designed to prepare students for group leader positions in private preschools, small and large day care centers, nursery schools, child development centers, Head Start and Follow Through programs and summer day camps. In most cases, work experience is required in addition to courses listed.

Prerequisites: A physical examination will be required of each student who initially enrolls in practice teaching courses. Any student working with children in a child care facility will submit a dated report of a satisfactory tuberculin test or chest x-ray to the director of the center.

Registration Requirement: All students taking a course or courses in a Trades and Industry Division program must have an appropriate Trades and Industry Division program advisor's signature on the course registration before registering. The advisors for the Child Care Services program are: Kathy Vasa, Maurine Summers, or Jim Hein, Division Chairman.

| Degree Requirements: |  |  |  |
| :---: | :---: | :---: | :---: |
| First Year |  |  |  |
| CCS | 100 | Introduction to Early Childhood Education | 2 |
| CCS | 131 | Practice Teaching I: Observations | 4 |
| CCS | 132 | Practice Teaching II: Lab | 6 |
| CCS | 133 | Practice Teaching III: Lab | 5 |
| CCS | 141 | Activities for Early Childhood Education I | 3 |
| CCS | 142 | Activities for Early Childhood Education II | 3 |
| CCS | 151 | Nutrition for Young Children | 3 |
| CCS | 161 | Child Growth and Development | 3 |
| CON | 101 | Fundamentals of Composition | 5 |
| COS | 115 | Applied Communication | 3 |
| HEN | 106 | Safety and First Aid | 3 |
| PSY |  | General Psychology | 5 |
|  | -OR- |  |  |
| PSY | 248 | Child Psychology | 5 |
| Electi |  |  | 2 |
| Total Credits for First Year |  |  |  |
| Second Year |  |  |  |
| CCS | 202 | Administration of Child Care Centers | 3 |
| CCS | 206 | Children's Literature | 3 |
| CCS | 231 | Advanced Practice Teaching: Lab | 7 |
| CCS | 232 | Human Relations in the Preschool Classroom: Lab | 7 |
| CCS | 233 | Family and Community Relations: Lab | 7 |
| CCS | 241 | Unit Planning for Early Childhood Education | 2 |
| CCS | 245 | Value of Play | 2 |
| SOC | 101 | Introduction to Sociology | 5 |
| MAT |  | Applied Business Mathematics | 5 |
| MGT | 208 | Small Business Management | 5 |
| Electi |  |  | 4 |
| Total Credits for Second Year |  |  |  |
| Total Credits for A.A.S Degree |  |  |  |
| Program Electives |  |  |  |
| CCS 145 |  | Workshop in Early Childhood |  |
|  |  | Education Materials | 2 |
| CCS |  | Early Childhood Education Music Movement Activities | 2 |
| CCS | 147 | Early Childhood Education Outdoor Activities | 2 |
| CCS | 148 | Early Childhood Education Math and Science | 2 |
| CCS | 149 | Carpentry Skills for Young Children | 2 |
|  | 155 | Toddler Care Workshop | 2 |
| (Students must complete 1 of the above courses for a certificate and complete 2 of the above courses for an A.A.S. degree. Other required electives for an A.A.S. degree may be selected with advisor approval.) |  |  |  |
| HEN |  | Personal Health | 3 |
| PSY |  | Transactional Analysis | 3 |

## COLORADO DEPARTMENT OF SOCIAL SERVICES REQUIREMENTS:

(Aims courses that meet Colorado Department of Social Services requirements for director qualifications for large day care centers (13 or more children.)

CHILD DEVELOPMENT AND ECE METHODS:
(Total of 18 quarter credits with at least 6 credits in child development.)
CREDITS

CCS 131 Practice Teaching I: Observations

| CCS | 141 | Activities for Early Childhood Education I | 3 |
| :--- | :--- | :--- | :--- |
| CCS | 142 | Activities for Early Childhood Education II | 3 |
| CCS | 145 | Workshop in ECE/Materials | 2 |
| CCS | 146 | ECE Music and Movement Activities | 2 |
| CCS | 147 | ECE Outdoor Activities | 2 |
| CCS | 148 | ECE Math and Science | 2 |
| CCS | 149 | Carpentry Skills for Young Children | 2 |
| CCS | 155 | Toddler Care Workshop | 2 |
| CCS | 161 | Child Growth and Development | 3 |
| CCS | 206 | Children's Literature | 3 |
| CCS | 245 | Value of Play | 2 |

## PSYCHOLOGY

(Total of 4.5 quarter hours required)
PSY 101 General Psychology 1
PSY 248 Child Psychology

## SOCIOLOGY

(Total of 4.5 quarter hours required) ..... 4.5
SOC 101 Introduction to Sociology ..... 5

NUTRITION FOR PRESCHOOL CHILD
(Total of 3 quarter hours required)3
CCS 151 Nutrition For Young Children ..... 3
ADMINISTRATION OF A PRESCHOOL OR DAYCARE PROGRAM
(Total of 4.5 quarter hours minimum)
CCS 202 Administration of Child Care Centers
MGT 208 Small Business Management 5

## CHILD CARE SERVICES <br> ADVISORY COMMITTEE

| Jerrilyn Eaton | Mary Moreno |
| :--- | :--- |
| UNC Child Care Center | Head Start |
| Barbara McFerron | Mary Shier |
| Children's World | Loveland Day Care Center |
|  | Marylouise Widmaier |
| Anne Merkley | Trinity Episcopal |
| Small Wonder Child | Parent Cooperative |



## GRAPHIC TECHNOLOGY

Program Length: 900 clock hours ( 74 credits) for the Certificate in Occupational Education program or 1210 clock hours ( 96 credits) for the Artistic Option; 1150 clock hours ( 97 credits) for the Typesetting Option; 1170 clock hours ( 95 credits) for the Photographic Option; 1120 clock hours ( 95 credits) for the Mechanical Option within the Associate of Applied Science degree program.

Potential Opportunities: The program is designed to prepare the student for entry into a number of career fields; opportunities are almost unlimited in Graphic Technology. Key occupations include: 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 program 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 Trades and Industry Division must have an appropriate Trades and Industry Division program advisor's signature on the course registration before registering. The advisors for the Graphic Technology program are: Deb King, Lori Ford, or Jim Hein, Division Chairman.


CERTIFICATE PROGRAM
Certificate Requirements:
CREDITS
Fall Quarter
BUS 101 Typewriting I
4
GRT 101 Graphic Technology I 20
Winter Quarter 25
BUS 142 Intermediate Communications 5
GRT 102 Graphic Technology II 20

Spring Quarter
GRT 103 Graphic Technology III 20
MAT 110 Applied Business Mathematics
Total Credits for Certificate

## DEGREE PROGRAM

## Degree Requirements:

Completion of five core courses plus six to seven courses related to the student's specialization as listed below.
(Total Degree Requirements range from 95 to 98 credits.)

## CREDITS

Core Courses
GRT 101 Graphic Technology I 20
GRT 102 Graphic Technology II 20
GRT 103 Graphic Technology III 20
HEN 106 Safety and First Aid 3
BUS 101 Beginning Typewriting 4
Core Credit Hours Required

The above courses are required and constitute the basic graphic technology core.

## ARTISTIC OPTION

AAD 101 Fundamentals of Art and Design I 5
AAD 131 Drawing I 3
AAD 132 Drawing II 3
AAD 221 Graphic Design $1 \quad 3$
BUS 142 Intermediate Communications 5
MAT 101 Applied Mathematics I 5
PSY 145 Human Relations at Work 5
The above courses are required for the artistic option. 29
Total Artistic Option Credits 96

TYPESETTING OPTION
AAD 101 Fundamentals of Art and Design I 5
BUS 102 Typewriting II 3
BUS 142 Intermediate Communications 5
COS 115 Applied Communications 3
CSC 101 Introduction to Computing and the BASIC Language

$$
4
$$

MAT 101 Applied Mathematics 1 5
PSY 145 Human Relations at Work 5
The above courses are required for the typesetting option. 30
Total Typesetting Option Credits 97

## PHOTOGRAPHIC OPTION

| AAD | 101 | Fundamentals of Art and Design I | 5 |
| :--- | :--- | :--- | :--- |
| AAD | 241 | Photography I | 3 |
| BUS | 142 | Intermediate Communications | 5 |
| CHE | 100 | Fundamentals of Chemistry | 5 |
| PHY | 120 | Fundamentals of Physics | 5 |
| PSY | 145 | Human Relations at Work | 5 |

The above courses are required for the photographic option.

## MECHANICAL OPTION

| BUS | 100 | Introduction to Business | 5 |
| :--- | :--- | :--- | :--- |
| BUS | 142 | Intermediate Communications | 5 |
| MAT | 100 | Introduction to Beginning Algebra | 3 |
| PHY | 101 | Applied Physics | 5 |
| PHY | 120 | Fundamentals of Physics | 5 |
| PSY | 145 | Human Relations at Work | 5 |

The above courses are required for the mechanical option.
Total Mechanical Option Credits

## Support Courses:

GRT 104 Graphic Technology IV 10
GRT 107 Silk Screen Printing 2
GRT 199 Graphic Technology/Special Needs I
GRT 295 Graphic Technology/Independent Study A 2
GRT 296 Graphic Technology/Independent Study B 3
GRT 297 Graphic Technology/Independent Study C 5
GRT 299 Graphic Technology/Practicum
The above supporting courses are for the purpose of enriching the Degree or Certificate programs, but are not required.

## GRAPHIC TECHNOLOGY ADVISORY COMMITTEE

Jerry David
Norwest Publishing Co., Inc.

Ken Eberly
Butler Paper Co.

Don Ford
Affordable Instant Printing

Dan Gares
Frontier Business Products

Ken Hamel
VWR Scientific

Jani Malkiewicz
J.L. Printing

Chuck Manthey
J.L. Printing

Eileen Soucie
Coors Paper Packaging

Margaret Willoughby
Graphic Production Aims Community College


## WELDING TECHNOLOGY

Program Length: 900 clock hours ( 72 credits) for Certificate in Occupational Education program or 1090 clock hours ( 72 credits plus 18 credits of general education) for Associate of Applied Science degree program.

Potential Opportunities: 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.

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 three certificate requirements will earn a Certificate in Occupational Education.

To earn an Associate of Applied Science degree, the student must complete the certificate requirements and at least 18 credit hours of general education courses. Students in Trades and Industry are encouraged to take the recommended general education courses when possible. With the consent of the student's advisor, other courses may be selected to fulfill the general education requirements.

For the students' convenience, the Welding Technology program offers an alternate delivery method for certificate program courses. This will allow students to take WLT 151,152 , and 153 for 72 credits or WLT $141,142,143,241,242$, and 243 for 72 credits.

Registration Requirement: All students taking a course or courses in a Trades and Industry Division program must have an appropriate Trades and Industry Division program advisor's signature on the course registration before registering. The advisors for the Welding Technology program are: Bill Killebrew, John Hickman, Mike Spika, or Jim Hein, Division Chairman.

## CERTIFICATE PROGRAM

## Certificate Requirements:

## CREDITS

Fall Quarter
WLT 151 Welding Technology I
24
(Equivalent to WLT 141 and 142)

## Winter Quarter

WLT 152 Welding Technology II
(Equivalent to WLT 143 and 241)
Spring Quarter
24
$\begin{array}{lll}\text { WLT } 153 & \text { Welding Technology III } & 24 \\ & \text { (Equivalent to WLT 242 and 243) }\end{array}$

## Total Credits for Certificate

Alternate Delivery Method for Certificate Program

| WLT | 141 | Oxy-Acet Welding | 12 |
| :--- | :--- | :--- | :--- |
| WLT | 142 | Shielded Metal Arc I | 12 |
| WLT | 143 | Shielded Metal Arc II | 12 |
| WLT | 241 | Shielded Metal Arc III | 12 |
| WLT | 242 | Pipe Welding | 12 |
| WLT | 243 | Gas Metal Arc Welding | 12 |

## Total Alternate Credits for Certificate

## DEGREE PROGRAM

## Degree Requirements:

Completion of all certificate requirements plus recommended general education courses.

|  | CREDITS |
| :--- | ---: | ---: |
| Certificate Requirements: |  |
| Recommended General Education Courses: | 19 |
| COS $115 \quad$ Applied Communications | 3 |
| ECO 105 Organizations and Institutions | 3 |
| HEN 106 Safety and First Aid | 3 |
| PHY 101 Applied Physics I | 5 |
| MAT $101 \quad$ Applied Mathematics | 5 |

Total Credits for A.A.S. Degree

| 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 | 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

| Mike Emerick | Gary Lyons |
| :--- | :--- |
| Hobart Brothers Welding | Winograds Steel |
| Roger Felker | Dale Majors |
| Felder \& Sons Welding | Majors Welding Supply |
| D.R. Joe Goddard | Larry Sarchet |
| Retired | Certified Welding |

Certified Welding

## Support Courses

| WLT | 100 | Beginning Welding | 2 |
| :--- | :--- | :--- | :--- |
| WLT | 105 | Basic Oxy/Acet Welding | 4 |
| WLT | 106 | Advanced Oxy/Acet Welding | 4 |





## COURSE DESCRIPTIONS

## ACC: ACCOUNTING

## ACC 101 PRINCIPLES OF ACCOUNTING I

Fundamentals of accounting theory and practice. Includes a study of the entire accounting cycle, accounting for a merchandising concern, special journals, control of cash, and accounts and notes receivable.
Five credits: 50 clock hours

## ACC 102 PRINCIPLES OF ACCOUNTING II

A continuation of ACC $101 \mathrm{emphasizing} \mathrm{the} \mathrm{study} \mathrm{of} \mathrm{inventories}$, plant and equipment, intangible assets, short-term and long-term liabilities, investments and bonds payable, and accounting for partnerships and corporations.
Prerequisite: ACC 101 (ACC 196 recommended to be taken concurrently)
Five credits: 50 clock hours

## ACC 103 PRINCIPLES OF ACCOUNTING III

A continuation of ACC 102 emphasizing departmental, manufacturing and cost accounting, flow of funds, standard cost and capital budgeting, and statement analysis.
Prerequisite: ACC 102 (ACC 299 recommended to be taken concurrently)
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 BUS 121 or permission of instructor Three credits: 30 clock hours

## ACC 121 INCOME TAX ACCOUNTING I

A study of the important income tax code provisions as they affect individuals and business enterprises: topics include who must file, inclusions/exclusions of gross income, tax liabilities, gains and losses, itemized deductions, depreciation, rental income, sale of personal residence, and income averaging.
Prerequisite: ACC 102 or permission of instructor
Five credits: 50 clock hours

## ACC 122 INCOME TAX ACCOUNTING II

A continuation of ACC 121 emphasizing the rules and regulations as they apply to employee retirement and compensation plans, Subchapter S, and corporations.
Prerequisite: ACC 121 or permission of instructor
Three credits: 30 clock hours

ACC 125 INCOME TAX ACCOUNTING I AND II
Combined ACC 121 and ACC 122 into one class. Covers same topics.
Prerequisite: ACC 102 or permission of instructor
Eight credits: 80 clock hours

## ACC 196 ACCOUNTING PRACTICUM

The completion of a merchandising practice set for a proprietorship. Prerequisite: ACC 101
One credit: 15 clock hours

## ACC 197 COMPUTERIZED PRACTICUM

A practice set to be completed with the use of the microcomputer.
Prerequisite: ACC 103 and ACC 196 or permission of instructor One credit: 15 clock hours

## ACC 201 INTERMEDIATE ACCOUNTING I

An in-depth study of the accounting cycle, and the principles and concepts of accounting. Attention is given to cash and temporary investments, receivables, and cost/valuation procedures for inventories. Prerequisite: ACC 103 or permission of instructor Five credits: 50 clock hours

## ACC 202 INTERMEDIATE ACCOUNTING II

Continuation of ACC 201 with emphasis on long-term assets and liabilities (long-term and short-term), investments, and flow of funds. Prerequisite: ACC 201 or permission of instructor
Five credits: 50 clock hours

## ACC 205 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 and ACC 201, or permission of instructor Five credits: 50 clock hours

## ACC 206 COST ACCOUNTING

A study of the fundamental elements of an organization's direct and indirect costs. Emphasis is on the preparation of cost data used by management for planning and controlling. It includes variable and fixed costs: cost-volume-profit relationships; job, process and operations systems; master and flexible budgeting; and standard and product costing.
Prerequisite: ACC 103 or permission of instructor
Five credits: 50 clock hours

## ACC 207 FINANCIAL MANAGEMENT

Deals with conceptual alternatives of financial management and emphasizes preparation and analysis of sources and uses of short-and long-term capital, and an in-depth analysis of financial statements. Prerequisite: ACC 103 or permission of instructor Five credits: 50 clock hours

## ACC 208 ELECTRONIC SPREADSHEETS/ACC

Provides students with an opportunity to apply accounting theory to spreadsheet software.
Prerequisite: ACC 102 or permission of instructor
Two credits: 30 clock hours

## ACC 209 ELECTRONIC SPREADSHEET 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 206 (may be taken concurrently) and ACC 208 or permission of instructor
Two credits: 30 clock hours

## ACC 215 ELECTRONIC SPREADSHEET APPLICATIONS FOR FINANCE

To provide the student with the opportunity to use state of the art electronic spreadsheets to solve common financial management problems such as ratio analysis, financial forecasting, and asset management.
Prerequistie: ACC 207 (may be taken concurrently)
Two credits: 30 clock hours

## ACC 216 ADVANCED ELECTRONIC SPREADSHEETS/ACC

To provide the student with the opportunity to apply the more complex features of electronic spreadsheet software to the solution of accounting and finance problems.
Prerequisite: ACC 208 or permission of instructor
Two credits: 30 clock hours

## 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 103 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 after ACC 102, job order or process cost practice set after ACC 206, or working from incomplete records after ACC 201.
Prerequisite: ACC 102 or permission of instructor
One credit: 15 clock hours

## ACC 299 COMPUTERIZED PRACTICUM/HP

A practice set to be completed with the use of an HP microcomputer. Prerequisite: ACC 102 and ACC 196
One credit: 15 clock hours

## AES: AEROSPACE STUDIES

## AES 110 U. S. MILITARY FORCES IN THE CONTEMPORARY WORLD I

To assist in initial education of the U.S. Air Force officer candidate, this course examines the history of airpower in the world and in the United States. Students receive an introduction to Air Force doctrine and how it relates to national strategy. Corps Training is included as a laboratory portion of all AFROTC courses.
Two credits: 20 clock hours

## AES 111 U. S. MILITARY FORCES IN THE CONTEMPORARY WORLD II

To assist in continuing education of the U.S. Air Force Officer candidate, this course examines the role and missions of the Strategic Air Command, Aerospace Defense Command, and the Tactical Air Command as used for instruments of national power. Corps Training is included as a laboratory portion of the course.
Two credits: 20 clock hours
$\begin{array}{lll}\text { AES } & 112 & \text { U. S. MILITARY FORCES IN THE }\end{array}$ CONTEMPORARY WORLD III
To assist in continuing education of the U.S. Air Force Officer candidate, this course examines the role and missions of the U.S. Army and U.S. Navy/Marines and how thse two organizations coordinate with the U.S. Air Force in achieving national goals. Corps Training is included as a laboratory portion of the course.
Two credits: 20 clock hours

## AES 210 THE DEVELOPMENTAL GROWTH OF AIRPOWER I

This survey course is designed to acquaint the USAF officer candidate with the history of the growth and development of airpower from its beginnings through the 1930's.
Two credits: 20 clock hours

## AES 211 THE DEVELOPMENTAL GROWTH OF AIRPOWER II

This survey course is designed to acquaint the USAF officer candidate with the history of the growth and development of airpower from the beginning of World War II through the Korean conflict.
Two credits: 20 clock hours

AES 212 THE DEVELOPMENTAL GROWTH OF AIRPOWER III
This survey course is designed to acquaint the USAF officer candidate with the history of the growth and development of airpower from 1952 to the present.
Two credits: 20 clock hours

## AGR: AGRICULTURE TECHNOLOGY

## AGR 111 INTRODUCTION TO AGRICULTURE

Basic elements of the agricultural sciences, educational requirements, employment possibilities and related topics.
Three credits: 30 clock hours

## AGR 115 AGRICULTURE/NATURAL RESOURCE ECONOMICS

Introductory course in the study of resources, basic economic principles, supply and demand concepts, market structures and competition, agriculture policy, and international trade as they apply to agriculture.
Five Credits: 50 clock hours

## AGR 125 AGRICULTURE PESTICIDES

Overview of more common pesticides used in agriculture, their makeup and uses. Includes sprayer calibrations, spray compounds, and medications.
Five credits: 50 clock hours

AGR 135 AGRICULTURE-ON-THE-JOB TRAINING I
AGR 235 AGRICULTURE-ON-THE-JOB TRAINING II
On-the-job work experience offers an extension and application of classroom instruction through college and employer supervised work experience that is related to the student's educational goals. Placement and educational objectives must be approved by the student's advisor. Students must work a minimum of 325 hours. Upon completion, an evaluation of the work experience will be accomplished by the student. the employer, and the program advisor.
Prerequisite: advisor approval
Ten credits each

AGR 136 AGRICULTURE ON-THE-JOB TRAINING IA 137 AGRICULTURE ON-THE-JOB TRAINING 1B
The courses are the same as AGR 135 except student works for 165 hours instead of 325 hours.
Prerequisite: advisor approval
Five credits each

## AGR 205 MARKETING FOR FARMERS

The student in this course will develop an understanding of the agriculture marketing system in the following areas: grain and cattle markets, grain and cattle futures, cash contracts and price analysis. Prerequisite: None

## AGR 236 AGRICULTURE ON-THE-JOB TRAINING IIA

 237 AGRICULTURE ON-THE-JOB TRAINING IIBThe courses are the same as AGR 235 execpt student works for 165 hours instead of 325 hours.
Prerequisite: AGR 135 or AGR 136 and 137 and advisor approval Five credits each

## AGR 178 GENERAL CROP SCIENCE

Cultural practices and botanical characteristics of crops including techniques of crop production and quality improvement. Emphasis on Colorado and this region's crops.
Five credits: 50 clock hours

## AGR 179 INTRODUCTION TO ANIMAL SCIENCE

Fundamentals of livestock production pertaining to principles of breeding, genetics, feeding, nutrition, disease and marketing. Breeds of beef, sheep, swine and horses will be covered.
Five credits: 50 clock hours

## AGR 215 INTRODUCTION TO SOILS AND FERTILIZATION

Formation, properties and management of soils. Soil testing and fertilizer recommendations. Fertilizer materials and fertilizing common crops.
Five credits: 50 clock hours

## AGR 216 FEEDS AND FEEDING

Common feeds and their uses in feeding livestock. Includes calculations of rations which meet requirements for maintenance, growth and production.
Five credits: 50 clock hours

## AGR 217 LIVESTOCK SELECTION

Growth, development and value determining characteristics of market animals. Emphasis on descriptive terminology and comparative selection of meat animals.
Prerequisite: AGR 179
Three credits: 30 clock hours

## AGR 218 FARM AND RANCH MANAGEMENT

Principles of economics as related to the practical operation of farm or ranch including inventory, land capabilities, farmstead planning, crop systems, feed and machinery requirements.
Five credits: 50 clock hours

## FMT: FARM AND RANCH BUSINESS MANAGEMENT

## FMT: FARM AND RANCH BUSINESS MANAGEMENT

## FMT 101 FARM AND RANCH BUSINESS MANAGEMENT I

The first in a series of courses one year in length. In this course the student will acquire basic knowledge of personal computers using agriculture software to develop an accurate and realistic set of farm/ranch records. Initial records will be used to locate problems, set goals and objectives, and evaluate resources available.
Twenty-Two credits: 40 hours lecture, 10-12 farm/ranch instructor visits

## FMT 102 FARM AND RANCH BUSINESS MANAGEMENT II

The second in a series of courses one year in length. This course will continue in the development of records and accounting procedures using the personal computer and agricultural software. The records developed through year one will be interpreted and analyzed to determine accuracy, strengths and weaknesses.
Twenty-two credits: 40 hours lecture, 10-12 farm/ranch instructor visits

## FMT 103 FARM AND RANCH BUSINESS <br> MANAGEMENT III

The third and final course in a series of one year courses. This course continues with the development and analyzing of records with emphasis on reorganization of the agriculture business to meet the farm/ranch and family living goals using accurate records and sound economic principles to implement those goals. If desired, the student will be assisted in identifying and associating with an agriculture management service upon completion of the program.
Twenty-two credits: 40 hours lecture, 10-12 farm/ranch instructor visits

## AGS: AGRICULTURE HOME STUDY COURSES

## MANAGEMENT DEVELOPMENT

## AGS 100 INTRODUCTION : 0 AGRIBUSINESS

An overview of agribusiness including farming, farm supplies and service businesses, and marketing farm products.
Three credits: 30 clock hours

## AGS 101 INTRODUCTION TO AGRIBUSINESS MANAGEMENT

Basic managerial principles, managing through people, financial strategies and planning.
Three credits: 30 clock hours

## AGS 102 AGRICULTURAL ECONOMICS

Agricultural resources and production, market-price determination and marketing, and the world agricultural situation.
Three credits: 30 clock hours

## AGS 103 PERSONNEL MANAGEMENT

Employee needs, selection and motivation, performance, appraisal, wage determination, and employee health and safety.
Three credits: 30 clock hours

## AGS 104 COOPERATIVE MANAGMENT BY OBJECTIVES

Setting objectives, writing performance standards, conducting effective performance appraisals.
Three credits: 30 clock hours

## AGS 105 POSITIVE PERFORMANCE APPRAISAL

Designing appraisal systems, conducting appraisal sessions, developing employees.
Three credits: 30 clock hours

AGS 106 EMPLOYEE SELECTION AND INTERVIEWING
Selection process, interviewing, checking references, equal opportunity employment.
Three credits: 30 clock hours

## ACCOUNTING/OFFICE MANAGEMENT

AGS 122 HOW MONEY WORKS IN AN AGRIBUSINESS
Financial management, organizing and analyzing financial information, source and use statement, securing finances, and flow of money. Three credits: 30 clock hours

## AGS 123 MARKETING THROUGH HEDGING

Introduction to the area of marketing called hedging. Explains what hedging is, where it is done and contract requirements. Three credits: 30 clock hours

## EMPLOYEE COMMUNICATIONS

## AGS 130 COOPERATIVE ORGANIZATIONS

Co-op history, co-ops and today's economy, federal legislation and cooperatives, cooperative organization financing and credit in co-ops, role of co-op directors and managers, and credit in co-ops.
Three credits: 30 clock hours

## AGS 132 AGRIBUSINESS TELEPHONE COMMUNICATIONS

Developing effective telephone manners, selling over the telephone, handling outside calls, and customer complaints and collecting delinquent accounts.
Three credits: 30 clock hours

## FERTILIZER AND AG CHEMICALS

## AGS 141 FERTILIZER

Soil types, nutrients and testing, fertilizer materials, fertilizing common crops, using the CO-OP Pharmacy File, selling CO-OP fertilizer.
Three credits: 30 clock hours

## AGS 142 AG CHEMICALS

Common insects and weeds, insecticides, herbicides, handling chemicals safely, stored grain chemicals, seed treatment.
Three credits: 30 clock hours

## AGS 143 LAWN AND GARDEN CENTER SALES

Establishment and maintenance of a lawn; weed, insect, and disease control in a lawn; and a proven sales approach for lawn and garden center sales.
Three credits: 30 clock hours

## AGS 144 CORN PRODUCTION

Corn plant development, hybrid selection, seedbed preparation and planting, fertilizing corn, corn insects, and diseases.
Three credits: 30 clock hours

## AGS 145 ANHYDROUS AMMONIA SAFETY

To acquaint agriculture students, the farmer/user and the dealer with whom he does business, with the hazards, safety procedures and first aid involved in dealing with anhydrous ammonia.
Three credits: 30 clock hours

## AGS 146 IRRIGATION

Introduction to modern methods of irrigation. Many of the factors that have to be considered for efficient use of water and its application are detailed.
Three credits: 30 clock hours

## ANIMAL PRODUCTION

AGS 151 FEED
Animal nutrition and digestion; roughages, grains, and supplements; ration formulation; feed warehousing; and selling CO-OP feed.
Three credits: 30 clock hours

AGS 152 ANIMAL HEALTH
Animal health term, diagnosing disease, wounds, poisonings, parasites, and CO-OP Animal Health products.
Three credits: 30 clock hours

AGS 153 BEEF PRODUCTION-COW/CALF PROGRAM
Beef cow feeding, crop feeding, feeding replacement heifers, herd health program.
Three credits: 30 clock hours

## AGS 154 BEEF PRODUCTION-GROWING AND FINISHING PROGRAM

The starting program, growing program, COPASS program, finishing program, grower and feedlot health programs.
Three credits: 30 clock hours

## AGS 155 SWINE PRODUCTION

The CO-OP Meat Market Program, management of the herd, hog health products, and hog facilities and equipment.
Three credits: 30 clock hours

## AGS 156 SHEEP PRODUCTION

Managing and feeding the breeding flock and fattening lambs, identifying diseases of sheep and managing the flock at lambing. Three credits: 30 clock hours

## AGS 157 DAIRY PRODUCTION

The dry cow, lactating herd, replacement heifer, dairy feeds, sanitation and fly control, management suggestions.
Three credits: 30 clock hours

## PETROLEUM, TBA, AND LPG

## AGS 161 PETROLEUM

CO-OP gasoline, diesel fuel, and lubricants; storage of fuels; operation of a bulk plant and tank truck; using the Farm Tractor Lube Guide; and selling CO-OP petroleum products.
Three credits: 30 clock hours

## AGS 162 SERVICE STATION SALES AND SERVICE

CO-OP service at the pump, effective merchandise displays, service station sales plan, under-the-hood checkpoints, and service station safety.
Three credits: 30 clock hours

## AGS 163 ON-THE-FARM SALES AND SERVICE

Repairing tractor tires, recording vital information, safety on the repair call, effective selling on the farm.
Three credits: 30 clock hours

## AGS 164 SELLING CO-OP TIRES, BATTERIES AND ACCESSORIES

The successful sale, TBA product information, product features and benefits, CO-OP warranties and adjustments, and the importance of coop service to TBA sales.
Three credits: 30 clock hours

## AGS 165 LP GAS HANDLING AND STORAGE

Transferring LP gas, care of equipment, bulk plant records and safety, filling cylinders, LP delivery.
Three credits: 30 clock hours

## AGS 166 LP CARBURETION

Provides an overview of the nature, origin, and use of LP gas. Teaches the carburetion system beginning with engine operation; covers fuel and combustion. Carburetion system parts covered are: air cleaner, ventilation, governors, ignition circuit, adjustments, tests, and trouble shooting.
Three credits: 30 clock hours

## GRAIN TRAINING

## AGS 173 PHYSICAL GRAIN HANDLING

Principles of grain management including facilities, operations, personnel, inventory, and financial management.
Three credits: 30 clock hour

## SALES TRAINING

## AGS 182 FARM STORE MANAGEMENT

Purchasing merchandise, display of merchandise, advertising, inventory control, store layout, budgets, financial statements, and employee training.
Three credits: 30 clock hours

## ANT: ANTHROPOLOGY

## ANT 101 INTRODUCTION TO ANTHROPOLOGY

Introduces the nature and scope of anthropology, organic man, race and the nature of culture.
Five credits

## ANT 106 INTRODUCTION TO ARCHAEOLOGY

Surveys the prehistory of man, his technology, and contributions to the modern world. Examines major archaeological groups and sites, methods of excavation, dating of artifacts, and analysis of data.

## Five credits

ANT 107 INTRODUCTION TO PHYSICAL ANTHROPOLOGY
A study of the biological and cultural origins of mankind based on the latest archaeological evidence as well as the most contemporary notions of genetics and evolution.
Five credits

## ANT 125 CULTURAL ANTHROPOLOGY

A survey of cultural patterns from throughout the world as well as an introduction to various cultural theories and cultural studies.
Five credits

## ART: ART AND DESIGN

## ART: ART

## ART 100 ART APPRECIATION

Introduction to art, architecture, and several fields of design. Through visual presentations, discussions, and studio exercises, students examine various ways in which people express themselves, and solve problems; e.g. painting, sculpture, crafts, housing, and consumer goods. Course fulfills a humanities requirement.
Five credits

## ART 107 ARTS FOR HUMAN DEVELOPMENT

This course offers a variety of information and activities in the areas of drawing, design and color, crafts, music, poetry and prose to heighten the student's sensitivity to and awareness of the arts.
One credit: 20 clock hours

## ART 111 ART HISTORY I <br> ART 112 ART HISTORY II <br> ART 113 ART HISTORY III

These courses provide students with a basic historical understanding of western art forms, architecture, and relevant crafts.
Five credits each: 50 clock hours each

## ART 299 ARTS 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 art form the student is working in and his or her level of proficiency. May be repeated at different levels of proficiency.
One to three credits: contact program coordinator

## ARS: ART STUDIO

## ARS 100 TEXTILE CRAFTS \& DESIGN

Emphasis is placed upon an introduction to fabric crafts with design application in each fabric craft.
Three credits: 40 clock hours

## ARS 125 HANDBUILT CLAY I <br> ARS 126 HANDBUILT CLAY II <br> ARS 127 HANDBUILT CLAY III

The study of functional and decorative design elements, designing handbuilt ceramics, and instruction in several methods of hand building.
Three credits each: 40 clock hours each

## ARS 131 STAINED GLASS I

This course teaches the techniques for the design and construction of stained glass.
Three credits: 40 clock hours

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 selfexpression to discover individual painting styles.
One credit each: 20 clock hours each

## ARS 241 PAINTING I <br> ARS 242 PAINTING II

These courses introduce students to the design principles, technical information, and skills necessary to express ideas and feelings through painting. Painting II emphasizes materials exploration in terms of painting, and further development of individual approaches to painting.
Three credits each: 40 clock hours each

## ARS 243 WATER MEDIA I <br> ARS 244 WATER MEDIA II

These courses include a survey of the various water media processes, instruction in the basic water media techniques, and work with the unique aspects of developing a painting. Water Media II includes the study of concepts, (forms for effective water media statements), and concentrates on individual patterns of expression.
Three credits each: 40 clock hours each

## ARS 251 SCULPTURE I <br> ARS 252 SCULPTURE II

These courses include a survey of traditional and contemporary sculptural forms, the study of sculptural elements, organization and imagery; experience in designing for sculpture; instruction in the basic techniques of modeling, carving, and construction. Sculpture II emphasizes the figure, further work in designing for sculpture, and further instruction in the techniques of modeling, bronze casting and construction.
Three credits each: 40 clock hours each

## ARS 261 JEWELRY AND METALWORK I ARS 262 JEWELRY AND METALWORK II

Jewelry and Metalwork I includes a study and survey of jewelry and related metal forms; experience in designing for jewelry and metalwork; and instruction in the basic techniques of cutting, forming, soldering, finishing, and stone setting. Jewelry and Metalwork II emphasizes conceptual design development and specialized techniques (e.g. casting, raising, enameling, stone cutting).
Three credits each: 40 clock hours each

## ARS 271 POTTERY AND CERAMIC DESIGN I ARS 272 POTTERY AND CERAMIC DESIGN II

Pottery and Ceramic Design I includes a survey of traditional and contemporary pottery and ceramic forms; the study of functional and decorative design elements and principles of organization; and experience in designing for ceramic objects. Pottery and Ceramic Design II includes a survey of wheel thrown pottery; continued instruction in the various aspects of throwing; the study of the essentials of glaze formulation; and work with creative design for wheel thrown forms. Three credits each: 40 clock hours each

## ARS 273 POTTERY AND CERAMIC DESIGN III

ARS 274 POTTERY AND CERAMIC DESIGN IV
Pottery and Ceramic Design III offers a survey of wheel thrown pottery, with emphasis on more advanced forms, refining technique, glaze techniques and kiln firing. Pottery and Ceramic Design IV presents a deeper involvement in all aspects of pottery making, glazing, and firing.
Three credits each: 40 clock hours each

## ARS 281 WEAVING I

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

## AAD: DESIGN

## AAD 101 FUNDAMENTALS OF ART AND DESIGN I

 AAD 102 FUNDAMENTALS OF ART AND DESIGN IIThese courses include the study of light, space, and perception. Students study the process of creative thinking, fundamental visual elements, and principles of organization. Included are: techniques for idea development, executing "rough" proposals, choosing effective materials, and making successful presentations. The application of these fundamentals to problems in the visual arts and design fields is surveyed. First course concentrates on two-dimensional situations; and second course focuses on three-dimensional conditions.

## Five credits each

AAD 128 COMPUTER GRAPHICS I
AAD 129 COMPUTER GRAPHICS II
These courses teach students the use of the TIME ARTS LUMENA Computer System, including a graphics tablet with stylus, and a color monitor.
Three credits: 40 clock hours - contact instructor
$\begin{array}{ll}\text { AAD 131 } & \text { DRAWING I } \\ \text { AAD 132 } & \text { DRAWING II }\end{array}$
These courses introduce students to drawing as a means of visual thinking and communication. Drawing I assignments cover visual perception, basic drawing techniques (e.g. line drawing, shading, perspective), and composition. Students may choose to emphasize "commercial" or personally expressive drawing approaches. Drawing II includes a survey of expressive drawing styles, design for drawing, further experience with developing and expressing concepts in terms of drawing, and an exploration of various drawing mediums.
Three credits each: 40 clock hours each

## AAD 201 SURVEY OF FASHION DESIGN

Within the context of fashion design and display, this course covers visual perception, the process of creative thinking and expression, the fundamentals of visual design as applied to this field, and a survey of examples.
Three credits: 40 clock hours

## AAD 221 GRAPHIC DESIGN I

AAD 222 GRAPHIC DESIGN II
These courses introduce students to graphic applications of drawing, painting and photographic techniques; and creative design with letter forms and composition (e.g. logos, letterheads, posters, brochures, advertising, and publications). Graphic Design I concentrates on basic concepts and working processes from idea development through the execution of the "rough" to the "complete." Graphic Design II covers additional design projects, such as calendars, other advertising, and publications such as newsletters, catalogs, or service manuals. Students will execute a project through camera ready art.
Three credits each: 40 clock hours each

## AAD 223 GRAPHIC DESIGN III

Includes a survey of graphic preparations for packaging, product design, signage, and interior and architectural planning; and the elements and principles relevant to their design.
Three credits: 40 clock hours

## AAD 225 CALLIGRAPHY

This course introduces calligraphy as an art form and as a major design element in graphic design. It includes instruction in techniques, information regarding tools and materials, practice in various lettering styles, and practical applications.
Three credits: 40 clock hours

AAD 231 FIGURE DRAWING I
AAD 232 FIGURE DRAWING II
These courses include a survey of figure drawing, study of anatomy in terms of drawing, and instruction in the basic techniques of drawing the human figure. Figure Drawing II includes additional study of anatomy and complex drawing problems.
Three credits each: 40 clock hours each

## AAD 235 GRAPHIC ILLUSTRATION

This course allows students with previous drawing experience to explore "commercial" applications such as illustration, or architectural rendering.
Prerequisite: AAD 131 and AAD 132
Three credits: 40 clock hours

AAD 241 PHOTOGRAPHY I
AAD 242 PHOTOGRAPHY II
AAD 243 PHOTOGRAPHY III
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 portfolio.
Three credits each: 40 clock hours each

## AAD 245 PHOTOJOURNALISM I

A study of photography used for telling a picture story. Includes composition and use of the camera for publications.
Prerequisite: AAD 241
Three credits: 40 clock hours

AAD 251 INTERIOR DESIGN I
AAD 252 INTERIOR DESIGN II
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

## AST: ASTRONOMY

## AST 101 INTRODUCTORY ASTRONOMY

Covers methods of observation and analysis used by astronomers: astronomic tools, the solar system, stars, galaxies, and constellations of 40 degrees N lat. Also includes observing with the telescope.
Three credits: three hours lecture

## AST 102 ASTRONOMY SEMINAR

An approach to more advanced topics in astronomy that allows students to explore an area of this subject in depth. Students will write a paper, determine the method of exposition, and present the special information to the class.
Three credits: three hours lecture

## AST 109 SELECTED ASTRONOMY TOPICS

Provides the opportunity to become familiar with the constellations, brighter stars, planets, lunar features, and conspicuous deep spaced objects visible during the course of the class. Discussions and lectures will focus on the solar system, extraterrestrial life, astronomical instruments, spectroscopy, and space exploration.
Two credits: two hours lecture

## 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 division chairman

## 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 oxy-acetylene 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 121 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 oxy-acetylene 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 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 acrylic enamels and acrylic lacquer 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 lacquers and enamels.
Prerequisite: ABF 151, or permission of instructor
Twelve credits: 150 clock hours

## ABR 199 SPECIAL NEEDS/AUTO BODY REPAIR

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 learn 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 learn 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 learn 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 learn to repair an auto with severe damage (totaled) and do the operations required to make the auto road-worthy.

## Prerequisite: ABR 221

Four credits: 60 clock hours

## ABR 223 AUTO BODY REBUILDING III

Continuation of ABR 222. 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 learn 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 write 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.
Prerequisite: ABR 141 or permission of instructor
Twelve credits: 150 clock hours

## AMT 104 BRAKE REPAIR

Designed to prepare students for the specialty work of modern automobile brake repair and adjustment. Conventional as well as dise systems are studied and worked on. 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 cars. 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 tune-up and service procedures as related to the automobile. Upon course completion students will be able to diagnose and service the components of the conventional point and electronic ignition systems. Good shop safety practices and accident prevention are included.
Four credits: 60 clock hours

## AMT 107 ADVANCED ENGINE TUNE-UP

Designed to give students the basic skills and knowledge in fuel systems and service procedures as related to the automobile. Upon course completion students will be able to diagnose and repair or overhaul the various types of carburetors found in American and most foreign cars.
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 will 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: 60 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 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, TRANSMISSIONS, AND FINAL DRIVES A

Students will learn various shop procedures that are common to all types of automotive repair shops; use and care of basic hand tools, and service reference materials will be covered. The repair and diagnosis of drum, disc, and power brakes will be covered during the first half of the course. During the second half, students will overhaul standard transmissions, clutches, driveshafts, and differentials. Good safety practices and accident prevention are included with each job in this course.
Twelve credits: 150 clock hours

## AMT 132 STEERING AND SUSPENSION SYSTEMS A

Students will develop necessary skills and knowledge to repair all parts of the suspension system, align front ends, perform four wheel alignment, balance wheels, overhaul and adjust rack and pinion, conventional and power steering units. Included is MacPherson strut service, transaxle overhaul, constant velocity joint service, and independent rear suspension service and adjustment. Good safety practices and accident prevention are included with each job in this course.
Twelve credits: 150 clock hours

## AMT 133 FUEL SYSTEMS AND TUNE-UP A

Students develop necessary skills and knowledge to perform complete major engine tune-ups and carburetor overhaul. Theory and overhaul of single, two, and four-barrel carburetors, fuel pumps, exhaust emission controls, and ignition systems are covered. Modern test equipment is used to diagnose performance problems such as infra-red exhaust analyzers, oscilloscopes, tachometer, dwell meter, ohmmeter, vacuum gauge, distributor stroboscope, and all types of engine testers. Students study the various emission control systems, how they work, and what pollutants each system controls. Procedures for emission testing are covered. Good safety practices and accident prevention are included with each job in this course.
Twelve credits: 150 clock hours

## AMT 136 EMISSION CONTROL

Provides a basic knowledge and understanding of the various emission control systems and how they function on the automobile to aid in reducing emissions. Pollutants such as carbon monoxide and hydrocarbons will be tested in the shop on the latest test equipment available.
Prerequisite: AMT 106 and AMT 107, AMT 133, or permission of instructor
Five credits: fifty clock hours

## AMT 199 SPECIAL NEEDS/AUTO MECHANICS

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.
Six credits: 10 to 30 clock hours

## AMT 207 INTRODUCTION TO DIESEL ENGINE

Students will learn the basic theory of the diesel engine. Comparisons are made between the gasoline and diesel engine on the basis of block design, fuel system, and electrical units. Emphasizes components, such as the turbocharger, blower, injector, fuel pumps, and their function in the diesel engine.
Six credits: 60 clock hours

## AMT 208 DIESEL ENGINE REPAIR I

Students learn construction, operation, parts identification and service procedures on modern automotive diesel engines. Study of cooling and lubrication systems is included. Students begin on mock-up units and progress to complete diesel engine overhaul. Shop math including fractions, decimals, cubic measurements, formulas and metric measurements will be covered. Good shop safety practices and accident prevention are included with each job in this course.
Twelve credits: 150 clock hours

## AMT 209 DIESEL ENGINE REPAIR II

Students develop necessary skills and knowledge to perform complete major diesel engine tune-ups. Theory and service of the fuel system and air delivery systems will be covered. Testing of pumps and injectors on both domestic and foreign diesels will be included. Testing of glow plugs and the diesel electrical system is also included. Good shop safety practices and accident prevention are included with each job in this course.
Twelve credits: 150 clock hours

## AMT 231 AUTOMOTIVE ENGINES A

Students learn construction, operation, parts identification, and service procedures on all types of modern automotive engines. Study of cooling and lubricating systems included. Students begin on mock-up units and progress to complete engine overhaul. Shop math 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 A

Students learn theory, diagnosis, and repair of all automotive electrical units including batteries, starters, generators, alternators, regulators, and electrical testing equipment to diagnose problems in automotive electrical units. Good safety practices and accident prevention are included with each job in this course.
Twelve credits: 150 clock hours

## AMT 233 AIR CONDITIONING AND COMFORT CONTROLS

Students learn basic theory of refrigeration systems components, evacuation, charging, and testing automobile air conditioners. They solve simulated problems on late model air conditioners. Heaters and defrosters are also covered.
Five credits: 50 clock hours

## AMT 234 AUTOMATIC TRANSMISSIONS AND AIR CONDITIONING A

Students learn 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 learn how to install after-market units, service factory installed air conditioners, and solve problems on late model units. 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. Feedback carburetors, all fuel injected systems including ported fuel injection systems will be covered. The input sensors and the electronic controls that change engine fuel, timing, and emission controls will also be covered. Students will learn how to test computer equipped engines using special test instruments and also with simple shop equipment such as an ohmmeter, voltmeter. and dwellmeter. Design and service of turbochargers for these engines will be covered.
Prerequisite: AMT 133 or AMT 106 and AMT 107 or permission of instructor
Four credits: 60 clock hours

## AMT 262 AUTOMOTIVE ELECTRONICS

Students will develop the knowledge to identify various circuits, calculate their values and operational features. They will study semiconductors and other electronic components used on the automobile. 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

The purpose of this course is to provide additional training to qualified students in the areas of automotive electronics, microprocessors and computer controlled systems. Students will develop the knowledge to identify various circuits, calculate their values and operational features. They will study semi-conductors and other electronic components used on the automobile. Computer design and operation as it relates to automotive systems will be covered. Students will develop the knowledge and skills to correctly diagnose problems in the electronic ignition and fuel delivery systems of late model automobiles. (With the permission of advisor, a student wishing to specialize in automotive electronics may elect to substitute this course for one of the certificate courses to satisfy graduation requirements.) Prerequisite: AMT 133 or AMT 132 or permission of instructor Twelve credits: 150 clock hours

## AVT: AVIATION TECHNOLOGY

## 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 and AVT 109
Three credits: 30 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
Three credits: 30 clock hours

## AVT 105 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.
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 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 117 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 have necessary skill and knowledge to pass a phase I flight check.
Prerequisite: AVT 102 or private license
Five credits: 70 clock hours

## AVT 118 COMMERCIAL FLIGHT LAB II

Continuation of AVT 117 with a greater emphasis on cross country flying. The student must complete the solo, night, and cross country requirements for FAA instrument rating during this lab. Upon successful completion of the course, the student will have the necessary skill and knowledge to pass a phase II flight check.
Prerequisite: AVT 117 or permission of instructor
Five credits: 70 clock hours

## AVT 119 CONVENTIONAL GEAR TRANSITION LAB

Includes orientation to tail wheel aircraft including principles of " P " factor and torque. Upon successful completion of the course, the student will be able to solo a tail wheel aircraft.
Two credits: 20 clock hours

## AVT 205 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 should be able to pass the FAA instrument test.
Prerequisite: AVT 108 or private license, or permission of instructor Six credits: 60 clock hours

## AVT 206 COMMERCIAL GROUND SCHOOL

Includes a review of material for commercial flying and FAR part 135. Upon successful completion of the course, the student should be able to pass the FAA commercial written test.
Prerequisite: AVT 108 or private license, or permission of instructor Five credits: 50 clock hours

## AVT 207 BASIC GROUND INSTRUCTOR

Fundamentals of instruction and theory. Students practice classroom presentations which examine all flight subjects.
Prerequisite: permission of instructor
Two credits: 20 clock hours

AVT 208 ADVANCED GROUND INSTRUCTOR
Students practice classroom presentations of advanced theory, advanced meteorology, weight balance, and transport-type aircraft.
Prerequisite: permission of instructor
Two credits: 20 clock hours

## AVT 209 INSTRUMENT GROUND INSTRUCTOR

Instruments and systems, instrument flight charts, IFR regulations, and instrument instructing techniques will be covered
Prerequisite: permission of instructor
Two credits: 20 clock hours

## AVT 211 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 109 or permission of instructor
Three credits: 30 clock hours

## AVT 212 INSTRUMENT FLIGHT SIMULATOR II

Designed to develop skills in all phases of instrument flying. Includes review of skills in AVT 211 and cross country procedures.
Prerequisite: AVT 211 or permission of instructor
Six credits: 60 clock hours

AVT 213 ADVANCED INSTRUMENT SIMULATOR
Designed to refine instrument flying skills and to complete simulator training for FAA instrument rating.
Five credits: 50 clock hours

## AVT 216 INSTRUMENT FLIGHT LAB

Includes necessary flight instruction to qualify the student to receive the FAA instrument rating. Upon successful completion of the course, the student will have the necessary skill and knowledge to pass FAA instrument check ride.
Prerequisite: AVT 118 or permission of instructor
Five credits: 70 clock hours

## AVT 217 COMMERCIAL FLIGHT LAB III

The final flight lab in preparation for the commercial license. Upon successful completion of the course, the student will have the necessary knowledge to pass the FAA commercial flight check.
Prerequisite: concurrent enrollment in AVT 216 or permission of instructor
Five credits: 70 clock hours

## AVT 218 CERTIFIED FLIGHT INSTRUCTOR

Theory and practice of instructional methods; fundamentals of instruction and preparing a lesson plan. A review of flight maneuvers. Upon successful completion of the course, the student will be able to pass the FAA CFI check ride.
Prerequisite: commercial pilot license or permission of instructor Five credits: 50 clock hours

## AVT 219 INSTRUMENT FLIGHT INSTRUCTOR

Theory and practice of teaching basic attitude instrument flying, instrument flight planning, and instructional techniques. Upon successful completion of the course, the student will be able to take the FAA IFI check.
Prerequisite: commercial pilot license or permission of instructor
Three credits: 30 clock hours

## AVT 225 MULTI-ENGINE TRANSITION LAB

Principles and procedures of light twin-aircraft, complicated systems, orientation and familiarization, emergency situations. Upon successful completion of the course, the student will have the necessary skill and knowledge to pass the multi-engine check ride
Prerequisite: commercial pilot license or permission of instructor Four credits: 40 clock hours

## AVT 226 MULTI-ENGINE SIMULATOR

Designed to prepare the student for multi-engine instructor in aircraft or to provide comprehensive review for multi-engine rated pilots.
Prerequisite: AVT 115, AVT 215, or permission of instructor
Three credits: 30 clock hours

## AVT 227 MULTI-ENGINE INSTRUMENT SIMULATOR

Designed to give the student additional skill in instrument flight with a complex airplane and to develop instrument and emergency skills to a high level.
Prerequisite: AVT 226 or permission of instructor
Two credits: 20 clock hours

## AVT 228 MULTI-ENGINE SIMULATOR REFRESHER I

Designed to keep the pilot proficient in instrument procedures.
Prerequisite: permission of instructor
One credit: 10 clock hours

## AVT 229 MULTI-ENGINE SIMULATOR REFRESHER II

Designed to keep the pilot proficient in instrument procedures.
Prerequisite: permission of instructor
One credit: 10 clock hours

## BIO: BIOLOGICAL SCIENCES

## BIO 101 BIOLOGY CONCEPTS

General survey of the characteristics of life emphasizing basic concepts and the theories in the fields of biology and related disciplines. Attention is given to levels of organization, energy flow, and changes within living organisms. Offered each quarter.
Five credits: four hours lecture, two hours lab per week

## BIO 106 FIELD BOTANY

Studies methods of collecting, preserving, and identifying plants.
Three credits: two hours lecture, two hours lab per week

## 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 COLLEGE BIOLOGY I

Study of animal nutrition and digestion, gas exchange, transport mechanisms, excretion, nervous system, sense organs, hormones, muscles, skeletons, and behavior
Prerequisite: Bio 101 or High School Biology, or permission of instructor
Five credits: four hours lecture, two hours lab per week
BIO 112 COLLEGE BIOLOGY II
Study of the classification of organisms, protista, lower invertebrates, higher invertebrates, vertebrate anatomy and evolution.
Prerequisites: BIO 101 or BIO 111, or permission of instructor
Five credits: Three hours lecture, four hours lab per week

## BIO 113 COLLEGE BIOLOGY III

Studies the structure of plants as related to the function of each part to the whole organism, and the interactions of the organism to its environment.
Prerequisite: BIO 101 or BIO 111, or permission of instructor Five credits: three hours lecture, four hours lab per week

## 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: four or five hours lecture per week

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. Credit will not be given for BIO 120 and BIO 211 .
Prerequisite: none
Five credits: four hours lecture, three hours lab per week

## 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

## BIO 211 HUMAN ANATOMY AND PHYSIOLOGY

First in a sequence of three courses emphasizing broad principles of human biology, anatomical structure of the human organism and the relationship between structure and function at all levels of organization. Includes chemical composition, cellular and tissue organization, the integumentary system, the skeletal system and basic concepts concerning the blood, lymph, intracellular fluids and electrolytes.
Prerequisite: BIO 101 or permission of instructor
Five credits: four hours lecture, three hours lab per week

## BIO 212 HUMAN ANATOMY AND PHYSIOLOGY II

Second course in the sequence emphasizing broad principles of human biology and the relationship of structure to body function. Includes the muscular system, the nervous system including the special senses, and the endocrine and digestive systems.
Prerequisite: BIO 211 or permission of the instructor Five credits: four hours lecture, three hours lab per week

## BIO 213 HUMAN ANATOMY AND PHYSIOLOGY III

Third course in the sequence emphasizing broad principles of human biology and the relationship of structure to body function. Includes nutrition and metabolism, the respiratory system, the cardiovascular system, immunology and the lymphatic system, the urinary system, fluid and electrolyte balance, the reproductive system and human genetics. Prerequisite: BIO 212 or permission of the instructor
Corequisite: Registration and completion of TEM 127 Cardiopulmonary Resuscitation (CPR)
Five credits: four hours lecture, three hours lab per week

## BIO 216 INTRODUCTION TO MICROBIOLOGY

Foundation course in microbiology emphasizing structure, function, development and classification of protists. Includes both protocaryotic and eucaryotic micro-organisms. Emphasizes organisms with medical and economic impact on human populations. Major laboratory emphasis is on staining techniques and laboratory safety.
Prerequisite: BIO 101 or one year high school biology and permission of the instructor
Five credits: three hours lecture, four hours lab per week

## BIO 217 INTRODUCTION TO ORNITHOLOGY

Introduction to the study of birds. Lecture includes classification and natural history, with field trips to different habitats for identification and observation of adaptations and behavior. Offered spring or summer quarters. Field trips required.
Prerequisite: BIO 101 or permission of instructor
Four credits: six clock hours per week

## 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 division chairman

## BCS: BUILDING CONSTRUCTION

## BCS 102 BASIC CABINETRY

Provides students with necessary instruction for skill development and understanding in the area of basic cabinet construction.
Four credits: 60 clock hours

## BCS 104 CABINETRY II

Students will learn to construct detailed cabinets using intermediate techniques in machine and hand tool joining, and will be able to analyze and design cabinets for home, office, and shop use.
Four credits: 60 clock hours

## BCS 105 BUILDING CONSTRUCTION I

Upon completion of this course, students will be able to read and understand a set of blueprints, and identify the various framing and cornice members. The student should be able to cut and assemble a floor, wall, and roof system; install the cornice, closures, and siding for a given set of prints.
Fourteen credits: 175 clock hours

## BCS 106 BUILDING CONSTRUCTION III

Upon completion of this course, students should be able to install the required insulation; hang, tape, and texture dry wall; assist in hanging doors and installing base and case; and do the required paint and stain. Fourteen credits: 175 clock hours

## BCS 107 BUILDING CONSTRUCTION V

Upon completion of this course, students will be able, when applicable, to assist in setting forms, assist in placing and finishing concrete. Instructions regarding special masonry requirements for walls and foundations is included.
Fourteen credits: 175 clock hours

## BCS 115 BUILDING CONSTRUCTION I B

This course provides training in safety, reading and use of blueprints and specifications. Students will study framing and floor; wall and roof systems, use and application of roofing materials, types and application of exterior wall coverings, exterior trim, doors and windows. (BCS 115 is equivalent to BCS 105.)
Prerequisite: Employment in building trades or related field.
Fourteen Credits: 60 clock hours plus 240 hours of work experience

## BCS 116 BUILDING CONSTRUCTION III B

This course provides instruction in basic math related to building trades; training and instruction in different insulations and their Rfactors; sheetrocking, taping, texturing, paints, stains and finishes; door hanging and hardware. (BCS 116 is equivalent to BCS 106.)
Prerequisite: Employment in building trades or related field Fourteen Credits: 60 clock hours plus 240 hours of work experience

## BCS 117 BUILDING CONSTRUCTION V B

Students will learn safety procedures, site selection and layout, forms and form setting methods, cement finishing, brick layout and brick laying. (BCS 117 is equivalent to BCS 107.)
Prerequisite: Employment in building trades or related field
Fourteen Credits: 60 clock hours plus 240 hours of work experience

## BCS 125 BLUEPRINT READING

This course provides training in how to read and understand blueprints - specifications - and door and window schedules.
Three Credits: 30 clock hours

## BCS 199 BUILDING CONSTRUCTION SPECIAL NEEDS

If the student is in need of special assistance, he or she will develop a step-by-step procedure which can be used in a specific area of housi,g construction. These procedures will be directly related to the methods and techniques set forth by the instructor of the building trades program.
One to three credits: 10 to 30 clock hours

## BCS 205 BUILDING CONSTRUCTION I

Upon completion of this course, students will be able to do a materials take off for a given set of prints in the areas of framing and exterior finish, do the basic layout and cut and assemble a structure in accordance with all state and local codes.
Fourteen credits: 175 clock hours

## BCS 206 BUILDING CONSTRUCTION IV

Upon completion of this course, students should be able to do a materials take off in the areas of insulation, dry wall, cabinets, interior trim, and paint and stain; lay out and build a set of cabinets, hang doors, and install the required interior trim in a house.
Fourteen credits: 175 clock hours

## BCS 207 BUILDING CONSTRUCTION V

Upon completion of this course, students should be able to locate a structure on a building site, estimate the excavation and concrete costs for a given structure, do a material breakdown on the masonry needed (including fireplaces), lay out and set forms as required, and lay out the bond and bed joints for the masonry construction.
Fourteen credits: 175 clock hours

BCS 215 BUILDING CONSTRUCTION II B
This course will provide training and instruction in estimating of exterior materials and labor. Training will also cover advanced framing, stair lay out and building, and roof systems. (BCS 215 is equivalent to BCS 205.)
Prerequisite: Employment in building trades or related field
Fourteen Credits: 60 clock hours plus 240 hours of work experience

## BCS 216 BUILDING CONSTRUCTION IV B

This course will provide training and instruction in estimating of interior building materials and labor, cabinet making and counter tops woods, wood joints and interior trim. (BCS 216 is equivalent to BCS 206.)

Prerequisite: Employment in building trades or related field
Fourteen Credits: 60 clock hours plus 240 hours of work experience

## BCS 217 BUILDING CONSTRUCTION VI B

This course will give instruction in the use of the U.B.C. (Uniform Building Codes) and State and local regulations; legal procedures pertaining to writing contracts, lien waivers, insurances and financial aids needed in contracting. (BCS 217 is equivalent to BCS 207.)
Prerequisite: Employment in building trades or related field
Fourteen Credits: 60 clock hours plus 240 hours of work experience

## BCS 225 CONSTRUCTION ESTIMATING I

This course provides training in estimating and take-offs of exterior building materials and labor and provides training in the use of basic math (job related) in conjunction with estimating.
Three Credits: 30 clock hours

## BCS 226 CONSTRUCTION ESTIMATING I

This course is designed to provide training in estimating and calculating of interior building materials and labor.
Prerequisite: BCS 225 or permission of instructor
Three Credits: 30 clock hours

## BCS 227 BUILDING CONTRACTS

This course is designed to provide training in how to write contracts use of lien waivers - necessary insurances and financial advice in contracting.
Three Credits: 30 clock hours

## BCS 236 CABINET MAKING THEORY

This course is designed to provide instruction in cabinet making and counter tops. It provides training in the types of wood and wood joints. Three Credits: 30 clock hours

## BCS 237 BUILDING CODES

This course is designed to provide instruction in the use of the U.B.C. codes and other state and local regulations.
Three Credits: 30 clock hours

## BIS: BUSINESS INFORMATION SYSTEMS

## BIS 100 INTRODUCTION TO COMPUTERS

This telecourse will provide the student with a comprehensive overview of the computer with a survey of computer hardware and software.

Four credits: 40 clock hours

## BIS 105 COMPUTERS FOR SMALL BUSINESS

To provide the student with the essential concepts of how and why computers are being used throughout today's business world. Students will gain hands on experience with the IBM-PC, using symphony. Five credits: 50 clock hours

## BIS 107 PROBLEM SOLVING USING NUMBERS

Familiarizes students with terms used in business calculations. Introduces numbering systems used with computers. Develops logic and problem solving algebraic concepts.
Five credits: 50 clock hours

BIS 110 INTRODUCTION TO DATA PROCESSING
A survey of information processing systems and computer technology. Topics include a nontechnical description of "how a computer works," business uses of computers, business systems design process, and introduction to computer programming.
Five credits: 50 clock hours

## BIS 111 COMPUTER CONCEPTS I

Studies the basic computer concepts to provide the proper framework for the advanced study of computer systems and programming languages. Topics include virtual storage, "computer math," operating systems, and file structure.
Prerequisite: BIS 110 with a grade of C or better, or if the student passes a BIS 110 challenge test with $85 \%$ or better
Five credits: 50 clock hours

## BIS 112 COMPUTER CONCEPTS II

A study of advanced computer concepts emphasizing how components relate to an integrated data processing system. Topics will include JCL machine language, internal storage, and introduction to assembler. Prerequisite: BIS 111 with a grade of $C$ or better, or written proof of education equivalent of the topics covered in BIS 111
Five credits: 50 clock hours

## BIS 116 BUSINESS BASIC PROGRAMMING

The purpose is to acquire the skills necessary to write and debug business programs utilizing the BASIC language. Programming is done on the IBS-PCs and includes logic building and file processing.
Prerequisite: BIS 110 with a grade of C or better, or if the student passes BIS 110 challenge test with $85 \%$ or better
Five credits: 50 clock hours

## BIS 117 COMPUTER OPERATIONS

A study of the hardware and software components of a computing system relative to the actual operations of the system. Both conceptual and hands-on exposure to topics are included.
Prerequisite: BIS 111 with a grade of C or better, or written proof of education equivalent of the topics covered in BIS 111
Five credits: 50 clock hours

## BIS 121 STRUCTURED COBOL PROGRAMMING

Fundamentals of business-oriented programming language using structured techniques. Documentation techniques, programming standards and logic will be stressed.
Prerequisite: BIS 116 with a grade of C or better, or written proof of education equivalent of the topics covered in BIS 116
Five credits: 50 clock hours

BIS 122 ADVANCED STRUCTURED COBOL
Continuation of BIS 121. Students will learn advanced COBOL techniques and efficiencies and will utilize table handling and various file structure maintenance. Emphasis on structured logic and documentation.
Prerequisite: BIS 121 and BIS 111 with a grade of C or better, or written proof of education equivalent to the topics covered in BIS 121 and BIS 111
Five credits: 50 clock hours

## BIS 126 REPORT PROGRAM GENERATOR II (RPG II)

Topics include printed report generation, file matching, control breaks, and table search. Prior knowledge of fundamental programming logic required.
Prerequisite: BIS 116 with a grade of C or better, or written proof of education equivalent to the topics covered in BIS 116
Five credits: 50 clock hours

## BIS 127 PL/I (PROGRAMMING LANGUAGE I)

Familiarizes students with techniques for using PL/I as a programming language and its application to business and scientific problems. Documentation is emphasized.
Prerequisite: BIS 116 with a grade of C or better, or written proof of education equivalent to the topics covered in BIS 116
Five credits: 50 clock hours

## BIS 135 MICRO ASSEMBLY LANGUAGE

The student will learn to apply modern programming practices to assembly programs on the microcomputer. The student will learn microcomputer architecture, number systems, and addressing modes. Prerequistie: BIS 116 with a grade of C or better or written proof of education equivalent to topics covered in BIS 116.
Five Credits: 50 clock hours

## BIS 145 IBM-PC SYMPHONY AND D BASE III

Develops proficiency using an integrated software package (Symphony) and a data base manager (D BASE III). The use of vendor manuals will be emphasized and the students will be able to adapt classroom applications to actually build their own specific business applications.
Prerequisite: BIS 105 with grade of C or better or written proof of equivalent experience or training
Five credits: 50 clock hours

## BIS 201 C PROGRAMMING LANGUAGE

Students will write interactive programs on a micro-computer (IBM compatable) using the C Language.
Prerequisite: Advanced programming techniques with a grade of B or better or written proof of equivalent experience or training
Five credits: 50 clock hours

## BIS 205 ASSEMBLER LANGUAGE PROGRAMMING

Programming concepts learned in BIS 112 are implemented using IBM 370 Assembler Language. Documentation techniques and programming standards stressed. College computer will be used to test programs written by students.
Prerequisite: BIS 112 and BIS 121 with a grade of C or better, or written proof of education equivalent to the topics covered in BIS 112 and BIS 121
Five credits: 50 clock hours

## BIS 206 NEW ISSUES AND DEVELOPMENTS IN

 DATA PROCESSINGFamiliarizes students with new hardware and software developments in all types of systems. Gives students the opportunity to research some of these new developments.
Prerequisite: BIS 205 with a grade of C or better, or written proof of education equivalent to the topics covered in BIS 205
Five credits: 50 clock hours

## BIS 207 PROGRAM MAINTENANCE AND JCL

Student will study the effects of changes to a business computer application from the perspective of the user, programmer, operations personnel, and customer. Students learn program maintenance methodology and study various operating system's job control languages.
Prerequisite: BIS 116 and BIS 121 with grade of C or better or written proof of equivalent experience or training
Five credits: 50 clock hours

## BIS 211 STRUCTURED SYSTEMS ANALYSIS

A pragmatic approach to systems development which identifies classic problems faced by an analyst. Topics include data flow diagrams, data dictionary, data structure diagrams, and other analyst's tools.
Prerequisite: BIS 122 and BIS 111 with a grade of C or better, or written proof of education equivalent to the topics covered in BIS 122 and BIS 111
Five credits: 50 clock hours

## BIS 212 SYSTEMS ANALYSIS II

The purpose is to take a logical model of a system with a stated objective for that system and produce physical system specifications to meet those objectives.
Prerequisite: BIS 211 with a grade of C or better
Five credits: 50 clock hours

## BUS 103 TYPEWRITING III

Further development of typing techniques. Emphasis on production of mailable copy of business letters, tabulations, business communication forms, and special reports.
Prerequisite: BUS 101 or speed of at least 45 wpm . Additional lab hours may be needed.
Four credits: 50 clock hours

## BUS 104 TYPEWRITING IV

Further development of typing techniques in office-type situations.
Emphasis will be placed on production of mailable copy from office style typing and transcribing machines. Office simulations will be done the last five weeks of the quarter.
Prerequisite: BUS 103, BUS 142, and speed of 50 wpm
Four credits: 50 clock hours

## BUS 106 OFFICE SKILLS I

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 and its environs.
Three credits: 50 clock hours

## BUS 107 OFFICE PROCEDURES

A study of general business office duties and problems, job interviewing and application, payroll and financial procedures, reception and messenger work, mail handling, telephone technique, and filing.
Prerequisite: BUS 101 or equivalent
Five credits: 50 clock hours

## BUS 108 10-KEY TOUCH CALCULATING

Students will become proficient in the touch method operation of the $10-$ key pad. Students will be able to use the calculator efficiently in record keeping activities.
One credit: 15 clock hours

## BUS 109 SECRETARIAL SKILLS

Review of basic typing, filing procedures, communication, mailing procedures, human relations, personnel, and duplicating, as well as other similar duties.
Two credits: 30 clock hours

## BUS 110 INTRODUCTION TO WORD/INFORMATION PROCESSING

Introduction to the usage and concepts of word processing. An orientation course for secretarial, management, accounting, and data processing students who wish to remain abreast of the latest state of the art in office efficiency and productivity.
Prerequisite: BUS 101 or 35 wpm typing speed or permission of instructor
Four credits: 40 clock hours

## BUS 111 WORD/INFORMATION

 PROCESSING ITo instruct the student through a combination of lecture and individualized study in overall operations of word processing software using personal computers. At the completion of the course the student will be able to produce letters, memos, tables, and reports.
Prerequisite: BUS 103 and BUS 110 or permission of instructor
Four credits: 50 clock hours

## BUS 112 WORD/INFORMATION

## PROCESSING II

This course is intended to provide the student with machine transcription skills and additional production experience using word processing software on personal computers. The student will learn to produce mailable copy from office-style material and transcription tapes.
Prerequisite: BUS 104 and BUS 111 and 50 wpm typing speed or permission of instructor
Four credits: 50 clock hours

## BUS 115 LEGAL TYPEWRITING

Production practice in preparing legal documents and legal forms. Emphasizes typewriting and spelling accuracy of legal terminology.
Prerequisite: BUS 103 and 60 wpm typing speed. To be taken concurrently with BUS 117
Four credits: 50 clock hours

## BUS 116 WORD PROCESSING:

 DEDICATED SYSTEMSThis course is designed to provide the student with production experience on a dedicated word processor using an individualized approach.
Prerequisite: BUS 110 and BUS 111 and permission of instructor
Four credits: 60 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.
Five credits: 50 clock hours

## BUS 118 LEGAL MACHINE TRANSCRIPTION

Student will review legal terminology and legal forms, transcribe legal material, and type legal forms commonly used in legal offices.
Prerequisite: BUS 115, BUS 117, and BUS 142
Four credits: 50 clock hours

## BUS 119 LEGAL ENVIRONMENT OF

 BUSINESSTo provide the student with an overview of business law, particularly as it pertains to mid-managers, legal secretaries, and business secretaries. Five credits: 50 clock hours

## BUS 121 COLLEGE BOOKKEEPING I

To give the student an understanding of the fundamentals of bookkeeping and accounting as applied to practical situations in the business community. To prepare the student to do the duties of an entrylevel bookkeeper.
Five credits: 50 clock hours

## BUS 122 COLLEGE BOOKKEEPING II

To give the student an understanding of bookkeeping and accounting as applied to practical business situations in the community. To prepare the student to take care of the duties of a bookkeeper in the average office.
Prerequisite: BUS 121 and BUS 195 or permission of instructor Five credits: 50 clock hours

## BUS 125 ADDING AND CALCULATING MACHINES

Student will acquire basic skills necessary to process data accurately and rapidly. They will learn to use electronic calculators properly and efficiently.
Prerequisite: MAT 110 or permission of instructor Two credits: 30 clock hours

## BUS 126 PROOFREADING TECHNIQUES

This course will assist individuals in developing proofreading skills necessary to create error-free communications. Recommended for clerical majors.
One credit: 10 clock hours

## BUS 127 BUSINESS WORD USAGE

This course will assist individuals in developing business language skills necessary to produce error-free communications. Recommended for clerical majors.
Prerequisite: BUS 141 and permission of instructor
Three credits: 45 clock hours

## BUS 128 KEYBOARDING FOR COMPUTERS

This course offers the opportunity for all individuals to learn keyboarding on an electric typewriter. This skill may be transferred for use on personal and/or business computers. This course is not intended to replace Typewriting I. Intended for non-secretarial majors.
Two credits: 25 clock hours

## BUS 131 TYPEWRITING REFRESHER I

An individualized refresher typing class tailored for persons reentering the labor market who need to refresh their typing skills.
Prerequisite: BUS 101 or one year high school typewriting
Four credits: 60 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 140 WORD PROCESSING ON MICROCOMPUTERS I

To gain a basic understanding of the functions and mechanics of word processing software used on a microcomputer.
Prerequisite: BUS 101
Two credits: 30 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 it applies to the business world. Written business communication will be introduced.
Five credits: 50 clock hours

## BUS 142 INTERMEDIATE COMMUNICATIONS

Students 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.
Prerequisite: BUS 141 or permission of instructor
Five credits: 50 clock hours

BUS 143 ADVANCED COMMUNICATIONS
Students develop communication skills to write with clarity and confidence. Students work towards precise, powerful business writing. The basic principles and practices of business letters, reports, memos, and oral communication are studied and applied.

Prerequisite: BUS 142 or permission of instructor
Three credits: 30 clock hours

## BUS 145 WORD PROCESSING ON MICROCOMPUTERS II

To gain further experience using word processing software and personal computers.
Prerequisite: BUS 140 or permission of instructor
Two credits: 30 clock hours

## BUS 146 OFFICE INTERNSHIP

The office internship will provide on-the-job experience in a business office.
Prerequisite: permission of instructor
Three credits: 90 clock hours

## BUS 150 INFORMATIONAL CONCEPTS FOR BANKERS

To introduce students to the basics of computer operation, and, in * particular, the skills necessary for the banking industry.
Two credits: 20 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 161 SHORTHAND I

To develop reading speed from book plates and handwritten notes. Develop shorthand writing of familiar and unfamiliar material. Develop the ability to transcribe at the typewriter.
Prerequisite: BUS 101 or 30 wpm typing speed and BUS 141, or permission of instructor
Five credits: 50 clock hours

## BUS 162 SHORTHAND II

Develops ability to construct outlines for unfamiliar words and increases skill in transcription. Emphasizes production of mailable letters from office style dictation, reviews theory of shorthand, and increases shorthand reading speed.
Prerequisite: BUS 161 or previous shorthand
Five credits: 50 clock hours

BUS 171 BUSINESS LEADERSHIP ACTIVITIES
BUS 172 BUSINESS LEADERSHIP ACTIVITIES 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 each

BUS 185 OFFICE INDEPENDENT STUDY
BUS 186 OFFICE INDEPENDENT STUDY
BUS 187 OFFICE INDEPENDENT STUDY
BUS 188 OFFICE INDEPENDENT STUDY
A course providing the opportunity for the student to study a specific area or skill under the direction of a qualified faculty member.
One to four credits

BUS 195 BOOKKEEPING PRACTICUM
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: BUS 121 or permission of instructor
One credit: 15 clock hours

BUS 196 COMPUTERIZED BOOKKEEPING PRACTICUM
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: BUS 121 and BUS 195 or permission of instructor One credit: 15 clock hours

## BUS 200 BUSINESS LAW

An introduction to law. Analyzes its origin, development and interaction with business.
Five credits: 50 clock hours

## BUS 210 BUSINESS AND BANKING

An introductory course in finance with special emphasis on various types of financial institutions and roles they play in the economy and society
Five credits: 50 clock hours

## BUS 211 LEGAL OFFICE PROCEDURES

To acquaint the student with the tasks performed in a legal office and to show how these tasks relate to the court system.
Prerequisite: BUS 115 and BUS 117
Five credits: 50 clock hours

## BUS 212 CAREER LEGAL SECRETARY

A comprehensive course for advanced-level students who desire to become legal secretaries. 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 OFFICIAL COURSE FOR LEGAL SECRETARIES - ADVANCED II

Continuation of BUS 225.
Three credits: 33 clock hours

## BUS 221 CPS REVIEW I

A review course highlighting six areas of business: business law, economics and management, accounting, behavioral science, office administration and communication, and office technology. Designed to prepare the student for Certified Professional Secretary test.
Two credits: 20 clock hours

## BUS 222 CPS REVIEW II

A continuation of CPS Review 1 .
Prerequisite: BUS 221
Two credits: 20 clock hours

## BUS 225 NALS OFFICIAL COURSE FOR LEGAL SECRETARIES - ADVANCED

Designed for the legal secretary who may perform the duties of a legal assistant and assumes some knowledge of the law. Three credits: 33 clock hours

BUS 231 WORD/INFORMATION PROCESSING II - LEGAL
Student will learn to use the word processor to prepare legal documents and legal correspondence from rough drafts and further develop problem solving and proof-reading skills. Students will gain production experience on WP equipment.
Prerequisite: BUS 111 and BUS 115
Four credits: 50 clock hours

## BUS 241 ADVANCED OFFICE PROCEDURES

A capstone course designed to simulate a typical business office. This class provides culminating, integrating experience in typing, word processing, shorthand, communications, and interpersonal skills. Students will gain production experience on WP equipment.
Prerequisite: BUS 104, BUS 111, BUS 161, or permission of instructor Four credits: 50 clock hours

BUS 285 SECRETARIAL INDEPENDENT STUDY
BUS 286 SECRETARIAL INDEPENDENT STUDY
BUS 287 SECRETARIAL INDEPENDENT STUDY
A course providing the opportunity for the student to study a specific area or skill under the direction of a qualified faculty member.
One to three credits

## BUS 291 LEGAL INTERNSHIP

Provides legal secretarial students with work experience in the legal field, preparing them to accept a position as a legal trainee.
Prerequisite: BUS 211
Three credits: 90 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 101, 102, 103). 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 arithmetic, acids, bases, pH and organic compounds. The laboratory exercises are designed to complement and reinforce lecture topics.
Prerequisite: one year of high school algebra or equivalent.
Five credits: three hours lecture, four hours lab per week

## CHE 101 GENERAL CHEMISTRY I

Students planning to major in chemistry, biology, pre-veterinary medicine, pre-medicine, pre-dental medicine, pre-chiropractic medicine and related disciplines should probably complete CHE 101, 102, and 103 as a minimum chemistry requirement in these areas. Some programs may accept CHE 101, 102, and 120 as fulfillment of a general chemistry requirement. Course includes an integrated lecture and laboratory study of the chemical and mathematical principles involving measurement, atomic theory, electronic configuration, atomic and molecular mass relationships, chemical formulas and equations, stoichiometry, nomenclature, properties of the gaseous state and chemical periodicity. Prerequisite: one year of high school chemistry, CHE 100 or permission of the instructor. The minimum mathematics requirement includes one year of high school algebra or MAT 121 or the equivalent.
Five credits: three hours lecture, four hours lab per week

## CHE 102 GENERAL CHEMISTRY II

Continuation of CHE 101 which includes an integrated lecture and laboratory study of the chemical and mathematical principles involving ionic and covalent bonding, molecular geometry, properties of the liquid and solid states, solutions, acid and base chemistry, instrumental analysis and organic chemistry. Prerequisite: CHE 101 or permission of the instructor. The minimum mathematics requirement includes two years of high school algebra, MAT 122 or the equivalent.
Five credits: three hours lecture, four hours lab per week

## CHE 103 GENERAL CHEMISTRY III

Continuation of CHE 102 which includes an integrated lecture and laboratory study of the chemical and mathematical principles involving chemical equilibrium, thermochemistry, oxidation-reduction reactions, electrochemistry, kinetics and nuclear chemistry. The laboratory course includes a study of semi-micro qualitative analysis.
Prerequisite: CHE 102 or permission of the instructor
Five credits: three hours lecture, four hours lab per week

## CHE 105 INTRODUCTORY NUTRITION

Basic principles and necessary food requirements involved in human nutrition and the treatment of disease through diet. Enables students to discriminate the scientific from pseudo-scientific and fact from fallacy in vast literature of both lay and scientific press.
Five credits: five hours lecture per week

## 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 121 or the equivalent. High school chemistry is recommended.
Five credits: four hours lecture, and three hours lab per week

## 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 101
One credit: five hours lecture, ten hours lab per week

## 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 101
One credit: five hours lecture, ten hours lab per week

## CHE 120 INTRODUCTORY 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: four hours lecture, three hours lab per week

## CHE 201 ORGANIC CHEMISTRY I

Studies atomic and molecular structures, nomenclature, chemical bonding reactions, reaction mechanisms of hydrocarbons, aromatics, alcohols, and organic halides; structural and geometric isomers, electrophilic and neucleophilic reactions. Stereochemistry also is included with industrial and biological applications. Laboratory will cover fundamental operations of simple and fractional distillation, melting points, recrystalization, nitration of aromatic compounds, hydrocarbon reactions, Grignard and aklyl halide reactions.
Prerequisite: CHE 102 or CHE 100 with written permission of instructor after successful completion of a pretest
Five credits: three hours lecture, four hours lab per week

## CHE 202 ORGANIC CHEMISTRY II

Examines the structure, nomenclature, reaction mechanisms, and applications of ethers, epoxides, carboxylic acids, aldehydes, and ketones, and organic nitrogen compounds. Identification of structure of organic compounds by classical and modern techniques will be covered. Laboratory will examine the Williamson ether synthesis, esterification and other carbonyl reactions; reactions of amines, infrared and nuclear magnetic resonance spectroscopy.
Prerequisite: CHE 201 or written permission of instructor after successful completion of a lecture and a laboratory pretest
Five credits: three hours lecture, four hours lab per week

## CHE 203 ORGANIC CHEMISTRY III

The third quarter of the organic chemistry sequence which deals with the structure, nomenclature, and reaction mechanisms, and biological applications of the following: fats and other lipids, terpenes, carbohydrates, proteins, amino acids, and enzymes. The laboratory consists of the synthesis, qualitative analysis, and structural determination of the above compounds.
Prerequisite: CHE 202 or written permission of instructor after successful completion of a pretest
Five credits: three hours lecture, four hours lab per week

## CHE 205 GLASSWARE CONSTRUCTION AND REPAIR

Instruction and practice in methods of repair and construction of laboratory apparatus.
Prerequisite: permission of instructor
Two credits: four hours lab per week

## 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 stressed where apppropriate.
Prerequisite: CHE 120 or equivalent.
Five credits: four hours of lecture, three hours of lab per week

## 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 102
One credit: five hours lecture, ten hours lab per week

## 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 102
One credit: five hours lecture, ten hours lab per week

## CHE 225, 226 CHEMICAL TECHNOLOGY III

Consists of two modules: pH Millivolt Titrations and Specific Ion Electrodes and Gas Chromotography.

## CHE 225 pH MILLIVOLT TITRATIONS AND SPECIFIC ION ELECTRODES

Intensive investigation of the electrode construction of pH meters and their use of acid/base and redox titrimetry. Theory and application of specific ion electrodes will be investigated.
Prerequisite: CHE 102
One credit: five hours lecture, ten lab hours per week

## CHE 226 GAS CHROMOTOGRAPHY

Column preparation, instrumentation, and applications will be investigated using thermoconductivity detection on single and multicolumn instruments.
Prerequisite: CHE 201
One credit: five hours lecture, ten hours lab per week

## CHE 235, 236 CHEMICAL TECHNOLOGY IV

Consists of two modules: Infrared Spectroscopy and Refractometry and Optical Activity.

## CHE 235 INFRARED SPECTROSCOPY

Concentrated study of instrumentation, sample preparation, applications and interpretation of infrared absorption spectra.
Prerequisite: CHE 202
One credit: five hours lecture, ten hours lab per week

## CHE 236 REFRACTOMETRY AND OPTICAL ACTIVITY

Laboratory oriented course concentrating on refractive indices of liquids and solutions and the use of a polarimeter for quantitative chemical analysis of optically active compounds.
Prerequisite: CHE 201
One credit: five hours lecture, ten hours lab per week

## CHE 245 VISCOMETRY

Laboratory course in the use of Cannon-Fenske pipets and the Brookfield Viscometer for measurement of viscosity.
Prerequisite: CHE 201
One credit: five hours lecture, ten hours lab per week

## 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 division chairman

## CCS: CHILD CARE SERVICES

## CCS 100 INTRODUCTION TO EARLY CHILDHOOD EDUCATION

An orientation to the field of early childhood education. Students will investigate different types of centers available for young children in relation to their own career goals.
Two credits: 20 clock hours

## CCS 131 PRACTICE TEACHING I: OBSERVATION

An observation experience in a child care center. Techniques of child study are applied to a real life setting through observations and written assignments. Course includes weekly class and laboratory observation time. To be taken concurrently with CCS 161.
Four credits: 50 clock hours

## CCS 132 PRACTICE TEACHING II: LAB

A practical experience in a child care center. Students will be responsible for orientation to the Early Childhood Education center, children's health and safety considerations, making and implementing plans and a variety of experiences with small groups of preschool children. To be taken concurrently with CCS 141 or CCS 142.
Prerequisite: CCS 131 or permission of instructor
Six credits: 80 clock hours

## CCS 133 PRACTICE TEACHING LAB III: LAB

A practical experience in a child care center. To practice skills of an early childhood classroom teacher. To critique plans and activities for small and large groups of preschool children. To further develop appropriate guidance techniques for young children. To be taken concurrently with CCS 141 or CCS 142.
Prerequisite: CCS 131 or permission of instructor
Five credits: 70 clock hours

CCS 141 ACTIVITIES FOR EARLY CHILDHOOD EDUCATION I
Introduction of practical experiences in curriculum areas including art, music, movement, science, etc., appropriate for young children. Students study materials which will enchance a child's potential through satisfying sensory-type activities.
Three credits: 30 clock hours

## CCS 142 ACTIVITIES FOR EARLY CHILDHOOD EDUCATION II

Students will examine and develop curriculum to meet the needs of the young child. Play learning theories will be assessed for their practical application.
Prerequisite: CCS 141 or permission of instructor
Three credits: 30 clock hours

## CCS 145 WORKSHOP IN EARLY CHILDHOOD EDUCATION MATERIALS

Hands-on experience with a variety of materials suitable for use with young children. Special emphasis on self-directing open-ended materials students can create.
Two credits: 20 clock hours

## CCS 146 EARLY CHILDHOOD EDUCATION MUSIC/MOVEMENT ACTIVITIES

Students will learn to develop innovative plans for introducing and using music and movement activities with young children. The emphasis will be on developing the students' self-confidence and ease with creative movement activities in the preschool classroom.
Two credits: 20 clock hours

## CCS 147 EARLY CHILDHOOD EDUCATION OUTDOOR ACTIVITIES

After visiting and evaluating various playgrounds, the student will plan and design learning activities appropriate for young children's developing abilities.
Two credits: 20 clock hours

## CCS 148 EARLY CHILDHOOD EDUCATION MATH AND SCIENCE

A practical course to assist students in extending young children's experiences in math and science activities.
Two credits: 20 clock hours

## CCS 149 CARPENTRY SKILLS FOR YOUNG CHILDREN

Students will practice skills and examine a variety of activities, materials, and tools appropriate for carpentry activities in the preschool classroom.
Two credits: 20 clock hours

## CCS 151 NUTRITION FOR YOUNG CHILDREN

A practical study of how essential nutrients contribute to the healthy growth of children. Students evaluate their own diets, plan menus for preschool children and develop nutrition curriculum for young children. Three credits: 30 clock hours

## CCS 155 TODDLER CARE WORKSHOP

Students will discuss toddler development and issues, evaluate play experiences, develop activities, and observe environments for children ages 12 months to 3 years.
Two credits: 20 clock hours

## CCS 161 CHILD GROWTH AND DEVELOPMENT

Designed for adults who work with children, this course examines the sequence of growth and development of the young child through 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. Recommended to be taken concurrently with CCS 131.
Three credits: 30 clock hours

## CCS 202 ADMINISTRATION OF CHILD CARE CENTERS

Studies the organization and management of various child care programs. Provides the technical information needed to open and operate a licensed child care facility.
Prerequisite: MGT 208 or permission of instructor
Three credits: 30 clock hours

## CCS 206 CHILDREN'S LITERATURE

Studies various forms of literature available for young children. Students design and implement curriculum to develop receptive and expressive communication skills in young children.
Three credits: 30 clock hours

CCS 231 ADVANCED PRACTICE TEACHING: LAB
Students will develop individual teaching skills and begin to formulate goals for individual children in a guided classroom teaching experience. Unit planning including meaningful and appropriate experiences for the young child's classroom will be practiced. This course will involve both lecture and laboratory instruction, and will be taken concurrently with CCS 241.
Prerequisite: CCS 132 or permission of instructor
Seven credits: 100 clock hours

## CCS 232 HUMAN RELATIONS IN THE PRESCHOOL CLASSROOM: LAB

An assessment of the teacher's role in the classroom and a continuation of CCS 231. This team teaching experience emphasizes effective relations with others and the development of a positive and constructive attitude towards self-appraisal and appraisals by others. This course will involve both lecture and laboratory instruction, and will be taken concurrently with CCS 206.
Prerequisite: CCS 231 or permission of instructor
Seven credits: 100 clock hours

## CCS 233 FAMILY AND COMMUNITY RELATIONS

A continuation of CCS 232 and a team teaching experience emphasizing the effects of a family, class, and ethnic value systems on the young child's personality. Students focus on assessment, parent communication, and the concept of the child as a member of the family. This course will involve both lecture and laboratory instruction, and will be taken concurrently with CCS 245 .
Prerequisite: CCS 232 or permission of instructor
Seven credits: 100 clock hours

## CCS 241 UNIT PLANNING FOR EARLY CHILDHOOD EDUCATION

Students will prepare daily schedules and unit plans for a preschool classroom. Plans will be implemented and evaulated.
Two credits: 20 clock hours

## CCS 245 VALUE OF PLAY

This course explores behavior management theories and guidance alternatives for the preschool classroom. Emphasis is on the development of techniques to suit the individual preshool child and the role of play in fostering their development
Two credits: 20 clock hours

## COS: COMMUNICATIONS

## *Indicates instruction is administered by Developmental Studies Division.

## *COS 012 LANGUAGE DEVELOPMENT II

Provides students who have readiness for beginning language skills a basic orientation to capitalization, punctuation, basic spelling, and basic sentence types. Students will learn how to apply these skills in short writing tasks.

Prerequisite: placement

## *OS 013 LANGUAGE DEVELOPMENT III

Students will learn to apply grammar, usage, and punctuation rules in short writing assignments leading to the writing of an original paragraph.
Prerequisite: COS 012 or placement

## *COS 014 LANGUAGE DEVELOPMENT IV

Students will learn to apply basic grammar, usage, and punctuation rules in short writing assignments leading to the writing of an original paragraph.
Prerequisite: COS 012 or placement

## 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.)

Stresses the value and importance of communications throughout man's social and working life. Provides instruction and skill development practice in both oral and written communications. Includes developing listening skills, giving and receiving oral instructions, taking job interviews, making group presentations, correct telephone procedures, giving and following written instructions, and writing common business letters, such as: letters of request, reference, complaint and information, filling out job applications and other business forms, and developing resumes.
Three credits

## COM: COMMUNICATIONS MEDIA

## COM 112 INTRODUCTION TO MASS MEDIA

Student studies the history, ethics, current problems, and practices of the mass media within the social system. Emphasizes newspapers, radio and television broadcasting, and advertising.

## Five credits

COM 113 INTRODUCTION TO RADIO BROADCASTING
Introduces basic radio principles and production techniques. Includes some laboratory experience in the studio.
Five credits

## COM 114 INTRODUCTION TO TELEVISION BROADCASTING I

Introduces the video production field, including equipment and processes. Students will operate TV cameras, microphones, audio mixes and video switchers, as well as facing the camera.
Five credits: four hours lecture, two hours lab per week

## COM 115 INTRODUCTION TO TELEVISION BROADCASTING II

Provides intermediate skills in video production, including color studio lighting, special effects, set design, audio mixing and video editing basics. Students will learn refined style and technique as they produce programs from inception to completion.
Prerequisite: COM 114
Five credits: four hours lecture, two hours lab per week

COM 118 INTRODUCTION TO AUDIO PRODUCTION
Introduces the audio production field, including equipment and processes. Students will operate microphones, audio mixers, and other equipment, as well as write and produce various projects. Includes some voice work.
Five credits: four hours lecture, two hours lab per week

## COM 291 TV FIELD PRODUCTION LAB I

Prepares students for production of professional-quality video programming. Students will have an opportunity to attain proficiency in single-camera remote videography as well as post production editing and engineering considerations.
Prerequisite: COM 115
Three credits: six hours

## COM 298 BROADCAST INTERNSHIP

Student works under the direction of a professional in the field of broadcasting.
Prerequisite: COM 291
Five credits: ten hours

## COM 299 COMMUNICATIONS PRACTICUM

Provides an opportunity for the serious minded student to develop his or her skills in writing and producing a broadcast program under the direction of a faculty member. May be repeated at different levels of proficiency.
Prerequisite: permission of instructor
One to three credits: two to six hours

## CNC: COMMUNITY NONCREDIT

The following classes in art, music, and theatre provide a nonacademic experience for citizens of the community. They are noncredit and are not applicable to the degree programs of the college.

## CNC 011 COMMUNITY POTTERY

Includes instruction in various hand building techniques and throwing on the potter's wheel.

## CNC 016 COMMUNITY JEWELRY \& SCULPTURE

Covers selected techniques of jewelry and stained glass design, and small sculpture.

## CNC 017 COMMUNITY FABRIC CRAFTS

Covers selected techniques of fabric design (e.g. batik, macrame, hooking, silk screen, hand weaving, stitchery, and applique).

## CNC 019 COMMUNITY HOME DECORATING

Covers the visual design and aesthetic aspects of remodeling and interior decorating.

## CNC 024 COMMUNITY CLOTHING AND TEXTILES

Includes instruction in the fundamentals of choosing fabrics, measuring, cutting, fitting, and sewing fabric used in the process of upholstery.

## CNC 025 COMMUNITY SEWING

For those persons learning to sew and also for those needing more advanced instruction.

## CNC 051 COMMUNITY GUITAR

A nonacademic experience with guitar.

## CNC 083 COMMUNITY PHOTOGRAPHY

(CAMERA AND DARKROOM TECHNIQUES)
Includes black and white photography, cameras, lenses, films, and papers. It also includes black and white photographic developing techniques, enlarging, and mounting of prints.

## CNC 085 COMMUNITY ARTS - ON LOCATION

This course includes a changing variety of subjects of a unique nature or limited scope (e.g. mountain photography, primitive pottery, landscape painting). They are frequently offered "on location."

## CON: COMPOSITION

*Indicates instruction is administered by Developmental Studies Division.

## *CON 093 LANGUAGE

Provides students who have fairly high reading abilities with a content-oriented course in which they can study to pass the GED as a goal and, at the same time, acquire basic grammar and writing skills. Prerequisite: placement

## *CON 095 BASIC COMMUNICATION SKILLS

Offers a survey of basic communication skills which involves a study of grammar, the writing of different types of sentences, beginning paragraph development, reading for main ideas, and how to listen effectively.
Prerequisite: placement

## CON 101 FUNDAMENTALS OF COMPOSITION

Prepares the student for CON 102. Emphasizes sentence building and paragraph development. Individual needs will be met within the classroom and in the writing lab. Proficiency in paragraph writing and competency in language skills are required for a passing grade.
Prerequisite: placement test
Five credits

## CON 102 INTRODUCTION TO WRITING

Emphasizes writing skills for various types of college essays.
Individual needs will be met within the classroom and in the writing lab. Proficiency in essay writing is required for a passing grade.
Prerequisite: CON 101 or placement test
Five credits

## CON 103 THE RESEARCH PAPER

Practice in using research techniques in writing a research paper. Students will learn to integrate use of library resources with the microprocessor to develop a research data file.
Prerequisite: CON 102 or placement test
Five credits

## CON 109 CREATIVE WRITING

Structured instruction in the techniques of short story and poetry writing reinforced by an informal study of professional writing in these areas. Student will receive practice in the type of writing best suited to his or her individual interest and talent. Student will receive positive criticism for improvement and practical information on publication. Five credits

## CON 202 ADVANCED COMPOSITION

Student will have the opportunity to study styles of professional writers in order to refine his or her writing skills. Student will be given practice in persuasive writing, analytical or critical reviews, and advanced expository writing. In addition, the student will learn the research skills and techniques of writing a research paper.
Prerequisite: CON 102
Five credits

## CON 211 CREATIVE WRITING PROJECTS

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: CON 109 or permission of instructor.

## Two credits

CON 295 INDEPENDENT STUDY IN COMMUNICATION
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: CON 102
One to three credits: contact instructor

## 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. (Cannot be used in Category I for A.A. degree.)
Prerequisite: None
Four credits: three lecture hours, two lab hours per week

## CSC 101 INTRODUCTION TO PROGRAMMING IN THE BASIC LANGUAGE

This is the first in the series of high level programming languages. The student will attain programming skills using the BASIC language. Topics include: design techniques, looping structures, compound conditionals, string manipulation and array processing.
Prerequisite: High school Algebra I or MAT 121 or the equivalent
Corequisite: CSC 111 - highly recommended
Four credits: three lecture hours, two lab hours per week

## CSC 102 ADVANCED BASIC PROGRAMMING

A continuation of CSC 101 that allows the student to learn advanced programming techniques such as: graphics, multiple control beaks, data editing, sequential and random file accessing and updating.
Prerequisite: CSC 101 or the equivalent
Three or Four credits: two or three lecture hours, two lab hours per week

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. Cannot be used in Category I for A.A. degree.) Prerequisite: None
Three credits: two lecture hours, two lab hours per week.

## CSC 110 INTRODUCTION TO DIGITAL PRINCIPLES

The objective of this course is to introduce the student to the concept of digital logic and design by using integrated circuits. The information and topics to be covered are: binary codes, error detection and correction, chips (IC's) and logic gates, exposure to boolean logic, Karnaugh Maps and their use, code conversions, flip-flops, counters, registers, and binary arithmetic.
Prerequisite: None (An adequate arithmetic background is highly recommended.)
Four credits: three lecture hours, two lab hours per week

## CSC 111 STRUCTURED PROGRAM DESIGN

The objective of this course is to introduce the student to the concept of instruction sequence. Modern program design techniques such as Modular Flowcharts, Warnier/Orr diagrams and Pseudo-code will be taught as viable program design methods generic of specific programming languages.
Prerequisites: None
Three credits

## 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 121 PROGRAMMING IN PASCAL

Computer programming through the use of Pascal. Students will attain necessary computing techniques which can be applied to their work in science, mathematics, business, or engineering. Topics to be included: problem solving, control structures, looping techniques, data types and structures, procedures and functions, subscripted variables, string manipulation, and as time permits, records, sets, recursion and pointer variables.
Prerequisite: Completion of one high-level language
Five credits

## CSC 141 MICROCOMPUTER MANAGED APPLICATIONS: WORD PROCESSING

This course is one of three courses which are designed to introduce students to basic computer operations, printer options, and the most widely used application software: word processing, electronic spreadsheet, and data base management. Students will attain a working knowledge of computer and software fundamentals which can then be applied to their work in science, mathematics, behavioral science, humanities, business, or engineering. The three courses can be taken in any sequence or separately. In this course, word processing, mail-merge applications, printing, printer options, and fundamentals of operating microcomputers will be emphasized.
Prerequisite: None
Two credits

CSC 142 MICROCOMPUTER MANAGED APPLICATIONS: ELECTRONIC SPREADSHEETS
This course is designed to introduce students to basic computer operations and application software. (See CSC 141.) It can be taken in sequence with CSC 141 or separately. In this course, the creation and use of electronic spreadsheets and computer-generated graphs will be emphasized. Additional topics involving advanced functions and macros will be covered as time permits.
Prerequisite: None
Two credits

## CSC 143 MICROCOMPUTER MANAGED APPLICATIONS: ELECTRONIC DATA BASES

This course is designed to introduce students to basic computer operations and application software. (See CSC 141.) it can be taken in sequence with CSC 141 and CSC 142 or separately. This course will provide a basic introduction to the creation and use of electronic data base files. Concepts will include sorting, indexing, searching, and updating data bases, as well as label and report generating. Programming in a data base language will be studied as time permits.
Prerequisite: None
Two credits

## CSC 201 PROGRAMMING IN FORTRAN 77

Students will attain skills using FORTRAN 77. Topics include: program design; data types; looping structures; array, matrix and character manipulation; functions and subroutines and printing and file formatting.
Prerequisites: One high level programming language.
Five credits

## CSC 211 INFORMATION SYSTEMS I

This first course in the sequence will focus on the internal representations of information within the computer. The student will be introduced to computer organization, data types, addressing and basic component operation. Binary arithmetic and assembler microcode will be used to illustrate internal information processing within the computer.
Prerequisite: One high level programming language Five credits

## CSC 212 INFORMATION SYSTEMS II

This course will focus on the storage, organization and retrieval of information on auxillary devices. Topics will include: device overviews, serial and sequential files, direct files and hashing, keyed and indexed files, and database management systems.
Prerequisite: CSC 211
Five credits

## CSC 221 COMPUTER SCIENCE I

ACM recommended topics will include: binary systems, boolean algebra and logic circuits, simplification of boolean functions using mapping techniques, combinational logic, coding, number representation, and digital arithmetic.
Prerequisite: CSC 121 or CSC 201
Four credits: three lecture hours, two lab hours per week

## CSC 222 COMPUTER SCIENCE II

ACM recommended topics will include: flip-flops and sequential circuits, registers and counters, register transfer logic, processor logic design, control logic design, computer design, and assembly language on a micro-processor.
Prerequisite: CSC 221
Four credits: three lecture hours, two lab hours per week

CSC 231 SPECIAL TOPICS IN COMPUTER SCIENCE
Topics will reflect the special expertise of the faculty and/or the special needs of the student.
Prerequisite: Consent of the instructor
One to Four credits: contact division chairman

## CSC 232 PROGRAMMING IN ADA

Lexical style, overloading (procedures and/or functions), the package concept, data types (enumeration, scaler and derived), scope and visibility concept, arrays (slices, constrained and unconstrained), parameters and binding modes, simple and variant records, discriminants, tree structures, linked lists, attributes, I/O exceptions, memory allocation (static and dynamic), and the tasking concept will be included. A final project will be required.
Prerequisite: CSC 121 or CSC 201
Five credits
CSC 233 DATA STRUCTURES AND ALGORITHMS
Algorithms and algorithm design, arrays, vectors, matrices, lists, linked lists, pointers, queues, stacks, binary trees, non-binary trees and binary search trees will be presented.
Prerequisite: CSC 121 or CSC 232
Five credits

## CSC 295 INDEPENDENT STUDY IN COMPUTER

 PROGRAMMINGProvides 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 division chairman

## CRJ: CRIMINAL JUSTICE

## CRJ 110 INTRODUCTION TO CRIMINAL JUSTICE

The history and philosophy of the American criminal justice system; an overview of the crime phenomena; organization of federal, state, and local agencies and their bureaucratic interaction.
Three credits: 30 clock hours

## CRJ 111 THE POLICE FUNCTION

Police as agents of social control, the conflict generated by the demands of the "police subculture," the police role, function and organization and the formal requirements of law.
Three credits: 30 clock hours

## CRJ 112 THE JUDICIAL FUNCTION

This course examines the criminal court system with an analysis of the major judicial decision-making, i.e., prosecutors, defense attorneys, judges, and the discretionary aspects of adjudication.
Three credits: 30 clock hours

## CRJ 113 THE CORRECTIONAL FUNCTION

An examination of the history and philosophy of correctional theory and practice.
Three credits: 30 clock hours

CRJ 114 COMMUNITY AND THE JUSTICE SYSTEM
A critical and interdisciplinary examination of the community influences on the justice system; special emphasis on the interrelationships and role expectations of various criminal justice agencies and the communities they serve.
Three credits: 30 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.
Three credits: 30 clock hours

## CRJ 202 CONSTITUTIONAL LAW I

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.
Three credits: 30 clock hours

CRJ 203 CONSTITUTIONAL LAW II
An intensive analysis of United States Supreme Court decisions interpreting the procedural and substantive protections of individual rights.
Three credits: 30 clock hours

## CRJ 248 CRIMINOLOGY

Examination of the question of crime causation from legal, social, political, psychological, and theoretical perspectives; history and development of criminology.
Three credits: 30 clock hours

## CRJ 249 DISCRETIONARY JUSTICE

The use of discretionary authority throughout all phases of the justice system and the influence of social, psychological and political variables upon the discretionary judgements.
Three credits: 30 clock hours

## CRJ 255 CRIMINAL JUSTICE INTERNSHIP

Assignments in a justice agency designed to further the student's integration of theory and practice. Placements arranged through consultation with advisor.
Three credits: 90 clock hours

## CRJ 261 CRIMINAL JUSTICE PRACTICUM

An intensive theoretical/practical introduction to law enforcement. Courses include: administration of justice, basic law, human relations, patrol procedures, traffic control, investigation techniques, firearms, communications, driving techniqes, arrest control techniques, etc. Thirty-Five credits: 450 clock hours

## GOV: DEVELOPMENTAL GOVERNMENT

## GOV 014 DEVELOPMENTAL GOVERNMENT IV

The purpose of the course is to aid students to increase their 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

## EAS: EARTH SCIENCE

## 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: four hours lecture, two hours lab per week

## 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.
Four credits: three hours lecture, two hours lab per week

## 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 division chairman

## ECO: ECONOMICS

## ECO 100 INTRODUCTION TO ECONOMICS

Survey course offering an introduction to basic economics. Current economic issues receive considerable attention.
Five credits

## ECO 105 ORGANIZATIONS AND INSTITUTIONS

(This course will not satisfy minimum nor elective requirements for the A.A. or A.S. degree. Trades and Industry Division course.)
The student will participate in activities which will enhance his or her ability to be a part of or deal with organizations such as companies, governmental agencies, banks, loan companies, service organization/unions. The history of these organizations and the relationship between them will be discussed.
Three credits: 30 clock hours

## ECO 201 PRINCIPLES OF ECONOMICS: MACROECONOMICS

Introduction to American capitalism, national policy, economic stability, economic growth, and economic problems.
Five credits

ECO 202 PRINCIPLES OF ECONOMICS: MICROECONOMICS
Emphasizes the firm: production, management decisions, and marginal decisions.
Five credits

## EDU: EDUCATION

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 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 215 MOTIVATING YOUR STUDENTS

To develop and explore various motivational techniques in the classroom.
One credit

## EDU 216 SUCIDE: TEACHER AWARENESS 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 PROFESSIONAL SKILLS FOR TEACHING

To investigate four areas of teaching: communication, creativity, teacher stress, and children anxieties; and examine techniques for developing professional skills in these areas.

## Three credits

EDU 218 CHILD ABUSE, NEGLECT AND PROTECTION
Become knowledgeable in signs, symptoms and patterns of child abuse and neglect; prevention strategies; and child advocacy in the system and community.
One credit

## 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

## ELT 106 APPLIED PHYSICS: Mechanical

Provides the technical student with an understanding of the basic principles of mechanics and properties of matter through problem solving and the practical applications of the basic physics laws in an industrial environment.
Five credits: 60 clock hours

## ELT 107 APPLIED PHYSICS: Heat-Light-Sound

Provides the technical student with an understanding of the physical properties of heat, light (optics) and sound through problem solving, and practical applications of the applicable physical laws and their relation to the industrial environment.
Five credits: 60 clock hours

## ELT 122 ELECTRONICS MATH

An applied math course designed to build proficiency in solving electronic problems. Algebraic operations, equations, determinants, graphic relationships, quadratic equations, exponentials, logarithms, right angle trigonometry, vectors, phasors, and J-operator will be examined. Math exercises emphasize typical electronic applications. Prerequisite: qualifying preassessment score and advisor approved Five credits: 60 clock hours

## ELT 141 INTRODUCTION TO ELECTRONICS

The study of direct applications in passive linear circuits with emphasis on the physics of electricity and network laws and theorems. Mathematical analysis and laboratory experiments are used to discover fundamental concepts. (ELT 150 and ELT 151 are equivalent to ELT 141.)

Prerequisite: qualifying preassessment scores
Ten credits: 120 clock hours

## ELT 142 AC/DC CIRCUIT ANALYSIS

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. The study of reactive component analysis. (ELT 152 and ELT 153 are equivalent to ELT 142.)
Prerequisite: ELT 141 or ELT 151, or permission of instructor Ten credits: 120 clock hours

## ELT 143 CIRCUITS AND APPLICATIONS

Introduction to active circuits. Development of analytical and graphic tools for practical applications to commonly encountered solid state circuits. Attention to measurements and troubleshooting including a variety of integrated circuits and solid state devices. (ELT 154 and ELT 155 are equivalent to ELT 143.)
Prerequisite: ELT 142 or ELT 153, or permission of instructor Ten credits: 120 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 143 or ELT 155 or permission of instructor Five credits: 60 clock hours

## ELT 150 DC FUNDAMENTALS I (Evening)

The study of direct current applications in passive linear circuits with emphasis on the physics of electricity and network laws and theorems. Mathematical analysis and laboratory experiments are used to discover fundamental concepts.
Prerequisite: qualifying preassessment scores
Five credits: 60 clock hours

## ELT 151 DC FUNDAMENTALS II (Evening)

Continuation of ELT 150. The application of basic fundamentals and the study of their functional characteristics. (ELT 150 and ELT 151 are equivalent to ELT 141.)
Prerequisite: ELT 150 or permission of instructor
Five credits: 60 clock hours

## ELT 152 AC FUNDAMENTALS I (Evening)

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 ELT 141, or permission of instructor Five credits: 60 clock hours

## ELT 153 AC FUNDAMENTALS II (Evening)

Continuation of ELT 152. The study of reactive component analysis. (ELT 152 and ELT 153 are equivalent to ELT 142.)
Prerequisite: ELT 152 or permission of instructor Five credits: 60 clock hours

## ELT 154 SOLID STATE CIRCUITS (Evening)

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 ELT 142, or permission of instructor Five credits: 60 clock hours

## ELT 155 SOLID STATE CIRCUITS II (Evening)

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. (ELT 154 and ELT 155 are equivalent to ELT 143.)
Prerequisite: ELT 154 or permission of instructor
Five credits: 60 clock hours

## ELT 201 DIGITAL FUNDAMENTALS I

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 tradeoffs 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

Special studies in computer systems. Studies can include new microprocessor types, interfacing, hardware/software development. Projects can be instructor assigned or student proposed (and approved). May be taken concurrently with ELT 283.
Prerequisite: ELT 202 or permission of instructor
Five credits: 60 clock hours

## ELT 255 LINEAR ICs AND SENSORS

Studies linear integrated circuits (especially operational amplifiers). Stresses analysis of commonly encountered applications. Some attention given to sensors and actuators.
Prerequisite: ELT 143 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 stressed. Also covers some electronics used in homes.
Prerequisite: ELT 272 and ELT 202, 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 143 or 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 in the previous course will be combined into complete systems. Transmission methods, transmission lines, antennas and introduction to microwave techniques are studied. Some special methods will be included 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 video monitors, and TV systems, microwave generation and transmission, data communications, antennas for special applications and update on satellite technology.
Prerequisite: ELT 272
Five credits: 60 clock hours

## ELT 275 INTEGRATED CIRCUIT FABRICATION AND TECHNIQUES

Provides the student with a general view of modern techniques. Study will include physics of semi-conductors, materials used, processes including photolithography, diffusion/vacuum system, device recognition, and field trips to nearby IC manufacturers.
Prerequisite: ELT 255, and ELT 201, or permission of instructor
Five credits: 60 clock hours

## ELT 276 FUNDAMENTALS OF ROBOTICS

Provides the student with general terminology, mechanical and electronic operating procedures, micro-computer control, and industrial applications of robots.
Prerequisite: ELT 255, ELT 202, ELT 106, ELT 107, or permission of instructor
Five credits: 60 clock hours

## TEM: EMERGENCY MEDICAL SERVICE

## TEM 105 EMERGENCY MEDICAL TECHNICIAN

Instruction in prompt and efficient care of victim, control of accident scene, safe and efficient transport, orderly transfer of patient information to hospital's emergency department, reporting and record keeping, vehicle and equipment care, legal aspects of emergency care, the ambulance and its equipment, and cardiopulmonary resuscitation.
Prerequisite: Advanced First Aid, or First Responder and C.P.R.
Twelve credits: 168 clock hours

## TEM 108 EMT REFRESHER

An eight-week course for refreshing and recertifying holders of Colorado Basic EMT certificates.
Four credits: 40 clock hours

## TEM 127 CARDIOPULMONARY RESUSCITATION (CPR)

Designed to qualify the successful student for the Basic Rescuer certificate issued by the American Heart Association. Covers basic cardiopulmonary resuscitation and emergency cardiac care from the theory and practice standpoints. Includes one-man CPR, two-man CPR, infant resuscitation, and choking.
One credit: 9 clock hours

## TEM 128 CPR INSTRUCTOR

Designed to qualify the successful student for the Basic Life Support Instructor certificate issued by the American Heart Association. Covers basic life support techniques and teaching aids necessary to instruct CPR. Also includes manikin care and cleaning.
One credit: 9 clock hours

## ENGINEERING TECHNOLOGY

## AET: ARCHITECTURAL ENGINEERING TECHNOLOGY

## AET 100 ARCHITECTURAL TECHNOLOGY

This course introduces the student to the world of architecture: the practice, drawing format, work environment, and land description history as well as history and philosophy of design through the ages.
Prerequiste: None
Two credits: 30 clock hours

## AET 103 DRAFTING III: Architectural

An introduction to the field of architectural drafting through development of basic skills and knowledge in planning, layout, and drawing of residential architecture. Guides students through a series of exercises starting with a basic idea and culminating with a full set of working construction drawings.
Prerequisite: AET 105, BET 102 and concurrent with BET 105 or instructor permission
Six credits: 80 clock hours

## AET 105 CONTRACT DRAWING INTERPRETATION

Provides students with an opportunity to study and evaluate typical documents, drawings, forms, and code requirements encountered in the day-to-day operation of an architectural design office.
Prerequisite: AET 100 and BET 101 or permission of instructor Four credits: 50 clock hours

AET 151 INTRODUCTION TO BUILDING CODES AND STANDARDS
Upon completion of this course the student will have a fundamental understanding of the basic codes and standards as set forth by the International Conference of Building Officials (Uniform Building Code). Basic areas of study include: engineering regulations, public property and street regulations, requirements based on occupancy and construction types as well as fire resistive standards for fire protection.

The student will also be introduced to related codes and standards, i.e., Uniform Housing Code, Uniform Sign Code, Uniform Solar Code, and Uniform Plumbing Code.
Prerequisite: None
Three credits: 30 clock hours

## AET 201 DRAFTING IV: ARCHITECTURAL

The student will study multi-family, multi-level frame construction techniques and review modular and component applications.
Prerequisite: AET 103 and CET 201 or concurrent with CET 201
Six credits: 80 clock hours

## AET 202 DRAFTING V: ARCHITECTURAL

Provides students with an opportunity to study concrete and masonry as building materials. Applications and techniques related to structure as well as decor will be explored.
Prerequisite: AET 103 and CET 201
Six credits: 80 clock hours

## AET 203 DRAFTING VI: ARCHITECTURAL

Provides students with an opportunity to study steel building applications and techniques. Structural and decorative applications in relation to building construction will be explored.
Prerequisite: AET 103 and CET 201
Four credits: 60 clock hours

## AET 208 APPLIED ENGINEERING PROBLEMS AND APPLICATIONS/ARCH

Provides 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 engineering tech skills individually and as a project team member.
Prerequisite: ALL required classes listed in this catalog for quarters one through five
Four credits: 60 clock hours.

## BET: BASIC ENGINEERING TECHNOLOGY (CORE COURSES)

ARC 105 INTRODUCTION TO TECHNICAL MATHEMATICS
The student will review basic mathematics operations and learn to apply them 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 basic algebra and practical applications.
Prerequisite: Qualifying preassessment scores. COURSE WILL NOT FULFILL PROGRAM REQUIREMENTS FOR GRADUATION Five credits: 60 clock hours

## BET 100 INTRODUCTION TO ENGINEERING TECHNOLOGY

Provides introductory information concerning engineering technologies (architectural, civil, computer aided manufacturing, and mechanical) and how to plan and succeed in a technical environment.
Prerequisite: None. SHOULD BE TAKEN FIRST QUARTER ENROLLED IN PROGRAM
One credit: 10 clock hours

## BET 101 DRAFTING FUNDAMENTALS I

This course provides development of basic drafting skills, i.e., lettering, use of drafting equipment, freehand lettering, basic sketching, geometric construction, orthographic projection, and sectioning practices.
Prerequisite: concurrent with BET 105 or permission of instructor Six credits: 80 clock hours

## BET 102 DRAFTING FUNDAMENTALS II

A continuation of basic drafting skill development in the areas of dimensioning practices, inking practices, development of permanent and temporary fastener drawings, and basic pictorial drawings development.
Prerequisite: BET 101 and BET 105
Six credits: 80 clock hours

## BET 103 DRAFTING III: ENGINEERING GRAPHICS

A continuation of basic drafting skill development in areas of: descriptive geometry, auxiliary views, intersections and developments, charts and graphs and vector graphics.
Prerequisite: BET 103
Six credits: 80 clock hours

## BET 105 APPLIED TECHNICAL MATHEMATICS

The student will become more proficient in the solution of practical technical problems through the use of linear equations in one and multiple unknowns, simultaneous and quadratic equations and graphic algebra. The student will also study right and oblique triangle trigonometry problems as applied to land surveying, statics, physics, and related engineering technology courses.
Prerequisite: qualifying preassessment score on mathematics and algebra skills. If acquired score is less than that required, a Technical Division advisor will assist in placement in the proper skill development course. Seven credits: 80 clock hours

## BET 106 APPLIED PHYSICS: STATICS/DYNAMICS

Provides the technical student with an understanding of the basic principles of mechanics and properties of matter through problem solving and the practical applications of the basic laws of physics in an industrial environment.
Prerequisite: BET 105 or equivalent, or permission of instructor Five credits: 60 clock hours

## BET 107 APPLIED PHYSICS: HEAT/FLUIDS

Provides the student with an understanding of the physical properties of heat and fluids through problem solving, and the practical applications of applicable physical laws and their relation to the industrial environment.
Prerequisite: BET 105 or equivalent, or permission of instructor Five credits: 60 clock hours

BET 201 INTRODUCTION TO COMPUTER AIDED DRAFTING
This course will acquaint the student with computer graphics as used in the engineering environment. The student will study the disk operating system and basic CAD system commands. The student will gain practical hands-on experience through the use of a personal computer and AutoCad software.
Prerequisite: BET 101 and BET 105, or CAM 101, or permission of instructor. (Knowledge of typewriter keyboard is helpful.)
Four credits: 60 clock hours

## BET 202 COMPUTER AIDED DRAFTING

A continuation of BET 201 with greater emphasis on the basic graphic commands. The student will study and use advanced size and shape description, editing and facilitation of assembly, working, and production drawings.
Prerequisite: BET 201
Four credits: 60 clock hours

## BET 203 ADVANCED COMPUTER AIDED DRAFTING

A continuation of BET 202. The student will become more proficient in the production of CAD products with an emphasis on proficiency in the area of the student's program option, i.e., architectural, computer aided manufacturing, civil, or mechanical.
Prerequisite: BET 202
Four credits: 60 clock hours

## BET 204 INDUSTRIAL RELATIONS

Person-to-person relationships are studied from the perspective of the first line supervisor and his/her development and responsibilities relative to management expectations. Emphasizes the employee and his/her development, employee evaluation, and leadership development. Job safety relative to current government standards is also discussed.
Prerequisite: none
Three credits: 30 clock hours

BET 206 STATICS
A study of analytical mechanics and the comprehension of the underlying principles and their application in the design of mechanisms and static structures. The successful student will be able to apply the principles to the design and/or analysis of static structures.
Prerequisite: BET 105 and BET 106
Five credits: 70 clock hours

## BET 207 TECHNICAL JOB SEEKING

The students will develop a better understanding of their skills, interests and job (employment) search procedures. Preparation of resumes, vitas, and applications is studied along with how to prepare and present oneself for an interview.

## Prerequisite: None

One credit: 10 clock hours

## BET 215 ENGINEERING PLANNING AND CONTROL

An introduction to concepts and applications in the areas of scheduling, estimating, engineering economy, and quality assurance Prerequisite: BET 103, BET 105, and CET 201
Four credits: 60 clock hours

## CET: CIVIL ENGINEERING TECHNOLOGY

## CET 105 BASIC FIELD SURVEY

Acquaints the student with basic surveying equipment, calculations, and note forms derived during survey operations. The student will become proficient in fundamental survey techniques and in the care and daily maintenance of surveying equipment.
Prerequisite: BET 102 and BET 105 or permission of instructor Six credits: 80 clock hours

## CET 201 DRAFTING IV: STRUCTURAL

This course acquaints the student with structural drafting practices, enabling completion of structural plans and details in wood, steel, and concrete for residential, commerical, and industrial structural systems.
Prerequisite: BET 103
Four credits: 60 clock hours

## CET 202 DRAFTING V: CIVIL I

Topographic drafting principles, interpretation, plotting, and detailing are studied to assist the student in the areas of open and closed traverses relating land descriptions and aspects of tract, plat, plot, and site maps. Prerequisite: BET 101 through BET 107
Five credits: 60 clock hours

## CET 203 APPLIED CIVIL DESIGN

A consolidation of the major aspects of the Civil Engineering Technology program with principle emphasis on design.
Prerequisite: CET 202
Six credits: 80 clock hours

## CET 208 APPLIED ENGINEERING PROBLEMS

 AND APPLICATIONS/CIVILProvides 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 engineering tech skills individually and as a project team member.
Prerequisite: ALL required classes as listed in this catalog for quarters one through five.
Four credits: 60 clock hours

## CET 216 CIVIL HYDRAULICS

A study of open channel flow and hydrology. The student will gain an understanding of urban drainage requirements and the solution of urban drainage problems through the use of design manuals. Design of small drainage structures will also be studied.
Prerequisite: BET 105, BET 106, and BET 107
Three credits: 40 clock hours

MET: MECHANICAL
ENGINEERING
TECHNOLOGY

## MET 101 ENGINEERING MATERIALS

Materials of industry are studied from the properties and applications viewpoints with emphasis on manufacturing.
Prerequisite: BET 105 or concurrent with BET 105
Four credits: 60 clock hours

## MET 102 MANUFACTURING AND PROCESSES

Continuation of MET 101 with an emphasis on manufacturing processes that use metals, woods and other common materials.
Prerequisite: MET 101
Three credits: 40 clock hours

## MET 201 STRENGTH OF MATERIALS I

The study of properties and their effects relevant to material stress and strain, tension, compression, and shear.
Prerequisite: BET 105 and BET 106
Three credits: 40 clock hours

## MET 202 MECHANICAL DESIGN: MANUFACTURING

This course will acquaint the student with mechanical design practices for manufacturing using sketching and problem solving techniques.
Prerequistie: BET through BET 107 or permission of instructor
Three credits: 40 clock hours

## MET 203 MECHANICAL DESIGN: FACILITIES

This course will acquaint the student with mechanical design practices for facilities using sketching and problem solving techniques.
Prerequisite: BET 101 through BET 107 or permission of instructor Three credits: 40 clock hours

## MET 204 STRENGTH OF MATERIALS II

A continuation of MET 201 with an emphasis on the study of beams and columns.
Prerequisite: MET 201
Three credits: 40 clock hours

## MET 205 ELECTRO/MECHANICAL DESIGN

This course will acquaint the student with electronic design drafting practices. Introduces the student to basic diagrams and packaging systems.
Prerequisite: BET 101 through BET 107 or permission of instructor Three credits: 40 clock hours

## MET 208 APPLIED ENGINEERING PROBLEMS AND APPLICATIONS/MECHANICAL

Provides 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 engineering tech skills individually and as a project team member.
Prerequisite: ALL required classes listed in this catalog for quarters one through five
Four credits: 60 clock hours

## MET 216 APPLIED FLUID POWER

A study of fluid power systems (hydraulic and pneumatic) and the applications of these systems in the engineering fields.
Prerequisite: BET 106
Three credits: 40 clock hours

## CAM: COMPUTER AIDED MANUFACTURING

## CAM 101 TECHNICAL DRAWING CONCEPTS

A freehand sketch approach to technical drawing intended to familiarize the student with the basic concepts and techniques of the engineering language. Covered will be basic knowledge of engineering lettering, scales, goometric construction, orthographic projection, sections, auxiliary views, rotation and revolution, threaded fasteners, pictorials, dimensioning procedures, and assembly drawings.
Prerequisite: None
Six credits: 80 clock hours

## CAM 105 INDUSTRIAL ELECTRICITY

The student will study the basic concepts of electrical circuits, equipment, and applications. Safety, troubleshooting, and National Electric Codes (NEC) will also be studied.
Prerequisite: None
Three credits: 40 clock hours

## CAM 106 ELECTRONICS FOR ENGINEERING

 TECHNICIANS IThis course will cover the basic concepts of industrial electronics with an emphasis on circuits and components.
Prerequisite: BET 105 or permission of instructor
Five credits: 60 clock hours

## CAM 205 COMPUTER AIDED MANUFACTURING

An introduction to the concepts of Computer Aided Manufacturing, including CNC programming and CIM.
Prerequisite: None
Four credits: 60 clock hours

## CAM 206 ELECTRONICS FOR ENGINEERING TECHNICIANS II

A continuation of CAM 106. The student will become familiar with microprocessor interfacing, troubleshooting, and typical robotic/CNC electronic systems.
Prerequisite: CAM 106
Five credits: 60 clock hours

## CAM 207 INTRODUCTION TO ROBOTICS

A basic course emphasizing the components, systems, and applications of industrial robots.
Prerequisite: None
Three credits: 40 clock hours

CAM 208 APPLIED ENGINEERING PROBLEMS AND APPLICATIONS/MFG
Provides 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 engineering tech skills individually and as a project team member.
Prerequisite: ALL required classes listed in this catalog for quarters one through five
Four credits: 60 clock hours

## ESL: ENGLISH AS A SECOND LANGUAGE

## ESL 011 SURVIVAL ENGLISH AS A SECOND LANGUAGE I

Designed to provide the non-English speaking individual with basic language survival skills which will be integrated with pattern usage of the English language. About 75 percent of class time will be devoted to oral and listening development, and about 25 percent devoted to writing simple statements and building vocabulary.

ESL 012 SURVIVAL ENGLISH AS A SECOND LANGUAGE II
Designed to provide the very limited English speaking individual with basic, language survival skills which will be integrated with pattern usage of the English language. These skills will be a continuation of those acquired in ESL I. Great emphasis will be placed on oral and listening development. Writing and reading skills also will be emphasized to build vocabulary skills.
Prerequisite: Completion of ESL 011, or score of 80 percent or better on test used to assess English skills learned in ESL 011

## ESL 013 SURVIVAL ENGLISH AS A SECOND LANGUAGE III

Designed to provide the limited English speaking individual with basic, language survival skills which will be integrated with pattern usage of the English language. These skills will be a continuation of those acquired in ESL I and II. Great emphasis will be placed on oral and listening development. Writing and reading skills also will be emphasized to build vocabulary skills.
Prerequisite: Completion of ESL 012, or score of 80 percent or better on test used to assess English skills learned in ESL 012

ESL 014 SURVIVAL ENGLISH AS A SECOND LANGUAGE IV
This course is designed to provide the limited English speaking individual with basic survival skills which will be integrated with pattern usage of the English language. These skills will be a continuatiof those acquired in levels I, II, and III. Great emphasis will be placed in oral and listening development. Writing and reading skills will also be emphasized for vocabulary skill buildup.
Prerequisite: ESL 013

ESL 015 SURVIVAL ENGLISH AS A SECOND LANGUAGE V
This course is designed to provide the limited English speaking individual with basic survival skills which will be integrated with pattern usage of the English language. These skills will be a continuation based upon those acquired in levels I, II, III, and IV. Great emphasis will be placed-in oral and listening development. Writing and reading skills will also be emphasized for vocabulary skill buildup.
Prerequisite: ESL 014

## ESL 011 CLASE DE INGLES - NIVEL I

Esta clase está disenada para darle al estudiante que no habla inglés una habilidad básica en inglés que será integrada con formas de como se usa el inglés correctamente. Como un 75 por ciento de la enseñanza de la clase pondrá énfasis en el desarollo oral (de conversación) y de escuchar el inglés. Como un 25 por ciento de la clase será dedicado a el desarollo de la escritura de oraciones simples.

## ESL 012 CLASE DE INGLES - NIVEL II

Esta clase está diseñada para darle al estudiane quien está muy limitado en la habilidad de comunicarse en inglés una habilidad básica en inglés que será integrada con formas de como se usa el inglés correctamente. Estas habilidades serán una continuación de esas habilidades introducidas en el Nivel I. Se dará mucha atención al desarollo de la escritura y lectura del inglés.
Requisito: Completar el Nivel I de inglés. El estudiante debe de tener un grado de 80 por ciento o mejor en el examen del Nivel I de inglés

## ESL 013 CLASE DE INGLES - NIVEL II

Esta clase está disenada para darle al estudiante quien está limitado en la habilidad de comunicarse en inglés una habilidad básica en inglés que será integrada con formas de como se usa el inglés correctamente. Estas habilidades seran una continuación de esas habilidades introducidas en los Nivels I y II. Se dará mucha atención al desarollo oral (de conversación) y de escuchar inglés. También se dará mucha atención al desarollo de la escritura y lectura.
Requisito: Completar el Nivel Il de inglés. El estudiante debe de tener un grado de 80 por ciento o mejor en el examen del Nivel II de inglés

## ESL 014 CLASE DE INGLES - NIVEL IV

Esta clase está diseñada para darle al estudiante quien está limitado en la habilidad de communicarse en inglés una habilidad básica en inglés que será integrada con formas de como se usa el inglés correctamente. Estas habilidades serán una continuación de esas habilidades introducidas en los Niveles I, II, y III. Se dará mucha atención al desarollo oral (de conversación), y de escuchar inglés. También se dara mucha atención al desarollo de la lectura y escritura.
Requisito: Completar el Nivel III de inglés. El estudiante debe de tener un grado de 80 por ciento o mejor en el examen de Nivel IIl de inglés

## ESL 015 CLASE DE INGLES - NIVEL V

Esta clase está diseñada para darle al estudiante quien está limitado en la habilidad de comunicarse en inglés una habilidad básica en inglés. Estas habilidades serán una continuación de esas habilidades introducidas en los Niveles I, II, III, y IV. Se dará much atención al desarollo de la lectura y escritura.
Requisito: Completar el Nivel IV de inglés. El estudiante debe de tener un grado de 80 por ciento o mejor en el examen del Nivel IV de inglés

## FAMILY AND LIFE EDUCATION

Expectant Families, Active Families and Changing Individuals are cosponsored with North Colorado Medical Center.

## FLE: EXPECTANT FAMILIES

## FLE 115 PREPARED CHILDBIRTH

Prepare as a family for the birth of your baby. Group discussions concern the physical and emotional aspects of pregnancy and the postpartum period, including new family relationships, the unique role of the father, basic nutrition, and initial newborn care. Promotes better preparation for labor and delivery processes by teaching and practicing related exercises and breathing techniques including the Lamaze method. Labor and delivery film is shown and tour of the hospital obstetrical facilities included.
Two credits

## FLE 117 REFRESHER

For parents who previously have completed a comprehensive childbirth education course. Review and practice of relaxation and breathing techniques for labor and delivery. Labor and delivery film is shown and tour of the hospital obstetrical facilities is included.
Prerequisite: childbirth education course
One credit

## FLE 121 NOW I'M A PARENT

Acquaints parents with growth, development, and the normal characteristics of early infancy. Helps parents understand and cope with their feelings.
One credit

## FLE 131 EXERCISE FOR PREGNANCY I

To help 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

To help 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 133 EXERCISE FOR POSTPARTUM

To help women get back in shape after the baby is born. Designed specifically for postpartum women.
One credit

## FLF: ACTIVE FAMILIES

## FLF 111 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

## FLF 112 HOW TO TALK SO KIDS WILL LISTEN II

Review the concepts from Part I and give practical applications to daily lives.
One-half credit

## FLF 117 YOUR CHILD'S SELF-ESTEEM

This workshop is 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

## FLF 127 COPING WITH YOUR ACTIVE TODDLER

For parents of one to two and one-half year olds. Discussions concern 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 HOW DO I GO ON? LOSS, GRIEF \& LIVING
Develop understanding of the grief process, prepare for the reactions of others to the death of your loved one, take stock and rebuild life without that person you loved.
One credit

## FLF 139 TEACHING YOUR CHILD TO SOLVE HIS OWN PROBLEMS

Recognize the when, where, why and how of helping kids to solve their own problems.
One-half credit

## FLF 141 PARENTING IN REMARRIAGE

Discover how to blend individuals into a new family unit, resolve discipline differences, adapt to new roles and develop positive relationships.
One-half to three credits

## FLF 142 PARENTING IN REMARRIAGE II

To continue to help stepparents in blending a new family unit and resolving discipline differences.
One-half to three credits

## FLF 159 ADOPTION A - Z

An overall view of adoption, from the decision to adopt and issues involved in that decision, through the placement of a child(ren). Two credits

## FLF 204 AS PARENTS GROW OLDER

Supplies adult children and professionals working with families insight into the medical, psychological and social aspects of aging. Discusses options and resources for the aging parent or relative and how to make decisions based on these alternatives.
One credit

## FLF 205 WOMEN'S ROLES, CHOICES AND CHALLENGES

Identifies personal needs which are sometimes swallowed up in the role of motherhood. Priority and goal-setting; time management, communication skills, self-concept, and relationships with others are discussed.
One credit

## FLF 207 CHILDREN OF DIVORCE

Explore the meaning of divorce to children and how it affects their lives in emotional and practical terms. Learn ways to help the child build positively from the divorce experience.

## One-half to one credit

## FLE 209 RELATING TO TEENS

Deals with reasons for teen misbehavior and suggests appropriate parental response. Emphasizes the teens responsibility, methods of discipline, and communications skills between parent and teen.
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 216 ACTIVE PARENTING

To increase parent awareness of effective parent-child communication and to provide problem solving skills and methods of achieving enhanced family relationships. Class discussions will center around video tape vignettes of parent-child interactions.

## One credit

## FLF 217 PREPARING FOR ADOLECENCE

Understand better the needs of a soon-to-be teenager in light of your own adolescence, normal development, and the role of the family. Learn more about handling communication and conflict, discipline, and parent needs at this time of change.

## One credit

## FLF 221 BALANCING WORK AND THE FAMILY

To help enhance the competency and sense of well-being of working parents, both at work and at home, by providing information and support to help them improve their ability to meet their personal needs as well as the demands of their employers and their families.

## One credit

FLF 222 BALANCING WORK AND THE FAMILY II
To help enhance the competency and sense of well-being of working parents by providing the skills needed for balancing work and family life. It will provide information on individual and family development. One credit

## FLF 226 YOUR ADOPTED ADOLESCENT

This class is designed to investigate the special concerns of being adopted and how these concerns affect the issues of normal adolescent development. Parents will gain information and skills to deal with these issues.
One credit

## FLF 227 PARENT BURNOUT

Learn to cope with parent burnout; explore strategies for coping with
the physical, mental and emotional stress of parenting.
One-half credit
FLF 228 SELF ESTEEM FOR WOMEN
Provides an overview of the issues that promote or inhibit positive self esteem for women.
One credit

## FLC: CHANGING INDIVIDUALS

## FLC 125 UNDERSTANDING MEDICARE AND SUPPLEMENTAL INSURANCE

To inform consumers about how the medicare system functions and how to choose supplemental health insurance.
One-half credit

## FLC 207 RETIREMENT PLANNING

Explore the options of what you can do now to make your retirement years more enjoyable and fulfilling.
Two credits

## FLS: SENIOR ADULT PROGRAM

## FLS 111 SENIOR SHAPE UP I

Introduces body conditioning to raise fitness levels of older adults. One credit

## FLS 112 SENIOR SHAPE UP II

A continuation of Senior Shape Up I to better improve fitness levels. One credit

## FLS 113 SENIOR SHAPE UP III

Allows the student to continue improvement of body fitness. One credit

## FLS 115 MANAGING STRESS FOR HEALTHY AGING

Identify age-related stress situations and learn techniques to cope. One credit

## FLS 121 ADVANCED SENIOR SHAPE UP I

A more active, strenuous exercise class with aerobic activity for older adults.
One credit

## FLS 122 ADVANCED SENIOR SHAPE UP II

A continuation of active exercises with some dance and walking. One credit

FLS 123 ADVANCED SENIOR SHAPE UP III
Allows continued improvement of total body fitness.
One credit

FLS 131 MOVING TOGETHER FOR FITNESS I
An exercise program for older adults with special needs.
One credit

FLS 132 MOVING TOGETHER FOR FITNESS II
A continuation of exercise to improve strength and flexibility. One credit

## FLS 133 MOVING TOGETHER FOR FITNESS III

Allows for continued improvement in strength and flexibility for older adults.
One credit

FLS 141 SUPER SHAPE UP
For the fit adult who needs a more vigorous workout.
One credit

FLS 145 LOOKING AT LEGAL RIGHTS IN YOUR LIFE
Focuses on concerns and rights of retirees.
One credit

## FLS 161 NUTRITION AND FITNESS I

Establishes guidelines for older adults to balance exercise and good nutrition for weight control.
One credit

## FLS 162 NUTRITION AND FITNESS II

This class reviews the benefits of regular exercise and emphasizes the importance of a diet that includes "nutrient-dense" foods for weight control for older adults.
One credit

## FLS 163 NUTRITION AND FITNESS III

To develop a plan of action for good health. It will include a determination of ideal weight, an understanding of the balance of calorie intake and output, and a determination of individual adjustments to diet and exercise to achieve ideal weight.
One credit

FLS 167 WEIGHT LOSS FOR THE OLDER ADULT
Learn to achieve your ideal weight and maintain it through good nutrition.
One credit
FLS 178 LIVING WITH HEARING LOSS
Workshop on causes of hearing disorders and coping strategies. One-half credit

## FLS 179 SELF-ESTEEM: THE MATURE YEARS

Examines how to restore and maintain feelings of self-worth in later years.
One credit

## FLS 181 HEALTH AWARENESS FOR SENIORS I

Provides information about health and aging and taking an active role in maintaining health. Topics include back care, the heart, arthritis, medications, digestion and circulation.
One credit

## FLS 182 HEALTH AWARENESS FOR SENIORS II

Additional information about health and aging includes hearing and vision, diabetes, chronic diseases, and community resources. One credit

## FLS 183 HEALTH THROUGH EXERCISE

Understand the many ways exercise benefits the health of the older adult and participate in exercises for strength and flexibility. One credit

## 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.
Three credits: 30 clock hours

## FIS 104 FIRE COMPANY ORGANIZATION

 AND PROCEDUREReview of fire department organization, fire company organization, the company officer, personnel administration, communications, fire equipment, maintenance, training, fire prevention, fire fighting, company fire fighting capability, records and reports.
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.
Twenty-five credits: 320 clock hours
FIS 106 FIRE FIGHTING TACTICS AND STRATEGY
Review of fire chemistry, equipment, and manpower; basic firefighting tactics and strategy; methods of attack, preplanning fire problems. Five credits: 50 clock hours

## FIS 108 FIRE HYDRAULICS

Review of basic mathematics; hydraulic laws and formulas as applied to fire service; application of formulas and mental calculation to hydraulic problems, water supply problems, and underwriters' requirements for pumps.
Three credits: 30 clock hours

## FIS 110 FIRE APPARATUS AND EQUIPMENT

Driving laws, driving techniques; construction and operation of pumping engines, ladder trucks, aerial platforms, and specialized equipment; apparatus maintenance.
Three credits: 30 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 help to decrease the hazards associated with operational areas.
Three credits: 30 clock hours

## FIS 112 FIRE SERVICE PLANNING

Students will acquire ability to develop and coordinate plans between various agencies for utilization of manpower, equipment, facilities, and water for fire suppression and prevention.
Three credits: 30 clock hours

## FIS 113 FIRE INSPECTOR I

Students will acquire the ability to inspect buildings for the compliance of adopted codes in their respective service area as well as understanding the function of the fire prevention organization.
Three credits: 30 clock hours

## FIS 115 INTRODUCTION TO INDUSTRIAL TRADES

Familiarization with the various trades in which specific hazards may present complicated and unique fire suppression or rescue problems for the firefighter.
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.
Five credits: 50 clock hours

## FIS 119 FIRE INSTRUCTOR I

Students will learn the role of the fire service instructor in today's fire service. Topics will include: The Instructor and the Job, Concepts of Learning, Planning Instruction, Presenting the Instruction, Training Aids, and Testing and Evaluation.
Three credits: 30 clock hours

FIS 190 ADMINISTRATION OF JUSTICE AND COURT PROCEDURES
Study of processes of criminal justice; procedures of local, state, and federal courts; organization of jurisdiction. Criminal justice in Colorado, conduct of trials, rights of accused, motions, and appeals also included. Three credits: 30 clock hours

## FIS 202 FUNDAMENTALS OF FIRE PREVENTION

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 203 UNIFORM BUILDING AND FIRE CODES

Familiarization with national, state, and local laws and ordinances which influence the field of fire prevention; emphasizes building codes and fire codes.
Five credits: 50 clock hours

## FIS 205 LIFE SAFETY CODES

Continuation of FIS 203, emphasizing life safety and fire codes. Three credits: 30 clock hours

## FIS 206 RESCUE PRACTICES

Rescue practices, rescue skills and techniques; rescue tools and equipment, emphasizing auto accident extrication; building collapse, cave-in and landslide, and other rescue problem procedures.
Three credits: 30 clock hours

FIS 207 APPLIED CHEMISTRY FOR FIREFIGHTERS
A basic, practical course in chemistry designed specifically for firefighters. Various materials which firefighters encounter will be discussed.
Five credits: 50 clock hours

## FIS 208 HAZARDOUS MATERIALS I

A review of basic chemistry, storage, and fire-fighting practices pertaining to hazardous materials. Includes basic laws and standards for handling various hazardous materials.
Prerequisite: FIS 207
Three credits: 30 clock hours

## FIS 209 HAZARDOUS MATERIALS II

Continuation of FIS 208. Emphasizes fire-fighting and control at the company officer level.
Prerequisite: FIS 208
Three credits: 30 clock hours

FIS 212 FIXED FIRE PROTECTION EQUIPMENT AND SYSTEMS
Portable fire extinguishing equipment requirements. Sprinkler systems: types, installation, and maintenance. Special protection systems for various hazards.
Three credits: 30 clock hours

## FIS 213 FIRE SERVICE SUPERVISION

Studies fire department organization. Includes personnel relations, leadership, motivation, training, hiring, and disciplinary action.
Three credits: 30 clock hours

## FIS 218 FIRE INVESTIGATION

Introduction to arson, incendiarism, and types of incendiary fires. Methods of determining fire cause, recognizing and preserving evidence, interviewing and detaining witnesses. Procedures in handling juveniles, court procedures, and giving court testimony.
Three credits: 30 clock hours

FIS 220 FIRE INSURANCE
An analysis of the fire insurance rating structure. Elements involved in establishing insurance rates, including the grading system for and classification of cities and towns. Hazard factors in occupancy, construction, and exposures.
Three credits: 30 clock hours

## FIS 230 BUILDING CONSTRUCTION FOR

 THE FIRE SERVICEStudents will study various types of building construction, principles of fire resistance, flame spread, and fire and smoke containment. Students may be required to complete a case study, slide presentation, and a written report.
Three credits: 30 clock hours

## FOREIGN LANGUAGE

## FRE: FRENCH

## FRE 101 BASIC APPLIED FRENCH I

Basics of spoken French are presented. Emphasizes vocabulary and sentence patterns that a traveler might need to order meals, get a room in a hotel, shop, exchange money, or travel.

## Three credits

FRE 102 BASIC APPLIED FRENCH II
Continuation of FRE 101.
Three credits

FRE 103 BASIC APPLIED FRENCH III
Continuation of FRE 102.

## Three credits

## FRE 111 BEGINNING FRENCH I

Course emphasizes basic language skills used in everyday situations. Also some study of the culture.
Five credits

## GER: GERMAN

## GER 101 BASIC APPLIED GERMAN

Course in conversational German designed to help the person who may be traveling in Germany.
Three credits

## GER 111 ELEMENTARY GERMAN I

Develops the ability to learn standard or High German through listening, reading, writing, and speaking the language. Primary aim is to give students an elementary, conversational, and grammatical knowledge of the language and an exposure to German culture and habits.
Five credits

GER 112 ELEMENTARY GERMAN II Continuation of GER 111.
Prerequisite: GER 111 or equivalent knowledge Five credits

GER 113 ELEMENTARY GERMAN III Continuation of GER 112.
Prerequisite: GER 112 or equivalent knowledge
Five credits

## SPA: SPANISH

## SPA 101 BASIC APPLIED SPANISH I

Course is an introduction to basic Spanish conversation. It is designed to give the student a prompt ability to communicate orally in the language.
Three credits

## SPA 102 BASIC APPLIED SPANISH II

Continuation of SPA 101.
Three credits

SPA 103 BASIC APPLIED SPANISH III
Continuation of SPA 102.
Three credits

## SPA 111 BEGINNING SPANISH I

Course is an introduction to Spanish language and culture. The course will cover grammar, syntax, phonetics, and vocabulary, as well as conversation about Hispanic civilization.
Five credits

## SPA 112 BEGINNING SPANISH II

Continuation of SPA 111.

## Five credits

SPA 113 BEGINNING SPANISH III
Continuation of SPA 112.

## Five credits

## SPA 201 ADVANCED SPANISH CONVERSATION

Gives Spanish students the opportunity to continue their study of the language and to practice their speaking of the language.
Prerequisite: SPA 103, SPA 113 or permission of instructor
Three credits

## GEO: GEOGRAPHY

## GEO 105 WORLD GEOGRAPHY

A study of the world's regions, emphasizing culture. Regions and factors such as landform, climate, vegetation, and soils are examined. The influence of these factors on mankind is discussed.
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: three hours lecture

## 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: four hours lecture per week

## GEY 111 PHYSICAL GEOLOGY

Promotes the physical awareness and observations of the student by a study of our physical surroundings; including rocks, minerals, and landforms. Emphasizes the processes that shape our everchanging landscape. Field trips required.
Five credits: three hours lecture, four hours lab per week

## GEY 112 INTRODUCTION TO FIELD GEOLOGY AND MAPPING

Introduces the skills and techniques used by the field geologist to obtain information from topographic maps, aerial photographs, geological maps, and field observations to identify major physical landforms and make interpretations of geologic structures. Field trips required.
Prerequisite: GEY 111 or permission of instructor
Three credits: two hours lecture, two hours lab per week

## GEY 113 HISTORICAL GEOLOGY

Studies the prehistorical earth and prehistoric life, using influences from the physical geology of the earth to determine the paleogeography, paleoclimate, and paleontology of past ages. Field trips required. Prerequisite: GEY 111 or permission of instructor Five credits: three hours lecture, four hours lab per week

## GRT: GRAPHIC TECHNOLOGY

## GRT 101 GRAPHIC TECHNOLOGY I

Students will be given the opportunity to acquire basic knowledge and skills in photocomposition, 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 complete the learning activities for duplicator-sized presswork. Students will then be given the opportunity to acquire advanced knowledge and skills in photocomposition, or layout, paste-up and film stripping or printing press operation and maintenance and bindery; and materials and personal activities. The student will perform the above advanced activities at production quality level. The student will also be given the opportunity to 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 advanced skills acquired in GRT 101 and GRT 102 in order to perform those skills at no more than double the average production time and at no less than production quality. The student also will 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 Artistic, Typesetting, Photographic, or Mechanical options.
Prerequisite: GRT 103 or permission of instructor
Ten credits: 125 clock hours

## GRT 107 SILK SCREEN PRINTING

Students will be given the opportunity to acquire basic knowledge in silk mounting, paper stencil, film stencil, photo stencil, two-color printing, blocking, textile printing, and clean-up. Students are encouraged to work on projects of their choice within the time constraints of the class.
Two credits: 30 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 to three credits: 10 to 30 clock hours

## GRT 295 GRAPHIC TECHNOLOGY/INDEPENDENT STUDY A

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/INDEPENDENT STUDYB

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/INDEPENDENT STUDY C

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 105 PERSONAL HEALTH

Studies problems involved in personal and community health. Emphasizes actions an individual can take to maintain the highest degree of mental and physical health.
Three credits: 30 clock hours

## HEN 106 SAFETY AND FIRST AID

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. (The official First Aid Standard Certificate is granted to students who satisfactorily pass the American Red Cross examination.)
Three credits: 30 clock hours

## HEN 107 ADVANCED SAFETY AND FIRST AID

This Red Cross Advanced First Aid and Emergency Care course is designed for persons who are responsible for giving emergency care to the sick and injured. It provides the essential information for developing functional first aid capabilities required by policemen, firefighters, ski patrol, and other special interest groups. Includes cardiopulmonary resuscitation. Students completing course and testing will be certified by the American Red Cross in advanced first aid and cardiopulmonary resuscitation.
Five credits: 50 clock hours

## 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 100 NURSE AIDE

Upon completion, the successful student will, in the classroom and laboratory, and/or in the clinical setting and to the instructor's satisfaction, be able to (1) perform basic personal care skills; (2) judiciously apply the safety principles taught; (3) observe and report changes in patient condition; (4) demonstrate tender, loving care; (5) perform assignments in both an ethical and legal manner. Additionally, the successful student will, upon verbal or written examination and with $70-100 \%$ accuracy, demonstrate knowledge of the course content.

The nurse aide student will have 84 clock hours clinical experience in extended care/nursing home and hospital settings. Supportive classroom/laboratory work will be done in the pre-operative and postoperative care of adult patients.
Prerequisite: 9 th grade reading skills, basic arithmetic skills
Concurrent: HLH 105
Fifteen credits: 180 clock hours, certificate program

## HLH 104 GRIEF AND DYING SEMINAR

Intended for health care providers who desire historical perspectives from a survey of selected art, literature, and music; perspectives from selected transcultural views of grief and dying and helpful and nonhelpful communication simulations.

## Prerequisite: none

One credit: 10 clock hours

## HLH 105 HOME HEALTH AIDE

To be taken concurrently with HLH 100 Nurse Aide, this class will enable the successful learner to: 1) apply practical skills and knowledge in personal care to the home setting, 2) understand differences between home and institutional settings in the aide's responsibilities, particularly in matters such as record keeping, direct supervision, medicines and treatments, 3) identify and discuss foods, food groups, and amounts in: a) non-therapeutic diets, b) commonly prescribed therapeutic diets to include diabetic, low sodium, low cholesterol, 4) identify, discuss and relate to job responsibilities the major growth and development events throughout the life span with emphasis on the older adult. A clinical orientation experience will be provided. Laboratory time will emphasize personal care skills. 5) Apply learned safety and first aid principles to the home setting. Prevention and first aid for falls, burns, cuts, medication errors will be emphasized.
Prerequisite: 9 th grade reading skills, basic arithmetic skills

## Concurrent: HLH 100

Three credits: 38 clock hours, certificate

## HLH 107 R.N. REFRESHER

Upon completion, the R.N. student will have (1) reviewed basic adult medical-surgical nursing care; (2) updated professional skills and knowledge of basic adult medical-surgical nursing care; (3) completed supervised laboratory practice of updated skills; (4) completed supervised clinical practice, applying the professional knowledge and skills learned.
Prerequisite: current Colorado R.N. license, personal professional liability insurance
Sixteen credits: 240 clock hours

## HLH 111 TRAVELERS' HEALTH

Intended for travel agents, bus drivers, and other public transportation providers who desire basic knowledge, assessment and management information for medical deviations that may occur during domestic or foreign travel. Course content includes American Heart Association Cardiopulmonary Resuscitation, American Red Cross Basic First Aid and Personal Safety. Also, lectures-discussions on selected travel-acquired, pre-existing, and unusual health needs of tourists with management of these needs, legal and social-psychological implications in unexpected death, and availability and capability of domestic and foreign emergency services and other medical agencies.
Prerequisite: none
Four credits: 38 clock hours

## 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: 1 to 12 clock hours

## HLH 129 SCHOOL HEALTH AIDE

Course content and activities are organized to prepare the student to understand how the school health assistant contributes to the total school health program; to assess the needs of those coming to the clinic for assistance, and to make decisions based upon the assessment; to assist the school nurse with health educational materials; to take a major role in health screening; to adequately maintain the clinic room.
Prerequisite: high school diploma or equivalent is normally required for employment by the school district
Three credits: 30 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 audio-visual aids and discussion.
Three credits: 30 clock hours

## HLH 136 MEDICAL OFFICE LABORATORY TECHNIQUES

Upon completion, the successful student will be able to: (1) aseptically perform venipuncture; (2) aseptically perform capillary stick; (3) accurately perform the manual laboratory tests that are taught; (4) correctly use and clean instruments and glassware that are used to perform the tests.

Specimen collection, routine urinalysis, plating of cultures, complete blood count, slide testing for mononucleosis and pregnancy (kit), and techniques of running and mounting electrocardiogram are included. Prerequisite: current employment as a medical assistant, office nurse, or with instructor's permission
Four credits: 40 clock hours

## HLH 205 I.V. THERAPY FOR LPNs

Expected to prepare the LPN for involvement in administration of 1.V. therapy. Content includes related anatomy and physiology, basics of fluid and electrolyte balance, specialized nursing care, regulations, policies, procedures pertinent to I.V. therapy. 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. Approved by Colorado State Board of Nursing.
Prerequisite: current Colorado nursing license, personal professional liability insurance
Four credits: 40 clock hours

## HIS: HISTORY

HIS 101 INTRODUCTION TO HISTORY: ANCIENT CIVILIZATIONS
A survey of the development of diverse ancient world civilizations: political, social and cultural patterns affecting our own age. 3000 B.C. 1000 A.D.
Five credits
HIS 102 INTRODUCTION TO HISTORY: TRADITIONAL CIVILIZATIONS
This course traces the development of traditional regional civilizations, the beginning of Western dominance and the effect on our own age. 1000-1800 A.D.
Five credits

## HIS 103 INTRODUCTION TO HISTORY: MODERN WORLD CIVILIZATIONS

This course traces the integration of and the conflict between Modern and Traditional civilizations in the nineteenth and twentieth centuries. Five credits

HIS 105 HISTORY OF THE UNITED STATES TO 1877 (MYTH \& REALITY IN AMERICAS PAST)
American history from the colonial period through the Civil War and Reconstruction, emphasizing economic, political, and constitutional development of the United States.
Five credits
HIS 106 HISTORY OF THE UNITED STATES FROM 1865-1945 (MYTH \& REALITY IN AMERICA'S PAST)
Myth and reality in America's past is the theme of this social, economic, and political survey. Examines America's historical myths and their causes.
Five credits

## HIS 107 HISTORY OF THE UNITED STATES SINCE 1945 (HIROSHIMA TO WATERGATE)

A survey of the events in the United States since 1945 emphasizing the background of current social, cultural, and political changes.

## Five credits

## HIS 108 MODERN RUSSIAN CIVILIZATION

A contemporary study of the Soviet Union. Contrasts life of today with the past by focusing on societal and cultural traits.
Five credits

## HIS 115 OCCULT SCIENCES

An historical examination of the beliefs and practices of voodoo, vampirism, witcheraft, hunting magic, snake handling cults, palmistry, tarot cards, I Ching, demonic possession and ESP.
Five credits

HIS 117 SEX IN HISTORY (EVOLUTION OF SEXUAL CUSTOMS)
Sexual customs is an historical area that here-to-fore has been taboo in Western society. As a result, sexual, courtship and certain marriage customs at any given period have been based on ignorance-historical tradition at its worst. The course offers an opportunity to rationally explore and understand the evolution of sexual attitudes.

## Three credits

## HIS 206, 207, 208 COLORADO HISTORY AND CAMPING PROGRAM

History and camping are integrated in these tri-yearly courses held in the Colorado Rockies. Each is a three or four day weekend excursion including van touring with accompanying lecture, visits to a variety of historic sites and the fellowship of group meals and camping. Each course includes two evenings of orientation and organization prior to the trip. For college credit a short paper is required; otherwise an " S " (satisfactory) grade will be earned. The lab fee pays for transportation and mountain meals.

## HIS 206 MESA VERDE

This late Spring Quarter trip explores the southern Colorado mountain region: Mesa Verde, the Great Sand Dunes, Durango and a gold mine.

## Three credits

## HIS 207 LEADVILLE

This mid-summer trip explores the central Colorado mountain region, examines the results of historic preservation in Leadville and includes a four-mile hike on the Hagerman Loop.

## Three credits

## HIS 208 ALPINE TUNNEL

Held during the peak of the aspen season at the beginning of Fall Quarter, this excursion includes South Park, Fairplay and a four-mile hike to the historic Alpine Tunnel.

## Three credits

## HIS 209 HISTORY OF COLORADO AND THE ROCKY MOUNTAIN WEST

A topical study of the Rocky Mountain West emphasizing study and development of Spanish and Indian influences and explorers, fur trading, mining, railroad, farming, and ranching frontiers. Field trips included.
Five credits

## HIS 215 HISTORY OF CHRISTIANITY

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 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

## 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

## HUM: HUMANITIES

## HUM 100 INTRODUCTION TO THE HUMANITIES

Introduces students to the creative and speculative nature of man through a survey of the arts and philosophy.
Five credits

## HUM 101 INTRODUCTION TO THE GREEK AND ROMAN PERIOD

Introduces students to the classical origins of Western culture through the study of the architecture, art, literature, music, and philosophy of the ancient Greeks and Romans.

## Five credits

## HUM 102 INTRODUCTION TO THE MIDDLE AGES AND RENAISSANCE PERIOD

Introduces students to the architecture, art, literature, music, and philosophy of Europe during the Middle Ages and Renaissance and shows the relevance to the development of our own culture.
Five credits

## HUM 103 INTRODUCTION TO THE MODERN PERIOD

 TO WORLD WAR IIIntroduces students to the arts of the seventeenth through the twentieth centuries, examining the actual works of the artist in architecture, music, painting, and literature.
Five credits

## HUM 104 CITIES AND HUMAN VALUES

A study of the quality of life in a technological society. Focuses on the philosophy of self, work, and related ethical and aesthetic issues. Includes a survey of American architecture and great civic centers of the past.
Five credits

## HUM 105 WORLD MYTHOLOGY

Students are acquainted with myths and legends from many areas of world culture.
Three to five credits

HUM 106 INTRODUCTION TO WORLD RELIGIONS
A comparative study of the ideas, doctrines, and concepts of the world's major religions (Eastern, Western or both) through their historical and geographical evolution.
Three to five credits

## HUM 107 INTRODUCTION TO THE ART OF FILM

Teaches film appreciation by viewing films in and out of class and by discussing the elements of film, including scripts, acting, photography, symbolism, editing and other technical aspects as well as the director's role.

## Five credits

## HUM 108 EASTERN PHILOSOPHY

Student examines the wisdom of the East, both theoretically and experientially through textual study and field research.
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.
Five credits

## HUM 115 POPULAR CULTURE

Student surveys contemporary values as reflected in popular arts and ideas.
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 time to the present.
Emphasis will be placed on the Folkloric aspects of Hispanic culture.
Five credits

## LIT: LITERATURE

*Indicates instruction is administered by Developmental Studies Division.

## *LIT 094 LITERATURE READING

Provides a basic introduction to reading in the content field of literature and general or practical reading. Major objectives are to familiarize students with the content vocabulary in literature, and to prepare students to apply skills well enough to pass the literature reading section of the GED test.
Prerequisite: placement

## LIT 105 INTRODUCTION TO LITERATURE

Increases the student's ability to understand himself and others through studying poetry, drama, short story, and the novel. Emphasizes helping students to discover basic concepts of these genres and the relevance of literature in any society.
Five credits

## LIT 107 INTRODUCTION TO NONFICTION

Introduces the student to nonfiction literature that focuses upon controversial issues and notable persons in world culture. Offered thematically, individual courses are taught under titles such as: The Nuclear Era, Biography, Self-Help Literature, Protest Literature, Utopias, Literary and Film Criticism, and others generated out of student interest. Course may be repeated under different titles for elective credit.
Two to five credits

## LIT 108 LITERATURE'S FAMOUS LOVERS

Introduces the student to the theme of love made universal and timeless by the world's famous lovers who are celebrated in novels, short stories, poetry, and drama.
Two to five credits

## LIT 109 WAR AND PEACE IN LITERATURE

Students explore the themes of war and peace in novels, short stories, plays, and poetry. The historical study shows the changing attitudes as reflected in literature and the other arts.

## Five credits

## LIT 115 INTRODUCTION TO FICTION

Students learn to analyze and interpret the short story and the novel to broaden and refine their interest in literature. This course emphasizes themes, characterization and styles.

## Five credits

## LIT 205 THE AMERICAN WEST

Studies American short stories, plays, poems, and novels with settings west of the Mississippi River, from after the Civil War to the present. It includes not only such themes as the settling of the frontier, but also more recent concerns, such as the white-minority relations, ecology, the Beat Generation, and Hollywood.
Five credits

## LIT 206 SHAKESPEARE: REPRESENTATIVE PLAYS

Introductory class in Shakespearean drama covering a cross section of plays drawing from comedies, histories, and/or tragedies. Background coverage of Elizabethan England will be included. Course fulfills a communications or humanities requirement.
Five credits

## LIT 215 SCIENCE FICTION

Students examine the genre of science fiction as it reflects social, political, psychological, and moral views of a variety of writers through the ages.
Five credits

## LIT 217 WOMEN IN LITERATURE AND MEDIA

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.
Prerequisite: CON 102 and a course in literature or humanities One to three credits: contact instructor

## MAT: MATHEMATICS

*Indicates instruction is administered by Developmental Studies Division.

## *MAT012 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

## *MAT013 DEVELOPMENTAL MATHEMATICS III

Provides remedial students, who lack computational skills, with instruction in fractions and decimals. Provides GED students with the necessary skills to pass the part of the GED test dealing with fractions and decimals. The major objective is to develop computational arithmetic operational skills in fractions and decimals to enable the student to enter MAT 014.
Prerequisite: MAT 012 or placement

## *MAT014 DEVELOPMENTAL MATHEMATICS IV

Provides remedial students with instruction in computational skills in percents, graphs, and measurements. The major objective is to develop computational and arithmetic operational skills in percents, graphs, and measurements to enable the student to enter MAT 096.
Prerequisite: MAT 013 or placement

## *MAT095 INTRODUCTORY MATHEMATICS

The primary purpose is to provide the student with enough arithmetic skills to enter business math or beginning algebra.
Prerequisite: placement

## *MAT096 PREPARATORY MATHEMATICS

Provides students with the skills necessary to pass the algebra section of the GED math subtests. The major objective is to provide problem solving skills in basic algebra.
Prerequisite: placement

## MAT 100 INTRODUCTION TO BEGINNING ALGEBRA

(This course will not satisfy minimum nor elective requirements for the A.A. or A.S. degree.)

Topics include fractions, decimals, percents, ratios, finding lowest common multiples and highest common factors, arithmetic in the set of integers (negative and positive numbers), and factoring composite numbers into prime numbers. As time allows the following will be discussed: variables, order of operations, symbols of grouping, distributive law, multiplication of binomials, factoring, algebraic fractions, complex fractions, and linear equations.
Prerequisite: competency in the arithmetic of whole numbers

## Three credits

## MAT 101 APPLIED MATHEMATICS I

(This course will not satisfy minimum nor elective requirements for the A.A. or A.S. degree. Trades \& Industry Division course)

Reviews many of the basic fundamentals of math as used in everyday life, on the job, at home, in business, and for leisure. Includes whole numbers, fractions, decimals, percentages, measurement, ratio and proportion, simple algebraic equations. The mathematical concepts and problems can be applied by the student to his or her special area of interest.
Five credits:

## 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) to 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 111 METRIC SYSTEM

An individualized course for the student who desires a working knowledge of metric measurements of length, area, volume, mass, and temperature. An individualized course to be completed in an average of $10-15$ hours; help is provided on request.
One credit

## MAT 112 CALCULATOR

An individualized course on scientific calculator operation, with assistance available at the Aims Community College Math Laboratory. Students will be tested on multiplication and division, roots, mixed multiplication and division by decimals, powers, and roots; and trigonometric operations.

## One credit

## MAT 120 SURVEY OF MATHEMATICS

For students not majoring in science or mathematics. The student will study sets and applications of sets as well as logic. Further study will include an introduction to algebra with emphasis on linear equations and inequalities in one and two variables, and an introduction to linear programming. Consumer mathematics also is studied as well as an introduction to geometry covering points, lines, planes, angles, polygons, and an exposure to networks. If time permits, some basic concepts of probability and statistics will be covered.
Prerequisite: a good knowledge of basic arithmetic or MAT 100; an entrance exam may be requested
Five credits

## MAT 121 BEGINNING ALGEBRA

The student will be introduced to integer arithmetic, linear equations with applications, and linear inequalities. Also taught will be the arithmetic of polynomials and fractions along with the techniques of factoring. Graphing of linear equations of two variables and linear inequalities of two variables will be covered as well as graphing to solve systems of linear equations and systems of inequalities. Systems of linear equations in two variables will be solved by algebraic techniques. Quadratic equations and radicals will be studied as time permits. Prerequisite: A good knowledge of basic arithmetic or MAT 100; an entrance exam may be requested
Five credits

## MAT 122 INTERMEDIATE ALGEBRA

The system of real numbers is developed through use of axioms and sets. The mechanics of factoring, fractions, exponents, and radicals will be emphasized. Solutions of equalities and inequalities (linear, quadratic, radical, absolute value, and fractional) will be included. If time allows, functions and systems of equations with graphing will be included.
Prerequisite: MAT 121, or equivalent high school course; an entrance exam may be requested
Five credits

## MAT 123 COLLEGE PLANE GEOMETRY

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 121 or equivalent Five credits

## MAT 130 MATHEMATICS FOR DECISION MAKING

Topics to include equations, inequalities, exponential and logarithmic functions, matrices, systems of equations, linear programming, combinatorics and probability.
Prerequisite: MAT 122 or equivalent
Five Credits

## MAT 131 COLLEGE ALGEBRA

Introduces relations, functions, inequalities in one and two variables, absolute value and progressions - both arithmetic and geometric. Second degree functions, relations, graphing, inequalities, permutations, combinations, binomial theorem, mathematical induction, complex numbers, polynomial functions of degree $n$, exponential functions and logarithmic functions. If time permits, an introduction to matrix theory is presented.
Prerequisite: High school Algebra I and II and a year of high school Geometry or MAT 122 and MAT 123, or any equivalent combination of the above; an entrance exam may be requested
Five credits

## MAT 132 COLLEGE TRIGONOMETRY

The wrapping function is used to develop the trigonometric functions and identities with applications to both right and oblique triangles. Covers trigonometric applications, complex numbers and topics in analytic geometry.
Prerequisite: MAT 131 or permission of instructor; an entrance exam may be requested
Five credits

## MAT 160 CALCULUS FOR DECISION MAKING

Stresses applications of calculus to problems in the business and management areas. Differentiation, partial differentiation, definite integration, indefinite integration and other selected topics will be presented. Credit not given for both MAT 160 and MAT 161.
Prerequisite: MAT 131
Five credits

## MAT 161 CALCULUS WITH ANALYTIC GEOMETRY I

Begins with a review of functions and functional notation. Limits, continuity, and the derivative are studied, including the mean value theorem and applications of the derivative to curve sketching, maximaminima problems, etc. The course finishes with an introduction to integration, the fundamental theorem of integral calculus, integration by change of variable, and numerical integration.
Prerequisite: MAT 131 or permission of instructor; an entrance exam may be requested; MAT 132 is highly recommended
Five credits

## MAT 162 CALCULUS WITH ANALYTIC GEOMETRY II

A continuation of MAT 161: logarithmic, exponential, trigonometric and hyperbolic functions; techniques of integration, conic sections and applications of the definite integral to work, volume, pressure, etc.
Prerequisite: MAT 132 and MAT 161
Five credits

## MAT 163 CALCULUS WITH ANALYTIC GEOMETRY III

A continuation of MAT 162: polar coordinates, sequences, improper integrals, infinite series, and vector calculus.
Prerequisite: MAT 162
Five credits

## MAT 261 LINEAR ALGEBRA

Includes an introduction to matrices and determinants with solutions to systems of equations by matrix methods. Emphasizes vector spaces and linear transformations. Eigenvalues, eigenvectors, quadratic forms, and some numerical methods of linear algebra are included as time permits.
Prerequisite: MAT 163 or permission of instructor
Five credits

## MAT 262 CALCULUS WITH ANALYTIC GEOMETRY IV

Functions of several variables, partial derivatives, double and triple integrals, and line integrals are presented.
Prerequisite: MAT 163 and MAT 261
Five credits

## MAT 263 ELEMENTARY DIFFERENTIAL EQUATIONS

Those ordinary differential equations which fall into the categories of variable separable, homogeneous coefficients, exact equations and those to be made exact with simple integration factors are treated along with some applications. The solutions of linear equations by the methods of undetermined coefficients, variation of parameters, differential and inverse differential operators, and Laplace transforms are studied. Systems of equations and nonlinear equations are included if time permits.
Prerequisite: MAT 262
Five credits

## 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 division chairman

## MAS: MEXICAN AMERICAN STUDIES

## MAS 100 INTRODUCTION TO MEXICAN AMERICAN STUDIES

Provides a general understanding of the Mexican American Studies department; its background, philosophy, and courses. Also analyzes the Mexican American community and the general American society; their differences, commonalities, and relative position to one another. Emphasizes the relationship of the Chicano to the American educational system.
Three 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.
Three 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

## MGT: MID-MANAGEMENT

## MGT 101 SALES

An interpretation of the psychological development of people. Emphasizes the art of making friends and the development of a successful relationship between customers and salesperson.
Five credits: 50 clock hours

## MGT 102 ADVANCED SALES

Develop skills of the professional salesperson through role playing situations and studies of advanced closing techniques.
Prerequisite: MGT 101 and employment in a sales position
Five credits: 50 clock hours

## MGT 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

## MGT 109 INTRODUCTION TO THE HOSPITALITY INDUSTRY

An exploratory course designed to acquaint the student with the restaurant/bar, hotel/motel and resort business and the employment opportunities available in the growing area of hospitality management. Three credits: 30 clock hours

## MGT 115 INTRODUCTION TO FOOD SERVICE MANAGEMENT

To familiarize the student with the principles of food service management, including organization and functions; design, layout and equipment; cost controls; laws and regulations; and marketing. Five credits: 50 clock hours

## MGT 116 INTRODUCTION TO FOOD SERVICE MANAGEMENT II

Students learn specific management practices being utilized in the food service industry. Emphasis is on management control functions such as purchasing, inventory, and budgeting. Students learn marketing and financing techniques.
Three credits: 30 clock hours

## MGT 120 INTRODUCTION TO FASHION MERCHANDISING

To acquaint the student with the fundamentals of fashion and the basic principles that control fashion movement and change. The history and development, organization and operation, merchandising activities, and marketing trends of industries engaged in producing and distributing fashion will be studied.
Five credits: 50 clock hours

## MGT 127 LANGUAGE OF CLOTHING

The students will study clothing from a marketing perspective and how it communicates people's values, personality, and attitudes.
Students analyze historic and contemporary fashions.
Five credits: 50 clock hours

## MGT 171 MANAGEMENT ACTIVITY I

This course is designed to encourage growth and development through activities in a student or business organization with professional goals. Two credits: 20 clock hours

MGT 185 INDIVIDUAL STUDIES IN MARKETING
MGT 186 INDIVIDUAL STUDIES IN MARKETING
MGT 187 INDIVIDUAL STUDIES IN MARKETING
These courses provide an opportunity for students to engage in intensive study and research beyond the stated prerequisites.
Prerequisite: MGT 211
One to three credits each: contact instructor

## MGT 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: MGT 101 and MGT 211
Five credits: 50 clock hours

## MGT 207 HUMAN RESOURCES MANAGEMENT

A survey of principles of personnel management and industrial relations policies. Emphasizes theories of work, organization, administration, manpower, management, staffing, and work incentives. Special emphasis on art of supervision.
Five credits: 50 clock hours

## MGT 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: MAT 110 or permission of instructor
Five credits: 50 clock hours

## MGT 211 PRINCIPLES OF MARKETING

A study of fundamental organization of distribution systems from manufacturer to consumer. Special emphasis at retail level.
Prerequisite: sophomore standing
Five credits: 50 clock hours

## MGT 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: MGT 211
Five credits: 50 clock hours

## MGT 215 PRINCIPLES OF MANAGEMENT

A study of the management process, the decision-making process and the science and art of management. The functions of management (planning, coordinating, organizing, testing, and controlling) are studied in formulating and carrying out the objectives, policies, methods, and procedures in managing a successful business enterprise.
Five credits: 50 clock hours

## MGT 225 FASHION 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 or permission of instructor
Five credits: 50 clock hours

## MGT 226 FASHION TEXTILES

This course is directed toward the student who may one day make his/ her career in an area where a knowledge of textiles would be important. The concepts, principles, and facts about fibers, yarns, fabrics, finishes and fabric construction are presented.
Five credits: 50 clock hours

## MGT 227 MERCHANDISING FASHION ACCESSORIES

This course is designed to introduce the student to all the fashion accessories industries including descriptions for various materials used for fashion purposes that are non-textiles.
Three credits: 30 clock hours

## MGT 228 CAREERS IN FASHION MERCHANDISING

To give the student guidelines in channeling career goals. Describes each of the possible fields and helps the student identify specific jobs of interest. Examines specific skills, training, and experience required for entry into each job.
One credit: 10 clock hours

## MGT 235 ORGANIZATIONAL ENVIRONMENT

Provides an understanding of human behavior, management theory, and leadership as they relate to the student's success in the work environment.
Prerequisite: MGT 207 and MGT 215
Five credits: 50 clock hours

## MGT 236 LABOR LAW RELATIONS

Gives students an understanding of the various laws that govern employer/employee relationships, unfair labor practices, strikes, boycotts, bargaining units, anti-trust, anti-injunction, etc.
Five credits: 50 clock hours

## MGT 237 SUPERVISORY MANAGEMENT

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

## MGT 238 MARKETING RESEARCH

This course will introduce the principles and practices of marketing research, including research instruments and data collection and interpretation.
Prerequisite: MGT 211
Four credits: 40 clock hours

## MGT 239 PURCHASING

A study of the many parts of the purchasing job: costs, vendor selection, quality determination, bids versus negotiated contracts, ethics, and inventory control methods. Follows the recommendations of the National Association of Purchasing Management, and will stress the significance of purchasing as a management function.
Prerequisite: permission of instructor
Five credits: 50 clock hours

## MGT 245 ANALYSIS OF FASHION CONCEPTS

This course will introduce the student to the principles of fashion design and the implications for marketing.
Three credits: 30 clock hours

## MGT 246 BUSINESS ETHICS

Students will examine current problems, practices, and trends of business ethics, including truth in advertising and professional codes of conduct.
Three credits: 30 clock hours

MGT 275 MID-MANAGEMENT SEMINAR
MGT 276 MID-MANAGEMENT SEMINAR
MGT 277 MID-MANAGEMENT SEMINAR
Contemporary problems are explored as they relate to students' goals and aspirations.
One to three credits each: 10 to 30 clock hours

MGT 285 INDIVIDUAL STUDIES IN MANAGEMENT
MGT 286 INDIVIDUAL STUDIES IN MANAGEMENT
MGT 287 INDIVIDUAL STUDIES IN MANAGEMENT
These courses provide an opportunity for students to engage in extensive study and research beyond the stated prerequisites.

## Prerequisite: MGT 215

One to three credits each: contact instructor

## MGT 291 PERSONAL ADJUSTMENT TO BUSINESS

MGT 292 PERSONAL ADJUSTMENT TO BUSINESS MGT 293 PERSONAL ADJUSTMENT TO BUSINESS

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 substitued with the consent of the advisor.
Prerequisite: (1) declared Mid-Management major, (2) consent of a MidManagement advisor, (3) enrolled in one or more of the MidManagement program courses each quarter, (4) employed part-time or seeking part-time employment in an acceptable job.
Six credits: 160 clock hours each

## MUS: MUSIC

## MUS 100 MUSIC APPRECIATION

This course emphasizes the understanding and enjoyment of music as a fundamental form of human expression. It includes a brief study of basic musical elements, style periods and composers. The course fulfills a humanities requirement.
Five credits

## MUS 105 FUNDAMENTALS OF MUSIC

Introduction to basic terminology, scales, key signatures, intervals, and ear-training. For students with little or no previous background in music theory.

## Five credits

## MUS 106 MUSIC THEORY

This course is designed to provide the mechanics of musical practice (e.g. keys, scales, chords, part-writing, sight-singing, and ear-training). It is intended for potential music majors or minors, and others with serious interest in developing their knowledge.
Four credits

MUS 111 MUSIC EXPRESSIONS I
MUS 112 MUSIC EXPRESSIONS II
MUS 113 MUSIC EXPRESSIONS III
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 credit

## MUS 220 CHILDREN'S MUSIC

Surveys musical materials appropriate for preschool and elementary school age children. Includes studying and working with listening, rhythm, and creative activities; experiences in singing and playing instruments are involved. Students will develop a repertoire of songs and guided listening for children.
Three 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 program coordinator

## MUP: MUSIC PERFORMANCE

| MUP | 131 | PIANO I |
| :--- | :--- | :--- |
| MUP | 132 | PIANO II |
| MUP | 133 | PIANO III |
| MUP | 134 | PIANO IV |
| MUP | 135 | PIANO V |
| MUP | 136 | PIANO VI |

These courses are for the student beginning to study piano. Reading skills and techniques necessary to play simple songs and accompaniments are included. Slected piano works are surveyed.
Two credits each: eight practice hours each

| MUP 151 | VOICE I |
| :--- | :--- |
| MUP 152 | VOICE II |
| MUP 153 | VOICE III |
| MUP 154 | VOICE IV |
| MUP 251 | VOICE V |

Vocal techniques for beginners or more advanced students; survey of selected vocal works included.
Two credits each: eight practice hours each

## MUP 171 CLASSICAL GUITAR I

MUP 172 CLASSICAL GUITAR II
MUP 173 CLASSICAL GUITAR III
These courses develop a basic technical and musical foundation for playing classical guitar. Sight reading, technical exercises, and selected guitar literature are studied.
Two credits each: eight practice hours each


## PHI: PHILOSOPHY

## PHI 105 INTRODUCTION TO PHILOSOPHY

A study of the fundamental questions concerning man and the universe that recur in the history of human thought - the nature of reality, the possession of free choice, value and its determination, and related subjects. Course fulfills a humanities requirement.
Five credits

## PHI 106 INTRODUCTION TO MODERN PHILOSOPHY

Examines the development of modern philosophy from Descartes to the present. Romanticism, pragmatism, existentialism, logical positivism, and phenomenology will be discussed and applied to the nature of human reality. Emphasis is given to creating a framework which the student can use to develop his or her own personal philosophy. Course fulfills a humanities requirement.
Five credits

## PHI 107 INTRODUCTION TO LOGIC

An introduction to the principle of logic used in the construction and appraisal of arguments. Course fulfills a humanities requirement. Five credits

## PHI 108 INTRODUCTION TO MODERN ETHICS

Introduces the student to different approaches to ethical problems. Emphasis will be placed on problems of our own society. Authoritarian, relativist and contextual concepts will be explored.

## 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

## PEA: PHYSICAL EDUCATION ACTIVITIES

## PEA 101 ARCHERY I

Teaches the techniques and fundamentals of archery. One credit: 20 clock hours

## PEA 102 ARCHERY II

Improves knowledge of the basic skills learned in PEA 101. More time will be spent on correction of errors and accuracy in shooting.
One credit: 20 clock hours

## PEA 103 ARCHERY III

For those who want to continue improving the skills and techniques of archery.
One credit: 20 clock hours

## PEA 131 BOWLING I

Rules, skills, strategy, and courtesies of individual and team bowling are covered.
One credit: 20 clock hours

## PEA 132 BOWLING II

Improves the basic skills of bowling and introduces techniques of tournament bowling.
One credit: 20 clock hours

## PEA 133 BOWLING III

For bowlers who wish to improve skills while working on rules, strategy, and techniques of team bowling.
One credit: 20 clock hours

## PEA 161 SWIMMING I

Instructs nonswimmers, using the American Red Cross swimming program. Teaches basic strokes of swimming.
One credit: 20 clock hours

## PEA 162 SWIMMING II

Incorporates the basic sequence of skills taught in the American Red Cross intermediate and advanced swimmer classifications.
One credit: 20 clock hours

## PEA 163 SWIMMING III

For the advanced swimmer to maintain and increase his/her endurance level.
One credit: 20 clock hours

## PEB: PHYSICAL EDUCATION BALL SPORTS

## PEB 100 RECREATIONAL BASKETBALL

An activity class designed to allow participation and additional training in the skills, fundamentals and the team play of basketball. One credit: 20 clock hours

## PEB 101 BASKETBALL I

An activity class which allows the student maximum participation on an intraclass team organizational basis.
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

## PEB 103 FLAG FOOTBALL I

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

## PEB 104 FLAG FOOTBALL II

Allows students to participate on a team level and provides additional opportunities in leadership experience
One credit: 20 clock hours

## PEB 107 GOLF I

Develops knowledge of the rules, courtesies, and skills of golf and instills an appreciation of the game.
One credit: 20 clock hours

## PEB 108 GOLF II

Improves the techniques of grip, stance, swing, and follow-through. Individual play and putting will be stressed.
One credit: 20 clock hours

## PEB 109 GOLF III

Develops advanced techniques of golf.
One credit: 20 clock hours

PEB 115 WALLYBALL I
Combination of Volleyball and Racquetball skills to play an off-thewall volleyball game.
One credit: 20 clock hours

## PEB 116 WALLYBALL II

Players will experience a higher level of skill and strategies.
One credit: 20 clock hours

## PEB 141 RACQUETBALL I

Teaches the basic movements, skills and rules of racquetball.
One credit: 20 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

## PEB 143 RACQUETBALL III

For students who want to improve skills and knowledge of racquetball.
One credit: 20 clock hours

## PEB 144 ADVANCED RAQUETBALL

An advanced course that will emphasize more strategy and a variety of difficult shots.
One credit: 20 clock hours

## PEB 151 SOFTBALL I

Teaches various skills, techniques, rules, and regulations of softball.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

PEB 152 SOFTBALL II
Improves knowledge of the fundamentals, skills, rules, and regulations of softball.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEB 161 TENNIS I

Introduces theory and practice of tennis. Skills taught include serve, forehand and backhand drives, volleying, footwork, scoring, rules.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEB 162 TENNIS II

Improves the player's skills and strategies. More individual play will be stressed.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEB 163 TENNIS III

For improvement and advancement of skills in tennis.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

PEB 170 VOLLEYBALL SKILLS
To develop the basic skills and strategies of Volleyball. One credit: 20 clock hours

## PEB 171 VOLLEYBALL I

Teaches basic skills of volleyball. Team play is stressed and some intrasquad competition is provided.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

PEB 172 VOLLEYBALL II
Teaches the finer skills and strategies of PEB 171. More time will be devoted to team play and intrasquad competition.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

PEB 173 VOLLEYBALL III
Improvement of skills, strategies, and knowledge of volleyball stressed.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEB 181 COMPETITIVE VOLLEYBALL I

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 182 COMPETITIVE VOLLEYBALL II

Provides the students the opportunity to continue improvement of skills and strategies of competitive volleyball.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEB 183 COMPETITIVE VOLLEYBALL III

The course gives the student the opportunity to maintain the high level of skills used in competitive volleyball.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PED: PHYSICAL EDUCATION DANCE

## PED 101 CLASSICAL BALLET I

Develops poise, grace, agility, and rhythm by learning the classical Cecchette form of ballet.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PED 102 CLASSICAL BALLET II

Increases the poise, grace, agility, and rhythm achieved in PED 101.
Develops an appreciation of ballet as an art form.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PED 103 CLASSICAL BALLET III

Improves the student's poise, grace, agility, and rhythm, and increases the student's personal enjoyment of ballet.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PED 111 AEROBICS I

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 112 AEROBICS II

Involves the student in more strenuous and difficult dance routines.
Develops better cardiovascular efficiency and proficiency.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PED 113 AEROBICS III

Continues to aid the student in maintaining greater cardiovascular efficiency. Routines will be more difficult.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PED 107 ADVANCED AEROBICS

Provides the student with advanced conditioning through excellerated aerobic training.
One credit: 20 clock hours

## PED 121 JAZZ DANCE I

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 122 JAZZ DANCE II

Continued instruction in jazz dance. Provides a rewarding, satisfying jazz dance experience.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PED 123 JAZZ DANCE III

Advanced instruction in jazz dance: develops a greater knowledge and proficiency in jazz as a form of dance.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

PED 141 SOCIAL DANCE I
A class in social dance for those students who desire to learn the basic skills and abilities in social dancing.
One credit: 20 clock hours

## PED 142 SOCIAL DANCE II

An advanced class in social dance for those students who desire to further their skills and abilities in social dancing.
One credit: 20 clock hours

## PED 151 SQUARE DANCING I

Teaches basic steps and other dancing skills that formulate a reasonably comprehensive introduction to square dancing.
One credit: 20 clock hours

## PED 152 SQUARE DANCING II

Square dancing patterns and fundamentals will be taught in addition to old and new square dances.
One credit: 20 clock hours

## PED 153 SQUARE DANCING III

For those who want to improve their skills and steps in square dancing. Students may be required to do some of the calling for the square dancing steps.
One credit: 20 clock hours

## PED 165 BALLROOM DANCING I

Students will learn a variety of social dances and various steps and the rhythmical aspects of ballroom dance.
One credit: 20 clock hours

## PED 166 BALLROOM DANCING II

For student who desire to further their skills in ballroom dancing. One credit: 20 clock hours

## PED 171 COUNTRY SWING I

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 172 COUNTRY SWING II

Advanced steps and dancing skills are taught, enabling students to enjoy the art of dancing for leisure time activity.
One credit: 20 clock hours

## PED 173 COUNTRY SWING III

For those who want to improve their skills and abilities in country swing dancing.
One credit: 20 clock hours

## PEF: PHYSICAL EDUCATION FITNESS

## PEF 104 AEROBIC CONDITIONING I

To develop a better figure, to increase circulation, to help students gain greater cardiovascular efficiency.
One credit: 20 clock hours

## PEF 105 AEROBIC CONDITIONING II

To further develop the individual figure and to work toward an improvement in physical condition.
One credit: 20 clock hours

## PEF 106 AEROBIC CONDITIONING II

Designed for those students who want to continue to increase their physical fitness and develop a better figure.
One credit: 20 clock hours

## PEF 107 SELF-DEFENSE I

Teaches various skills and techniques of self defense.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEF 108 SELF-DEFENSE II

To further the skills and techniques of more advanced self-defense.

## One credit: 20 clock hours

One and one-half credits: 30 clock hours

## PEF 111 PHYSICAL FITNESS I

A variety of exercises are taught to improve students' physical fitness.
Students also will have the opportunity to jog a few miles each week.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEF 112 PHYSICAL FITNESS II

A continuation of PEF 111. Uses a variety of exercises to develop endurance and a higher level of physical fitness.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEF 113 PHYSICAL FITNESS III

An activity course which continues to improve the endurance and overall condition of the individual.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEF 115 EXERCISE \& NUTRITION

Provides scientifically based information on proper exercise and nutrition for developing and maintaining optimal levels of health and fitness.
Two credits: 30 clock hours

## PEF 121 SLIMNASTICS I

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 122 SLIMNASTICS II

Designed to improve the individual's figure, posture, and coordination.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEF 123 SLIMNASTICS III

For those students who want to continue in an advanced slimnastics course. Emphasizes the development of the total body.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

PEF 141 YOGA I
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 spirit.
One credit: 20 clock hours

## PEF 142 YOGA II

Improves the student's appreciation of physical health and clarity of mind through various exercises.
One credit: 20 clock hours

## PEF 161 BODYBUILDING I

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 162 BODYBUILDING II

To allow the student to continue improvement in bodybuilding techniques and improve physical condition.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEF 163 BODYBUILDING III

To improve lifting and bodybuilding techniques to maintain and improve physical conditioning.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEF 171 TAI CHI CHUAN I

To introduce the students to theories and methodologies of Tai Chi Chuan. Individual forms will be taught and then put together into one long continous form.
One credit: 20 clock hours

## PEF 175 MARTIAL ARTS I

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

## PEF 176 MARTIAL ARTS II

Students will learn the advanced form of kicking, punching and blocking, and self-defense techniques of martial arts.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEF 177 MARTIAL ARTS III

A continuation of Martial Arts II. Students will develop a deeper understanding of the principles of martial arts through the study of advanced techniques.
One credit: 20 clock hours
One and one-half credits: 30 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

## PEF 182 ADULT FITNESS II

Continuation of Adult Fitness I. The student will continue activities which are in fulfillment with his/her individual exercise prescription. Periodic re-evaluations will be necessary for prescription purposes. One credit: 20 clock hours

## PEF 183 ADULT FITNESS III

Continuation of Adult Fitness I \& II, re-evaluations of individual exercise prescriptions.
One credit: 20 clock hours

## PEF 191 BODY TRIM I

A class designed for individuals who want a toning and aerobic program. The class concentrates on toning and conditioning with special emphasis on the hips, thighs, waist and abdomen.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEF 192 BODY TRIM II

Designed to further develop the individual figure and to work towards an improvement in physical condition.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PEF 193 BODY TRIM III

Designed for those students who want to continue to increase their physical fitness and develop a better figure.
One credit: 20 clock hours
One and one-half credits: 30 clock hours

## PHY: PHYSICS

## PHY 101 APPLIED PHYSICS I

(This course will not satisfy minimum nor elective requirements for the A.A. or A.S. degree, Trades and Industry course)

Introduces the student to a survey of physics as it applies to the scientific concepts of mechanics. Includes energy, work and power, torque, force, pressure, speed, velocity and acceleration, inertia momentum, properties of matter, the gas laws, mechanices of fluids and simple machines. Involves lecture and discussion on theory and practical applications of concepts. No lab time is required.
Prerequisite: none
Five credits

## PHY 120 FUNDAMENTALS OF PHYSICS

Qualitative survey of the basic concept of physics. Designed for the student who has minimal mathematical preparation and wants to explore the field of physical science including basic mechanics, thermal dynamics, sound, light, electricity, and magnetism.
Five credit hours: four hours lecture, two hours lab per week

## PHY 151, 152, 153 INTRODUCTORY COLLEGE PHYSICS COURSES

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 151 INTRODUCTORY COLLEGE PHYSICS I:

## CLASSICAL MECHANICS

Studies the concepts of statics, kinematics, momentum, work, and energy using a non-calculus approach.
Prerequisite: two years of high school algebra, MAT 131, or permission of instructor.
Five credits: four hours lecture, two hours lab per week

## PHY 152 INTRODUCTORY COLLEGE PHYSICS II: THERMODYNAMICS, WAVES AND OPTICS

Studies the concepts of heat, waves, optics, and energy trans-
formations using a non-calculus approach.
Prerequisite: PHY 151 or permission of instructor
Five credits: four hours lecture, two hours lab per week

## PHY 153 INTRODUCTORY COLLEGE PHYSICS III: ELECTRICITY,MAGNETISM, AND MODERN PHYSICS

Studies the concepts of electricity, magnetism, special relativity, quantum, phenomena, and radioactivity using a non-calculus approach. Prerequisite: PHY 152 or permission of instructor
Five credits: four hours lecture, two hours lab per week

## PHY 201, 202, 203 GENERAL PHYSICS COURSES

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 201 GENERAL PHYSICS I: CLASSICAL MECHANICS
An analytical and comprehensive treatment of mechanics and mechanical waves, including basics of relativistic mechanics.
Prerequisite: MAT 161 (or may be taken concurrently) or permission of instructor
Five credits: four hours lecture, three hours lab per week

## PHY 202 GENERAL PHYSICS II: ELECTRICITY,

 MAGNETISM, AND MODERN PHYSICSAn analytical and comprehensive treatment of electricity, magnetism, special relativity, quantum phenomena, and radioactivity.
Prerequisite: MAT 162 (or may be taken concurrently), and PHY 201, or permission of instructor
Five credits: four hours lecture, three hours lab per week

## PHY 203 GENERAL PHYSICS III: THERMODYNAMICS, SOUND, AND OPTICS

An analytical and comprehensive treatment of heat waves, optics, and energy transformations. A research paper or project may be required. Prerequisite: MAT 163 (or may be taken concurrently), and PHY 202, or permission of instructor
Five credits: four hours lecture, three hours lab per week

## 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 division chairman

## POS: POLITICAL SCIENCE

## POS 100 INTRODUCTION TO POLITICAL SCIENCE

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 101 AMERICAN GOVERNMENT

A survey of the American system of government and politics and of the development of the system into its present-day form.

## Five credits

## POS 118 STATE AND LOCAL GOVERNMENTS

Study of structure and function of municipal, state, and county governments in the United States.
Five credits

## POS 205 INTERNATIONAL RELATIONS

An examination of the underlying principles of international relations with a view toward understanding current international problems. Five credits

POS 208 COMPARATIVE FOREIGN GOVERNMENT
The governmental systems and political cultures of several representative countries outside the United States are surveyed. Five credits

## PSY: PSYCHOLOGY

## PSY 101 GENERAL PSYCHOLOGY I

Introduces principles of human behavior, including personality development, emotions, learning, memory, abnormal psychology, psychotherapy, and other processes.
Five Credits

## PSY 102 GENERAL PSYCHOLOGY II

Sequential course for the student interested in exploring the following topics: sensation and perception, genetic psychology, cognitive development, pain and hypnosis, personality testing, and social psychology.
Five credits

## PSY 107 TRANSACTIONAL ANALYSIS

This course will explain basic concepts of personality structure and interpersonal relationship through an investigation of T.A. theory. Topics will include: ego states (Parent-Adult-Child), life scripts, strokes, games, time structuring, and contract for change.
Three credits

## PSY 111 BASIC HUMAN POTENTIAL SEMINAR

A personal growth workshop based on the self-actualization principals 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 seminar 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 115 HUMANISTIC PSYCHOLOGY

A survey of the third force in psychology; emphasizing Gestalt therapy, psychosynthesis, reality therapy, bio-energetics, body movement, biofeedback, and transactional analysis.
Five credits

## PSY 117 INTRODUCTION TO CAREER PLANNING

A course designed to help clarify abilities, interests, and values; and to help with job information, vocational planning, and decision making. One or three credits

## PSY 118 PSYCHOLOGY OF ADULTHOOD

Explores the psychological, social, and physiological issues of adulthood and aging, from a lifespan perspective and as a framework for viewing the adult years.

## Three credits

PSY 120 PSYCHOLOGY OF LEADERSHIPAND 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 128 LOVE AND LONELINESS

This course details unexpected human dimensions that make loneliness a positive good and necessity. It describes how love and loneliness contribute to identity and how a person can move to more authenticity and more meaningful love relationship with his or her fellow human beings.

## Three credits

## PSY 131 BEGINNING COUNSELING

A beginning course which introduces students to basic concepts and skills involved in counseling. Emphasizes the uses of and abuses of basic counseling skills. Provides information to help students decide if they want to become counselors.

## Five credits

## PSY 138 BIOFEEDBACK AND STRESS MANAGEMENT

A survey of coping and preventive skills and techniques for dealing with the disabling 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 labwork utilizing biofeedback.
Four credits: three hours lecture, two hours lab

## PSY 145 HUMAN RELATIONS AT WORK <br> (Business Division course)

A study of personal development and adjustment in business and industry, and attitudes and working relationships with co-workers and supervisors, in order that organizations can be run in greater harmony. Five credits: 50 clock hours

## PSY 166 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 168 PSYCHOLOGY OF THE FAMILY
A study of psychological perspectives of familial relationships and individual behavior. Topics will include: types of families, family structures, communication styles and functional and dysfunctional patterns of family behavior.
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.
Five credits

PSY 205 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.
Three credits

## PSY 206 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 211 PARAPSYCHOLOGY I

A broad, experimental introduction to the study of psychic phenomena, including ESP, psychokinesis, psychic healing and others. Three credits

## PSY 221 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.

## Five credits

## PSY 225 ADVANCED COUNSELING

The emphasis of the course is on a multi-modal approach to the development of counseling skills such as attending, assessment, life-style analysis, pacing, empathy, reframing, and problem solving skills.
Prerequisite: PSY 13I
Four 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 237 ASSERTIVENESS TRAINING
Study and practice in asserting individual needs and feelings. Three credits

## PSY 241 BIOFEEDBACK I: BIOFEEDBACK AND THE PSYCHOLOGY OF HEALTH (PRINCIPLES)

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 242 BIOFEEDBACK AND STRESS MANAGEMENT II
Continuation of Biofeedback and Stress Management. Concrete applications of biofeedback training as well as the use of adjunctive techniques of covert sensitization, covert reinforcement, imagery, desensitization, implosion, flooding and cognitive re-structuring.
Prerequisite: PSY 138, PSY 241 or PSY 244
Four credits: three hours lecture, two hours lab

## PSY 243 BIOFEEDBACK III: CLINICAL PROCEDURES

Introduction to assessment procedures, contract and homework forms, and clinical methods for the treatment of psychophysiologic disorders.
Prerequisite: permission of instructor
Six credits

## PSY 244 BIOFEEDBACK AND HYPERTENSION

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 248 CHILD PSYCHOLOGY

A study of the normal child's emotional, physical, cognitive, social, and moral development from infancy through adolescence.
Five credits

## PSY 251 BIOFEEDBACK AND PSYCHOTHERAPY

Major psychotherapeutic techniques that supplement biofeedback therapy are studied and practiced.
Prerequisite: permission of instructor
Six credits

## PSY 267 BIOFEEDBACK IV: PRACTICUM

Supervised clinical education in biofeedback. Supervised trainees begin clinical work with clients.
Prerequisite: PSY 243 and PSY 251
Twelve credits:

## PSY 268 BIOFEEDBACK V: PRACTICUM

Supervised clinical education continued. The trainee works with a variety of clients.
Prerequisite: PSY 267
Twelve credits

## PSY 275 HYPERTENSION FOLLOW-UP

Continuation of the training begun in PSY 244, including biofeedback training, diet, exercise, stress management, and cardiovascular functioning.
Prerequisite: PSY 244
Two 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 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

## 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. Topics will include the psychology of the Mexican American male and female and social related problems.
Three credits

## XRT 105 PATIENT CARE

Designed to provide the student with concepts of patient care including considerations of physical and psychological conditions. Routine and emergency patient care procedures will be described. Emphasis is on body mechanics, applied communications, vital signs, infection control, asepsis, contrast media. Aspects of death and dying will be discussed.
Prerequisite: none
Two credits

## XRT 111 CLINICAL EXPERIENCE I

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 fulltime radiologic technology students are permitted to participate in this course.
Prerequisite: majors only
Two credits

## 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 111, majors only
Five credits

## 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
Five credits

## 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
Ten credits

## 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

## 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

## XRT 122 RADIOGRAPHIC EXPOSURE II

Continuation of XRT 121 with emphasis on application of theory.
Prerequisite: XRT 121, XRT majors only
Three credits

## XRT 205 SPECIAL PROCEDURES/PATHOLOGY

Acquaints the student with the theory, equipment, and methodology of selected special procedures. 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
Two credits

## XRT 207 RADIOGRAPHIC IMAGING

A study of image intensification, recording media, and special imaging techniques in radiography.
Prerequisite: permission of instructor
Three credits

## 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

## XRT 212 CLINICAL EXPERIENCE VI

Continuation of XRT 211. Correlates skills from previous classes.
Prerequisite: XRT 211, majors only
Eight credits

XRT 213 CLINICAL EXPERIENCE VII Continuation of XRT 212.
Prerequisite: XRT 212, majors only
Ten credits

XRT 214 CLINICAL EXPERIENCE VIII
Continuation of XRT 213.
Prerequisite: XRT 213, majors only
Ten credits

## XRT 218 COMPUTERS IN MEDICINE

Designed to make the student aware of the various uses of computers in imaging.
Prerequisite: permission of instructor
Two credits

## XRT 221 X-RAY PHYSICS I

Imparts an understanding of basic x-ray physics, includes: unit of measurement, mechanics, structure of matter, electrostatics, magnetism, and electrodynamics.
Prerequisite: permission of instructor
Four credits

## XRT 222 X-RAY PHYSICS II

A continuation of XRT 221. Consideration will be given to electromagnetism, rectification, and production and properties of x-rays, x -ray tubes, and x -ray circuits.
Prerequisite: XRT 221 or permission of instructor
Three credits

## 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 Two 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

Provides the beginning reader with additional skills in word attack and comprehension, and provides practice in developing these skills. Primary purposes are to give the student a basic introduction to general reading skills and to prepare the student for REA 013.
Prerequisite: placement

## REA 013 DEVELOPMENTAL READING III

Provides the intermediate level reader with instruction in vocabulary development, structural analysis, comprehension, and reading for specific purpose. Provides practice in these reading skills in both 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

## REA 014 DEVELOPMENTAL READING IV

Provides the advanced intermediate reader with additional instruction in vocabulary development, structural analysis, comprehension, and reading for a specific purpose. Includes 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

## *REA 100 INTRODUCTION TO COLLEGE READING

To provide the opportunity to learn and improve all basic reading skills necessary for comprehension.
Prerequisite: placement
Five credits

## *REA 101 MASTERING COLLEGE READING

To increase the student's ability to comprehend college level texts by providing him/her with critical, affective and creative reading skills. Prerequisite: placement

## Five credits

## REA 102 COLLEGE READING AND STUDY SKILLS

Increases the student's ability to read college level texts and to provide him/her with the study techniques necessary for success in content areas and study situations.
Prerequisite: placement
Five credits

## REA 103 BASIC VOCABULARY SKILLS

This course is designed to help students achieve a higher literacy by understanding and mastering new words and by understanding how words and language are created.
Prerequisite: placement
Three credits
*REA 104 BASIC SPELLING SKILLS
Provides opportunity to learn and improve the basic spelling skills necessary for academic success.
Prerequisite: placement
Two credits

## *REA 105 THINKING SKILLS

This course explores the various modes of thinking such as critical and creative in relation to reading and writing skills.
Prerequisite: placement
Two credits

## REA 107 SPEED READING IMPROVEMENT

To increase knowledge of literal, critical, and affective comprehension skills while teaching the use of six reading speeds.
Prerequisite: REA 101 or placement
Five credits

## RES: REAL ESTATE

## RES 103 REAL ESTATE LICENSE PREPARATION

Assists students in preparing for the Colorado Real Estate License
Examinations required to enter the field of real estate.
Prerequisite: RES 106, or permission of instructor
Three credits: 30 clock hours

## RES 104 REAL ESTATE CLOSING AND TRUST ACCOUNTS

Provides the student with an understanding of the legal requirements, record keeping responsibilities, establishment and maintenance of trust accounts, and the broker's responsibilities related to closings.
Three credits: 30 clock hours

## RES 106 REAL ESTATE PRACTICE AND LAW

Each student will be familiar with the language of real estate, know the essential elements of real estate principles and law, and be able to practice real estate under the supervision and training of a manager broker.
Six credits: 60 clock hours

## RES 115 COLORADO REAL ESTATE LAW AND COLORADO REAL ESTATE CONTRACTS

To protect the public by introducing and instructing students in Colorado Real Estate Laws and Colorado Real Estate Commission approved real estate contracts.
Three credits: 30 clock hours

## RES 205 REAL ESTATE FINANCE

Teaches the student how to counsel buyers and sellers in financing techniques, including seller financing, the importance of calculations and disclosures required for the various methods of financing, and an understanding of necessary documents for financing.
Prerequisite: RES 106 or permission of instructor
Two credits: 20 clock hours

## RES 207 ADVANCED REAL ESTATE LAW

Provides a study of 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.
One credit: 10 clock hours

## 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
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
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 students to apply comprehension skills of reading appropriate to the area of the natural science adequate to allow students to pass the reading comprehension section of the GED test.

Prerequisite: placement

## SCI 105 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: SCI 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 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 acknowledgements also will be included. Prerequisite: CON 102 or equivalent Three credits

## SOC: SOCIOLOGY

*Indicates instruction is administered by Developmental Studies Division.

## *SOC 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 students to apply comprehension skills of reading appropriate to the area of social science adequate to allow students to pass the reading comprehension sections of the GED test.
Prerequisite: placement

## SOC 101 INTRODUCTION TO SOCIOLOGY

An introduction to the sociological analysis of social systems, culture, social stratification, population, and social change. Cultivates an interest in and awareness of social change.
Five credits

## SOC 105 SOCIOLOGY OF MARRIAGE AND FAMILY

A study of marriage and family relationships, focusing on social institutions, value systems, communication, mate selection, and other social/cultural factors. The course will emphasize courtship, marriage, and conjugal life in contemporary America, and discuss the changes in these areas.
Five credits

## SOC 106 CONTEMPORARY SOCIAL PROBLEMS

A study of both specific and general problems of our time. Some of the social problem studies include poverty, civil liberties, social change, crime and delinquency in the context of contemporary American society. Three credits

## SOC 205 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 access for upward mobility.

## Three credits

## SOC 207 SOCIOLOGY OF WORK AND LEISURE

Analysis of the changing relationship between work and leisure (nonwork). As we enter the post-industrial/high-tech society, our quest for quality of life may be affected by new occupations, new opportunities, and nonwork patterns of behavior.

## 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

## MAS 100 INTRODUCTION TO MEXICAN AMERICAN STUDIES

Provides a general understanding of the Mexican American Studies department; its background, philosophy, and courses. Also analyzes the Mexican American community and the general American society; their differences, commonalities, and relative position to one another.
Emphasizes the relationship of the Chicano to the American educational system.
Five 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 025 CLASES DE CIUDADANIA

Esta clase se ensena para preparar estudiantes para que puedan pasar el examen de ciudadania de los Estados Unidos. Se dara enfasis a las funciones y procedimientos del govierno local, estatal y nacional. Cuando el estudiante este listo, un sobre con las aplicaciones necesaries del Departamento de Imigracion y Naturalizacion se dara al estudiante para que pueda aplicar por ciudadania. Instruccion en espanol se dara a los que la necesiten.

## DST 065 CLASES DE MANEJAR

Esta clase es para preparar estudiantes para que entiendan y pasen el examen de licencia en la forma oral o escrita. La instruccion de signos, leyes y reglas del estado de Colorado sera presentada oralmente si el estudiante no puede leer o escribir. Instruccion en espanol se dara a los que la necesiten.

## 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.

## SPE: SPEECH

## SPE 115 SPEECH COMMUNICATIONS

Provides students with practical experience in everyday, oral communications, such as group discussion, interpersonal communications, listening skills, and certain fundamentals of public speaking.
Five credits

## SPE 116 PUBLIC SPEAKING

Emphasizes organization, preparation, and presentation of various types of speeches. Includes some practice in group discussion for the five credit hour requirement.

## Three to five credits

## SPE 118 INTERPERSONAL COMMUNICATIONS

Focuses on learning communication skills used in listening and sending messages. Students develop problem solving skills as well as selfconfidence and self-awareness while working in pairs and small groups. Five credits

## SPE 119 INTRODUCTION TO SEMANTICS

Introductory study of how persons respond to words 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.
Three credits

SPE 125 WORD POWER: ADVANCED VOCABULARY
Provides an opportunity to increase the student's knowledge of the function in the English language of words derived from Latin, Greek, and other languages.
Two credits

## SPE 200 ORGANIZATIONAL COMMUNICATION

Students will investigate the nature of communication systems within an organization, with special emphasis on strategies and practice in effective organizational communication.
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: permission of instructor
One to three credits

## STA: STATISTICS

## STA 200 GENERAL STATISTICS

Includes descriptive measures of samples and populations, simple correlation and regression, probability and distribution theory, hypothesis tests, confidence intervals, one-way AOV, and certain nonparametric techniques. Maximum of seven credits allowed for STA 200 and STA 201.
Prerequisite: two years high school algebra or MAT 122 or permission of the instructor
Five 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. Maximum of seven credits allowed for STA 200 and STA 201.
Prerequisite: two years high school algebra or MAT 122 or permission of the instructor
Five credits

## STA 202 STATISTICS FOR BUSINESS, SCIENCE, AND SOCIAL SCIENCE II

Includes tests of statistical hypothesis based upon the $\mathrm{z}, \mathrm{t}$, chi-square and F distributions. Other selected topics may include analysis of variance, multiple regression, nonlinear estimation and time series analysis.
Prerequisite: STA 201 or permission of instructor
Five credits

## STA 203 STATISTICS FOR BUSINESS, SCIENCE, AND SOCIAL SCIENCE III

A treatment of statistical topics and techniques to include: single and two factor analysis of variance, multiple regression and correlation, forecasting models and time series analysis, nonlinear regression and statistical quality control.
Prerequisite: STA 202 or permission of instructor
Five credits

## THE: THEATRE

## THE 100 INTRODUCTION TO DRAMA

Involves the study and appreciation of a variety of dramatic presentations in the media of live theatre, television, and cinema. Includes an introduction to acting and directing. Course fulfills a humanities requirement.
Five 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 tos 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

## 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 program coordinator

## WLT: WELDING TECHNOLOGY

## 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 are 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 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
Twenty-four 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 E-7018. 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 6 G positions using E-6010 and E-7018 electrodes.
Twelve credits: 150 clock hours


## AIMS JUNIOR COLLEGE DISTRICT BOARD OF TRUSTEES

James T. Turner Chairman
J. Edward Husted Secretary
Burl Van Buskirk Treasurer
Dale Majors ..... Member
Lynn Pitcher Member

## ADMINISTRATIVE STAFF

DR. GEORGE R. CONGER (President) ..... 1979
PAUL W. GAISER (Dean: School of Occupational Education) ..... 1977
DR. JERRY KIEFER (Dean of the College) ..... 1974
DR. DWANE R. RAILE (Dean: School of Arts and Sciences) ..... 1971
WILLIAM M. HILLARD (Dean: Student Personnel Services) ..... 1984
DON CUMMINS (Associate Dean of the College and Director of the South Campus) ..... 1980
ROBERT N. RANGEL (Associate Dean of the College: Evening Program/Affirmative Action Officer) ..... 1969
PHILIP ROUSE (Associate Dean: School of Occupational Education) ..... 1980
ARIETTA M.C. WIEDMANN (Associate Dean: School of Arts and Sciences and Director: Continuing Education) ..... 1984
RICHARD E. BOGGS (Director: Computer Services) ..... 1977
RICHARD C. BURNS (Director: Purchasing) ..... 1981
TERRY CARR (Director: Financial Aid) ..... 1971
WILLIAM GREEN (Registrar) ..... 1985
RALPH D. MARTINEZ (Director: Student Services - South Campus) ..... 1973
OSGOOD McCOLLUM (Business Manager) ..... 1982
DIANE W. MILLER (Director: Personnel and Payroll) ..... 1984
ROBERT MITCHELL (Controller) ..... 1985
MARK L. OLSON (Director: Public Information) ..... 1982
DONALD B. RITTER (Director: Institutional Planning) ..... 1971
DAN TINDALL (Director: Physical Plant) ..... 1980

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## AIMS COMMUNITY COLLEGE FACULTY

ACKERMAN, ALAN H.<br>(Chemistry and Biology)<br>B.A., Clark University, Massachusetts: Ph.D., Massachusetts<br>Institute of Technology.<br>\section*{ADAMS, JAMES R.}<br>(Mid-Management)<br>B.A., University of Northern Colorado; Graduate study, University of Northern Colorado; Eighteen years business experience.

## ADAMSON, WILLIAM H. <br> (Electronics Technology)

B.S.E.E., University of Southern California; Graduate study, University of California-Los Angeles; Colorado State University; University of Northern Colorado; Eighteen years industrial and military experience. Aims Foundation Fellow, 1983.

## ARON, ANN

(Division Chair, Business)
B.S., University of Nebraska; M.A., University of Northern Colorado.

## BAILEY, WILLIAM N.

(Program Supervisor, Fire Science)
Colorado Certificate, Fire Fighter I, Instructor I; Ten years public
fire suppression and fire administrative experience.

## BANTIN, FREDERICK

## (Electronics Technology)

B.A., University of Nebraska-Omaha; Electronic Technology Institute, Inc., Denver; Graduate study, University of Northern Colorado; Twelve years industrial experience.

## BATMAN, LARRY G.

(Mathematics and Computer Science)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced graduate study, Colorado State University.

## BAY, MARVIN L.

(Aviation Technology)
B.S., Colorado State University; M.A., University of Northern Colorado; Advanced graduate study, University of Northern Colorado; Eight years industrial experience.

## BECK, ROBERT

(Electronics Technology)
Two years electronics school, U.S. Navy; Fifteen years industrial experience.1980

## BENAVIDEZ, E. C. "VERA"

(Assistant Chair - Developmental Studies, South Campus) B.A., Metropolitan State College; M.A., University of Northern Colorado.

## BENESCH, BARBARA

(General Business)<br>B.S. Colorado State University; M.E. Colorado State University.

## BINGER, WILLIAM R.

(Building Construction)
Twenty years industrial experience.

## BITTERMAN, R. BEN

(Auto Body)
Ten years trade experience.

## BOEHM, CLAUDIA S.

(Mid-management)
B.A., University of Northern Colorado; graduate study, University of Northern Colorado; Ten years business experience. 1985

## BROCKSHUS, MERLE

(Agriculture Technology)
(Farm and Ranch Business Management)
B.S. Iowa State University; M.S. Iowa State University; Graduate study, University of Wisconsin, University of Northern Iowa, and
Colorado State University.

## BROWN, W. ARLIN

## (Communications \& Humanities)

B.A., Eastern New Mexico University; M.A., Western State College of Colorado; Ed. D., University of Northern Colorado. 1968

## BUXMAN, BETTY J. <br> (Accounting) <br> A.A., Aims Community College; B.A., University of Northern Colorado; M.A., University of Northern Colorado; Eight years business experience.

## CAMERON, ROY E.

(Biology)
B.S., University of Illinois; M.S., University of Illinois; Advanced graduate study, Purdue University, Illinois Institute of Technology, Eastern Illinois University, Northern Illinois University, University of California-Berkeley, University of Northern Colorado, University of Denver, Colorado State University. Aims Foundation Fellow, 1984.

CHRISTENSON, MAXINE GROSS
(Mid-Management)
B.S., University of Wisconsin, M.S., University of Wisconsin;

Advanced graduate study, University of Northern Colorado; Four years business experience.

1986

## CLAY, DOUGLAS G.

## (Computer Science; Program Supervisor)

B.S., Purdue University, Illinois; M.A., Lesley College, Massachusetts; Advanced Graduate Study, Florida International University.

1985

## COLTON, KERRY L.

(Accounting)
B.A., University of Northern Colorado; M.S., University of Northern

Colorado; One year business experience.

## COOPER, SAM

(Physics and Computer Science; Program Supervisor)
A.A., Aims Community College; B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced graduate study, Colorado State University.

## CRIBELLI, SUSAN

(Mathematics and Computer Science)
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; Twenty years industrial experience.

## CULLINS, BILL <br> (Engineering Technology)

B.S., Tarleton State University, Texas; Graduate study University of Northern Colorado and Angelo State University; Five years industrial experience.

## DAGGETT, NANCY SUE

(Communications \& Humanities)
B.A., University of Northern Iowa; M.S.T., Wisconsin State University; Advanced graduate study, University of Northern Colorado.
DARLING, DONALD W. (Engineering Technology)
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1985

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1985
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## HEIN, B. JIM

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(Psychology)
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1974
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1983

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1982

## LANE, E. KEITH

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PAGE, TRULENE B.

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Colorado. ..... 1968

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1969

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## R

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APPLICATION FOR
ADMISSION
Parentheses ( ) are for the coding purposes of the Admissions Office

AIMS COMMUNITY COLLEGE
540 I W. 20 St.
Greeley, Colorado 80631
(303) 330-8008

NO APPLICATION FEE
REQUIRED
PLEASE PRINT
$\qquad$
RESIDENCY STATUS ( - ) SOCIAL SECURITY NUMBER $\qquad$ NAME
LAST FIRST MIDDLE MAIDEN
Sex
2.Male $\square$ Female
Quarter \& Year of expected enrollment: Fall $\qquad$ Winter $\qquad$ Spring $\qquad$ Summer $\qquad$ Year 19 $\qquad$ $(---)$
BIRTHDATE $\qquad$ $(-----)$

Country of Citizenship ( --- )
If not a U.S. citizen, what type
Of visa?
Visa no.
Expiration date $\quad$

ADDRESS $\qquad$

| County $(--)$ | State | Zip Code |
| :--- | :--- | :--- |

PHONE
Area Code Number

In case of emergency, contact
Name $\quad$ Address $\quad$ Phone

High School Attended
Name Address Phone ( ---- )

Present grade in high school or highest high school grade completed
Date graduated or will gradua $e$ e? $\qquad$ ( - - )
If you did not graduate, have you earned a GED Certificate? (Circle one) Yes No
Date Issued $\qquad$ ( $-\ldots$ )
Previous College(s) attended

| Name | Address | Phone |
| :---: | :---: | :---: |
|  |  | $-(1)$ |
| Name | Address | Phone |

## COLLEGE PLANS

Do you plan to follow a specific program published in the Aims Community College Catalog?YES If yes. complete Section A below. Indicate Degree or certificate (Check only one) and area of interest.

## Section A

1.Associate of Arts/Science or General Studies Degree
2. area of interestAssociate of Applied Science Degree
3. program titleCertificate program title $\square$NO If no, complete section B below. Indicate your primary reason for enrolling at Aims Community College (Check only one) and area of your interest.

## Section B

4.Skills Upgrade or retraining
area of interest
5.Personal interest
area of interest
6.Other. Please indicate reason for enrolling: area of interest $\qquad$

## TRANSFER INFORMATION

Do you plan to transfer to another college after completing studies at Aims Community College?

1. ayes 2. $\square_{\text {no }}$ If yes. name of college $\qquad$

## PRIOR ENROLLMENT

1. Have you previously attended Aims Community College' Yes _No $\qquad$
2. If "Yes." Quarter $\qquad$ Year $\qquad$

## APPLICATION FOR <br> ADMISSION

Parentheses ( ) are for the coding purposes of the Admissions Office

AIMS COMMUNITY COLLEGE
5401 W. 20 St.
Greeley, Colorado 80631
(303) 330-8008

NO APPLICATION FEE
REQUIRED
PLEASE PRINT

DATE
RESIDENCY STATUS ( - )
SOCIAL SECURITY NUMBER $\qquad$ NAME
LAST FIRST MIDDLE/MAIDEN
Sex

1. $\square$ Male
2.Female

Quarter \& Year of expected enrollment: Fall $\qquad$ Winter $\qquad$ Spring $\qquad$ Summer $\qquad$ Year 19 $\qquad$ ( $-\quad$ - $)$ $\operatorname{BIRTHDATE}^{\text {Mo. Day } \quad \text { Year }}(\ldots-\cdots)$


ADDRESS $\qquad$
PHONE
Area Code
Number
In case of emergency, contact
Name Address Phone

High School Attended $\qquad$ $(----)$
Present grade in high school or highest high school grade completed

| Address | Phone |
| :--- | :--- | $(--)$

Date graduated or will gradua:e? $\qquad$ ( -- )
If you did not graduate, have you earned a GED Certificate? (Circle one) Yes

No
Date Issued $\qquad$ $(----)$
Previous College(s) attended

| Name | Address | Phone |
| :---: | :---: | :---: |
|  |  | - ) |
| Name | Address | Phone |

## COLLEGE PLANS

Do you plan to follow a specific program published in the Aims Community College Catalog?
$\square$ YES If yes, complete Section A below. Indicate Degree or certificate (Check only one) and area of interest.

## Section A

I.Associate of Arts/Science or General Studies Degree
2.Associate of Applied Science Degree
3.
program title Certificate program title
$\qquad$

NO If no, complete section B below. Indicate your primary reason for enrolling at Aims Community College (Check only one) and area of your interest.

## Section B

4. $\square$ Skills Upgrade or retraining area of interest
5.Personal interest area of interest
6.Other. Please indicate reason for enrolling: area of interest

## PRIOR ENROLLMENT

1. Have you previously attended Aims Community College? Yes _No $\qquad$
2. If "Yes," Quarter Year $\qquad$

STATISTICAL DATA: The information below is requested for Federal and state reporting: it is not required for admission.

## Veterans status

1. Receive benefits, not active duty
2. Non-veteran, not active duty
3. Veteran, not receiving benefits
4. On active duty

## Current employment status

1. Full-time, 30 + hours/week
2. Part-time, 1-29 hours/week
3. प Unemployed

Are you handicapped or disabled?

- yes no

If yes, please indicate handicap
$\qquad$
$\qquad$

TUITION CLASSIFICATION: All information must be completed. Application must be signed and dated.
TUITION CLASSIFICATION (failure to answer all questions may result in being classified as a non-resident)

When did you begin living in Colorado? $\qquad$

If married, date of marriage $\qquad$
Have you filed a Colorado State Income Tax Return (Circle one) Yes No
Last year filed $\qquad$

Do you have a current motor vehicle operator's license? (Circle one) Yes No State of Issue $\qquad$
Date of Issue $\qquad$
Have you owned a motor vehicle during the past year? (Circle one) Yes No
Where is vehicle registered? $\qquad$ Date of Issue $\qquad$

Place of employment of past 12 months:

Employer's Name

## If you are under 21 years of age and unmarried:

a. When did your parent or court appointed legal guardian begin living in Colorado?
Month Day Year
b. Has your parent or court appointed legal guardian filed a Colorado State Income Tax Return? (Circle one) Yes No

From 19 $\qquad$ to 19 $\qquad$
c. Does your parent or court appointed legal guardian have a current motor vehicle operator's license? (Circle one) Yes No

Date of Issue $\qquad$ State of Issue $\qquad$
d. Current address of parent or court appointed legal guardian:

Name (last)
(First)
Address
e. If you have a court appointed legal guardian, attach court decree to this application

I certify that to the best of my knowledge the information furnished on this form is true and complete. I also understand that if found otherwise, this misrepresentation becomes sufficient cause for rejection or dismissal.



[^0]:    * Indicates the year each joined the College.

