## MSI Separator Sheet

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1984-1985
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# GRADUATION ㅎ TRANSFER EVALUATION COPY 

# AIMS COMMUNITY COLLEGE 1984-85 CATALOG 

## Established 1967

A College Serving
North-Central Colorado

5401 W. 20th Street
P.O. Box 69

Greeley, Colorado 80632
Telephone (303) 330-8008

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## ACADEMIC CALENDAR 1984-1985

## SUMMER SESSION, 1984

## (Four-Day Week)

June 18, 1984

*Registration
June 19, 1984
Classes Begin
June 25, 1984
July 4, 1984
July 5, 1984
July 5, 1984
July 16-19, 1984
August 23, 1984
August 23, 1984
September 3, 1984
Last Day to Drop Classes With 100\% Refund
.Fourth of July Holiday (College Closed)
Graduation Applications Deadline for Summer Quarter
. Last Day to Drop Classes with 75\% Refund
. Midterm Week
Last Day of Quarter

## FALL QUARTER, 1984

September 19-21, 1984
*Advising and Registration for Returning Students
September 24-25, 1984
*New Student Orientation, Advising and Registration
Classes Begin
September 27, 1984
October 3, 1984 .
Last Day to Drop Classes with 100\% Refund
October 10, 1984. Last Day to Drop Classes with 75\% Refund
October 11, 1984.
October 29-November 2, 1984 Graduation Applications Deadline for Fall Quarter

November 9, 1984
Midterm Week
November 21-23, 1984.
December 12-13, 1984
Graduation/End of Quarter

December 14, 1984.
December 24-28, 1984
Staff Development Day (No Classes)

December 31-January 1, 1985
Thanksgiving Holiday (College Closed)
Evaluation Days

## WINTER QUARTER, 1985

January 2, 1985
January 3, 1985
January 11, 1985
January 18, 1985
January 19, 1985.
February 4-8, 1985
March 13-14, 1985
March 15, 1985
Graduation/End of Quarter
. Christmas Holiday (College Closed)
. New Year's Holiday (College Closed)

## SPRING QUARTER, 1985

March 18-22, 1985
Spring Break

March 27, 1985
Classes Begin

April 10, 1985 Last Day to Drop Classes with 75\% Refund
April 11, 1985
Graduation Applications Deadline for Spring Quarter
April 29-May 3, 1985
Midterm Week
May 27, 1985
Memorial Day (College Closed)
June 5-6, 1985
Evaluation Days
June 7, 1985
Graduation/End of Quarter
*See quarterly schedule for advising and registration times.


## 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 they, in turn, selected Dr. Ed Beaty as the college's initial president.

After Dr. Beaty's death in 1975, Dr. Richard Laughlin was appointed president, in 1976. He served the college in this post until 1979 when Dr. George Conger assumed the position.

Enrollment has expanded over the past fifteen years from 900 students in 1967, to over 13,000 students annually in 1983.

As enrollment has increased, so has the diversity of classes and programs. The college currently offers three associate degrees: the Associate of Arts degree (A.A.) and the Associate of Science degree (A.S.), designed for those who plan to transfer to another college or university to pursue a baccalaureate degree, and the Associate of Applied Science degree (A.A.S.) that prepares students in eighteen program areas for direct job entry at a technical or managerial level.

The college also awards the Certificate in Occupational Education in 15 occupational areas and issues certificates to those who complete a variety of developmental, adult special interest, and occupationally related programs of less than one year in duration. The college also trains area high school students in a limited number of career fields.

Aims Community College's initial 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 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 the Office Occupations Building which opened in 1973. In 1975 the Center for the Arts and Crafts/Skill Center was completed. The Physical Education Building was constructed in time for the opening of the winter quarter in 1976.

Ed Beaty Hall, named for Aims' first president, opened in the Fall of 1978. This distinctive facility provides over 60,000 square feet of laboratory and classroom space. The Office of the President is also located in Ed Beaty Hall.

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 a new classroom building in the fall of 1984.

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

To meet the needs of Aims students living in the Loveland/Berthoud area, classes are being offered through the cooperation and facilities of Thompson Valley School District R2-J. The expanded course offerings are designed to meet the needs not only of the students but the businesses of the area.

The Aims Cable Campus is another innovative attempt to serve the area. Beginning in January, 1982, this 24 hour learning system began broadcasting from the Aims Community College campus.

Offering telecourses for credit and noncredit, as well as public service programming, the station is the first of its kind in the region, perhaps in the nation.

## 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 Committee elected by the voters of the Aims Junior College District. All programs are approved by the Colorado State Board for Community Colleges and Occupational Education. In addition the Colorado Commission on Higher Education reviews and approves all programs leading to the associate degree.

## THE FOUNDATION

The Aims Community College Foundation was established during the 1979-1980 \#cademic year to provide financial and other support for the college and its activities beyond those which can be obtained 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: Mrs. Stephanie Arries, Mr. Ron Brown, Mr. George Bush, Dr. George R. Conger, Mr. Tom Cowan, Mr. Dwane Cramer, Mr. John J. Dugan, Mr. Conrad J. Greicar, Mr. Mike Geile, Mr. Wes Goehring, Mrs. Margaret Houtchens, Mr. Floyd A. Oliver, Jr., Mr. Louis C. Rieker, Mr. Dennis White, Mr. Jerry Winters and Mrs. Bonnie Dean (ex-officio).

## 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 is complying with the Federal Family Education Rights and Privacy Act of 1974, which specifies that a student has the right to inspect and review certain specified official records, files, and data directly related to the 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 Personnel/Payroll Officer.

## CATALOG CHANGES

Aims Community College reserves the right, whenever in its judgment 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.



## STUDENT SERVICES

## ADMISSIONS

No Aims Junior College District resident will be denied admission to the college 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 to the college. In keeping with the belief in the worth of universal education, Aims Community College has adopted an "open door" admissions policy.

The College will admit students over the age of 16 years who are not enrolled in a regular program of kindergarten through grade twelve (12) in a public, independent, or parochial school and any other persons who can profit from the instruction for which they enroll. Students who are currently enrolled in high school 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.

Admission to the college, however, does not guarantee 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 enroll in Aims Community College any time during the quarter. It may be necessary for students to enroll in preparation or skill building courses until the end of a given quarter. In most cases it is to the student's advantage to enroll at the beginning of the quarter.

## APPLICATION FOR ADMISSION TO AIMS COMMUNITY COLLEGE

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 application form, students should submit one of the following to the Admissions Office:

- A high school transcript showing 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 registration.
The preassessment requirement may be met in one of the following ways:

1. By taking the Aims Community College preassessment test 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.

## ADMISSION REQUIREMENTS FOR FOREIGN STUDENTS

1. Submit application for admission. A $\$ 50.00$ 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), English Language School (ELS), or Michigan Test. To be considered for admission to Aims Community College, foreign students must have a minimum score of 500 on the TOEFL, Level 109 at a certified ELS center, or score of 80 on the Michigan test.
Any foreign student not meeting one of the above criteria will be required to enroll in the ESL program at Aims Community College as a condition of admission.
3. Completed application and supporting credentials must be in the Admissions Office by midterm of the quarter preceding the quarter of enrollment.
4. Foreign 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. Foreign students are required to maintain satisfactory progress to be eligible for reenrollment in a subsequent quarter.
If a foreign student is admissible, the student will be issued the U.S. Immigration Form 20 (1-20). Questions regarding the admission of foreign students should be forwarded to the Admissions Office.


## 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.

## REQUEST FOR TRANSCRIPTS

A student requesting that a transcript (record of grades) be sent to an educational institution or to a prospective employer must complete the appropriate form in the Admissions Office. The first transcript for an Aims Community College student is supplied free of charge. A charge of $\$ 2.00$ is made for each additional transcript. All accounts with the College must be settled before a transcript may be issued.

## REGISTRATION

After completing the admissions process, the student must complete the following registration process at the beginning of each quarter. A schedule of both day and evening classes is published each quarter, and is available in the Admissions Office prior to early registration and registration. Consult the calendar in the front of this catalog for registration dates.

1. Obtain registration pass from Office of Admissions and Records
2. Preassessment
3. Academic advising
4. Financial aid
5. Course registration
6. Pay tuition*
*NOTE: A student is not registered until the assessed tuition for the quarter is paid. Students must have all financial obligations to Aims Community College paid before they will be permitted to register for subsequent course work.

## CHANGE OF REGISTRATION

## COURSE CANCELLATIONS

The college must retain the customary right to cancel course offerings where enrollments are insufficient to permit them on an educationally sound and economically efficient basis.

## WITHDRAWAL

A course status designation of WITHDRAWAL can be initiated by a faculty member or an administrator if a student's best interest so warrants when the student is unable to attend class regularly.

## ADDING CLASSES

Adding of classes may be done on a continuing basis provided there is space available and the instructor has given permission to enroll.

## DROPPING CLASSES

Dropping of classes should be done within the first eight (8) days of the class term. This is the registration readjustment period and no academic record will be generated.

Any class dropped on the ninth (9) class day or thereafter will generate a "W" on the student's transcript and can affect the student's academic standing.

Students may drop classes throughout the quarter with instructor approval.

## HOW TO ADD AND/OR DROP COURSES:

1. Obtain an Add/Drop form from the Admissions Office, Room 202, General Services Building.
2. Fill out form indicating complete information on course to be added or dropped and resubmit the form with appropriate instructor signature to Admissions. It is the responsibility of the student to contact the Admissions Office to be officially added or dropped from the records. Faculty members or administrators may initiate the withdrawal of students from their class rolls for failure to meet established course requirements.

In cases of emergency the student should write to the Admissions Office, Aims Community College, P.O. Box 69, Greeley, Colorado 80632, indicating the reasons necessitating the withdrawal and request that the withdrawal be completed by mail. Telephone requests will not be 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 WITHDRAWAL (dropping all classes) or 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:
A. Prior to the first official date of classes date identified in the Academic Calendar as beginning date for quarter. For late starting classes, date class is scheduled to begin...... 100\%
B. Beginning with the first official date of classes and through the fifth (5) class day
$.100 \%$
C. Beginning with the sixth (6) official date of classes and through the tenth (10) class day .......................... $75 \%$
D. After the fenth (10) class day ................. . NO REFUND

Official Add/Drop Period-Beginning with the first official date of classes and through the tenth (10) class day.
A. Part-Time Students (11 credit hours or less)

During the official add/drop period, students are permitted to offset equal credit through the add/drop procedure. Tuition for credits dropped in excess of credits added will be refunded at the appropriate percentage rate. For credits added in excess of credits dropped, additional tuition must be paid.
B. Full-Time Students (12-20 hours)

During the official add/drop period, students are permitted to add/drop credit hours through the add/drop procedure within the above stated full-time credit hour ranges without refund or additional tuition assessment.
C. Full-Time Students
(21 credit hours or more)
During the official add/drop period, students are permitted to offset equal credits through the add/drop procedure. Tuition for credits dropped in excess of credits added will be refunded at the appropriate percentage rate. For credits added in excess of credits dropped additional tuition will be assessed.
D. Refunds will not be available until after the official add/drop period.
Following the Official Add/Drop Period - Beginning with the eleventh (11) class day through the end of the quarter.
A. Part-Time Students (11 credit hours or less) After the official add/drop period, students will be permitted to offset equal credits through the add/drop procedure. Tuition for credits dropped in excess of credits retained will not be refunded. For credits added in excess of credits dropped, additional tuition must be paid until full-time status is attained.
B. Full-Time Students (12 credit hours or more)

After the official add/drop period, students will be permitted to offset equal credits through the add/drop procedure. Tuition for credits dropped in excess of credits added will not be refunded. For credits added in excess of credits dropped, additional tuition must be paid only for credit hours added in excess of 20 credit hours.
C. Any requests for refunds beyond the tenth (10) class day must be submitted, in writing, to the Chief Accountant.
Self Supporting Classes - Classes for which tuition and fees are the only source of support. No refunds will be granted unless classes are dropped prior to the first official date of classes.
Cancelled Classes: $100 \%$ refund will be available after the official add/drop period.

## 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: . . . . . . . . ......... $\$ 132.00$ per quarter
$\quad$ (greater Weld County area)
In-State, Out-of-District residents: $\ldots \ldots \ldots \ldots . . \$ 240.00$ per quarter
Out-of-State residents: . ....................... $\$ 840.00$ per quarter
Surcharge: over 20 credit hours
In-State, In-District residents: . . . . . . . . . . . . . . $\$ 8.80$ per credit hour (greater Weld County area)
In-State, Out-of District residents: $\$ 16.00$ per credit hour
Out-ot-State residents: $\$ 56.00$ per credit hour
Part-time Students: 1-11 credit hours
In-State, In-District residents: . ts: ....
(greater Weld County area)
In-State, Out-of-District residents:
.$\$ 11.00$ per credit hour

Out-of-State residents:
. $\$ 20.00$ per credit hour

Occasionally, some classes may require payment of a lab fee. Classes requiring this fee will be designated in the quarterly registration materials.

ALL TUITION AND FEE CHARGES ARE SUBJECT TO CHANGES BY THE AIMS JUNIOR COLLEGE DISTRICT COMMITTEE AS CIRCUMSTANCES MAY REQUIRE, WITHOUT NOTICE.

If a student believes he or she is eligible for reclassification of residency, the student may obtain a Change of Residency Petition from the Registrar. The final decision regarding residence classification rests with the College. All questions concerning residency should be directed to the Registrar. Petitions for a change of residency classification must be received in the office of Admissions and Records prior to registration.

## TUITION DEFERMENTS

Any student who meets the following criteria will be eligible for a tuition deferment (application for deferment must be made at the Cashier's Office):

1. Minimum class load of 5 credit hours.
2. Minimum of $\$ 25.00$ down payment of tuition; all fees due at time of registration (lab fees and insurance charge).
3. A non-refundable deferment charge of $\$ 5.00$ due at time of deferment.
4. Deferment balance is due and payable by the end of midterm week.
5. If a student fails to pay the remaining balance within the time period, eligibility for future deferments will be denied, a hold placed on all records and future registrations, and current registrations will be cancelled.
6. If a check written as a down payment on a deferment is returned to Aims from our bank or CheckRite for any reason, the deferment will become null and void resulting in the entire balance becoming due and payable immediately. This action will result in the denial of future deferments.


## STUDENT INSURANCE FEES

Each full-time student (12 credit hours or more) is assessed a mandatory fee of $\$ 1.75$ per quarter for accident insurance coverage. This insurance is nonmandatory for part-time students ( 11 credit hours or less) and is $\$ 2.25$ 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 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 programs described below 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 lowa City, Iowa. The ACT Family Financial Statement and information about financial aid may be obtained from the high school guidance counselors. Students currently enrolled at Aims can obtain the ACT Family Financial Statement from the Financial Aid Office.


## ESTIMATED ACADEMIC YEAR BUDGETS (9 MONTHS)

| Single Resident (Weld County) | Single Nonresident |
| :---: | :---: |
| Tuition \& Fees . . . . . . \$ 402.00 | Tuition \& Fees . . . . . . $\$ 2526.00$ |
| Room \& Board. . . . . . . 2723.00 | Room \& Board. . . . . . . 2723.00 |
| Books \& Supplies . . . . . 245.00 | Books \& Supplies ...... 245.00 |
| Personal Expenses..... 937.00 | Personal Expenses..... 937.00 |
| Transporation ......... 498.00 | Transporation ........ 498.00 |
| \$4805.00 | \$6929.00 |
| Single Resident Out of Weld County |  |
| Add $\$ 805.00$ to above Resident Budget. |  |
| Married Resident/NonResident |  |
| Add $\$ 2474.00$ to above budgets. |  |
| These budgets are current as of the Financial Aid Office for most rec | publication date. Check with the nt estimates. |

## APPLICATION PROCEDURES

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

1. Student Data Form
2. Family Financial Statement (FFS) of the American College Testing program (ACT)
3. Financial Aid Transcript (only for students who have attended another college)
4. Copy of previous year's Federal Income Tax 1040 Form
5. Verification of Non-taxable Income

Applicants for financial assistance are considered after they have complied with the admissions procedures listed in this catalog and have been issued an official notice of admission to the college. The following dates will be the deadlines for submitting applications for guaranteed processing:

Summer quarter . .............................................. March 1
Fall quarter. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . June 15
Winter quarter . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . October 31
Spring quarter . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 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.)

## STUDENT FINANCIAL ASSISTANCE PROGRAMS

## LOANS

## NATIONAL DIRECT STUDENT LOANS (NDSL):

Undergraduate students may borrow up to $\$ 5,000$ during their undergraduate career. Total loans for the first two years of school may not exceed $\$ 3,000$. Repayment of the NDSL begins six 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.

## COLORADO GUARANTEED STUDENT LOANS (CGSL)

Undergraduate dependent students may borrow up to $\$ 2,500$ per year, but not more than $\$ 12,500$ during their undergraduate career. The interest on a CGSL is $9 \%$ simple interest.
Students who are interested in applying for a CGSL should contact their local lending institutions. If local lending institutions do not participate, the student should contact the student Financial Aid Office or the Colorado Guaranteed Student Loan program; ABS Building, Suite 100, 7000 Broadway, Denver, Colorado 80221; (303) 427-0259 for further information.

## 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 the program before other aid can be awarded.

## 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.

## COLORADO STATE GRANT (CSG):

State funds made available to Colorado resident undergraduate students with financial needs. Awards vary from $\$ 100$ to $\$ 1,000$, 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.

## COLORADO STUDENT INCENTIVE GRANT (CSIG):

Grants of up to $\$ 2,000$ 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.

## 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.

## COLORADO WORK-STUDY PROGRAM:

Allocations from college 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.

## 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.

## 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 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 Scholarship application. Colorado high school students should contact their high school counselors regarding these scholarships. Colorado Scholarship Program is an undergraduate program.

## 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. Applications are due by May 15 in the Financial Aid Office. 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, 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 | 1 | 2 | EA. ADD. |
| DEPS. | DEP. | DEPS. | DEP. |  |
| Full time (12 credit hours) | $\$ 342$ | $\$ 407$ | $\$ 464$ | $\$ 29$ |
| Three-Fourths Time <br> (9-11 credit hours) | 257 | 305 | 349 | 22 |
| Half Time <br> (6-8 credit hours) | 171 | 204 | 232 | 15 |

## CHAPTER 32 - MONTHLY RATES - VEAP

Full-Time ( 12 credit hrs.) ..... \$225
Three Fourths Time (9-11 credit hrs.) ..... 169
Half Time ( $6-8$ credit hrs.) ..... 113

Students who are receiving VA benefits must report immediately to the Veterans Affairs Office any change in their study program or training status. 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 VETERANS TUITION ASSISTANCE PROGRAM

The Colorado Veterans Tuition Assistance Program represents a commitment by the State of Colorado to provide assistance to qualified students whose initial term of military duty occurred during the Vietnam Era, August 5, 1964, to May 12, 1975. The program's intent is to give tuition assistance to Colorado veterans enrolled for post-secondary education in specified institutions. Aims students who are eligible for tuition assistance are those who are veterans of the military services, are currently Colorado residents, were Colorado residents prior to entry into active military service and have been discharged less than eight years prior to the term being certified. Student veterans who are eligible, receive tuition assistance in the amount as determined by the State. Both full and part-time students will be eligible for assistance. Veterans will accrue eligibility for assistance at a rate of 11 quarter credit hours or its equivalent (7.33 semester) for each month of active duty between August 5, 1964, and May 12, 1975.

Applications for this program may be obtained at the Veterans Affairs Office and returned along with a copy of DD-214 before awards are made.

## FINANCIAL AID AND VA SATISFACTORY PROGRESS

All Aims Community College students who receive financial aid and/or VA benefits are required to meet the College's academic standards of satisfactory progress (see Academic Standards). For most scholarship programs, the academic standards may be higher.
The Financial Aid Office will review academic progress for those students receiving student or veteran aid assistance on a quarterly basis. Students receiving financial aid or veteran assistance will be monitored in the following manner:

1. Appropriate GPA according to number of quarters attended. This includes quarter GPA and cumulative GPA.
2. Completion of $75 \%$ of the classes attempted during the quarter. (All drops/adds after the eighth (8) day will be counted as will any NC grades, Incompletes, and Withdrawals from classes.)

Those students who do not comply with this standard will be placed on financial aid and/or veteran assistance probation.

Once students are placed on financial aid/veteran assistance probation, they will be suspended from financial aid and/or veteran assistance if, during any subsequent quarter, they fail to meet academic standards. If the Academic Standards Committee permits the students to continue in a college program (without financial aid and/or veteran assistance) and, during the subsequent quarter within the same academic year, the students meet the standards of progress, they can be reinstated on financial aid and/or veteran assistance upon request.
If students whose financial aid or VA assistance has been terminated believes that there have been unusual circumstances affecting their progress, they have the right to appeal this decision to the Financial Aid Appeals Committee. Any students interested in appealing such a decision must return a completed appeal form to the Financial Aid Office within one week after being notified that their financial aid has been terminated.

Students reinstated through the appeal process will remain on academic probation. They must, however, complete all classes attempted during the quarter of reinstatement while meeting the Academic Standards of the College.

No student will receive financial aid assistance for more than eight (8) quarters while attending Aims Community College.

## PUBLIC 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 the news media.
2. Other listings to the news media for special awards, honors, and events.
Consent for release of educational records or personally identifiable information shall not be required for the following parties:
3. Aims Community College officials.
4. Officials of others schools or colleges where the student intends to enroll
5. State or federal educational authorities.
6. In connection with a student's application for financial aid.
7. State and local officials requiring reporting data.
8. Organizations conducting studies for educational institutions or agencies.
9. Accrediting organizations.
10. Parent of a dependent student.
11. In compliance with judicial order.
12. In case of emergency to protect the health, safety, or welfare of the student or other persons.

## STUDENT RECORDS AND STUDENT RIGHTS

The Records Office, under the direction of the Registrar, keeps the following student records:

1. Personal data - e.g., name, address, phone number, sex, Social Security number;
2. Educational background information - e.g., previous high school and/or college attended, degrees earned;
3. College major and degree expectations;
4. Degrees and honors received;
5. College transcripts containing hours attempted, grades earned, credits earned, and dates of enrollment, and;
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 reenroll during this two-year period, the record is microfilmed, 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 Educational 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 Records Office. In the event students feel their records are in error, they may initiate the following appeal procedure:

1. Appeal to the Registrar to review the records.
2. If needed, appeal to the Director of Admissions and Records.

The college will not permit access to or the release of student educational records, or personally indentifiable information contained therein, other than Public Information, without the written consent of the student.

## ACADEMIC INFORMATION

## DEGREES AND CERTIFICATES AWARDED

## ASSOCIATE OF ARTS (A.A.) <br> ASSOCIATE OF SCIENCE (A.S.) <br> ASSOCIATE OF APPLIED SCIENCE (A.A.S.) <br> 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 for 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 so 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 Communjcations, 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.

Since 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 eleqctives 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. Forty-five 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 ( a " C " average).
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. Only 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.


## 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 (a " C " average).
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.

## CERTIFICATE IN OCCUPATIONAL EDUCATION

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

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

1. A minimum cumulative grade point average of 2.0 ( a " C " average).
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.


## 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 for receipt of any type of degree or certificate, and 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 must be returned to the Records Office with the faculty advisor's signature. Graduate evaluations will be made and 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. A student may elect, however, to meet the requirements of any subsequent catalog which is not more than five years old (including the current year). This election must be made when the student files a declaration of intent to graduate.

In the case of a specific program, a student who has a break in enrollment of three quarters or more, excluding summer sessions, must meet the program requirements of the catalog in use at the time of readmission. If the program in which the student was previously enrolled has been discontinued, or if a 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

Each student is assigned a faculty advisor who becomes conversant with the student's background, aptitudes, and educational objectives, and who 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.
New Arts and Sciences students, taking from 1 to 17 credit hours, may self-advise, secure advising and a signature from a faculty advisor, or from the staff of the advising center. Upon reaching 18 credits or more, it is mandatory that a student see an advisor. After initial advising, the student may continue with the same advisor, may be referred to an advisor in a more appropriate division, or may be authorized to self-advise.
New and Continuing Occupational students, full-time or part-time, must meet with an occupational faculty advisor and secure a signature. In addition, all students who take one occupational course or more, must have approval from occupational faculty.
New and Continuing Developmental Studies students, full-time or part-time, must meet with a Developmental Studies faculty advisor and secure a signature.

## 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 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

A student may challenge a course for which the student believes his or her training and study are adequate to meet the instructor's requirements for successful completion. The student is not required to attend class, but must gain approval of the instructor, obtain a challenge form from the Admissions Office and pay, in advance to the Cashier, the challenge fee of $\$ 5.00$ per challenged course. Whether or not credit is allowable for challenged courses will be determined by the instructor. A student who successfully completes the challenge will receive a letter grade " $P$ " and credit for the course, and appropriate entries will be made on the student's permanent academic record. Course work attempted through the challenge procedure is not eligible for Financial Aid or VA benefits. Grade designators of " P " count toward graduation requirements, but are not computed in the student's GPA.

A student must be enrolled in and attending at least one additional course in which a challenge is not involved.

## 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 course 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 twenty-four credit hours of occupational education training courses or twenty credit hours of arts and sciences courses.

## CREDIT RATIOS

Academic credit is a measure of the total time commitment required of a typical student in a particular course of study. Total time consists of three components: (1) time spent in class; (2) time spent in laboratory, studio, fieldwork, or other scheduled activity; (3) time devoted in reading, studying, problem solving, writing, or preparation. One quarter hour is assigned in the following ratio of component hours per week devoted to the course of study: (1) lecture courses-one contact hour for each credit hour, (two hours of outside work implied); (2) laboratory or studio course-at least two contact hours for each credit hour, (one hour of outside preparation implied); (3) independent study-at least three hours of work per week for each credit hour.

## COURSE NUMBERING

0-99 Precollege level courses not designed for transfer to other institutions
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 drop from the course; or by failing to drop 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 "NC" may repeat the course once to raise the grade to a " C " or better to meet the performance 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 unless the instructor approves another repeating of the course. All grades will be listed on the student's transcript, but only the highest grade earned will be computed in the student's grade point average (GPA).

## GRADING SYSTEM

Aims Community College, in keeping with its philosophy of placing top priority on the welfare of its students, has adopted a grading system which emphasizes achievement rather than failure. This system permits the permanent recording of those grades indicating successful completion of courses and the recording of course status designations when, for whatever reason, a student is unable to fulfill the minimum requirements of the course. Such an approach provides students an opportunity to redirect their efforts into areas more suitable to their aptitudes and interests without the stigma of failure. Learning accomplishment at a level judged to be inadequate receives no credit, but is made a part of the student's permanent record.

## LETTER GRADES

Grade descriptions derive from the average grade attained by students, the C-level, and are as follows:

## Grade Quality of Work Indicated Symbol by Symbol

A The student has demonstrated superior mastery or achievement of course objectives and/or additional objectives.
B Thestudenthas demonstrated better-than-acceptable mastery or achievement of the course objectives and/or additional objectives.
C Acceptable standard for graduation. The student has demonstrated acceptable mastery or achievement of the course objectives.
D The student has demonstrated less-than-acceptable mastery or achievement of course objectives. Although a grade of "D" is passing, it does not constitute satisfactory performance according to the standards of certain programs. Some program areas, therefore, may not issue the letter grade " $D$ "; rather the "NC" designation will be granted.
P PASSING. Used for those students who have successfully challenged a course.
S SATISFACTORY. Used for students who achieve at a level of "C"or above in designated course.

## COURSE STATUS DESIGNATION

All courses which receive course status designation are not calculated in a student's cumulative grade point average but are made a part of the student's permanent record.

## Designation

Explanation
W WITHDRAWAL. The student has officially withdrawn from the course. Students may initiate a withdrawl from class by completing an Add/Drop form any time before the end of the quarter.
INCOMPLETE WORK. 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 " 1 " has not been completed, the student will receive the "NC" designation for the course. If a student's individual circumstances justify, the instructor and/or the Division Chairman may approve an extension for an " 1 " completion up to a four-quarter maximum.
NC NO CREDIT means that the student has not adequately mastered the objectives of the course. Veterans receiving benefits should be aware that reenrollment in a course for which they initially received an "NC" does not normally qualify for benefits.
AU AUDIT. Available in non-credit courses only.

## 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 ;
Divided by total number of credits accumulated.
Only the credits accumulated and grade points earned at Aims Community College are used in computation of quarterly and cumulative GPAs which appear on grade reports.

## 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 students who fall 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. Drops (after 8 day) and/or received an "NC" 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 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.

## 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 AND TUTORIAL CENTER

Supplemental Services and the Arts and Sciences Tutorial Center have combined facilities, resources, and services to help any student on campus who needs "extra help" with a course. The facilities and staff provide help with any vocational or liberal arts course, as well as tutorial services for the basic skills of reading, studying, writing, grammar, spelling and mathematics.

Supplemental Services and the Tutorial Center are located in the former Business Building.

## MEDIA SERVICES/ TELECOMMUNICATION SERVICES

The Media Services/Telecommunication Services component supports, through its multitude of services, the total instructional system at Aims Community College. This includes the development of training modules and the design and production of instructional materials, utilizing all graphic, photographic, audio and television media. The production unit includes an audio production lab, duplications of audio and video media, a black and white television studio, and a color television studio, a 4-track audio recording/ production studio, and extensive photographic equipment ranging from portrait to duplication services. Media Services/Telecommunication Services is designed to support the faculty and staff of Aims in meeting the needs and goals of adult student learners.


## 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 Channel 33 on 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.

## AUDIO-VISUAL EQUIPMENT CENTER

The Audio-Visual Equipment Center provides preventive 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 compatible 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 both print (books, magazines) and nonprint (filmstrips, audio-cassettes, microfilm) materials. The total number of materials available to students, faculty, staff, and the community is about 40,000 . The Library also subscribes to 600 periodicals (magazines, journals, newspapers). A large number of the periodicals are vocationally-oriented so that up-to-date technological information is available. Students check out library materials by providing their Aims student identification number.
Reserve materials for classes are checked out at the Circulation Desk. Students should ensure their instructor has placed materials on reserve, and they should obtain the exact title from their instructor.

For study purposes, a limited number of audio-visual equipment is available for student check-out with the instructor's approval. Audio-visual equipment is checked out from the library secretary in the library office area.

Other Aims services located in the library area are: Career Resource Center, Media Services, and Counseling Information Center.

## 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.
source Center


## COUNSELING INFORMATION CENTER

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, wide-ranging 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

## DEVELOPMENTAL STUDIES

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 required level necessary to pass the General Education Development (GED) examination and/or to benefit from occupational or degree programs.

## STUDENT ADVISORY BOARD-(ASACC)

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 by representing student opinions and giving input on matters relating to student life 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 Mid-Management Club
AIDD - American Institute of Drafting and Design Aims Aggies


## 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.

## 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 cooperates with local businesses to also 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 581.

## 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 next to the Bookstore, 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

Students may purchase textbooks and supplies in the Aims Community College Bookstore during posted hours.

## 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 minorillnesses; 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.

## CHILD DEVELOPMENT CENTER

Aims Community College offers, for a nominal fee, a Child Development 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 Child Development 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 fouryear 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

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."

## 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 flying 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.

## ADULT 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. These courses usually will not serve as transfer courses to another college. Major emphasis is on personal 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, community pottery, community guitar, social dance, and community photography.

## 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 to register for the individualized class.

## TELECOURSES

Telecourses combine vivid and 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 Channel 33 on 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.


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

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

| Communications | Credits |
| :--- | ---: |
| Humanities | 15 |
| Behavioral and Social Science | 15 |
| Mathematics and Science | 15 |
| Physical Education | 15 |
| Electives | 5 |
| Total | 31 |
|  | $\mathbf{9 6}$ |

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

Total Minimum Requirements:
CREDITS

## COMMUNICATIONS

CON 102 Introduction to Writing
5
As the 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 from the following courses:

| SPE | 115 | Speech Communications | 5 |
| :--- | :--- | :--- | ---: |
| SPE | 116 | Public Speaking | $3-5$ |
| SPE | 118 | Interpersonal Communications | 5 |

Select from the following courses:
CON 103 The Research Paper
CON 109 Creative Writing 5
CON 202 Advanced Composition 5
LIT 105 Introduction to Literature: Types and Themes 5
LIT 107 Introduction to Nonfiction 2-5
LIT 108 Literature's Famous Lovers 2-5
LIT 205 The American West 5
LIT 206 Shakespeare: Representative Plays 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
555-55555 .
SPE 117 Oral Interpretation ..... 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 ..... 15
CREDITS
HUMANITIES5
Select from the following courses: ..... 5
HUM 101 Introduction to the Greek and Roman period ..... 5
Select from the following courses: ..... 10
HUM 102 Introduction to the Middle Ages and Renaissance Period ..... 5
HUM 104 Contemporary Careers and 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
HUM 108 Oriental Culture ..... 5
HUM 109 Modern American 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
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. Degree
BEHAVIORAL AND SOCIAL SCIENCES
Select from the following courses: ..... 5
PSY 101 General Psychology I ..... 5
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 5HIS 103 Introduction to History: Modernization of Man 5
HIS 105 History of the United States to 1877
(Myth and Reality in America's Past) ..... 5
HIS 106 History of the United States from 1865-1945 (Myth and Realityin America's Past)5

History of the United States Since 1945 (Hiroshima to Watergate) 5
HIS 108 Modern Russian Civilization 5
HIS 209 History of Colorado and the Rocky Mountain West 5
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

## 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 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 hour requirements for the A.A. degree. Students who desire a physical education waiver must contact the Director of Admissions.


## 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. (Exclude the following: MAT 100, MAT 101, MAT 102, MAT 110, MAT 111, MAT 112, MAT 120, CSC 100 and any course numbered below 100.)

## CATEGORY II

Select from the following courses:
minimum of 3
Any course having the prefix AST, BIO, CHE, GEY, PHY, or SCl . (Exclude the following: PHY 101, and any course numbered below 100.)

## 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. (Exclude the following: MAT 100, MAT 101, MAT 102, PHY 101, and any course 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) Computational Skills requirements can be met by completing: STA 200 or STA 201 or STA 202 or MAT 121, or a higher numbered course with the MAT prefix.

Students transferring to Colorado State University (CSU) or any other four-year institution should be aware of the specific requirements of that institution.
Total Credits for A.A. Degree
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.

## Recommended degree requirements for area of emphasis:

CREDITS
COMMUNICATIONS ..... 15
SPE 116 Public Speaking ..... 3-5
See A.A. degree requirements ..... 10
HUMANITIES ..... 15
PHI 105 Introduction to Philosophy ..... 5
See A.A. degree requirements ..... 10
BEHAVIORAL AND SOCIAL SCIENCE ..... 15
PSY 101 General Psychology I ..... 5
POS 101 American Government ..... 5
GEO 105 World Geography ..... 5
PHYSICAL EDUCATION
See A.A. degree requirements
MATHEMATICS AND SCIENCE1531
Electives ..... 3
EDU 105 Early Field Experience in Education ..... 3
PSY 248 Child Psychology ..... 5
SOC 101 Introduction to Sociology ..... 5
Select 15 credits from the following courses:
SOC 105 Sociology of Marriage and Family ..... 4
SOC 106 Contemporary Social Problems ..... 3
SOC 115 Sociology of Education ..... 3
PSY 115 Humanistic Psychology ..... 5
HEN 105 Personal Health ..... 3
AAD 101 Fundamentals of Art \& Design I ..... 5
MUS 105 Fundamentals of Music ..... 5
MUS 220 Children's Music ..... 3
MAS 100 Introduction to Mexican American Studies ..... 3
Total Credits for Area of Emphasis
HUMANISTIC PSYCHOLOGY EMPHASISRecommended degree requirements for area of emphasis:
COMMUNICATIONS15

[^0]HUMANITIES ..... 15
See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCE ..... 15
PSY 101 General Psychology 1
See A.A. degree requirements ..... 10
PHYSICAL EDUCATION ..... 5
See A.A. degree requirements
MATHEMATICS AND SCIENCE15
See A.A. degree requirements
Electives
PSY 107 I'm OK, You're OK - Psychology of Personal Relations ..... 3
PSY 111 Basic Human Potential Seminar ..... 3
PSY 115 Humanistic Psychology ..... 5
PSY 131 Beginning Counseling ..... 5
PSY 241 Biofeedback I: Biofeedback \& the
Psychology of Health (Principles) ..... 5
PSY 248 Child Psychology ..... 5
SOC 105 Sociology of Marriage and the Family ..... 4
Select from the following courses: ..... 3-4
PSY 242 Biofeedback II ..... 4
SOC 106 Contemporary Social Problems ..... 3
SOC 115 Sociology of Education ..... 3
SOC 117 Sociology of Leisure ..... 3
Total Credits for Area of Emphasis ..... 96-97
PARAPROFESSIONAL COUNSELING EMPHASISRecommended degree requirements for area of emphasis:

| COMMUNICATIONS |  |  | REDITS |
| :---: | :---: | :---: | :---: |
|  |  |  | 15 |
| See A.A. degree requirements |  |  |  |
| HUMANITIES |  |  | 15 |
| See A.A. degree requirements |  |  |  |
| BEHAVIORAL AND SOCIAL SCIENCE |  |  | 15 |
| PSY |  | General Psychology I | 5 |
|  |  | See A.A. degree requirements | 10 |
| PHYSICAL EDUCATION |  |  | 5 |
| See A.A. degree requirements |  |  |  |
| MATHEMATICS AND SCIENCE |  |  | 15 |
|  |  | See A.A. degree requirements |  |
| Electives |  |  | 28 |
| PSYPSY | 107 | I'm OK, You're OK - Psychology of Personal Relations | 3 |
|  | 131 | Beginning Counseling | 5 |
| PSY | 138 | Biofeedback and Stress Management | 4 |
| PSY | 221 | Abnormal Psychology | 5 |
| PSY | 241 | Biofeedback I: Biofeedback \& the Psychology of Health (Principles) | 5 |
| PSY | 248 | Child Psychology | 5 |
| PSY | 249 | Crisis Counseling | 3 |
| Select one of the following courses: |  |  | 3-4 |
| PSY | 111 | Basic Human Potential Seminar | 3 |
| PSY | 231 | Psychology of Dreams | 5 |
| PSY | 237 | Assertiveness Training | 3 |
| PSY | 242 | Biofeedback II | 4 |
| Total Credits for Area of Emphasis |  |  | 96-97 |

## BIOFEEDBACK EMPHASIS

Recommended degree requirements for area of emphasis:
CREDITS
COMMUNICATIONS ..... 15
See A.A. degree requirements
HUMANITIES15
See A.A. degree requirements
BEHAVIORAL AND SOCIAL SCIENCE15
PSY 101 General Psychology I ..... 5
See A.A. degree requirements ..... 10
PHYSICAL EDUCATION ..... 5
See A.A. degree requirements
MATHEMATICS AND SCIENCE12
BIO 211 Human Anatomy: Physiology I ..... 4
BIO 212 Human Anatomy: Physiology II ..... 4
BIO 213 Human Anatomy: Physiology III ..... 4
Electives21
PSY 131 Beginning Counseling ..... 5
PSY 138 Biofeedback and Stress Management ..... 4
PSY 241 Biofeedback I: Biofeedback \& the
Psychology of Health (Principles) ..... 5
PSY 242 Biofeedback II ..... 4
PSY 244 Biofeedback and Hypertension ..... 5
Electives18
Total Credits for Area of Emphasis ..... 96

## CERTIFICATE PROGRAM IN CLINICAL BIOFEEDBACK

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 have been met.

1. B.A. or B.S. degree or an A.A. from Aims Community College with an emphasis in Biofeedback.
2. Completion of the following courses at Aims Community College or their equivalent at other colleges.BIO 211 Human Anatomy: Physiology I4
BIO 212 Human Anatomy: Physiology II ..... 4
BIO 213 Human Anatomy: Physiology III ..... 4
PSY 131 Beginning Counseling ..... 5
PSY 221 Abnormal Psychology ..... 5
3. Completion of the following classes at Aims Community College.
CREDITS
PSY 241 Biofeedback I: Biofeedback \& the Psychology of Health (Principles) ..... 5
PSY 242 Biofeedback II ..... 4
PSY 138 Biofeedback \& Stress Management ..... 4
4. Pass an examination interview by a faculty member of the Aims Biofeedback Institute.

## CERTIFICATE PROGRAM

## Certificate Requirements:

Fall Quarter
PSY 243 Biofeedback III: Clinical Procedures
PSY 149 Biofeedback and Psychotherapy
Winter Quarter
PSY 267 Biofeedback IV: Practicum
Spring Quarter
PSY 268 Biofeedback V: Practicum
10
Total Credits for Certificate: 30

## GOVERNMENTAL CAREER EMPHASIS

Designed for those students interested in city, county, state, or federal civil service or political careers immediately upon graduation from Aims or following further study at a four-year institution in such major areas as political science, public administration, and related fields. For further information on career or transfer possibilities, contact the Behavioral and Social Science Division.
Recommended degree requirements for area of emphasis: CREDITS
COMMUNICATIONS15
HUMANITIES1515
BEHAVIORAL AND SOCIAL SCIENCE
5
5
POS 118 State and Local Governments ..... 5
Select one of the following courses:
5
5
PSY 101 General Psychology I
PSY 101 General Psychology I ..... 5
PHYSICAL EDUCATION ..... 5
See A.A. degree requirements15
See A.A. degree requirements
The following courses are suggested after consultation with an ..... 25advisor:
ACC 101 Principles of Accounting I ..... 5
ACC 102 Principles of Accounting II ..... 5
ECO 201 Principles of Economics - Macroeconomics ..... 5
EDP 110 Introduction to Data Processing5
MGT 207 Human Resources Management ..... 5
Electives (as appropriate)6
Total Credits for Area of Emphasis ..... 96

## 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. 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
HIS 103 Introduction to History: Modernization of Man ..... 5
Select one of the following courses:
PSY 101 General Psychology I ..... 5
SOC 101 Introduction to Sociology ..... 5
Select one of the following courses:
ECO 100 Introduction to Economics ..... 5
ECO 201 Principles of Economics - Macroeconomics ..... 51515
PHYSICAL EDUCATION ..... 5
See A.A. degree requirements
MATHEMATICS AND SCIENCE
See A.A. degree requirements1525
Electives
History of the United States from 1877
(Myth and Reality in America's Past) ..... 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 desired ..... 1-4
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 ..... 15

See 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 5
HIS 107 History of the United States Since 1945 (Hiroshima to Watergate)

| PSY 101 | General Psychology I | 5 |
| :--- | :--- | ---: |
| POS 101 | American Government | 5 |
| POS 118 | State and Local Governments | 5 |
| SOC 101 | Introduction to Sociology | 5 |
| SOC 111 | Social Services I | 3 |
|  |  | Consult with an advisor to determine which of |
|  |  | these courses will apply to the A.A. degree "area" |
|  |  | requirements and which will apply to "elective" |
|  |  | requirements. All of the above courses are required |

PHYSICAL EDUCATION
See A.A. degree requirements
MATHEMATICS AND SCIENCE
See A.A. degree requirements

## Electives

5
Total Credits for Area of Emphasis

## SOCIAL WORK EMPHASIS

The term "social services" is used to denote a goal of orienting students to possibilities for employment in social organizations concerned with meeting direct human needs. In its broadest sense, social services include concern for health, among other areas. A fundamental principle in the provision of social services is to stimulate people to utilize their capabilities and resources so that they are able to deal with their life situations.

The primary objectives of this program are (1) to complete the requirements for the Associate of Arts (A.A.) degree and (2) to prepare students for entry into a junior year, baccalaureate degree program in social work, occupational therapy, probation/parole work, or other social service areas.

## Recommended degree requirements for area of emphasis:

## CREDITS

COMMUNICATIONS

| CON 102 | Introduction to Writing | 5 |
| :--- | :--- | :--- |
| CON 202 | Advanced Composition | 5 |
| SPE 115 | Speech Communications | 5 |

HUMANITIES
HUM 100 Introduction to the Humanities
Select two of the following courses:
ART 100 Art Appreciation 5
HUM 101 Introduction to the Greek and Roman Period

5
HUM 102 Introduction to the Middle Ages and Renaissance Period
MUS 100 Music Appreciation 5
PHI 105 Introduction to Philosophy 5
BEHAVIORAL AND SOCIAL SCIENCE
ANT 101 Introduction to Anthropology 5
POS 101 American Government 5
SOC 101 Introduction to Sociology 5
PHYSICAL EDUCATION
See A.A. degree requirements
MATHEMATICS AND SCIENCE
BIO 101 Biology Concepts
MAT 131 College Algebra 5

Select one of the following courses:
CHE 105 Introduction to Nutrition 5
STA 201 Statistics for Business, Science, and Social Science I
Electives ..... 27
ECO 100 Introduction to Economics ..... 5
MAS 106 Psychology of the Mexican American ..... 3
PSY 101 General Psychology I ..... 5
SOC 106 Contemporary Social Problems ..... 3
SOC 111 Social Services I ..... 3
SOC 112 Social Services II ..... 3
SOC 113 Social Services III ..... 5
Select one of the following courses: ..... 3-5
PSY 118 Psychology of Adulthood ..... 3
PSY 248 Child Psychology ..... 5
Remaining hours selected as desired: ..... 0-1
Total Credits for Area of Emphasis ..... 96-97


# FAMILY AND LIFE EDUCATION <br> EXPECTANT FAMILIES AND ACTIVE FAMILIES ADVISORY COMMITTEE 

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

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

## STAFF COORDINATORS

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

## INSTRUCTOR REPRESENTATIVES

| Barbara Kiser | Geni Spalding |
| :--- | :--- |
| Rhoda Stenson |  |

NORTH COLORADO MEDICAL CENTER

Carol Shropshire, M.A.
Manager
Department of Education
Ginger Maki, M.A.
Health Promotion Coordinator
Becky Leonard
Social Services Manager

Catherine Orosz, R.N. Nursing Care Coordinator

Robert Bradley, M.D.
Family Practice

William Boelter, M.D.
Obstetrics

Sandee Strobel, R.N.
Nursing Care Coordinator
Rebecca Crowley, R.N. Nursing Care Coordinator

Weld Mental Health Center Diane Smith

Weld County Health Department Judy Lavelle
Weld County School District 6 Jean Mallett, R.N.

James Kagan, M.D. Pediatrics

John Watt, M.D.
Internal Medicine

Child Abuse Resource and Education
Nina Wentz
Weld County Department of Social Services
Enita Kearns
Lynn Thomas


## 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 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:
CREDITS

## COMMUNICATIONS

CON 102 Introduction to Writing 5
COM 112 Introduction to Mass Media 5
SPE 116 Public Speaking 5
HUMANITIES
HUM 100 Introduction to Humanities
$\begin{array}{lll}\text { HUM 100 } & \text { Introduction to Humanities } & 5 \\ \text { HUM 109 } & \text { Modern American Culture } & 5\end{array}$
Select one other Humanities course from:
HUM 106 Introduction to World Religions

THE 100 Introduction to Theatre Arts

MUS 100 Music Appreciation 5
ART 100 Art Appreciation
BEHAVIORAL AND SOCIAL SCIENCE
See A.A. degree requirements

## MATHEMATICS AND SCIENCE

See A.A. degree requirements
PHYSICAL EDUCATION
See A.A. degree requirements

## Electives

COM 113 Introduction to Radio Broadcasting 5
COM 114 Introduction to Television Broadcasting 5
COM 291 Television Production Labl(6 hours) 3
COM 298 Broadcast Internship (10 hours) 5
SPE 117 Oral Interpretation 5
Recommended Electives 5
COM 113 Introduction to Radio Broadcasting 5
COM 114 Introduction to Television Broadcasting 5
COM 291 Television Production Lab I (6 hours) 3
COM 298 Broadcast Internship (10 hours) 5
SPE 117 Oral Interpretation 5
Total Credits for Area Emphasis
96

## HUMANITIES

ADVISORY COMMITTEE

Elizabeth Bowers
Librarian (Retired)
Weld County Public Library
Virginia Husman
Pianist/Private Music Teacher
Howard Johnson
Architect

Jil Rosentrater Cultural Affairs Director City of Greeley

Kenneth E. Whitney
Certified Public Accountant Anderson \& Whitney

## DESIGN AND CREATIVE STUDIES

## (DESIGN, VISUAL ARTS, MUSIC, THEATRE AND MOVEMENT, TEXTILES AND CLOTHING)

The study of design and the arts is an exciting venture with several facets. Students may work in these courses to deepen their understanding of human expression and invention, to strengthen their sensory skills, to develop creative thinking abilties, or to create their own unique expressions, images, or objects.

The transfer level courses may be taken as rewarding electives within a program of general education, or as work toward a four-year program in design, visual arts, music, theatre and dance, or textiles and clothing. Each course is not offered every quarter. Some are offered every other year, or on demand. (See Aims Annual Schedule.)

The curriculum for each area of emphasis is developed on the basis of requirements of the university level programs to which students may transfer, and the needs of firms in Northern Colorado involved in work related to the offerings. Those students who have specific plans for transfer should consult the faculty in Design and Creative Studies to choose the combination of courses most appropriate for them. These emphases are intended as guides and should not be viewed as designating major requirements in a specific four-year program.

Students wishing to enroll in art, music, or theatre courses solely for recreational purposes are advised to register for one of the nontransferable "community" classes. These courses are not applicable to the degree programs of the college.


## DESIGN AND VISUAL COMMUNICATION EMPHASIS

Recommended degree requirements for area of emphasis:
COMMUNICATIONSCREDITSSee A.A. degree requirements
HUMANITIES
ART 100 Art Appreciation ..... 515
See A.A. degree requirements ..... 10
BEHAVIORAL AND SOCIAL SCIENCE ..... 15See A.A. degree requirements
PHYSICAL EDUCATION5
See A.A. degree requirements
MATHEMATICS AND SCIENCE15
See A.A. degree requirements
Electives31Select from the following courses, with advisor approval:(These are required prerequisites in most college artand 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
with advisory approval: ..... 3
AAD 201 Survey of Fashion Design ..... 3
AAD 221 Graphic Design I ..... 3
AAD 222 Graphic Design II
AAD 223 Graphic Design III ..... 3
AAD 225 Lettering ..... 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 250 Introduction to Architecture and Interior Design3
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

## DESIGN AND CREATIVE STUDIES ADVISORY COMMITTEE

## Architecture

Robert Shreve
Architect and Vice President ARIX - Architects, Engineers, Planners

Fashion Design
Sami Demitt
Sami's Unique Apparel
Graphic Design
Deborah Dalton
Free Lance Graphic Designer
Bill Van Eron
Graphic Designer
Hewlett Packard
NOTE: The courses in the Design segment of the program are also used by many adults to develop or expand a variety of working skills. The Advisory Committee assures that these courses contain information and techniques that are practical and applicable to the working needs of the region.

## 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
HUM 100 Introduction to the Humanities
5
Select two of the following courses:
ART 100 Art Appreciation 5
MUS 100 Music Appreciation 5
THE 100 Introduction to Theatre Arts 5
BEHAVIORAL AND SOCIAL SCIENCE 15
See A.A. degree requirements
PHYSICAL EDUCATION
5
See A.A. degree requirements
MATHEMATICS AND SCIENCE
See A.A. degree requirements
Electives - Art
31
Select from the following fundamental 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 |

Select from the following studio art courses, with advisor approval:
AAD 225 Lettering 3

AAD 231 Figure Drawing I 3
AAD 232 Figure Drawing II 3

| ARS 241 | Painting I | 3 |
| :--- | :--- | :--- |
| ARS | 242 | Painting II |
| 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 281 | Weaving and Textile Design I | 3 |
| ARS 282 | Weaving and Textile Design II | 3 |

ARS 282 Weaving and Textile Design II

Electives - Music and Theatre
Select from the following courses, with advisor approval:

| MUP 121 | Ensemble | 1 |
| :--- | :--- | ---: |
| MUP 131 | Piano I | 3 |
| MUP 132 | Piano II | 3 |
| MUP 133 | Piano III | 3 |
| MUP 151 | Voice I | 3 |
| MUP 152 | Voice II | 3 |
| MUP 171 | Classical Guitar I | 3 |
| MUP 172 | Classical Guitar II | 3 |
| MUP 173 | Classical Guitar III | 3 |
| MUS 105 | Fundamentals of Music | 5 |
| MUS 106 | Music Theory | 4 |
| MUS 220 | Children's Music | 3 |
| THE 100 | Introduction to Theatre Arts | 5 |
| THE 105 | Acting I | 3 |
| THE 106 | Acting II | 3 |
| THE 255 | Directing | 3 |
| THE 299 | Theatre Practicum | $1-3$ |

(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 ..... 15
Humanities ..... 15
Behavioral and Social Science ..... 15
Physical Education ..... 5
Mathematics and Science ..... 35
Electives ..... 11Total96

## ALTERNATIVE ASSOCIATE OF SCIENCE DEGREE

The requirements in Behavioral and Social Science, Communications, Humanities and Physical Education may vary depending upon the four-year 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:
CREDITS

## COMMUNICATIONS

CON 102 Introduction to Writing
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 from the following courses:
SPE 115 Speech Communications
SPE 116 Public Speaking
SPE 118 Interpersonal Communications
Select from the following courses:
CON 103 Research Paper 3
CON 109 Creative Writing 5
CON 202 Advanced Composition 5
LIT 105 Introduction to Literature:
Types and Themes 5
LIT 107 Introduction to Nonfiction 2-5
LIT 108 Literature's Famous Lovers $\quad 2-5$
LIT 205 The American West 5
LIT 206 Shakespeare: Representative Plays 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
SPE 117 Oral Interpretation 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:

| HUM | 100 | Introduction to the Humanities |  |
| :---: | :---: | :---: | :---: |
| HUM | 101 | Introduction to the Greek and Roman Period |  |
| Select from the following courses: |  |  |  |
| HUM | 102 | Introduction to the Middle Ages and Renaissance Period |  |
| HUM | 104 | Contemporary Careers and Values |  |
| HUM | 105 | World Mythology | -5 |
| HUM | 106 | Introduction to World Religions | 3-5 |
| HUM | 107 | Introduction to the Art of Film |  |
| HUM | 108 | Oriental Culture |  |
| HUM | 109 | Modern American Culture |  |
| 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 |
| PHI | 205 | Topics in Philosophy | 5 |
| THE | 100 | Introduction to Theatre Arts | 5 |

Total Credits for A.S. Degree

## CREDITS

5

Select from two of the following five areas:

## ANTHROPOLOGY

ANT 101 Introduction to Anthropology

## ECONOMICS

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

HISTORY
HIS 101 Introduction to History Ancient Civilization
HIS 102 Introduction to History: Traditional Civilization
HIS 103 Introduction to History: 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
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
POLITICAL SCIENCE
POS 100 Introduction to Political Science
POS 101 American Government
POS 118 State and Local Governments
POS 205 International Relations 5
POS 208 Comparative Foreign Government

GEOGRAPHY
GEO 105 World Geography
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
5
CREDITS

## MATHEMATICS AND SCIENCE

(Note: All Associate of Science degree plans must be approved by the Division Chairman of Mathematics and Science.)

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. The degree requirements may be met by completing:

1. Any area of emphasis in the Mathematics and Science Division as listed in this catalog.
2. An alternative plan for the Associate of Science degree. This series of courses must be approved by an appropriate advisor.
3. A minimum of 45 credits selected from approved courses with the following prefixes: AST, BIO, CHE, CSC, EAS, GEY, MAT, PHY, SCI, STA.
4. A minimum of 35 credits selected from approved courses with the following prefixes: $\mathrm{AST}, \mathrm{BIO}, \mathrm{CHE}, \mathrm{EAS}, \mathrm{GEY}, \mathrm{PHY}, \mathrm{SCI}$. Competency in mathematics must be demonstrated.
5. A block of course work which includes a minimum of 32 credits from approved courses with the following prefixes: CSC, MAT, STA, and at least 3 credits selected from approved courses with the following prefixes: AST, BIO, CHE, EAS, GEY, PHY, SCI.

Total Credits for 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 nonscience 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 life-science and health-science disciplines. Students may enjoy opportunities to conduct experiments in an open laboratory environment with para-professional faculty and tutors 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 Science, Life Sciences, Mathematics, Pre-Health Professions, and Science and Mathematics. An area of emphasis requires divisional approval and a minimum of 35 quarter hours ( 45 quarter hours in the case of science and mathematics) of courses selected from the appropriate discipline(s).
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 | 102 | Animal Biology <br> or |
| :---: | :---: | :---: |
| BIO | 103 | Plant Biology |

## CREDITS

CHE 101 General Chemistry I ..... 5
CHE 102 General Chemistry II ..... 5
CHE 103 General Chemistry III ..... 5
SPE 116 Public Speaking ..... 5
PSY 101 General Psychology I ..... 5
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 Education3
HUM 100 Introduction to the Humanities ..... 5
CSC 201 Introduction to Computer Programming and the FORTRAN 77 Language ..... 4
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 ofAccounting 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 | General Chemistry I, II, III | (each) 5 |
| :--- | :--- | :--- |
| MAT 131, 132 | College Algebra, Trigonometry | (each) 5 |

MAT $161 \quad$ Calculus with Analytic Geometry $1 \quad 5$
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 Introduction to Computer Programming and the FORTRAN 77 Language 4
SCI 230
Scientific Writing
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:

CREDITS

## Required:

CHE 101, 102, 103 General Chemistry I, II, III (each) 5
CHE 115, 116
MAT 131
Chemical Technology I
(each) $\uparrow$
College Algebra
CSC 101 Introduction to Computing and the BASIC Language 5

CSC
HEN 106
CON 102
Safety and First Aid
Introduction to Writing

## Recommended:

CHE 120
Fundamentals of Organic Chemistry 5
GEY 111 Physical Geology 5
PHY 151, 152, 153
Introduction to College
Physics I, II, III
(each) 5
MAT $161 \quad$ Calculus with Analytic Geometry 5
BIO 101 Biology Concepts 5

## TERMINAL COURSE BLOCK:

Required:

CHE 201, 202, 203
CHE 215, 216
CHE 225, 226
CHE 235, 236
Recommended:
CHE 205
CHE 230
CHE 245
CHE 295

STA 200 or 201
CSC 201

BIO 216

Organic Chemistry I, II, III (each) 5 Chemical Technology II Chemical Technology III Chemical Technology IV each) 5 (each) 1 (each) 1 (each) 1

Glassware Construction and Repair 2
Scientific Writing 3
Viscometry 1

Independent Study - Chemical Literature and Study Methods

## Statistics

5
Introduction to Computer Programming and the FORTRAN 77 Language
Introduction to Microbiology

CHEMICAL TESTING TECHNOLOGY ADVISORY COMMITTEE

Bill Beard
U.S. Department of Agriculture
Larry Mounce
Fort Collins, Colorado

Larry Scott
Triple S. Labs, Inc.
Bob Steiner
Eastman Kodak Company
Colorado Division

## COMPUTER/INFORMATION SCIENCE 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.

## OPTIONI COMPUTER PROGRAMMING

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

## Degree Requirements: <br> CREDITS

MAT $130 \quad$ Mathematics for Decision Making 5
CSC 100 Computer and Society 3-4
CSC 101 Introduction to Computing and the

CSC 111 Introduction to Computer Programming and the Pascal Language
Introduction to Computer Programming and the FORTRAN 77 Language 4
CSC 211, 212
CSC 231
Information Systems I, II (each) 5
Advanced Topics in Computer Programming

4
STA 201, 202
Statistics for Business, Science and Social Science I, II
(each) 5
Highly Recommended:

| SCI 230 | Scientific Writing | 3 |
| :--- | :--- | :--- |
| EDP 121 | Structured COBOL Programming | 5 |
| EDP 122 | Advanced COBOL Programming | 5 |

Additional requirements and electives as appropriate.

## 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.

## Degree Requirements:

CREDITS
MAT 131
College Algebra
5
MAT $160 \quad$ Calculus for Decision Making
5
CSC 101 Introduction to Computing and the BASIC
CSC 102
Language
4

CSC 111 Introduction to Computer Programming
Introduction to Computer Programming
and the Pascal Language
Introduction to Computer Programming and the FORTRAN 77 Language

4
CSC 211, 212
Information Systems I, II
(each) 5
CSC 231 Advanced Topics in Computer Programming

4
STA 201, 202, 203 Statistics for Business, Science, and
Social Science, I, II, III
(each) 5

## Highly Recommended:

SCI 230
Scientific Writing
EDP 121
Structured COBOL Programming
Advanced COBOL Programming
EDP 122

Advanced COBOL Programming
Additional requirements and electives as appropriate.

## OPTION III COMPUTER SCIENCE

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

## CREDITS

## Degree Requirements:

| MAT 131 | College Algebra |
| :---: | :---: |
| MAT 132 | Trigonometry |
| CSC 101 | Introduction to Computer Programming and the BASIC language |
| CSC 102 | Advanced BASIC 4 |
| CSC 111 | Introduction to Computer Programming and the Pascal Language |
| CSC 201 | Introduction to Computer Programming and the FORTRAN 77 Language |
| CSC 221, 222 | Computer Science I, II (each) 5 |
| CSC 231 | Advanced Topics in Computer Programming |
| MAT 161, 162, 163 | Calculus with Analytic <br> Geometry, I, II, III <br> (each) 5 |
| MAT 261 | Linear Algebra |
| STA 201, 202 | Statistics for Business, Science, and Social Science I, II |
| SCI 230 | Scientific Writing |

Additional requirements and electives as appropriate.


## 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, but not an area of emphasis in engineering.

INITIAL COURSE BLOCK:

| MAT 131, 132 | College Algebra, Trigonometry (each) 5 |
| :---: | :---: |
| MAT 161, 162, 163 | Calculus with Analytic <br> Geometry I, II, III (each) 5 |
| CSC 111 | Introduction to Computer Programming and the Pascal Language |
| CSC 201 | Introduction to Computer Programming and the FORTRAN 77 Language |
| CSC 231 | Advanced Topics in Computer Programming |
| CHE 101, 102, | General Chemistry I, II (each) 5 |

Electives (as appropriate)
TERMINAL COURSE BLOCK:
STA 201, 202 Statistics for Business, Science, and Social Science I, II (each) 5
PHY 201, 202, 203 General Physics I, II, III (each) 5
MAT 261 Linear Algebra
Calculus with Analytic Geometry IV 5
MAT 262 Calculus with Analytic Geometry IV 5
MAT 263 Elementary Differential Equations
SCl 230 Scientific Writing
3
Electives (as appropriate)
Note: This emphasis contains College Algebra and Trigonometry which may transfer as electives only. Consequently, students may require a longer period of time to complete the baccalaureate degree.

## LIFE SCIENCES EMPHASIS

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

## INITIAL COURSE BLOCK:

## CREDITS

BIO 111, 112, 113 College Biology I, II, III
CHE 101, 102, 103 General Chemistry I, II, III
MAT 131
College Algebra
Electives (as appropriate)
TERMINAL COURSE BLOCK:
BIO 211, 212, 213 Human Anatomy:
Physiology I, II, III (each) 4
BIO 215 Introduction to Microbiology
CHE 201
Organic Chemistry I
5
SCI 230
STA 201,202

Statistics for Business, Science and
Social Science I, II
(each) 5

Electives (as appropriate)

## MATHEMATICS EMPHASIS

Students may complete the first two years of a typical requirement through Differential Equations. This area of emphasis is also the basis of study for chemistry, computer science, engineering, physics, and statistics.

## INITIAL COURSE BLOCK:

CREDITS
CSC 101 Introduction to Computing and
CSC 201

BASIC Language
Introduction to Computer Programming and the FORTRAN 77 Language

MAT 131, 132
MAT 161, 162, 163 College Algebra, Trigonometry Calculus with Analytic Geometry I, II, III
(each) 5

Statistics for Business, Science, and
Social Science I, II (each) 5
Electives (as appropriate)
TERMINAL COURSE BLOCK:

MAT 261
MAT 262
MAT 263
PHY 201, 202, 203
Electives (as appropriate)
Note: This emphasis contains College Algebra and Trigonometry which may transfer as electives only. Consequently, students may require a longer period of time to complete the baccalaureate degree.

## PRE-HEALTH PROFESSION EMPHASIS

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

INITIAL COURSE BLOCK:
CREDITS
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 Physics I, II, III
(each) 5
STA 201
Statistics for Business, Science, and Social Science
Electives (as appropriate)
TERMINAL COURSE BLOCK:
BIO 211, 212, 213 Human Anatomy:
Physiology I, II, III
(each) 4
BIO 216
Introduction to Microbiology
CHE 201, 202, 203 Organic Chemistry I, II, III (each) 5
SCI 230
Scientific Writing
3
Electives (as appropriate)

## QUIET!

YOU'RE IN A STUDY AREA

## 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 raise their level of 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 occupational or degree programs.

The College offers its developmental studies through five programs:

## INTENSIVE ENGLISH AS A SECOND LANGUAGE

The IESL program is designed for students who are literate in their native language and want to master the English language for college preparation. Students will be placed in a level of study commensurate with their abilities. The IESL program consists of six levels. Instruction in English, grammar, writing, reading, listening and speaking is offered at each level. Successful completion of the college preparatory level enables students to continue in their studies in any other program offered at Aims Community College. Foreign students wishing to take this curriculum must have their visa cleared by the Office of Admissions and Records.

## 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 SEGUNDA LENGUA

Estas clases son principalmente para estudiantes que quieren aprender o mejorar su habilidad en inglés. Énfasis en la enseñanza de las clases seráen 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 conversación), lectura y escritura principante será enseñada junto con la ensênanza 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.

## 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.

## 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 oppoutunities for future education.
These courses also are designed to give students who have a GED high school diploma, or their equivalency preparation in reading, language arts, math, and social sciences sufficient for them to meet their personal, vocational, and/or academic needs on a college level.

## 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 selfimprovement goals, passes 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
Intensive English as a Second Language

10-60
Remedial Language
10-16
Mathematics:
Developmental Mathematics 20
Remedial Mathematics $\quad 5-20$
Reading:
Developmental Reading
Remedial Reading $\quad 9-24$
Intensive English as a Second Language Reading



## SCHOOL OF OCCUPATIONAL EDUCATION

Aims Community College offers a variety of vocationaltechnical 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 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

Kathi Kline, Chair
Resource and Development Manager
Hewlett-Packard

Steve Abrams, Vice Chair
Executive Vice President
Director of Economic
Development
Greeley Area Chamber of Commerce

Lynn Brown, R.N.
Director of Nursing Services
North Colorado Medical Center
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.
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.

## ACCOUNTING <br> ACCOUNTING

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

## ELECTRONIC DATA PROCESSING ELECTRONIC DATA PROCESSING <br> (two-year A.A.S. degree)

GENERAL BUSINESS
business secretary
LEGAL SECRETARY
OFFICE CLERICAL
(two-year A.A.S. degree)

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, Marilyn Mathews, 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: |  | 70 |
| ACC 101 | Principles of Accounting I | 5 |
| ACC 102 | Principles of Accounting II | 5 |
| ACC 103 | Principles of Accounting III | 5 |
| ACC 105 | Payroll Accounting | 3 |
| ACC 196 | Accounting Practicum I | 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 299 | Computerized Practicum | 1 |
| BUS 125 | Adding and Calculating Machines | 2 |
| BUS 142 | Intermediate Communications | 5 |
| BUS 143 | Advanced Communications | 3 |
| BUS 200 | Business Law | 5 |
| EDP 110 | Introduction to Data Processing | 5 |
| MAT 110 | Applied Business Mathematics | 5 |
| Select from the following courses: |  | 5 |
| BUS 100 | Introduction to Business | 5 |
| PSY 145 | Human Relations at Work | 5 |
| Electives (selected with advisor approval) |  | 21 |
| Total Credits for A.A.S. Degree |  | 96 |

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

Degree Requirements:
CREDITS
ACC 101 Principles of Accounting I ..... 5 ..... 79
ACC 102 Principles of Accounting II ..... 5
ACC 103 Principles of Accounting III ..... 5
ACC 196 Accounting Practicum I
BUS 142 Intermediate Communications ..... 1 ..... 1 ..... 5
BUS 143 Advanced Communications ..... 3
EDP 110 Introduction to Data Processing ..... 5
EDP 111 Computer Concepts I
EDP 112 Computer Concepts II ..... 5
EDP 116 Business BASIC ..... 5
EDP 117 Computer Operations ..... 5
EDP 121 Structured COBOL Programming ..... 5
EDP 122 Advanced COBOL Programming ..... 5
EDP 205 Assembler Language Programming ..... 5
EDP 206 New Issues and Developments in Data Processing ..... 5
EDP 211 Structured Systems Analysis ..... 5
MAT 110 Applied Business Mathematics ..... 5
Select one with advisor approval: ..... 5
EDP 126 Report Program Generator II (RPG II) ..... 5
EDP 127 PL/1 Programming Language I ..... 5
EDP 212 Systems Analysis II ..... 5
BUS 142 Intermediate Communications ..... 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
Electives (selected with advisor approval) ..... 10
Total credits for A.A.S. Degree ..... 99
ELECTRONIC DATA PROCESSINGADVISORY COMMITTEE

| Rick Ayers <br> Weld County School District 6 | Bob Rhinesmith <br> Weld County |
| :--- | :--- |
| Richard Boggs <br> Aims Community College | Gordon Sheets <br> Univac |
| Leon Overbeck | Marcus N. Valerio <br> State Farm Insurance <br> Diversified Computer <br> Systems of Colorado |

## GENERAL BUSINESS

(Ann Aron, Lucille Eckhardt, Jerry Goddard, Gale Heiman, Judy Leusink, Maxine Marquez, Paul Martin, Trulene Page, Miriam Peterson, Linda Scott)

Potential Opprotunities: The programs are designed for persons interested in learning 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 SCERETARY |  |  |
| :---: | :---: | :---: |
| degree program |  |  |
|  |  | CREDITS |
| Degree Requirements: |  | 71 |
| ACC 296 | Bookkeeping Practicum | 1 |
| BUS 100 | Introduction to Business | 5 |
| BUS 101 | Beginning Typewriting | 1 |
| BUS 102 | Intermediate Typewriting | 4 |
| BUS 103 | Advanced Typewriting and Transcribing Machines | 4 |
| BUS 107 | Office Procedures | 5 |
| BUS 110 | Introduction to Word/Information Processing | 4 |
| BUS 111 | Word Processing: Applications I | 4 |
| BUS 121 | College Bookkeeping I | 5 |
| BUS 125 | Adding/Calculating Machines | 2 |
| BUS 131 | Gregg Shorthand I | 5 |
| BUS 132 | Gregg Shorthand II | 5 |
| BUS 133 | Gregg Shorthand III | 5 |
| BUS 142 | Intermediate Communications | 5 |
| BUS 143 | Advanced Communications | 3 |
| MAT 110 | Applied Business Mathematics | 5 |
| PSY 145 | Human Relations at Work | 5 |
| Electives (selected with advisor approval) |  | 25 |
| Total Credits for A.A.S. Degree |  | 96 |
| LEGAL SECRETARY |  |  |
| DEGREE PROGRAM |  | CREDITS |
| Degree Requirements: |  | 85 |
| ACC 296 | Bookkeeping Practicum | 1 |
| BUS 100 | Introduction to Business | 5 |
| BUS 102 | Intermediate Typewriting | 4 |
| BUS 106 | Legal Terminology | 5 |
| BUS 110 | Introduction to Word/Information Processing | 4 |
| BUS 111 | Word Processing: Applications I | 4 |
| BUS 115 | Legal Typewriting | 4 |
| BUS 116 | Word Processing: Legal Applications | 3 |
| BUS 117 | Legal Machine Transcription | 4 |
| BUS 121 | College Bookkeeping I | 5 |
| BUS 125 | Adding/ Calculating Machines | 2 |
| BUS 131 | Gregg Shorthand I | 5 |
| BUS 132 | Gregg Shorthand II | 5 |
| BUS 133 | Gregg Shorthand III | 5 |
| BUS 142 | Intermediate Communications | 5 |
| BUS 143 | Advanced Communications | 3 |
| BUS 211 | Legal Office Procedures | 5 |
| BUS 212 | Career Legal Secretary | 3 |
| BUS 291 | Legal Internship | 3 |
| MAT 110 | Applied Business Mathematics | 5 |
| PSY 145 | Human Relations at Work | 5 |
| Electives (selected with advisor approval) |  | 1 |
| Total Credits for A.A.S. Degree |  | 96 |
| OFFICE CLERICAL |  |  |
| CERTIFICATE PROGRAM |  |  |
|  |  | CREDITS |
| Certificate Requirements: |  | 34 |
| ACC 296 | Bookkeeping Practicum | 1 |
| BUS 101 | Beginning Typewriting | 4 |
| BUS 102 | Intermediate Typewriting | 4 |
| BUS 107 | Office Procedures | 5 |
| BUS 121 | College Bookkeeping I | 5 |
| BUS 125 | Adding/Calculating Machines | 2 |
| BUS 142 | Intermediate Communications | 5 |

BUS 143 Advanced Communications ..... 3
MAT 110 Applied Business Mathematics ..... 5
Select from the following courses with business advisor approval:
ACC 105 Payroll Accounting 3
BUS 103 Advanced Typewriting and Transcribing Machines4
Introduction to Word/Information Processing ..... 4
BUS 110 Introduction to Word/Information
3
BUS 111 Word Processing: Applications I
3
3
BUS 112 Word Processing: Applications II
BUS 112 Word Processing: Applications II
5
5
BUS 122 College Bookkeeping II
BUS 122 College Bookkeeping II ..... 5
EDP 105 Computers for Small Business347Electives (selected from Occupational Courses withadvisor approval)
50
Total Credits for Certificate
GENERAL BUSINESS ADVISORY COMMITTEE

Carol Bailey<br>National Board of Chiropractic Examiners

Iris Bergum
State Farm Insurance Companies

Reva Bond

Pat Kinson
Colorado Services

Pat Morimoto
University of Northern Colorado

Kay Norton
Monfort of Colorado

Aims Community College


## MID-MANAGEMENT

(Jim Adams, Elmer Kiekhaefer, Cal McKibbin, Mary Webster)
Program Length: Usually six quarters for Associate of Applied Science degree program. The degree will be awarded in MidManagement, 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 mid-management 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.

## FASHION MERCHANDISING OPTION

| Degree Requirements: | CREDITS |  |
| :--- | :--- | ---: |
| MGT 101 | Sales | 93 |
| MGT 105 | Principles of Advertising | 5 |
| MGT 120 | Introduction to Fashion Merchandising | 5 |
| MGT 127 | Fashion Evolution | 3 |
| MGT 128 | Fashion Trends | 3 |
| MGT 207 | Human Resources Management | 5 |
| MGT 208 | Small Business Management | 5 |
| MGT 211 | Principles of Marketing | 5 |
| MGT 215 | Principles of 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 291 | Personal Adjustment to Business | 6 |
| MGT 292 | Personal Adjustment to Business | 6 |
| AAD 201 | Survey of Fashion Design | 3 |
| BUS 121 | College Bookeeping I | 5 |
| BUS | 142 | Intermediate Communications |
| BUS 143 | Advanced Communications | 5 |
| MAT 110 | Applied Business Mathematics | 3 |
| PSY 145 | Human Relations at Work | 5 |
| Electives (selected with advisor approval) | 5 |  |

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

## INDUSTRIAL/INSTITUTIONAL MANAGEMENT OPTION

## Degree Requirements:

BUS 121 College Bookkeeping I 5
BUS 142 Intermediate Communications 5
BUS 143 Advanced Communications 3
BUS 200 Business Law 5
EDP 105 Computers for Small Business 5
MAT 110 Applied Business Mathematics 5
MGT 101 Sales
5
MGT 207 Human Resources Management 5
MGT 215 Principles of Management 5
MGT 235 Organizational Environment 5
MGT 236 Labor Law Relations 5
MGT 237 Supervisory Management 5
MGT 238 Production Management 5
MGT 239 Purchasing 5
MGT 291 Personal Adjustment to Business 6
MGT 292 Personal Adjustment to Business 6
MGT 293 Personal Adjustment to Business 6
PSY 145 Human Relations at Work
5
Electives (selected with advisor approval)
Total credits for A.A.S. Degree

## SALES OPTION

| Degree Requirements: |  | CREDITS |
| :---: | :---: | :---: |
|  |  | 92 |
| BUS 142 | Intermediate Communications | 5 |
| BUS 143 | Advanced Communications | 3 |
| BUS 200 | Business Law | 5 |
| EDP 105 | Computers for Small Business | 5 |
| MAT 110 | Applied Business Mathematics | 5 |
| MGT 101 | Sales | 5 |
| MGT 102 | Advanced Sales | 5 |
| MGT 105 | Principles of Advertising | 5 |
| MGT 171 | Management Activity 1 | 2 |
| MGT 172 | Management Activity II | 2 |
| MGT 173 | Management Activity III | 2 |
| MGT 206 | Sales Management | 5 |
| MGT 207 | Human Resources Management | 5 |
| MGT 211 | Principles of Marketing | 5 |
| MGT 215 | Principles of Management | 5 |
| MGT 235 | Organizational Environment | 5 |
| MGT 291 | Personal Adjustment to Business | 6 |
| MGT 292 | Personal Adjustment to Business | 6 |
| MGT 293 | Personal Adjustment to Business | 6 |
| PSY 145 | Human Relations at Work | 5 |
| Electives (selected with advisor approval) |  | 7 |
| Total Credits for A.A.S. Degree |  | 99 |

SMALL BUSINESS MANAGEMENT OPTION
Degree Requirements:
BUS 121 College Bookkeeping I ..... 92
BUS 142 Intermediate Communications ..... 5
BUS 143 Advanced Communications ..... 3
BUS 200 Business Law ..... 5
EDP 105 Computers for Small Business ..... 5
MAT 110 Applied Business Mathematics ..... 5
MGT 101 Sales ..... 5
MGT 171 Management Activity I ..... 5
2
MGT 172 Management Activity II ..... 2
MGT 173 Management Activity III ..... 2
MGT 205 Credit Management ..... 5
MGT 208 Small Business Management ..... 5
MGT 211 Principles of Marketing ..... 5
MGT 215 Principles of Management ..... 5
MGT 291 Personal Adjustment to Business ..... 6
MGT 293 Personal Adjustment to Business ..... 6
PSY 145 Human Relations at Work
Electives (selected with advisor approval)
Total Credits for A.A.S. Degree99
REAL ESTATECourses offered toward completion of the ColoradoReal Estate Agent license:
RES 101 Real Estate Practice ..... 3
RES 102 Real Estate Law ..... 3
Support/Elective Courses
RES 103 Real Estate License Preparation ..... 3
RES 104 Real Estate Closings ..... 3
RES 205 Real Estate Finance ..... 3
RES 206 Real Estate Appraisal ..... 3
Courses offered toward completion of the ColoradoReal Estate Broker license:
RES 101 Real Estate Practice ..... 3
RES 102 Real Estate Law ..... 3
RES 205 Real Estate Finance ..... 3
RES 206 Real Estate Appraisal ..... 3

## Support/Elective Courses

$\begin{array}{lll}\text { RES } & 103 & \text { Real Estate License Preparation } \\ \text { RES } & 104 & \text { Real Estate Closings }\end{array}$

TRANSPORTATION

| TRA | 101 | Transportation Terms and Documentation | 4 |
| :--- | :--- | :--- | :--- |
| TRA | 102 | Transportation Functions and Regulations | 4 |
| TRA | 103 | Transportation Freight Rates and Tariffs | 4 |

MID-MANAGEMENT ADVISORY COMMITTEE

George Evans<br>Northwestern Mutual Life<br>Rolland Higgins<br>Higgins Sentry Hardware

## FASHION MECHANDISING ADVISORY COMMITTEE

| Willard Fantle | Valerie Sorenson <br> Fashion Bar |
| :--- | :--- |
| University of Northern Colorado  <br> Charlie Reilly Maynard Weber <br> Joslins Otis Brothers |  |

Joe Roberts
Colorado State University

## REAL ESTATE ADVISORY COMMITTEE

Carol Campbell
Century 21
Campbell \& Associates
Edwin Dyer
Wheeler Realty

Richard Gazlay
Cornerstone Management


## 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)

## FIRE PROTECTION TECHNOLOGY

(two-year A.A.S. degree)
FIRE SCIENCE TECHNOLOGY (two-year A.A.S. degree)
HEALTH OCCUPATIONS:
EMERGENCY MEDICAL TECHNICIAN (16 week certificate)
RADIOLOGIC TECHNOLOGY (two-year A.A.S. degree)
RESPIRATORY CARE
(one-year certificate)

OTHER HEALTH SERVICES

## CRIMINAL JUSTICE

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

Potential Opportunities: The program is designed to prepare qualified persons to work in the law enforcement field and to perform duties and tasks in the areas of public safety, human relations, crime prevention, and criminal investigation. Officers may find employment in city police departments, sheriff's offices, highway patrol, U.S. Marshall, or border patrol. A high school diploma or equivalent is a prerequisite. Civil Service requirements for height, weight and vision may be obtained from the appropriate law enforcement agency.

The Criminal Justice program consists of courses totaling 102 hours. Fifty-seven credit hours will be taught by vocationally certified instructors from the sheriff's office and police departments, district attorney's office, Nineteenth Judicial District Court, and other agencies. The remaining 45 credits are general courses.

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.

## DEGREE PROGRAM

## Degree Requirements:

## LAW ENFORCEMENT BASIC TRAINING

This requirement can be met in three ways:

1. Certification by the Colorado Law Enforcement Training Academy as a Police Officer (CLETA).
2. Completion of CRJ 150 Law Enforcement Basic Training-30 credit hours.
3. Completion of the following:

| CRJ | 141 | Law Enforcement Basic Training I | 10 |
| :--- | :--- | :--- | :--- |
| CRJ | 142 | Law Enforcement Basic Training II | 10 |
| CRJ | 143 | Law Enforcement Basic Training III | 10 |

Note: If Options 2 or 3 are selected, only 20 credit hours of the 30 apply to the degree program.

## CRIMINAL JUSTICE

| CRJ | 101 | Introduction to Criminal Justice |
| :--- | :--- | :--- |
| CRJ | 115 | Traffic Control and Accident Investigation |
| CRJ | 130 | Community and the Justice System |
| CRJ | 135 | Criminal Justice Communications |
| CRJ | 140 | Juvenile Delinquency |
| CRJ | 200 | Criminal Law |
| CRJ | 210 | Criminal Investigation |
| CRJ | 215 | Law of Criminal Investigation |
| CRJ | 225 | Criminal Evidence |
| CRJ | 231 | Criminal Justice Procedures |
| CRJ | 240 | Constitutional Law |

CRJ 115 Traffic Control and Accident Investigation 3
CRJ 130 Community and the Justice System 3
CRJ 140 Juvenile Delinquency 3

- 3

3
CRJ 225 Criminal Evidence 3
CRJ 231 Criminal Justice Procedures 3
CRJ 240 Constitutional Law

COMMUNICATIONS
CON 102 Introduction to Writing
As a result of a placement test, the student may be required to take Fundamentals of Composition, CON 101, for elective credit (five credits)
SPE 115 Speech Communications
BUS 142 Intermediate Communications

## BEHAVIORAL AND SOCIAL SCIENCE

POS 118 State and Local Government 5
PSY 101 General Psychology I 5
Select one of the following courses:
ECO 100 Introduction to Economics 5
HIS 105 History of the United States to 1877
(Myth and Reality in America's Past)
HIS 209 History of Colorado and the Rocky Mountain West
SOC 101 Introduction to Sociology

## MATHEMATICS AND SCIENCE

BIO 101 Biology Concepts
Select one of the following courses:
CHE 100 Fundamentals of Chemistry 5
PHY 120 Fundamentals of Physics 5
Recommended Electives:
CRJ 158 Forensic Photography 3
CRJ 251 Police Cadet Cooperative 1
CRJ 252 Police Cadet Cooperative 2
CRJ 253 Police Cadet Cooperative 3
CRJ 254 Police Cadet Cooperative 4
CRJ 255 Police Cadet Cooperative 5 Courses having the prefix BIO, MAT, and PHY in the Mathematics and Science Division. 5 Other advisor-approved courses may be used to meet this requirement.
Total Credits for A.A.S. Degree

## CRIMINAL JUSTICE ADVISORY COMMITTEE

M. Donald Darrohn

Kodak of Colorado
Rick Dill
Sheriff's Department
Weld County
Dave Feldman
Fort Collins Police Department

Bruce Luedeman
University of Northern Colorado

Jim McEachron
Greeley Police Department

Stan Peek
District Attorney
Weld County
Marilyn Pultz Fort Collins Police Department

Philip L. Reichel University of Northern Colorado

Tom Yates
Colorado State University


## FIRE PROTECTION TECHNOLOGY FIRE SCIENCE TECHNOLOGY

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 DEGREE PROGRAM

|  |  | CREDITS |
| :--- | :--- | :--- |
| Degree Requirements: | 83 |  |
| CON | 101 | Fundamentals of Composition |
| CON | 105 | Elements of Technical Writing |
| FIS | 100 | Introduction to Fire Science and Suppression |
| FIS | 104 | Fire Company Organization and Procedure |
| FIS | 108 | Fire Hydraulics |
| FIS | 115 | Introduction to Industrial Trades |
| FIS | 190 | Administration of Justice and Court Procedures3 |
| FIS | 202 | Fundamentals of Fire Prevention |
| FIS | 203 | Uniform Building and Fire Codes |
| FIS | 205 | Life Safety Codes |
| FIS | 207 | Applied Chemistry for Firefighters |
| FIS | 208 | Hazardous Materials I |
| FIS | 209 | Hazardous Materials II |
| FIS | 212 | Fire Protection Equipment and Systems |
| FIS | 216 | Private Fire Protection Alarm Systems |
| FIS | 218 | Fire Investigation |
| FIS | 220 | Fire Insurance |
| FIS | 230 | Building Construction for the Fire Service |
| MAT | 101 | Applied Math I |
| PHY | 120 | Fundamentals of Physics |
| PSY | 111 | Basic Human Potential Seminar |
| SOC | 101 | Introduction to Sociology |
| SPE | 115 | Speech Communications |
| Recommended Electives: | 3 |  |
| BUS | 101 | Beginning Typewriting |
| ECO | 104 | Applied Economics |
| FIS | 111 | Fire Safety |
| FIS | 112 | Fire Service Planning |
| FIS | 113 | Building Fire Inspections |
| FIS | 232 | Fire Service Supervision |
| HEN | 106 | Safety and First Aid |
| TEM | 105 | Emergency Medical Technician |
| POS | 101 | American Government |
| POS | 118 | State and Local Governments |
| PSY | 107 | I'm OK, You're OK: Psychology of |
|  |  | Personal Relations |

Support Course

CREDITS

## FIS 105 Fire Service Training Academy

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 DEGREE PROGRAM

| Degree Requirements: |  |  |  |
| :--- | :--- | :--- | :---: |
| CON | 101 | Fundamentals of Composition |  |
| CON | 105 | Elements of Technical Writing |  |
| FIS | 100 | Introduction to Fire Science and Suppression |  |
| FIS | 104 | Fire Company Organization and Procedure |  |
| FIS | 106 | Fire Fighting Tactics and Strategy |  |
| FIS | 108 | Fire Hydraulics |  |
| FIS | 110 | Fire Apparatus and Equipment |  |
| FIS | 115 | Introduction to Industrial Trades |  |
| FIS | 202 | Fundamentals of Fire Prevention |  |
| FIS | 206 | Rescue Practices |  |

FIS 214 Fire Department Administration ..... 3
FIS 218 Fire Investigation ..... 3
FIS 220 Fire Insurance ..... 3FIS 230 Building Construction for theFire Service3
MAT 101 Applied Math I ..... 5
PHY 120 Fundamentals of Physics ..... 5
PSY 111 Basic Human Potential Seminar ..... 3
SOC 101 Introduction to Sociology ..... 5
SPE 115 Speech Communications ..... 5
Recommended Electives: ..... 24
BUS 101 Beginning Typewriting ..... 4
ECO 104 Applied Economics ..... 3
FIS 111 Fire Safety ..... 3
FIS 112 Fire Service Planning ..... 3
FIS 113 Building Fire Inspections ..... 3
FIS 232 Fire Service Supervision ..... 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 I'm OK, You're OK: Psychology of Personal Relations ..... 3
Total Credits for A.A.S. Degree ..... 104
FIRE PROTECTION TECHNOLOGY FIRE SCIENCE TECHNOLOGY ADVISORY COMMITTEE

| Dave Bierwiler <br> Longmont Rural Fire Protection <br> District | Jerry Peden <br> Community Representative |
| :--- | :--- |
| Don Cummins <br> Aims Community College <br> South Campus | Robert Starman <br> Loveland Fire Department |
| James Edwards <br> Super Vacuum <br> Loveland | Duane Stauffer <br> Eastman Kodak Company <br> Colorado Division |
| Brian Johnson |  |
| Western Hills Fire Protection |  |
| District |  |$\quad$| Ron Uthmann |
| :--- |
| Poudre Fire Authority |

## EMERGENCY MEDICAL TECHNICIAN

Program Length: Usually 16 weeks for Certificate in Occupational Education program. Nine credit hours required ( 93 clock hours). In addition, the student must pass practical examinations and obtain 16 hours of supervised emergency experience.

Designed to qualify the successful student for the Emergency Medical Technician (EMT) Certificate issued by the Emergency Medical Services Division of the Colorado Department of Health. The Certificate must be renewed every three years. EMT refresher certificate length usually is eight weeks. Four credit hours required (40 clock hours).

Applications for the basic program are required before acceptance into the program. Applications must be returned to the Emergency Services Academy Office two weeks prior to registration dates for returning students. Student selection is then made, based on priorities established by the advisory board. Students should seek advisement by the EMT faculty advisor prior to receiving an EMT application.

Potential Opportunities: Entry level employment in this field is frequently difficult to obtain. The course is designed to serve those who, in an official capacity, may be first responders to an accident scene. This will commonly include but not necessarily be limited to: ambulance crew members, highway patrolmen, fire rescue teams (both paid and volunteer), police department rescue teams, ski patrol or mountain rescue groups, 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.
CERTIFICATE PROGRAM
CREDITS
Certificate Requirements:9
TEM 105 Emergency Medical Technician ..... 9
Total Credits for Certificate9
CERTIFICATE RENEWAL PROGRAM
CREDITS
Certificate Renewal Requirements:TEM 108 EMT Refresher44
Total Credits for Certificate Renewal4
EMERGENCY MEDICAL TECHNICIAN ADVISORY COMMITTEE

Dave Bressler, EMT-P
Weld County Ambulance Service
Cathy Caster, R.N., EMT-P
North Colorado Medical Center
Weld County Ambulance Service

Greg Miller, EMT
Western Hills Fire Department
Frank R. Purdie, M.D.
North Colorado Medical Center
Larry Richardson, EMT

Fort Lupton Fire Department

## 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 April 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.
all registration forms each quarter.
James Seery, R.N.Eastman Kodak CompanyColorado Division

Butch Taylor, EMT
Tri-Area Ambulance
Jerry Wones, EMT-P
Weld County Ambulance Service
Gary Sandau, First Resp.
LaSalle Fire Department

-     - 

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 ..... 18
HLH 131 Medical Terminology ..... 3
XRT 100 Introduction to Radiologic Technology Patient Care/Lab ..... 1
XRT 101 Radiographic Positioning I ..... 5
XRT 111 Clinical Experience I ..... 5
BIO 211 Human Anatomy: Physiology I ..... 4
Winter Quarter ..... 18
BIO 212 Human Anatomy: Physiology II ..... 4
XRT 102 Radiographic Positioning II ..... 5
XRT 112 Clinical Experience II ..... 5
XRT 121 Radiographic Exposure: Lecture ..... 4
Spring Quarter ..... 18
BIO 213 Human Anatomy: Physiology III ..... 4
XRT 103 Radiographic Positioning III ..... 5
XRT 113 Clinical Experience III ..... 5
XRT 116 Radiographic Processing ..... 2
XRT 122 Radiographic Exposure: Lab ..... 2
Summer Quarter ..... 16
XRT 114 Clinical Experience IV ..... 14
XRT 115 Film Evaluation I ..... 2
Total Credits for First Year ..... 70

SPE 119 Introduction to Semantics 2
SPE 125 Word Power: Advanced Vocabulary

## BEHAVIORAL AND SOCIAL SCIENCES

PSY 107 I'm OK, You're OK - Psychology of Personal
Relations

PSY 111 Basic Human Potential Seminar 3
PSY 206 Psychology of Women 3
PSY 212 Holistic Health 3
PSY 237 Assertiveness Training 3
PSY $241 \begin{gathered}\text { Biofeedback I: Biofeedback and the } \\ \text { Psychology of Health (Principles) }\end{gathered} \quad 3$
MATHEMATICS AND SCIENCE
BIO 101 Biology Concepts 5
MAT 100 Introduction to Beginning Algebra 3
MAT 121 Beginning Algebra 5
MAT 131 College Algebra 5
$\begin{aligned} & \text { PHYSICAL EDUCATION } \\ & \text { Maximum }\end{aligned} 1-2$
Total Credits for A.A.S. Degree 143

## RADIOLOGIC TECHNOLOGY ADVISORY COMMITTEE

Denise Dunham, R.T.
Department of Radiology
North Colorado Medical Center
Robert Hamm, M.D.
McKee Medical Center
Glenn Hewitt, M.D.
Department of Radiology
North Colorado Medical Center
Dennis Isaacson
Chief Technologist
Poudre Valley Hospital

## RESPIRATORY CARE TECHNICIAN

Program Length: Four quarters of full-time study.
Program Admission: Students are admitted in the Fall Quarter ONLY, after completion of the following requirements: Enrollment in RSC 101, Introduction to Respiratory Therapy; completion of the program application packet; and selection by the Admissions and Advisory Board of the Program. Selection includes a high school
diploma or an equivalent (GED), college preassessment tests and a completed medical profile. Also, each student must be interviewed by the faculty.
Program Description: Respiratory Care is a relatively new and developing health profession concerned with the treatment, management, control and care of patients with deficiencies and abnormalities associated with the respiratory system. The student practitioner will understand the needs of the patient, the disease, the limitations of the equipment and the goals of the physician. Upon successful completion of the program, the graduate will receive a certificate of completion from the College. The graduate technician within a few months after graduation is eligible to take the National Board for Respiratory Care Entry-Level examination. Upon completion of this exam, the technician is awarded the Certified Respiratory Therapy Technician credential.

Potential Opportunities: The placement of the graduates since its founding in 1976 has been $95 \%$. Salaries range from $\$ 6.50$ to $\$ 8.00$ per hour within the community. The graduate technicians are usually employed at hospitals not only within the community but also throughout the nation.

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.

## CERTIFICATE PROGRAM

Certificate Requirements: ..... 21Fall Quarter
RSC 111 Respiratory Science I ..... 3
RSC 121 Respiratory Equipment Application I ..... 5
RSC 131 Respiratory Practicum I ..... 3
OHC 100 Orientation to Health Care ..... 4
HLH 101 Applied Science ..... 3
COS 115 Applied Communication ..... 3
Winter Quarter ..... 16
RSC 112 Respiratory Science II ..... 3
RSC 122 Respiratory Equipment Application II ..... 5
RSC 132 Respiratory Practicum II ..... 8
Spring Quarter ..... 18
RSC 133 Respiratory Practicum III ..... 8
RSC 211 Respiratory Science III ..... 3
RSC 221 Respiratory Equipment Application III ..... 5
RSC 228 Respiratory Neonatal and Pediatrics ..... 2
Summer Quarter ..... 16
RSC 134 Respiratory Practicum IV ..... 8
RSC 212 Respiratory Science IV ..... 2
RSC 222 Respiratory Equipment Application IV ..... 3
RSC 241 Clinical Conference I ..... 2
RSC 251 Respiratory Seminars ..... 1
Total Credits for Completion of Program ..... 71
RESPIRATORY CARE TECHNICIAN ADVISORY COMMITTEE

Robert Cash, M.D., A.C.C.P.
Pulmonary and Internal Medicine Greeley Clinic

Harold Chadwick
Consumer Representative
Rebecca Crowley, R.N.
North Colorado Medical Center
Jim Fitts, R.R.T.
Brighton Community Hospital

Elaine Geisler McKee Medical Center<br>Robert Roehrich, R.R.T. North Colorado Medical Center<br>William Teaney, R.R.T.<br>St. Joseph's Hospital<br>Student Representative

## TECHNICAL DIVISION PROGRAMS

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

## 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 curricula for each program has these classes designated. Program advisors will assist in course selection when classes are noted as recommended. The student must take a munimum 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 SALES AND SERVICE TECHNOLOGY
(two-year A.A.S. degree or four-quarter certificate)

PRODUCTION AGRICULTURE
(Program under development. Contact Technical Division for additional information).

## AGRICULTURE TRANSFER

(two-year A.S.degree)
PROGRAM (See page 29)
YOUNG FARMER PROGRAM
(no degree awarded)

## AVIATION TECHNOLOGY

ELECTRONICS TECHNOLOGY
ARCHITECTURAL DRAFTING TECHNOLOGY

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

Architectural Emphasis
Civil Emphasis
Mechanical Emphasis

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

## AGRICULTURE SALES AND SERVICE TECHNOLOGY

Program Length: Usually four quarters for Certificate in Occupational Education program or six quarters for Associate in Applied Science degree program.
Potential Opportunities: Upon completion of the program, the student will have job entry skills in the following:
A. Farm Cooperative Occupations
B. Co-op Services Center Sales and Services
C. Agriculture Chemical Service
D. Management Trainee
E. Farm Equipment Sales and Service

Registration Requirement: All students taking a 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 ..... 19
CHE 100 Fundamentals of Chemistry ..... 5
CSC 100 The Computer and Society ..... 5
Elective--Advisor approved course from Behavioral and Social
Science5
Elective--Advisor approved course from Communications and Humanities. ..... 5
Agriculture Core Courses ..... 43
AGR 111 Introduction to Agriculture ..... 3
ECO 115 Agriculture Economics ..... 5
MAT 101 Applied Mathematics
OR
MAT 110 Applied Business Mathematics ..... 5
MGT 101 Sales ..... 5
BUS 100 Introduction to Business ..... 5
AGR 135 Agriculture on-the-Job Training I ..... 10
AGR 136 Agriculture on-the-Job Training II ..... 10
Agriculture Electives35
Select from the following:
AGR 118 Fertilization and Soils ..... 5
AGR 125 Agriculture Pesticides ..... 5
AGR 178 General Crop Science ..... 5
AGR 179 Introduction to Animal Science ..... 5
AGR 215 Introduction to Soil Science ..... 5
AGR 216 Feeds and Feeding ..... 5
AGR 217 Livestock Selection ..... 3
AGR 218 Farm and Ranch Management ..... 5as they are developed and equipment becomesavailable. Inquire about availability in DivisionOffice.
CREDITS
AGRICULTURE HOME STUDY COURSE ELECTIVESSelect from the following courseswith advisor approval:12

## 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 |
| 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 |
| 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 Carburation | 3 |
| GRAIN TRAINING |  |  |  |
| AGS |  | Physical Grain Handling | 3 |
| SALES TRAINING |  |  |  |
| AGS |  | Farm Store Management | 3 |

Total Credits for A.A.S. Degree
Merle "Dutch" Carwin
Vocational Agriculture Instructo
Greeley West High School

Jack Smith
Vocational Agriculture
Instructor
Platte Valley High School
Frank Hummel
$\begin{array}{ll}\text { Golf Course Architect } & \text { Bob Steele } \\ & \text { Big R Farm \& Home Supplies }\end{array}$
Jerry Lewis
Agland
Eaton

Gerald Miyoshi
Miyoshi Gardens

John Norwood
Vice-President
Production Credit Association
J.V. Teague

Manager
Lowell Paul Dairy
Bob Wall
Stout-Wall Research Inc.
Loveland

## 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 designed 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 they can be organized. Programs will have some flexbility because a minimum of 15 meetings is required, and the fiscal year is from July 1 to June 30 of each year.

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

## CERTIFICATE PROGRAM

## Certificate Requirements:

AGR 111 Introduction to Agriculture 3
ECO 115 Agriculture 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 10
17 credits to be selected from AGR Mechanics and/or AGS Home Study courses as approved by instructor.
Total Credits for Certificate

## AGRICULTURE ADVISORY COMMITTEE

Clarence Carlson<br>Farmer<br>Weld County<br>Alvie Rothe<br>Extension Agent<br>Colorado State University

## AVIATION TECHNOLOGY

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:

Commercial Pilot
License:

Certified Flight Instructor:

Instrument Flight Instructor:

Multi-Engine Rating:
AVT 219 Instrument Flight Instructor

Basic Ground Instructor:AVT 207 Basic Ground Instructor
Advanced Ground Instructor: AVT 208 Advanced Ground Instructor Instrument Ground Instructor:

AVT 209 Instrument Ground Instructor


## DEGREE PROGRAM

Degree Requirements:

## Classroom

| AVT | 105 | Aviation Seminar | 2 |
| :--- | :--- | :--- | :--- |
| AVT | 108 | Private Ground School | 6 |
| AVT | 205 | Instrument Ground School | 6 |
| AVT | 206 | Commercial Ground School | 3 |

Flight (conducted at airport)
AVT 101 Private Flight Lab I 3
AVT 102 Private Flight Lab II 3
AVT 117 Commercial Flight Lab I 3
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 Commercial Flight Simulator 3
AVT 212 Instrument Flight Simulator 6
General Education
18
CSC 101 Introduction to Computing and the BASIC Language
CON 102 Introduction to Writing 5
EAS 106 Introduction to Meteorology 4
PSY 101 General Psychology I 5
Select one of the following courses: 3
$\begin{array}{llll}\text { REA } & 106 & \text { Speed Reading } & 3 \\ \text { SPE } & 115 & \text { Speech Communications } & 5\end{array}$
$\begin{array}{lllr}\text { SPE } & 115 & \text { Speech Communications } & 5 \\ \text { SPE } & 116 & \text { Public Speaking } & 3-5\end{array}$
Select two of the following courses: 10-1
BET 105 Applied Technical Mathematics 7
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 102 Applied Physics II 5
PHY 120 Fundamentals of Physics 5
PHY 151 Introductory College Physics: Mechanics 5
Total Required Courses $\quad 91-95$
Electives (select with advisor approval)
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:

## Classroom

AVT 105 Aviation Seminar 2
AVT 108 Private Ground School 6
AVT 205 Instrument Ground School 6
AVT 206 Commercial Ground School 3
Flight (conducted at airport)
AVT 101 Private Flight Lab I 3
AVT 102 Private Flight Lab II 3
AVT 117 Commerical Flight Lab I 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 Commercial Flight Simulator 3
AVT 212 Instrument Flight Simulator 6
Total Credits For Certificate

## AVIATION TECHNOLOGY ADVISORY COMMITTEE

Robert Anderson
Greeley National Bank

Edward Beegles
P.O.E. Aircraft

George Hopper
FAA Designated Pilot Examiner

Ernest Kampe Kampe Aviation

Roy Shore, M.D.
FAA Medical Examiner
John Warrender
Corporate Pilot

Bud Johnson
United Airlines


## ELECTRONICS TECHNOLOGY

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: Many of the electronics courses have prerequisites that must be met prior to class admittance. See ELT course descriptions for specific requirements.

A good mathematics background through algebra is required. Students requiring additional knowledge for specific course admission may obtain it through preparatory courses within the College.

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.
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:
CREDITS
First Year
20

ELT 141 Introduction to Electronics
(or Evening classes):
ELT 150 DC Fundamentals I
ELT 151 DC Fundamentals II (5)
BET 106 Applied Physics: Mechanical $\quad 5$
SPE 115 Speech Communications
Winter Quarter
ELT 142 AC/DC Circuit Analysis
(or Evening classes):
ELT 152 AC Fundamentals I
(5)

ELT 153 AC Fundamentals II
(5)

BET 107 Applied Physics: Heat-Light-Sound 5
ECO 201 Principles of Economics:
Macroeconomics (recommended) OR
ECO 202 Principles of Economics: Macroeconomics
Spring Quarter
ELT 143 Circuits \& Applications
(or Evening classes):
(5)

ELT 154 Solid State Circuits I
CSC 101 Introduction to Computing \& the 4
ELT 281 Computers I 5
Total Credits for First Year 59

## Second Year

CREDITS
Fall Quarter
5
ELT 282 Computers II 5
ELT 271 Communications I 5
ELT 255 Linear ICs and Sensors 5
CSC 102 Advanced BASIC
OR
4
CSC 111 Introduction to Computer Programming
and the Pascal Language
Winter Quarter
ELT 283 Computers III 5
ELT 272 Communications II 5
ELT 266 Electronic Design and Fabrication 5
BET 205 Technical Communications 4
BET 207 Technical Job Seeking 1
Spring Quarter
ELT 268 Practical Solid State Troubleshooting 5

## Electives:

Select a minimum of 10 credit hours with advisor approval:
Recommended Courses:
ELT 284 Computers IV 5
ELT 273 Communications III 5
ELT 276 Fundamentals of Robotics 5
ELT 275 Integrated Circuit Fabrication and Techniques
Total Credits Second Year
Total Credits for A.A.S. Degree
ELECTRONICS TECHNOLOGY ADVISORY COMMITTEE

Monte Gabriel
NCR Microelectronics
Ken Ketels
Hewlett-Packard
Clarence Laber
Hewlett-Packard
John Martin
Woodward Governor, Inc.

Rick Petersen
Woodward Governor, Inc.
Lowell Shatraw
Eastman Kodak Company
Colorado Division

Tom Henderson
Hewlett-Packard

## DRAFIING

Drafting courses at Aims Community College are offered to meet the various needs of students within the college district.

A series of six courses are offered as part of the two year Engineering Technology degree program. A student who is interested in developing drafting skills may enroll in these courses for skill development. It is emphasized that the student should consider his or her basic skills and subject matter objectives before selecting a specific course.

Upon request, nondegree students will be awarded certificates of completion for the various drafting courses which have been completed.

Courses in the drafting program also are available to the secondary students enrolled in the Area Vocational School. These courses are offered during the regular college hours to all students in the Aims Junior College District. Students interested in these courses should contact their school principals or counselors for details and about 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).


## ARCHITECTURAL DRAFIING TECHNOLOGY

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

Potential Opportunities: The program is designed to qualify the student for entry level employment as an architectural drafter. The student will develop an understanding of applied mathematics and drafting techniques utilized in the architectural 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:
Fall Quarter
CREDITS
AAD 131 Drawing I ..... 153
BET 100 Introduction to Technology ..... 1ARC 105 Introduction to Technical MathBET 101 Drafting I5Winter Quarter
AAD 132 Drawing II ..... 3
BET 102 Drafting II ..... 6
AET 100 Architectural Technology ..... 2
BET 207 Technical Job Seeking ..... 1
Spring Quarter ..... 12
BET 103 Drafting III ..... 6
AET 103 Drafting III: Architectural ..... 6
Fall Quarter
AET 202 Drafting IV: Architectural ..... 5
AET 205 Contract Drawing Interpretation ..... 4
BET 201 Introduction to Computer Aided Drafting ..... 41213
Total Credits for Architectural Drafting Certificate (4 quarters) ..... 52
ARCHITECTURAL DRAFTING TECHNOLOGY ADVISORY COMMITTEE

Loren Bley
Bley Associates
Herbert Davidson
Director of Public Works
City of Evans
Pat Dwyer
ARIX
Denny Graham
Engineer (Retired)
Colorado Department of Highways

Howard Johnson
Architect
Herb Peralez
Drafter
Miner \& Miner Consulting
Engineers, Inc.

## ENGINEERING TECHNOLOGY

Program Length: Usually six quarters for Associate in 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, physics, and materials and techniques relative to human relations, leadership, career planning, and obtaining a position.

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

Many engineering technology courses have prerequisties that must be met prior to class admittance. See BET, CET and MET course descriptions for specific requirements.

General Information: The Engineering Technology student has the choice of three areas of emphasis-architectural, civil or mechanical. Each area utilizes the same core courses allowing the student two or three quarters to decide on a specific area of emphasis.

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.
The following core courses are required for each of the Engineering Technology areas of emphasis.

| BET | 100 | Introduction to Engineering Technology |
| :--- | :--- | :--- |
| BET | 101 | Drafting I |
| BET | 102 | Drafting II |
| BET | 103 | Drafting III |
| BET | 105 | Applied Technical Mathematics |
| BET | 106 | Applied Physics: Mechanical |
| BET | 107 | Applied Physics: Heat-Light-Sound |
| BET | 206 | Statics |
| BET | 215 | Costs and Material Estimating |
| BET 205 | Technical Communications |  |
| BET | 207 | Technical Job Seeking |
| BET 208 | Applied Engineering Problems \& Applications |  |

The following courses may be added as electives in any of the Engineering Technology options.

BET 201 Introduction to Computer Aided Drafting
BET 202 Computer Aided Drafting
BET 203 Advanced Computer Aided Drafting

## DEGREE PROGRAM <br> ARCHITECTURAL EMPHASIS

## First Year

Fall Quarter
BET 100 Introduction to Engineering Technology 1
BET 101 Drafting I 6
BET 105 Applied Technical Mathematics 7
CON 101 Fundamentals of Composition
5
Winter Quarter
AET 100 Architectural Technology 2
BET 102 Drafting II 6
BET 106 Applied Physics: Mechanical 5
SPE 115 Speech Communications 5
Spring Quarter
BET 103 Drafting III 6
AET 103 Drafting III: Architectural 6
BET 107 Applied Physics: Heat-Light-Sound
5
Total Credits for First Year

## Second Year

Fall Quarter
AET 201 Drafting IV: Structural 5
AET 202 Drafting IV: Architectural
AET 205 Contract Drawing Interpretation 4
BET 206 Statics 5
Winter Quarter

AET 203 Drafting V: Architectural 5
BET 215 Cost and Material Estimating 3
BET 207 Technical Job Seeking 1
CET 202 Drafting $V$ 5
CSC 100 The Computer and Society (recommended)

Spring Quarter
18
AET 204 Drafting VI: Architectural 5
BET 205 Technical Communications 4
BET 208 Applied Engineering Problems \& Applications 4
ECO 201 Principles of Economics:
Macroeconomics (recommended)
Total Credits for Second Year 54
Total Credits for A.A.S. Degree Architectural Option 108

## DEGREE PROGRAM CIVIL EMPHASIS

CREDITS

## Degree Requirements:

## First Year

Fall Quarter $\quad 19$
BET 100 Introduction to Engineering Technology 1
BET 101 Drafting I 6
BET 105 Applied Technical Mathematics 7
MET 101 Materials \& Processes I 2
CSC 100 The Computer and Society (recommended) 3

## Winter Quarter

BET 102 Drafting II 6
BET 106 Applied Physics: Mechanical 5
CON 101 Fundamental of Composition 5
MET 102 Materials \& Processes II 2
Spring Quarter 20
BET 103 Drafting III 6
BET 107 Applied Physics: Heat-Light-Sound 5
CET 105 Basic Field Survey 6
MET 208 Industrial Relations 3
Total Credits for First Year 57
Second Year
Fall Quarter
AET 201 Drafting IV: Structural 5
BET 206 Statics 5
$\begin{aligned} \text { ECO } 201 & \begin{array}{l}\text { Principles of Economics: } \\ \text { Macroeconomics (recommended) }\end{array}\end{aligned}$
MET 207 Basic Quality Control 3
Winter Quarter $\quad 17$
BET 215 Costs and Material Estimating 3
BET 207 Technical Job Seeking 1
CET 202 Drafting V: Civil I 5
MET 201 Strength of Materials I 3
SPE 115 Speech Communications 5
Spring Quarter
BET 205 Technical Communications 4
BET 208 Applied Engineering Problems \& Applications
CET 203 Drafting V: Civil II
MET 204 Strength of Materials II 3
Total Credits for Second Year 51
Total Credits for A.A.S. Degree Civil Option 108

## DEGREE PROGRAM <br> MECHANICAL EMPHASIS

CREDITS
Degree Requirements:
First Year
16
Fall Quarter
BET 100 Introduction to Engineering Technology
BET 101 Drafting I 6
BET 105 Applied Technical Mathematics 7
MET 101 Materials \& Processes I 2

Winter Quarter
BET 102 Drafting II
BET 106 Applied Physics: Mechanical 5
CON 101 Fundamentals of Composition 5
MET 102 Materials \& Processes II 2

Spring Quarter
BET 103 Drafting III 6
BET 107 Applied Physics: Heat-Light-Sound 5
CSC 100 The Computer and Society (recommended) 3
ECO 201 Principles of Economics: Macroeconomics (recommended)
Total Credits for First Year

## Second Year

Fall Quarter
AET 201 Drafting IV: Structural 5
BET 206 Statics 5
MET 206 Fluid Mechanics 5
MET 207 Basic Quality Control 3
Winter Quarter
MET 202 Drafting V: Mechanical I 5
BET 207 Technical Job Seeking 1
BET 215 Cost and Material Estimating 3
MET 201 Strength of Materials I 3
SPE 115 Speech Communications 5
Spring Quarter
MET 203 Drafting VI: Mechanical II 5
BET 205 Technical Communications 4
BET 208 Applied Engineering Problems \& Applications
MET 204 Strength of Materials II 3
MET 208 Industrial Relations 3
Total Credits for Second Year
Total Credits for A.A.S. Degree Mechanical Option 107

## ENGINEERING TECHNOLOGY

 ADVISORY COMMITTEE| Loren Bley <br> Bley Associates | Mike Preston <br> Preston Steel Building <br> Company |
| :--- | :--- |
| Herbert Davidson <br> Director of Public Works <br> City of Evans | Bruce F. Meyer <br> Meyer-Adams Architects |
| Pat Dwyer | Bob Thomas |
| ARIX | Registered Land Surveyor |
| ARIX |  |
| Denny Graham |  |
| Engineer (Retired) |  |
| Colorado Department of |  |
| Highways | Art Uhrich |
| Howard Johnson | Subdivision Supervisor |
| Architect | Sharon Wake |
| Herb Peralez | Drafter |
| Drafter | McRae and Short, Inc. |
| Miner \& Miner Consulting |  |
| Engineers, Inc. |  |

## 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

## AUTOMOTIVE MECHANICS TECHNOLOGY

(A.A.S degree or Occupational Certificate)

## BUILDING CONSTRUCTION

(A.A.S degree or Occupational Certificate)

## CHILD CARE SERVICES

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

GRAPHIC TECHNOLOGY
(A.A.S. degree or

Occupational Certificate)

## WELDING TECHNOLOGY

(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 üsed 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.

## CERTIFICATE PROGRAM

Certificate Requirements: CREDITS12
ABF 151 Auto Refinish I ..... 12
Winter Quarter ..... 12
ABF 152 Auto Refinish II ..... 12
Spring Quarter ..... 12
ABF 153 Auto Refinish III ..... 12
Total Credits for Certificate ..... 36


## 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 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 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.

## CERTIFICATE PROGRAM

## Certificate Requirements:

ABR 141 Auto Body Repair I ..... 12
ABR 241 Auto Body Repair IV ..... 12
Winter Quarter ..... 24
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 ..... 12 ..... 1224
Total Credits for Certificate72
DEGREE PROGRAM
Degree Requirements:
Completion of all certificate requirements plusrecommended general education courses.
Certificate Requirements:
CREDITS72
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 IPHY 101 Applied Physics ITotal Credits for A.A.S. Degree
Support Courses
ABR 102 Basic Straightening ..... 4
ABR 103 Basic Refinishing ..... 4ABR 111 Damage Repair
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 ..... 1-3
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 | Earl Nicks |
| :--- | :--- |
| Rogers Distributing | Edwards Chevrolet |
| Mike Foster | Bill Peil |
| Stevens Automotive |  <br> Frame Services |
| Dave Markley | Rondo Sherman <br> Bob Markley Motors |
|  | Edwards Chevrolet |

## 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 can become a specialist in one or more of the following areas: automotive diagonistician, 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 why and how it operates so that $\mathrm{s} / \mathrm{he}$ 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.
For those already employed as an automotive apprentice on a full time basis, Aims offers the Auto Mechanic 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 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.

## CERTIFICATE PROGRAM

## Certificate Requirements:

## CREDITS

## Fall Quarter

24
AMT 131 Brakes, Transmissions and Final Drives A 12
AMT 231 Atuomotive Engines A 12
Winter Quarter
AMT 133 Fuel Systems and Tune-up A 12
AMT 232 Electrical A 12
Spring Quarter
AMT 132 Steering and Suspension Systems A 12
AMT 234 Automotive Transmission and Air Conditioning A 12
Total Credits for Certificate

## DEGREE PROGRAM

## Degree Requirements:

Completion of all certificate requirements plus recommended general education courses.
Certificate Requirements:
CREDITS ..... 72
Recommended General Education Courses ..... 19
COS 115 Applied Communications
ECO 105 Organizations and Institutions ..... 3 ..... 3
HEN 106 Safety and First Aid ..... 3
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 124 Automotive Service Management ..... 3
AMT 125 Auto Certification Refresher ..... 2
AMT 136 Emission Control ..... 5
AMT 199 Special Needs/Auto Mechanics ..... 1-3
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
On-the-Job Training Courses
AMT 141 Brakes, Transmissions, and Final Drives B ..... 12AMT 142 Steering and Suspension Systems B12
(Equivalent to AMT 132)AMT 143 Fuel Systems and Tune-up B12(Equivalent to AMT 133)AMT 241 Automotive Engines B12
(Equivalent to AMT 231)
AMT 242 Advanced Electrical B12
AMT 244 Automotive Transmissions and Air Conditioning B ..... 12
(Equivalent to AMT 234)
AUTOMOTIVE MECHANICS TECHNOLOGY ADVISORY COMMITTEE

| Monty Loftus <br> Stanley Lincoln Mercury | George Richards <br> Edwards Chevrolet |
| :--- | :--- |
| Walt Loftus | Thomas Troudt |
| Coors Distributing | Markley Imports |
| Jerry Park |  |
| Silver Star Service |  |

## 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 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, and 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, $1 / 33$ and $3 / 32$ nail sets, and a pencil.

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 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.

## CERTIFICATE PROGRAM

## Certificate Requirements:

## Fall Quarter

## 28

BCS 105 Building Construction I
BCS 205 Building Construction II 14

Winter Quarter
BCS 106 Building Construction III
BCS 206 Building Construction IV
Spring Quarter 28
BCS 107 Building Construction V
BCS 207 Building Construction VI 14

Total Credits for Certificate

## 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 ..... 5
PHY 101 Applied Physics I ..... 5 .
Total Credits for A.A.S. Degree ..... 103
Support Courses
BCS 102 Basic Cabinetry ..... 4
BCS 104 Cabinetry II ..... 4
BCS 199 Building Construction Special Needs Class ..... 1-3
BUILDING CONSTRUCTION ADVISORY COMMITTEE

Tom Cowan
Best Way Paving
Dennis Gibson Gibson Construction

Wayne Grunewald Greeley Board of Realtors

Clint Jurgensen Jurgensen Realty

Gary Martin
R \& R Custom Woodworking

Pat Ormsby
Ormack Construction


## CHILD CARE SERVICES

## CERTIFICATE PROGRAM <br> 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 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 child care services.

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 lab 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.

CREDITS
Certificate Requirements:
Fall Quarter
16
CCS 100 Introduction to Early Childhood Education 2
CCS 131 Practice Teaching I: Observations 4
CCS 161 Child Growth and Development 3
CON 101 Fundamentals of Composition 5
Elective
Winter Quarter
CCS 132 Practice Teaching II: Lab 6
CCS 141 Activities for Early Childhood Education I 3
CCS 151 Nutrition for Young Children 3
HEN 106 Safety and First Aid 3
Spring Quarter
16
CCS 133 Child Care Field Experience: Lab 5
CCS 142 Activities for Early Childhood Education II 3
COS 115 Applied Communication 3
PSY 248 Child Psychology 5
Total Credits for Certificate

## DEGREE PROGRAM

## CHILD CARE SERVICES

Program Length: 1130 clock hours ( 98 credits), usually six quarters for an Associate in 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 child care services.

The program is designed to prepare students for group leader or director postitions 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 experiences is required in addition to courses listed.
Prerequisites: A physical examination will be required of each student who initially enrolls in lab 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.Degree Requirements:First Year
Fall Quarter ..... 16CCS 100 Introduction to Early Childhood Education 2
CCS 131 Practice Teaching I: Observations ..... 4CCS 161 Child Growth and Development
CON 101 Fundamentals of Composition3
Elective ..... 2
Winter Quarter
CCS 132 Practice Teaching II: Lab ..... 6
CCS 141 Activities for Early Childhood Education I ..... 3
CCS 151 Nutrition for Young Children ..... 3
HEN 106 Safety and First Aid ..... 3
Spring Quarter ..... 16
CCS 133 Child Care Field Experience: Lab ..... 5
CCS 142 Activities for Early Childhood Education II ..... 3
COS 115 Applied Communication ..... 3
PSY 248 Child Psychology ..... 5
Total Credits for First Year ..... 47
Second Year
Fall QuarterCCS 231 Advanced Practice Teaching: Lab17
CCS 241 Unit Planning for Early Childhood Education7
MAT 110 Applied Business Mathematics ..... 5
Elective ..... 2Winter Quarter17
CCS 206 Children's Literature ..... 3
CCS 232 Human Relations in the Preschool Classroom: Lab ..... 7
MGT 208 Small Business Management ..... 5
Elective ..... 2
Spring Quarter17
CCS 202 Administration of Child Care Centers3
CCS 232 Family and Community Relations: Lab ..... 7
CCS 245 Value of Play
CCS 245 Value of Play ..... 2
SOC 10 Introduction to Sociology ..... 5
Total Credits for Second YearTotal Credits for A.A.S Degree98
Program Electives
CCS 145 Workshop in Early Childhood Education Materials ..... 2
CCS 146 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 Children2
(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 105 Personal Health
PSY 107 I'm OK, You're OK: Psychology of Personal Relations

## COLORADO DEPARTMENT OF SOCIAL SERVICES REQUIREMENTS:

(Educational courses required by the Colorado Department of Social Services for certification as a director of a child care center.)

| CCS | 100 | Introduction to Early Childhood Education | 2 |
| :---: | :---: | :---: | :---: |
| CCS | 141 | Activities for Early Childhood Education I | 3 |
| CCS | 142 | Activities for Early Childhood Education II | 3 |
| CCS | 145 | Workshop in Early Childhood Education Materials | 2 |
| CCS | 146 | 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 |
| CCS | 151 | Nutrition for Young Children | 3 |
| CCS | 161 | Child Growth and Development | 3 |
| CCS | 202 | Administration of Child Care Centers | 3 |
| CCS | 206 | Children's Literature | 3 |
| CCS | 241 | Unit Planning For Early Childhood Education | 2 |
| CCS | 245 | Value of Play | 2 |
| PSY | 101 | General Psychology I | 5 |
| SOC | 101 | Introduction to Sociology | 5 |
| HEN | 106 | Safety and First Aid | 3 |
| MGT | 208 | Small Business Management | 5 |

## CHILD CARE SERVICES ADVISORY COMMITTEE

| Sandra Bright | Barbara McFerron |
| :--- | :--- |
| ABC Child Development Center | Rainbow Path Preschool |
| Lyn Danielson | Jeannine Truswell |
| Highland Day Care Center | Partners, Inc. |
| Jerrilyn Eaton | Marylouise Widmaier |
| Head Start | Trinity Episcopal |
|  | 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 maintain long-term and advancement in the printing industry.

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.

## CERTIFICATE PROGRAM

## Certificate Requirements: CREDITS

## Fall Quarter

BUS 101 Beginning Typewriting
4
GRT 101 Graphic Technology I
20
Winter Quarter
25
BUS 155 Intermediate Communications
5
GRT 102 Graphic Technology II 20
Spring Quarter
GRT 103 Graphic Technology III
MAT 110 Applied Business Mathematics 5
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 from 95 to 99 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

## 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 |
| :--- | :--- | :--- |
| AAD | 131 | Drawing I |
| AAD | 132 | Drawing II |

AAD 221 Graphic Design I 3
BUS 142 Intermediate Communications 5
MAT 101 Applied Mathematics I 5
PSY 145 Human Relations at Work 5
General Education/Support Courses Required
Total Artistic Option

## TYPESETTING OPTION

| AAD | 101 | Fundamentals of Art and Design I | 5 |
| :--- | :--- | :--- | ---: |
| BUS | 105 | Speed \& Accuracy Development in Typewriting | 3 |
| BUS | 142 | Intermediate Communications |  |
| COS | 115 | Applied Communications |  |
| CSC | 101 | Introduction to Computing and |  |
| the BASIC Language |  |  |  |
| MAT | 101 | Applied Mathematics I | 3 |
| PSY | 145 | Human Relations at Work | 4 |

General Education/Support Courses Required
Total Typesetting Option

## 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 |
| PSY | 120 | Fundamentals of Physics | 5 |
| PHY | 145 | Human Relations at Work | 5 |

General Education/Support Courses Required ..... 28
Total Photographic Option ..... 95
MECHANICAL OPTION
BUS 100 Introduction to Business ..... 5
BUS 142 Intermediate Communications ..... 5
MAT 100 Beginning Alegebra ..... 3
PHY 101 Applied Physics ..... 5
PHY 120 Fundamentals of Physics ..... 5
PSY 145 Human Relations at Work ..... 5
General Education/Support Courses Required

Total Mechanical Option

## Support Courses

GRT 104 Graphic Technology IV 10
GRT 107 Silk Screen Printing 2
GRT 199 Graphic Technology/Special Needs $\quad 1-3$
GRT 295 Graphic Technology/Independent Study $\quad 2-5$
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| Richard K. Brown | Norman Nash |
| :--- | :--- |
| Tisdale Creations | Shef Enterprises |
|  |  |
| Elizabeth Guigli | Jim Poppe |
| State Farm Insurance | Greeley Printing |

[^1]

## 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 also 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.

Welding Technology I, II, and III (WLT 151, 152, 153) are offered every quarter. These courses are equivalent to former offerings: WLT 151 is equivalent to WLT 141 and 142; WLT 152 is equivalent to WLT 143 and 241; WLT 153 is equivalent to WLT 242 and 243.
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.

## CERTIFICATE PROGRAM

Certificate Requirements:CREDITS
Fall Quarter ..... 24
WLT 151 Welding Technology I ..... 24
Winter Quarter ..... 24
WLT 152 Welding Technology II ..... 24
Spring Quarter ..... 24
WLT 153 Welding Technology III ..... 24
Total Credits for Certificate72
DEGREE PROGRAM
Degree Requirements:
Completion of all certificate requirements plusrecommended general education courses.
Certificate Requirements: ..... 72
Recommended General Education Courses: ..... 19
COS 115 Applied Communications ..... 3
HEN 106 Safety and First Aid ..... 5
PHY 101 Applied Physics I ..... 5
Total Credits for A.A.S. Degree ..... 91
Support Courses
WLT 105 Basic Oxy/Acet Welding ..... 4
WLT 106 Advanced Oxy/Acet Welding ..... 4
WLT 107 Basic Shield Metal Arc Welding ..... 4
WLT 108 Advanced Shielded Metal Arc Welding ..... 4
WLT 109 Basic Gas Metal Arc Welding ..... 4
WLT 115 Advanced Gas Metal Arc Welding ..... 4
WLT 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 251 Welding Fabrication ..... 24
WELDING TECHNOLOGY ADVISORY COMMITTEE

Kurt Burrel
Eastman Kodak Company Colorado Division

Dr. Joe Goddard
Self-employed
Murray Hill
Lundvall Manufacturing

Gene Johnson
Self-employed
Dale Majors
Majors Welding Supply
Larry Sarchet
Certified Welding
n


## 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 emphasizing the study of 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 and ACC 196, 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
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, BUS 121 or permission of instructor Three credits: 30 clock hours

## ACC 106 CAREERS IN ACCOUNTING

An exploratory class for accounting students to determine specific job opportunities, entry level skills needed, and possibilities for advancement in accounting positions.
Prerequisite: ACC 101 or permission of instructor
One credit: 10 clock hours

## ACC 115 FARM RECORDS AND TAX

Presents guidelines for keeping farm records and using them for filing tax forms. Provides information on determining the need for increasing capital assets and methods of financing them. Depreciation and investment credit will be discussed.
Five credits: 50 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 are: who must file, inclusions/exclusions of gross income, tax liabilities, gains and losses, itemized deductions, depreciation, rental income, and sale of personal residence.
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 pension funds, annuities, IRS, Keogh plans; partnerships and corporations; net operating losses; investment credit carryovers, carrybacks and recapture; installment sales on personal residence; and minimum, maximum, and alternative taxes. 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 195 BOOKKEEPING PRACTICUM

The completion of a practice set through the bookkeeping cycle. Prerequisite: BUS 121
One Credit: 15 clock hours

## ACC 196 ACCOUNTING PRACTICUM I

The completion of a merchandising practice set for a proprietorship. Prerequisite: ACC 101 with a grade of C or better
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 flow 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 with the microcomputer.
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 shortand long-term capital, and an in-depth analysis of financial statements.
Prerequisit: ACC 103 or permission of instructor
Five credits: 50 clock hours

## ACC 295 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

A practice set to be completed with the use of a microcomputer Prerequisite: ACC 101, ACC 195 or ACC 196 with a grade of C or better.
One credit: 15 clock hours

## AGR: AGRICULTURE SALES AND SERVICE 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 118 FERTILIZATION AND SOIL
General overview of soil and nutrients and their makeup. Soil testing and analyzing included.
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 136 AGRICULTURE-ON-THE-JOB TRAINING IIOn-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 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 SOIL SCIENCE

Formation, properties and management of soils. Emphasis on soil conditions that affect plant growth.
Prerequisite: CHE 101, 102
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 terminology used in describing 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

## AGS: AGRICULTURE HOME STUDY COURSES

## MANAGEMENT DEVELOPMENT

## AGS 100 INTRODUCTION TO 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

## 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 Farmacy File, selling $\mathrm{CO}-\mathrm{OP}$ 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

## 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, creep 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 co-op 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 CARBURATION

Provides an overview of the nature, origin, and use of LP gas. Teaches the carburation system beginning with engine operation; covers fuel and combustion. Carburation 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 115 NORTH AMERICAN INDIANS I<br>Examines various tribes and their cultural development within the confines of their environment.<br>Three credits<br>\section*{ANT 116 NORTH AMERICAN INDIANS II}<br>Same as North American Indians I, but explores different groups. Prerequisite: none<br>Three credits

## ARC: ARCHITECTURAL DRAFIING TECHNOLOGY

## ARC 105 INTRODUCTION TO TECHNICAL MATH

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 introduction to basic algebra and its practical applications.
Prerequisite: qualifying preassessment score
Five credits: 60 clock hours

## ART

## ART

## ART 100 ART APPRECIATION

Introduction to art, architecture, and the 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 ART 112 ART HISTORY II

These courses provide students with a basic historical understanding of western art forms, architecture, and relevant crafts. Art History I covers prehistoric through Medieval periods and Art History II covers the Renaissance through contemporary movements.

## Five credits 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 241 PAINTING I
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: 60 studio hours each

ARS 243 WATER MEDIA I
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: 60 studio 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: 60 studio 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: 60 studio 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; experience in designing for ceramic objects, and instruction in the several techniques of handbuilding. 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: 60 studio 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: 60 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: 60 clock hours each

## DESIGN

## AAD 101 FUNDAMENTALS OF ART AND DESIGN I AAD 102 FUNDAMENTALS OF ART AND DESIGN II

These 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 125 GRAPHIC DESIGN WORKSHOP

This course includes a changing variety of subjects of practical or limited scope (e.g. executing the "comprehensive", air brush techniques, slide shop production, design of graphs and charts, and publication design). May be repeated for different subjects.
One credit: 20 studio hours
AAD 131 DRAWING I
AAD 132 DRAWING II
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: 60 studio hours each

## AAD 145 PHOTOGRAPHY WORKSHOP

This course includes a changing variety of subjects of practical or limited scope (e.g. "graphic" photography, slide show production, and other subjects with a range of media). May be repeated for different subjects.
One credit: 20 studio hours

## AAD 155 INTERIOR DESIGN WORKSHOP

This course includes a changing variety of subjects of practical or limited scope (e.g. design for remodeling, review of new materials, simple design ideas, and design for landscape). May be repeated for different subjects.
One credit: 20 studio hours

## 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: 60 clock hours

## AAD 221 GRAPHIC DESIGN I <br> 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: 60 studio 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: 60 studio hours

## AAD 225 LETTERING

This course introduces lettering (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: 60 studio hours
$\begin{array}{lll}\text { AAD } & 231 & \text { FIGURE DRAWING I } \\ \text { AAD } & 232 & \text { FIGURE DRAWING II }\end{array}$
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: 60 studio 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: 60 studio hours

AAD 241 PHOTOGRAPHY I
AAD 242 PHOTOGRAPHY II
AAD 243 PHOTOGRAPHY III
AAD 244 PHOTOGRAPHY IV
Photography I and II includes 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: 60 studio hours each

## AAD 245 PHOTOJOURNALISM

A study of photography used for telling a picture story. Includes composition and use of the camera for publications.
Prerequisite: AAD 241
Three credits: 60 studio hours

## AAD 250 INTRODUCTION TO ARCHITECTURE AND INTERIOR DESIGN

Includes a historical survey of architectural and interior styles. Introduces architectural vocabulary forms and materials and methods of construction. Provides a fuller understanding of the architectural design and planning fields.
Three credits

AAD 251 INTERIOR DESIGN
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: 60 studio 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.
Three 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
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

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 to three credits: 10 to 30 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.
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: AUTOMOTIVE MECHANICS TECHNOLOGY

## AMT 101 AUTO MECHANICS FOR BEGINNERS

Students develop a basic knowledge of the major systems of the automobile. They will learn parts identification and basic theory of how automotive systems work. Minor repair and diagnosing common problems will be taught. Good shop safety practices and accident prevention are included with each job in this course.
Four credits: 60 clock hours

## AMT 104 BRAKE REPAIR

Designed to prepare students for the specialty work of modern automobile brake repair and adjustment. Conventional as well as disc 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 tuneup 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 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 Automobile 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, balance wheels, overhaul and adjust both conventional and power steering units. Includes how to perform complete chassis lubrication and make car body service adjustments (such as doors, hoods, and trunk lids) normally performed by automotive mechancs. 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, hydrocarbons, and nitrogen oxides will be tested in the shop on the latest test equipment available.
Prerequisite: AMT 106 and AMT 107, AMT 133, AMT 143, or permission of instructor
Five credits: five clock hours per week

## AMT 141 BRAKES, TRANSMISSIONS AND FINAL DRIVES B

Students develop necessary skills and knowledge to accurately diagnose and repair various brake systems (conventional power, self-adjusting, and disc type) during the first half of the course. In the second half students will overhaul standard transmissions, clutches, drive shafts, and differentials. Work experience credit will be given for approved full-time current work as an auto mechanic. (AMT 141 is equivalent to AMT 131.)
Twelve credits: six clock hours

## AMT 142 STEERING AND SUSPENSION SYSTEMS B

Students develop necessary skills and knowledge to repair all parts of the suspension system, align front ends, balance wheels, overhaul and adjust both conventional and power steering units, perform complete chassis lubrication and make car body service adjustments, such as doors, hood, and trunk lids, normally performed by automotive mechanics. Work experience credit will be given for approved full-time current work as an auto mechanic. (AMT 142 is equivalent to AMT 132.)
Twelve credits: six clock hours

## AMT 143 FUEL SYSTEMS AND TUNE UP B

Students develop necessary skills and knowledge to perform complete major engine tune-ups and carburetor overhauls. Theory and overhaul of single, two-and four-barrel carburetors, fuel pumps, exhaust emission systems, and ignition systems are covered Stresses using modern scientific test equipment in diagnosis of performance problems. Equipment such as a vacuum gauge, tachometer, dwell meter, ohmmeter, distributor stroboscope, oscilloscope, exhaust analyzer, and all types of engine testers are used. Work experience credit will be given for approved full-time current work as an auto mechanic. (AMT 143 is equivalent to AMT 133.)

Twelve credits: six 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 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 AUTOMOTIVE 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 are 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 241 AUTOMOTIVE ENGINES B

Students learn construction, operation, parts identification, and service procedures on all types of modern automotive engines. Students begin on mock-up units and progress to actual automobiles, beginning with minor jobs like valve adjustment or gasket replacement and progressing to a complete engine overhaul. Work experience credit will be'given for approved full-time current work as an auto mechanic. (AMT 241 is equivalent to AMT 231.)
Twelve credits: six clock hours

AMT 242 ADVANCED ELECTRICAL B
Students learn theory, diagnosis, and repair of all automotive electrical units including batteries, starters, generators, alternators, regulators, and electrical testing equipment used to diagnose problems in automotive electrical units and circuits. Work experience credit will be given for approved full-time current work as an auto mechanic. (AMT 242 is equivalent to AMT 232.)
Twelve credits: six clock hours

## AMT 244 AUTOMATIC TRANSMISSIONS AND AIR CONDITIONING PRACTICE B

Students learn principles of hydraulics, planetary gear sets, and power flow through modern automatic transmissions; gain experience in disassembly, inspection, replacement of defective parts; complete diagnosis of functions. Covers basic theory of refrigeration systems, components, evacuation, charging, and testing automotive air conditioners. Good safety practices and accident prevention are included with each job in this course. Work experience credit will be given for approved full-time current work as an auto mechanic. (AMT 244 is equivalent to AMT 234.)
Twelve credits: six 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 101 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: 50 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: 50 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 Three credits: 30 clock hours

## AVT 207 BASIC GROUND INSTRUCTOR

Fundamentals of instruction and theory. Students practice classroom presentations which study 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 metcorology, 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, instrument instructing techniques will be covered.
Prerequisite: permission of instructor
Two credits: 20 clock hours

## AVT 211 COMMERCIAL FLIGHT SIMULATOR

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

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 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: 50 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: 50 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 102 ANIMAL BIOLOGY
Phylogenetic approach to the animal kingdom emphasizing invertebrate phyla. Role of these organisms in ecological, economic, and medical relationships to humans is emphasized.
Prerequisite: BIO 101 or permission of instructor
Five credits: three hours lecture, four hours lab per week

## BIO 103 PLANT BIOLOGY

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 permission of instructor
Five credits: three hours lecture, four hours lab per week

## BIO 105 THE HUMAN ENVIRONMENT

Comprehensive examination of effects of humans on the environment. Emphasizes developing ecological awareness by learning about population, land use, effects of increased productivity, and energy flow through the food chain.
Three credits: three hours lecture per week
BIO 106 FIELD BOTANY
Studies methods of collecting, preserving, and identifying plants.
Three credits: two hours lecture, two hours lab per week

## BIO 107 BIOLOGY OF THE HUMAN RACES

Biological aspects of race formation will be considered, including genetic foundations, range of human variability and race mixtures, and usefulness of biological factors in understanding racial problems.
Three credits: three hours lecture 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 theses 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, protisa, 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 credits: four hours lecture 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
Four credits: Three hours lecture per week

## BIO 207 VERTEBRATE BIOLOGY

Emphasizes the comparative morphology, ecology, and economic importance of the vertebrate classes. Morphology of lampreys through mammals is considered for laboratory study.
Prerequisite: BIO 101 or permission of instructor
Five credits: three hours lecture, four hours lab per week

## BIO 208 INTRODUCTION TO ENTOMOLOGY

Introduction to the study of insects. Insect morphology, classification, life cycles, economic importance, and controls are discussed. Laboratory emphasis is on the use of taxonomic keys in the identification of insects. An insect collection, field trips, and a term paper are required.
Prerequisite: BIO 101 and BIO 102
Five credits: three hours lecture, four hours lab per week

## BIO 211 HUMAN ANATOMY: PHYSIOLOGY I

Beginning classes in human physiology emphasizing broad, general biological principles, anatomical structures of the human body, and the relationship of structure to body functions. Includes chemical composition, cellular and tissue organization, the integumentary and skeletal system, and blood.
Prerequisite: BIO 101 or permission of instructor
Four credits: three hours lecture, three hours lab per week

## BIO 212 HUMAN ANATOMY: PHYSIOLOGY II

Second in sequence of classes in human physiology emphasizing broad, general biological principles, anatomical structures of the human body, and the relationship of structure to body functions. Includes the muscular, nervous, respiratory and cardiovascular systems.
Prerequisite: BIO 211 or permission of instructor
Four credits: three hours lecture, three hours lab per week

## BIO 213 HUMAN ANATOMY: PHYSIOLOGY III

Third in a sequence of classes in human physiology emphasizing broad, general biological principles, anatomical structures of the human body, and the relationship of structure to body functions. Includes the lymphatic, endocrine, digestive, urinary and reproductive systems.
Prerequisite: BIO 212 or permission of instructor
Corequisite: Registration and completion of TEM 127-Cardiopulmonary Resuscitation (CPR)
Four credits: three 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 and BIO 102
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 205 BUILDING CONSTRUCTION II

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 VI

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

## BUS: GENERAL BUSINESS

## 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; hand, tape, and texture the dry wall; assist in setting cabinets, 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 to assist in setting forms, assist in placing and finishing concrete, and lay masonry units to the line.
Fourteen credits: 175 clock hours

## BCS 199 BUILDING CONSTRUCTION SPECIAL NEEDS CLASS

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 housing 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

## BUS 100 INTRODUCTION TO BUSINESS

A survey of principles, problems, institutions, practices, private and governmental systems affecting the world of business.
Five credits: 50 clock hours

## BUS 101 BEGINNING TYPEWRITING

An introduction to typewriting. Emphasizes learning the keyboard and parts of the typewriter, proper technique, speed and control, and basic typewritten applications such as copy placement, business letters, tabulations, and simple reports. For students with no typing background.
Four credits: 50 clock hours

## BUS 102 INTERMEDIATE TYPEWRITING

Eurther development of typing techniques. Emphasis on production of mailable copy of business letters, tabulation, 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 103 ADVANCED TYPEWRITING AND TRANSCRIBING MACHINES

Further development of typing techniques in office-type situations. Emphasis will be placed on production of mailable copy from officestyle typing and the transcribing machine. Office simulations will be done the last five weeks of the quarter.
Prerequisite: BUS 102, BUS 142, and speed of 50 wpm
Four credits: 50 clock hours

## BUS 105 SPEED AND ACCURACY DEVELOPMENT IN TYPEWRITING

A skill-building class designed to help the student build speed and accuracy through the use of proper technique, proper position, and concentrated effort.
Prerequisite: BUS 101, one year high school typing, or 25 wpm typing speed.
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 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.
Four credits: 40 clock hours

## BUS 111 WORD PROCESSING: APPLICATIONS

To instruct the student through a combination of lecture and individualized study in the basic operations of entry-level word processing equipment. At the completion of the course, the student will be able to produce letters, memos, tables, and reports.
Prerequisite: BUS 102
Four credits: 50 clock hours

## BUS 112 WORD PROCESSING: APPLICATIONS II

The course is intended to provide the student with additional intensive production experience on word processing equipment.
Prerequisite: BUS 111
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 192, BUS 117, and 60 wpm
Four credits: 50 clock hours

## BUS 116 WORD PROCESSING: LEGAL APPLICATIONS

To instruct the student through an independent study in the basic operations of the memory typewriter. Projects are designed for the student pursuing a legal secretarial career and provide practice in typing legal correspondence and legal documents.
Prerequisite: BUS 102 or equivalent
Three credits: 45 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

Provides students with in-depth practice in transcribing legal documents.
Prerequisite: BUS 142, BUS 116, and BUS 117
Four credits: 50 clock hours

## BUS 120 MONEY MANAGEMENT

To enable the individual to understand and develop a skill in choice-making. To enable him to make sound decisions in wise management of income, using credit, buying goods and services, purchasing housing, and protection against loss through insurance. To familiarize the student with banking services and enable him to use those services to better advantage. To enable individuals to understand laws and agencies that are set up for them and where to go when they need help.
Two credits: 20 clock hours

BUS 121 COLLEGE BOOKKEEPING I
Fundamentals of bookkeeping. Includes basic concepts of double entry bookkeeping, journals, ledgers, payroll, accounting for personal enterprises on a cash basis, and mercantile enterprises on an accrual basis. Emphasizes single proprietorship form of business ownership.
Five credits: 50 clock hours

## BUS 122 COLLEGE BOOKKEEPING II

Continuation of BUS 121 with further development of special journals; emphasizes partnership form of ownership. Studies inventory valuation, prepaid expenses, long-lived assets; owner's equity for single proprietorships, partnerships, and corporations, annual reports, and interim financial statements.
Prerequisite: BUS 121 or permission of instructor; ACC 195
Five credits: 50 clock hours

## BUS 125 ADDING AND CALCULATING MACHINES

Emphasizes speed and accuracy and the efficient use of the machine in problem solving in business.
Prerequisite: MAT 110
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 secretarial majors.
One credit: 10 clock hours

## BUS 127 CAREER PERSONAL DEVELOPMENT

Assists students in realizing their potential in both career and personal life by developing poise, confidence and an attractive appearance.
Two credits: 20 clock hours

## BUS 128 KEYBOARDING FOR COMPUTERS

The 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 Beginning Typewriting. Intended for nonsecretarial majors.
Two credits: 25 clock hours

## BUS 131 GREGG SHORTHAND I

Introduces the first three-fourths of the theory of Gregg Shorthand, Diamond Jubilee Series. Develops reading speeds from book plates and handwritten notes. Develops shorthand writing of familiar and unfamiliar material to speeds of 50-60 words per minute. Five credits: 50 clock hours

## BUS 132 GREGG SHORTHAND II

Review of the first three-fourths of the theory of Gregg Shorthand, Diamond Jubilee Series. Introduces the last one-fourth of the theory of Gregg Shorthand. Develops reading speed from handwritten notes. Develops shorthand writing of familiar and unfamiliar material to speeds of 60-80 words per minute. Increases the ability to transcribe at the typewriter.
Prerequisite: BUS 101 and BUS 131, or previous Gregg Shorthand instruction
Five credits: 50 clock hours

## BUS 133 GREGG SHORTHAND III

Develops shorthand writing of unfamiliar material to speeds of 80-100 words per minute. Emphasizes production of mailable letters. Prerequisite: BUS 132 or two years of high school shorthand, ability to write at 60 words per minute and BUS 142
Five credits: 50 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 communications are studied and applied.
Prerequisite: BUS 142 or permission of instructor
Three credits: 30 clock hours

## BUS 171 BUSINESS LEADERSHIP ACTIVITY

BUS 172 BUSINESS LEADERSHIP ACTIVITY
BUS 173 BUSINESS LEADERSHIP ACTIVITY
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
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 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

A study of the routines common to legal offices. Intensive practice in preparing many types of legal documents. For legal secretarial students.
Prerequisite: BUS 102 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
Three credits: 30 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 communications, 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 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 knowledge 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

Preliminary college chemistry course designed to be the basis of a thorough preparation for the higher level college chemistry courses required of science and engineering majors (CHE 101, 102, 103). Basic principles of chemistry are studied, including measurements, matter, compounds, energy, elements, conversion, mole concept, behavior of gases, atomic structure, periodic table, chemical bonds, formulas, nomenclature, chemical equations, chemical arithmetic, and nuclear chemistry.
Prerequisite: one year of high school algebra
Corequisite: MAT 121
Five credits: three hours lecture, four hours lab per week

## CHE 101 GENERAL CHEMISTRY I

Students planning to major in chemistry, engineering, veterinary medicine, pre-med, and related disciplines should complete CHE 101, 102, and 103 as a minimum requirement in these areas. Course includes a study of the chemical principles and mathematical operations involving chemical stochiometry, the atom, the molecule, chemical formulas, chemical equations, thermochemistry, gases, gas laws, kinetic theory, electronic structure of atoms, solutions, water, and chemical bonding.
Prerequisite: one year of high school chemistry, CHE 100, MAT 121, or written permission of instructor
Five credits: three hours lecture, four hours lab per week

## CHE 102 GENERAL CHEMISTRY II

Continuation of CHE 101 which includes a study of the chemical principles and mathematical operations involving chemical equilibrium, properties of covalent species (organic chemistry), ionic solutions, oxidation and reduction, water pollution problems, thermodynamics, ionic equilibrium, rates of reaction, the atmosphere, the air pollution problems, and acids and bases.
Prerequisite: CHE 101 or written permission of instructor Five credits: three hours lecture, four hours lab per week

## CHE 103 GENERAL CHEMISTRY III

Continuation of CHE 102 which includes a study of the chemical principles and mathematical operations involving precipitation reactions, complex ions (coordination compounds), electrochemistry, transition metals, nonmetallic elements, nuclear reactions, polymers and proteins, and instrumental analysis. Laboratory is predominantly semi-micro qualitative analysis and instrumental analysis.
Prerequisite: CHE 102 or written permission of 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 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

An introductory course for students in nursing, home economics, and other prehealth sciences. Content includes structures, nomenclature, and chemical properties of alkanes, alkenes, alkynes, aromatic molecules, alcohols, organic halides, ethers, epoxides, acíds, aldehydes, ketones, heterocyclic and nitrogen compounds. Selected topics in the chemistry of molecules of biological interest also will be presented.
Prerequisite: CHE 102 or written permission of instructor
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 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 making, plans and working with small groups of young 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 CHILD CARE FIELD EXPERIENCE: LAB

The student will work as a teacher's aide under the direction of a qualified teacher in an off-campus setting 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 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 CCS231. 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 their role of play in fostering their development.
Two credits: 20 clock hours

## COS: COMMUNICATIONS

*Indicates instruction is administered by Developmental Studies Division.

## *COS 011 LANGUAGE DEVELOPMENT I

Students will be introduced to oral patterns in English and provided with verbal experiences sufficient to allow the students to express themselves verbally in a series of assigned tasks.
Prerequisite: placement

## *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: COS 011 or placement

## *COS 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 Division and Trades \& Industry Division course)

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

Introduces the use of video production equipment and processes. Gives students some experience with microphones, TV cameras, audio and video switchers.
Prerequisite: permission of instructor
Five credits

COM 205 STUDIO THEATRE
Introduces the student to a variety of dramatic experiences in the television studio setting.

## Five credits

## COM 291 TELEVISION PRODUCTION LAB I

Practice in the use of production equipment in the television studio. Emphasizes program production techniques.
Prerequisite: COM 114 or permission of instructor
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 nonademic 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 involved 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 TECHNIQUES)

Includes black and white photography, cameras, lenses, films, and papers.

CNC 084 COMMUNITY PHOTOGRAPHY

## (DARKROOM TECHNIQUES)

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 094 BASIC WRITING SKILLS

Study and focused application of the way in which words are put together to form phrases and sentences and of how sentences are combined to form cohesive paragraphs. It involves an exploration oí structure, diction, style, and syntax. Emphasis is placed on the transfer of English language skills and knowledge to the student's own writing.
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, a 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 Emphasis on bibliography and library use.
Prerequisite: CON 101 or placement test
Three 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. Students 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 help 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 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: COMPUTER SCIENCE

## CSC 100 THE COMPUTER AND SOCIETY

An introduction to computers, their application and impact on man and social institutions. Presents factual and technical information to give the ability to make objective judgments about computer use and to think constructively and creatively about technology and its social impact. Topics to be presented include the vocabulary of computing, literacy, resource management and other aspects of the information age.
Three or four credits

## CSC 101 INTRODUCTION TO COMPUTING AND THE BASIC LANGUAGE

Introduction to computer programming by using the BASIC language. Various concepts relating to computer hardware and software are presented. Students will attain necessary computing techniques which can be applied to their work in physical science, mathemetics, business, biological sciences, social sciences, and engineering. Topics include subscript operations, arrays, and string manipulation.
Four credits: four clock hours per week

CSC 102 ADVANCED BASIC
A continuation of CSC 101 that will allow the student to learn advanced programming techniques to include: multiple level control breaks, and simulation. Sequential and random files will be emphasized.
Prerequisite: CSC 101 or equivalent
Four credits: four clock hours per week

## CSC 111 INTRODUCTION TO COMPUTER PROGRAMMING AND THE PASCAL LANGUAGE

Introduction to computer programming through the use of Pascal. Various concepts of relating to computer hardware and software will be presented. Students will attain necessary computing techniques which can be applied to their work in physical science, mathematics, business, biological science, social science, and engineering. Topics include subscript operations, arrays, and string manipulation.
Four credits: four clock hours per week

## CSC 121 INTRODUCTION TO COMPUTER PROGRAMMING

 AND THE HPL LANGUAGEIntroduction to computer programming through the use of HPL. Various concepts relating to computer hardware and software will be presented. Students will attain necessary computing techniques which can be applied to their work in physical science, mathematics, business, biological science, social science, and engineering. Topics include subscript operations, arrays, and string manipulation.
Four credits: four clock hours per week

## CSC 201 INTRODUCTION TO COMPUTER PROGRAMMING AND THE FORTRAN 77 LANGUAGE

Introduction to computer programming through the use of FORTRAN 77. Various concepts relating to computer hardware and software will be presented. Students will attain necessary computing techniques which can be applied to their work in physical science, mathematics, business, biological science, social science, and engineering. Topics include subscript operations, arrays, subroutines, and function subprograms.
Prerequisite: completion of one computer language is highly recommended.
Four credits: four clock hours per week

## CSC 211 INFORMATION SYSTEMS I

Computer systems, data storage, software, hardware, systems development and implementation and computer based support technology will be covered.
Prerequisite: one high-level language
Five credits

## CSC 212 INFORMATION SYSTEMS II

Binary arithmetic and machine implementation, introduction to computer structure, machine translation, registers, Macros, specialized arithmetic and Assembly Language concepts will be presented. Prerequisite: CSC 211
Five credits

## CSC 221 COMPUTER SCIENCE I

ACM recommended topics will include a brief overview of digital systems, combinational circuits, simulation of hardware, sequential circuits, coding, number representation, and arithmetic.
Prerequisite: CSC 111 or CSC 201
Four credits: three hours lecture, two hours lab per week

## CSC 222 COMPUTER SCIENCE II

ACM recommended topics will include an introduction to computer organization and architecture; the study of several real computers, including microcomputers, minicomputers, and larger systems. A detailed survey of trends and alternatives along with selected topics will be presented.
Prerequisite: CSC 221
Four credits: three hours lecture, two hours lab per week

CSC 231 ADVANCED TOPICS IN COMPUTER

## PROGRAMMING

A continuation of Pascal or FORTRAN 77 as the language applies to more extensive and sophisticated problems. Multiple-level controls, simulation techniques, and file management will be emphasized.
Prerequisite: CSC 111 or CSC 201, or permission of instructor Three or four credits

## CSC 295 INDEPENDENT STUDY IN COMPUTER PROGRAMMING

Provides an opportunity for the experienced programming student to complete appropriate projects if interested. The student will be limited as to the number of independent study credits to be taken. Prerequisite: previous computer programming courses or programming experience
One to three credits: contact division chairman

## CRJ: CRIMINAL JUSTICE

## CRJ 101 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 115 TRAFFIC ACCIDENT INVESTIGATION

Legal, theoretical and practical aspects of accident investigation and reconstruction (i.e., skid-mark determination, kinetic energy, coefficient of friction determination, conversion factors, technical investigative analysis, diagramming and report writing).
Three credits: 40 clock hours

## CRJ 130 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 135 CRIMINAL JUSTICE COMMUNICATIONS

Techniques of communicating facts, information, and ideas effectively in a clear, brief and logical manner in the various types of criminal justice system reports, letters, memoranda, directives and administrative reports; emphasis on correct usage of English grammar and criminal justice terminology.

## Prerequisite: CON 102

Three credits: 30 clock hours

## CRJ 140 JUVENILE DELINQUENCY

Origins, philosophy and objectives of the juvenile justice system; nature, etiology, and extent of delinquency; legal processes; diversion, detention, and treatment of the juvenile offender.
Three credits: 30 clock hours

## CRJ 141 LAW ENFORCEMENT BASIC TRAINING I

Part I of an intensive introduction to law enforcement; history and orientation, basic law, police procedure, skill training, community relations. The requirement for this course also can be met by certification of successful completion of the basic recruit seminar taught at the Colorado Law Enforcement Training Academy (CLETA).
Ten credits: 116 clock hours

CRJ 142 LAW ENFORCEMENT BASIC TRAINING II
Part ll of an intensive introduction to law enforcement: history and orientation, basic law, police procedure, skill training, community relations. The requirement for this course also can be met by certification of successful completion of the basic recruit seminar taught at the Colorado Law Enforcement Training Academy (CLETA).
Ten credits: 116 clock hours

## CRJ 143 LAW ENFORCEMENT BASIC TRAINING III

Part III of an intensive introduction to law enforcement: history and orientation, basic law, police procedure, skill training, community relations. The requirement for this course also can be met by certification of successful completion of the basic recruit seminar taught at the Colorado Law Enforcement Training Academy (CLETA).
Ten credits: 116 clock hours

## CRJ 150 LAW ENFORCEMENT BASIC TRAINING

An intensive introduction to law enforcement: history and orientation, basic law, police procedure, skill training, community relations. A certificate of completion is awarded to successfu: candidates.
Thirty credits: 350 clock hours

## CRJ 158 FORENSIC PHOTOGRAPHY

Studies basic principles of photography and their application to traffic accidents, fire, crimes against persons, crimes against property. Infrared and videotape techniques and preparation of photographic evidence for court testimony are included.
Three credits: 40 clock hours

## CRJ 200 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 210 CRIMINAL INVESTIGATION

The study of basic principles of all types of investigations utilized in the justice system. Coverage will include human aspects in dealing with victims, witnesses, and suspects; specific knowledge necessary for handling the preliminary investigation of common street crimes.
Prerequsite: CRJ 225
Three credits: 40 clock hours

## CRJ 215 LAW OF CRIMINAL INVESTIGATION

A critical examination of the legal controls on the investigation of crimes, with special emphasis on court decisions.
Prerequisite: CRJ 150, CRJ 200 or permission of instructor
Three credits: 30 clock hours

## CRJ 225 CRIMINAL EVIDENCE

Study of criminal rules of evidence with special focus on the application of these rules as criminal justice practitioners present evidence in court.
Prerequisite: CRJ 215 or permission of instructor Three credits: 30 clock hours

## CRJ 231 CRIMINAL JUSTICE PROCEDURES

An analysis of the events occurring after the arrest of a criminal suspect; pre-trial procedures, jury selection, trial procedures, sentencing, and appellate relief. Special consideration on constitutional and civil rights of persons accused of crimes.
Prerequisite: CRJ 225 or permission of instructor
Three credits: 30 clock hours

An intensive analysis of the United States Constitution and
especially the amendments to that Constitution; a study and review of court decisions which interpret the Constitution.
Three credits: 30 clock hours

CRJ 251 POLICE CADET COOPERATIVE
CRJ 252 POLICE CADET COOPERATIVE
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CRJ 255 POLICE CADET COOPERATIVE
Recommended elective for candidates. Credit is obtained on the basis of one credit for each 30 hours work experience at a recognized law enforcement agency.
One to five credits

## 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 115 AGRICULTURE 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
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. Knowledge of algebra not required.
Five credits

## EDU: EDUCATION

## EDU 104 INTRODUCTION TO EDUCATION

Provides prospective teachers with a general introduction to the field of education and more specifically, the career of teaching. Includes discussion of contemporary educational issues and the organization of public education.

## Three credits

## EDU 105 EARLY FIELD EXPERIENCE IN EDUCATION

Provides classroom experience as teacher aides, coaching assistants, etc., to students anticipating careers in the teaching profession. (Fulfills UNC's teacher aide requirements.)

## One to three credits

## EDU 106 INTRODUCTION TO TEACHER AIDE

 TRAINING PROGRAMDesigned to help teacher aides understand the role of paraprofessionals in the classroom. Class discussion topics will include: educational procedures, responsibility, classroom operations, the development of the paraprofessional's self concept, learning concepts, and the paraprofessional's learning style.
Three credits: 30 clock hours

## EDU 107 INTRODUCTION TO BILINGUAL EDUCATION

Students will develop an awareness of bilingual education; its history and current programs. Students will be required to review, select, and use materials applicable to the bilingual classroom. Also included will be development in the adoption of materials for use in a bilingual classroom.
Three credits: 30 clock hours
EDU 108 FIELD EXPERIENCE IN TEACHER AIDE EDUCATION Provides an opportunity for teacher aide trainees to receive practical, on-site experience in the classroom under the direction of professional teachers.
Five credits: 50 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

## EDP: ELECTRONIC DATA PROCESSING

## EDP 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.
Five credits: 50 clock hours

## EDP 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

## EDP 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: EDP 110 with a grade of C or better, or if the student passes an EDP 110 challenge test with $85 \%$ or better
Five credits: 50 clock hours

## EDP 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: EDP 111 with a grade of $C$ or better, or written proof of education equivalent of the topics covered in EDP 111
Five credits: 50 clock hours

## EDP 116 BUSINESS BASIC

The purpose is to acquire the skills necessary to write and debug business programs utilizing the BASIC language. This class will include file processing.
Prerequisite: EDP 110 with a grade of C or better, or if the student passes EDP 110 challenge test with $85 \%$ or better
Five credits: 50 clock hours

## EDP 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: EDP 111 with a grade of C or better, or written proof of education equivalent of the topics covered in EDP 111
Five credits: 50 clock hours

EDP 121 STRUCTURED COBOL PROGRAMMING
Fundamentals of business-oriented programming language using structured techniques. Documentation techniques and programming standards will be stressed
Prerequisite: EDP 116 with a grade of $C$ or better, or written proof of education equivalent of the topics covered in EDP 116
Five credits: 50 clock hours

## EDP 122 ADVANCED COBOL PROGRAMMING

Continuation of EDP 121. Students will learn advanced COBOL techniques and efficiencies and will utilize table handling and various file structure maintenance.
Prerequisite: EDP 121 and EDP 111 with a grade of $C$ or better, or written proof of education equivalent to the topics covered in EDP 121 and EDP 111
Five credits: 50 clock hours
EDP 126 REPORT PROGRAM GENERATOR II (RPG II)
An elective course in RPG programming language. Topics include printed report generation, file matching, control breaks, and table search. Prior knowledge of fundamental programming logic required. Prerequisite: EDP 116 with a grade of $C$ or better, or written proof of education equivalent to the topics covered in EDP 116
Five credits: 50 clock hours

## EDP 127 PL/I (PROGRAMMING LANGUAGE I)

An elective course in PL/I programming language and its application to business problems.
Prerequisite: EDP 116 with a grade of $C$ or better, or written proof of education equivalent to the topics covered in EDP 116
Five credits: 50 clock hours

EDP 205 ASSEMBLER LANGUAGE PROGRAMMING
Programming concepts learned in EDP 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: EDP 112 and EDP 121 with a grade of $C$ or better, or written proof of education equivalent to the topics covered in EDP 112 and EDP 121
Five credits: 50 clock hours

## EDP 206 NEW ISSUES AND DEVELOPMENTS IN DATA PROCESSING

Familiarizes students with new hardware and software developments in all types of systems. Gives students the opportunity to research some of these new developments.
Prerequisite: EDP 205 with a grade of $C$ or better, or written proof of education equivalent to the topics covered in EDP 205
Five credits: 50 clock hours

## EDP 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: EDP 122 and EDP 111 with a grade of $C$ or better, or written proof of education equivalent to the topics covered in EDP 122 and EDP 111
Five credits: 50 clock hours

## EDP 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: EDP 211 with a grade of $C$ or better
Five credits: 50 clock hours

## ELT: ELECTRONICS TECHNOLOGY

## ELT 122 ELECTRONICS MATH (Evening)

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, J-operator. 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 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 225 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 282
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 282, or permission of instructor
Three credits: 40 clock hours

## ELT 271 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 permission of instructor
Five credits: 60 clock hours

## ELT 272 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 COMMUNICATIONS III

Assists students in obtaining the FCC second class radio telephone license. Based on typical license examination questions, study of FCC regulations and review of electronic circuit theory.
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, ELT 266, and ELT 283, 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 283, BET 106, BET 107, or permission of instructor
Five credits: 60 clock hours

ELT 281 COMPUTERS 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 permission of instructor
Five credits: 60 clock hours

## ELT 282 COMPUTERS II

Continuation of hardware and software elements of digital machines. Counters, registers, ROM, RAM and reference to systems (microprocessor) continues.
Prerequisite: ELT 281 or permission of instructor
Five credits: 60 clock hours

## ELT 283 COMPUTERS III

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 282 or permission of instructor
Five credits: 60 clock hours

## ELT 284 COMPUTERS IV

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 282 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 and 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.
Nine credits: 93 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, twoman 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, Prerequisite: 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: BET 102 or instructor approval, concurrent with BET 103
Six credits: 80 clock hours

## AET 201 DRAFTING IV-Structural

Acquaints the student with structural drafting practices, enabling completion of structural plans and details in wood, steel, and concrete for residential, commercial and industrial structural systems.
Prerequisite: BET 103
Five credits: 70 clock hours

## AET 202 DRAFTING IV-Architectural

The student will study multi-family, multi-level frame construction techniques and reviewing modular and component applications. Prerequisite: AET 103 and concurrent with AET 201 and AET 203 Five credits: 70 clock hours

## AET 203 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 201 and AET 202
Five credits: 70 clock hours

## AET 204 DRAFTING VI-Architectural

Provides students with an opportunity to study steel applications and techniques. Structural and decorative applications in relation to building construction will be explored.
Prerequisite: AET 201 and AET 202
Five credits: 70 clock hours

## AET 205 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: concurrent with AET 201 and AET 202 or permission of instructor
Four credits: 50 clock hours

## BET: BASIC ENGINEERING TECHNOLOGY

## BET 100 INTRODUCTION TO ENGINEERING TECHNOLOGY

Provides introductory information concering engineering technologies (architectural, civil, and mechanical) and how to plan and
succeed in a technical environment.
Prerequisite: none
One credit: 10 clock hours

## BET 101 DRAFTING I

Provides an initial development of basic drafting skills in the areas of lettering, drafting instruments, geometric construction, orthographics, auxiliaries, and sectioning.
Prerequisite: concurrent with BET 105 or permission of instructor Six credits: 80 clock hours

## BET 102 DRAFTING II

Continuation of basic drafting skill development in the areas of dimensioning, descriptive geometry, auxiliaries, and threads and fasteners.
Prerequisite: BET 101
Six credits: 80 clock hours

## BET 103 DRAFTING III

Continuation of basic drafting skill development in the areas of pictorial drafting, inking and production drafting.
Prerequisite: BET 102
Six credits: 80 clock hours

## BET 105 APPLIED TECHNICAL MATH

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 math and algebra skills. If acquired score is less than that required by a department, a Technical Division advisor will assist in a proper skill development course. Preassessment score MUST be met before admittance to BET 105
Seven credits: 80 clock hours

## BET 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.
Prerequisite: BET 105 or equivalent
Five credits: 60 clock hours

## BET 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.
Prerequisite: BET 105 or equivalent
Five credits: 60 clock hours

## BET 201 INTRODUCTION TO COMPUTER AIDED DRAFTING

This course will acquaint the technical student with computer graphics as used in an engineering environment. Through the use of CAD systems, the student will gain practical knowledge and handson experience using the basic commands.
Prerequisite: BET 103 and BET 105, or permission of instructor Four credits: 50 clock hours

## BET 202 COMPUTER AIDED DRAFTING

A continuation of BET 201 with greater emphasis on the use of graphic commands. Through hancis-on experience, the student will gain a greater depth and breadth of the use and production of CAD products in the engineering and architectural environments.
Prerequisite: BET 201
Three credits: 50 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. Emphasis will be proficiency on more than one software system and in the area of the student's program emphasis, i.e., architectural, civil, or mechanical.
Prerequisite: BET 202
Three credits: 50 clock hours

## BET 205 TECHNICAL COMMUNICATIONS

This course will assist the student to prepare, present, and interpret technical information through written and oral reporting technical memos and proposals. Group and interpersonal communications will also be studied.
Prerequisite: CON 101 and SPE 115 or equivalents
Four credits: 50 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: 60 clock hours

## BET 207 TECHNICAL JOB SEEKING

Job seekers will develop a better understanding of their skills, interests and job search procedures. Preparation of resumes, vitas, and applications are studied along with how to prepare and present oneself for an interview.
Prerequisite: None
One credits: 10 clock hours

## BET 208 APPLIED ENGINEERING PROBLEMS AND APPLICATIONS

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 of major emphasis
Four credits: 50 clock hours

## BET 215 COST AND MATERIAL ESTIMATING

Introduces the student to accepted techniques and procedures relative to cost and material estimating as used in construction and manufacturing industries. Emphasis is on material take-off requirements for construction projects. The student will perform take-offs for actual projects.
Prerequisite: BET 103, BET 105 and AET 201
Three credits: 40 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 101, BET 102 and BET 105 or permission of instructor
Six credits: 80 clock hours

## CET 202 DRAFTING V-Civil I

Topographic drawing principles, interpretation, plotting, and detailing are studied to assist the student in the areas of open and closed traverses, relating maps to land descriptions and aspects of tract, plat, plot, and site plans.

Prerequisite: BET 101 through BET 107
Five credits: 70 clock hours

CET 203 DRAFTING VI-Civil II
A continuation of CET 202 with emphasis in the areas of plan and profile, cross sections and an introduction to photogrammetry as used in the industry.
Prerequisite: CET 202
Five credits: 70 clock hours

## MET: MECHANICAL ENGINEERING TECHNOLOGY

## MET 101 MATERIALS AND PROCESSES I

Materials of industry are studied from the properties and application standpoints with emphasis on processing and manufacturing.
Prerequisite: BET 105 or concurrent with BET 105
Two credits: 30 clock hours

## MET 102 MATERIALS AND PROCESSES II

Continuation of MET 101 with an emphasis on manufacturing processes that use metals, plastics, woods and other common materials.
Prerequisite: MET 101
Two credits: 30 clock hours

## MET 201 STRENGTH OF MATERIALS I

The study of physical properties and their effects relevant to material stress and strain, tension, compression, and shear.
Prerequisite: BET 105 and BET 106
Three credits: 30 clock hours

MET 202 DRAFTING V-Mechanical I
The study of mechanical drafting techniques, practices, and production drawings in the areas of HVAC, plumbing, electrical and process piping.
Prerequisite: BET 100 through BET 107
Five credits: 70 clock hours

## MET 203 DRAFTING VI-Mechanical II

The study of mechanical drafting techniques, practices, and production drawings with emphasis in the areas of kinematics, power transmission, gears, cams, and basic machine design procedures.
Prerequisite: BET 101 through BET 107
Five credits: 70 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 206 FLUID MECHANICS

The study of the practical application of basic fluid mechanics in the areas of fluid power and fluid transmission along with the calculations associated with the design and evaluation of such systems.
Prerequisite: BET 105, BET 106 and BET 107
Five credits: 60 clock hours

## MET 207 BASIC QUALITY CONTROL

The study of statistical methods used in the control of process and product. The student will examine and design methods to facilitate the maintenance of quality and quality improvement. The most economical production levels that allow full customer satisfaction is emphasized.
Prerequisite: BET 105
Three credits: 40 clock hours

## MET 208 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 discussed.
Prerequisite: None
Three credits: 30 clock hours

## ESL: ENGLISH AS A SECOND LANGUAGE

## ESO 090 INTENSIVE ORAL I

Designed for the student who has little or no previous training in spoken English. Introduces non-English speakers to the sound system, vocabulary, and syntax of phrases, clauses and sentences. Prerequisite: placement

## ESO 091 INTENSIVE ORAL II

Continuation in the development of basic oral communication in English. Emphasis on patterns relating to syntax, intonation, rhythm, and pronunciation. Considerable attention will be given to vocabulary development.
Prerequisite: ESO 090 or placement

## ESO 092 INTENSIVE ORAL III

Talking and listening skills will be developed in individual and informal group situations. Designed to develop acquired oral skills in the areas of speech patterns, word usage and question and answer responses. Practice in listening effectively for information, retention, and participation. Introduction of idiomatic expressions.
Prerequisite: ESO 091 or placement

## ESO 093 INTENSIVE ORAL IV

Designed to give the student oral practice in English language usage in complex forms and formal interview situations.
Prerequisite: ESO 092 or placement

## ESO 094 INTENSIVE ORAL V

Develop oral and listening skills in interpreting taped professor's lectures for content and style. Vocabulary development in students area of interest.
Prerequisite: ESO 093 or placement

## ESO 095 INTENSIVE ORAL VI

Introduction to the fundamentals of public speaking such as informative, persuasive, argumentative, etc. Use acquired oral skills to use language and style appropriate to the situation and adjust content and style to fit the purpose and the audience. This course requires the most advanced level of vocabulary.
Prerequisite: ESO 094 or placement

## ESG 090 INTENSIVE GRAMMAR I

Designed to provide the student with no English background with the very elementary functions of the parts of speech. The class will be introduced in simple, English-language patterns. The grammatical generalization will be introduced as each grammatical item is introduced.
Prerequisite: an English proficiency evaluation
Contact hours: 40-50 hours per quarter
Lab hours: 10-15 hours per quarter

## ESG 091 INTENSIVE GRAMMAR II

A continuation of ESG-Level I. Level II emphasizes further study of the syntatic structure of the English language. This level is designed for the student with limited English skills.
Prerequisite: ESG 090 or an English proficiency evaluation
Contact hours: 40-50 hours per quarter
Lab hours: 10-15 hours per quarter

## ESG 092 INTENSIVE GRAMMAR III

A continuation of ESG-Level II. Grammatical items will be taught in situations with lexical items (that generally co-occur) to help clarify their meaning. Levellll will continue to expound unequivocally that language is a rule-governed behavior. This level is designed for students with partial ability in English.
Prerequisite: ESG 091, or an English proficiency evaluation
Contact hours: 40-50 hours per quarter
Lab hours: 10-15 hours per quarter

## ESG 093 INTENSIVE GRAMMAR IV

A graded continuation of ESG-Level III. Level IV emphasizes a logical sequence of language within larger grammatical categories that will be integrated with those the student already knows.
Prerequisite: ESG 092 or an English proficiency evaluation
Contact hours: 40-50 hours per quarter
Lab hours: 10-15 hours per quarter

## ESG 094 INTENSIVE GRAMMAR V

A graded continuation of ESG-Level IV. Level $V$ reaffirms the importance of meaning in grammatical analysis. It continues to characterize the rules of grammar, allowing the student to see that the rules can be applied over and over again to similar base strüctures.
Prerequisite: ESG 093 or an English proficiency evaluation Contact hours: 40-50 hours per quarter
Lab hours: 10-15 hours per quarter

## ESG 095 INTENSIVE GRAMMAR VI

A graded continuation of ESG-Level V. Level VI will explain ambiguities in sentences by distinguishing between deep and surface structures. This level will continue to emphasize English competency by having the student apply the rules which he has internalized up to this level. Emphasis will be placed on reviewing those grammatical items that will help the student to pass the TOEFL exam.
Prerequisite: ESG 094 or an English proficiency evaluation
Contact hours: 40-50 hours per quarter
Lab hours: 10-15 hours per quarter

## ESR 090 INTENSIVE READING I

This course is designed to instruct foreign students in basic reading skills. Primary objectives are to provide the student with initial skills in word attack and comprehension. This course also prepares the student for Intensive ESR II.
Prerequisite: placement

## ESR 091 INTENSIVE READING II

This course is designed to provide the foreign student who is beginning to read with additional skills in word attack and comprehension. Primary purposes are to provide the student with a basic introduction to general reading skills and to prepare the student for Intensive ESR III.
Prerequisite: ESR 090 or placement

## ESR 092 INTENSIVE READING III

This course is designed to provide the foreign student with instruction in vocabulary development, structural analysis, comprehension, and reading for a specific purpose. Primary purposes are to improve the students reading level and to prepare the student for Intensive ESR IV.
Prerequisite: ESR 091 or placement

## ESR 093 INTENSIVE READING IV

This course is designed to provide the foreign student with additional instruction in vocabulary development, structural analysis, comprehension, and reading for a specific purpose. The course will also include instruction in locational skills. The student will apply these skills in both general and content area reading.
Prerequisite: ESR 092 or placement

## ESR 094 INTENSIVE READING V

This course is designed to provide the foreign student with instruction in extensive vocabulary development and high level comprehension skills. The primary purposes of this course are to raise the reading level of the student, to expand the variety of reading skills the student uses and prepare the student for Intensive ESR VI. Prerequisite: ESR 093 IV or placement

## ESR 095 INTENSIVE READING VI

This course is designed to provide the foreign student with additional instruction in extensive vocabulary development and high level comprehension skills. In addition the course will introduce reading strategies to enable students to function in content area college courses.
Prerequisite: ESR 094 or placement

## 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 continuation based upon 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 INGLÉS - NIVEL I

Esta clase está diseగ̃ada para darle al estudiante que no habla inglés una habilidad básica en inglés que será integrada con formas de como se usa el ingles 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 las clase será dedicado a el desarollo de la escritura de oraciones simples.

## ESL 012 CLASE DE INGLÉS - NIVEL II

Esta clase está diseñada para darle al estudiane quien está muy limitado en la habilidad de comunicarse en inglés una habilidad basica 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 darámucha atención al desarollo de la escritura y lectura del inglés.
Requisito: Completar el Nivell de ingleś. El estudiante debe de tener un grado de 80 por ciento o mejor en el examen del Nivel I de ingles

## ESL 013 CLASE DE INGLÉS - NIVEL III

Esta clase está disenada para darle al estudiante quien está limitado en la habilidad de comunicarse en ingles una habilidad básica en inglés que será integrada con formas de como se usa el ingles correctamente. Estas habilidades serán 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. Tambien se dará mucha atención al desarollo de la escritura y lectura.
Requisito: completar el Nivel II 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 INGLÉS - NIVEL IV

Esta clase está diseñada para darle al estudiante quien esta limitado en la habilidad de communicarse en inglés una habilidad basica en inglés que sera 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 darámucha atención al desarollo oral (de conversación), y de escuchar inglés. Tambien se dará 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 III de Ingles

## ESL 015 CLASE DE INGLES - NIVEL V

Esta clase está diseत̂ada 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 Inglés

# FLE: FAMILY AND LIFE EDUCATION 

Expectant Families, Active Families and Changing Individuals are cosponsored with North Colorado Medical Center.

## EXPECTANT FAMILIES

## FLE 114 PREGNANCY - A TIME TO PREPARE

Take class as soon as pregnancy is confirmed. Discussions concern physical changes, emotional adjustments, basic nutrition, fetal development, breast and bottle feeding, baby equipment, and parent-infant bonding. Body conditioning, proper body mechanics, and relaxation are taught.
One credit

## FLE 115 PREPARED CHILDBIRTH I

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 125 PREPARED CHILDBIRTH FOR SINGLE MOTHERS

Designed for mothers who are single or alone. Class will offer education for pregnancy, labor and delivery as well as group support. Discussions focus on: comfort measures for pregnancy, labor and delivery, anesthesia, Cesarean birth, basic baby care and support systems. Relaxation and Lamaze breathing is taught. Labor and delivery film is shown and tour of hospital obstetrical facilities is included.
Two credits

## FLE 126 EATING FOR THE TWO OF YOU

Learn appropriate eating habits for pregnancy. Content includes nutrition for pregnancy and breast feeding, snack ideas and use of salt during pregnancy. Three one and one-half hour sessions.
One-half credit

## FLE 129 EXERCISE FOR PREGNANCY

For women wanting to prepare physically for the birth of their baby, and wanting to get back into shape after the baby is born. Includes stretching, body conditioning, and aerobic exercises designed specifically for pregnant women and new mothers.
One credit

## 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 115 CARING FOR THE SICK CHILD

For those wishing to know more about caring for the sick child at home. Includes handling different ages, discipline and activities with the ill child, medical concerns and working with parents. This class provides background for persons wishing to become part of a sick-child-care referral system of the Children's Resource Network. One credit

## FLF 116 WORKING PARENTS: GUILT AND TIME MANAGEMENT

Learn time management techniques to help in juggling parent and work roles, and the effects of working parents on children. Look at sources of guilt, community resources and supports, and realistic expectations.
One-half to one credit

## FLF 117 SELF-ESTEEM: THE ROOTS OF WELLBEING

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-half to 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 self-esteem, language, and motor skills; snacks and finger foods, accidents and poisonings, toilet training, and dependence versus independence. Child care provided for daytime classes.
Two credits

## FLF 147 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 one credit

## FLF 151 PARENTING ALONE

For those who deal with the challenges of children in single parent homes. Parents explore feelings, define roles, practice resolving problems, and discuss finding personal support and community resources.
One credit

## FLF 153 SURVIVING WITH TEENAGERS I

Explores sexual development and attitudes, risks, such as substance abuse, and communication techniques for the early teen years.
One credit

FLF 154 SURVIVING WITH YOUR TEENAGERS II
Sessions for parents of older teens on stress and the teen, ingredients for success, and family communications.
One credit

## FLF 155 MAXIMIZING CHILDREN'S POTENTIAL

Considers the special needs and rewards of parenting gifted and talented children. Topics include definitions and testing for giftedness, parent power, and program options.
One to three credits

## FLF 156 FOSTER AND ADOPTIVE PARENTING

Provides foster and adoptive parents with a working knowledge of general child development by age group and the special needs of these children. Includes alternatives in communication and discipline, and skills in building a child's self-esteem.
Three 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 WIFE, MOTHER, OR ME?
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

## 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 218 CHILD ABUSE AND NEGLECT AND PROTECTION Provides information about the dynamics of family violence, the abnormal rearing cycle, legal aspects, and intervention strategies. Two credits

## FLF 219 WORKING WITH SINGLE PARENTS

For professionals and single parents. Topics include statistics and myths, the "new poor," stages of adjustment, custody and absent parent issues, discipline, and coping techniques.
One to two credits

## CHANGING INDIVIDUALS

FLC 115 DO I WANT A CHILD? (OPTIONAL PARENTHOOD)
For people trying to decide whether o not to have a child. Pros and cons of parenting and remaining child-free will be discussed.
One credit
FLC 116 PREGNANCY OVER THIRTY: MAKING THE DECISION
The course is designed to increase awareness of the practical, sociological, psychological and medical aspects of delayed pregnancy. Although first pregnancy will be emphasized, the course will also be relevant for those considering additional children.
One credit

## FLC 205 LIVING AND GROWING THROUGH CHANGE

Change and transition are major characteristics of life today. This course is designed to help participants view transition as a positive aspect of one's life through assessment of personal resources.

## Two credits

## FLC 207 RETIREMENT PLANNING

Explore the options of what you can do now to make your retirement years more enjoyable and fulfilling.

## Two credits

## CHANGING INDIVIDUALS: SENIORS

## FLS 111 SENIOR SHAPE UP I

Introduces total body conditioning to raise fitness levels of older adults.
One credit
FLS 112 SENIOR SHAPE UP II
A more strenuous, more active exercise class with aerobic activity. One credit

FLS 115 MANAGING STRESS FOR HEALTH AGING
Indentify age-related stress situations and learn techniques to cope.
One credit

FLS 216 HOW TO STRETCH YOUR HEALTH CARE DOLLAR
Get the most from the money you spend on health care needs. 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 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

FLS 185 MOVEMENT FOR HEALTH
Participation in exercises for older adults.
One credit

## FLS 187 NUTRITION AND FITNESS

Exercise, walking, and good nutrition are discussed as parts of a meaningful plan for weight control.
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 PROCEDURE Review 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 necssary 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 hou s

## 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 SAFETY

Students will gain individual fire-fighting safety knowledge. Includes learning OSHA requirements, and how to plan and organize citizen fire safety programs.
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 BUILDING FIRE INSPECTIONS

Students will acquire ability to inspect buildings for the elimination of fire related hazards.
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 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 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 214 FIRE DEPARTMENT ADMINISTRATION

Consideration of basic administrative concepts and principles applicable to the organization and administration of an efficient fire department.
Prerequisite: FIS 104
Three credits: 30 clock hours

## FIS 216 PRIVATE FIRE PROTECTION ALARM SYSTEM

An analysis of private protection and alarm systems. Covers organization and operation of private fire brigades and complete water system layouts. Fire detection, alarm, and supervisory systems are studied and evaluated.
Prerequisite: FIS 212
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 SERVICE

Students 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

## FIS 232 FIRE SERVICE SUPERVISION

Studies fire department organization. Includes personnel relations, leadership, motivation, training, hiring, and disciplinary action. Three credits: 30 clock hours

## FOREIGN LANGUAGE

## FRE 101 BASIC APPLIED FRENCH

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

## 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 101 BASIC APPLIED SPANISH I
Course in conversational Spanish concerned with developing the ability to understand and speak regional Spanish.

## 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

Develops ability to understand, speak, read, and write Spanish within the limits of the vocabulary learned. Especially designed for the nonnative speaker of Spanish. Emphasizes the language and culture of the Southwest.

## Five credits

## SPA 112 BEGINNING SPANISH II

Continuation of SPA 111.
Five credits
SPA 113 BEGINNING SPANISH III
Continuation of SPA 112.
Five 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 economic activities is discussed.
Five credits

## GEY: GEOLOGY

## 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. Offered winter quarter only.
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. Offered fall quarter only.
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. Offered spring quarter only.
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 duplicatorsized 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

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 their specialization.
Prerequisite: GRT 102
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
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
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 295 GRAPHIC TECHNOLOGY INDEPENDENT STUDY B
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 295 GRAPHIC TECHNOLOGY INDEPENDENT STUDY C
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 299 GRAPHIC TECHNOLOGY PRACTICUM

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 each: 10 clock hours each

## 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

## HEN 108 CARE OF SPORTS INJURIES

An introductory study for the future teacher-coach or trainer in the area of athletic injury. Contribute to the physical and mental well being of the athlete through sound application of kinesiological principles related to injury prevention. Knowledge and application of techniques in the conditioning, prevention, care and rehabilitation of athletic injury.
Twö credits: 20 clock hours

## HLH: HEALTH OCCUPATIONS

## 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
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.)

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 post-operative care of adult patients.
Prerequisite: 9th grade reading skills, basic arithmetic skills
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 non-helpful communication simulations.
Prerequisite: none
One credit: 10 clock hours

## 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
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 socialpsychological 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 135 GERIATRIC 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 geriatric aide student will have 13 clock hours of clinical experience in extended care/nursing home settings. Prerequisite: 9 th grade reading skills, basic arithmetic skills
Seven credits: 80 clock hours, certificate program

## 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 I.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: MODERNIZATION OF MAN

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 AMERICA'S 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 109 NUGGETS FROM THE PAST (RE-CREATING COLORADO HISTORY)

An elective class primarily for community interest in which each participant researches some particular incident from the region's past. Utilizes pictures, slides, and artifacts. Winter quarter evening class only.
Four credits

## HIS 115 OCCULT SCIENCES

An historical examination of the beliefs and practices of voodoo, vampirism, witchcraft, hunting magic, snake handling cults, palmistry, tarot cards, I Ching, demonic possession and ESP. Five credits

## HIS 117 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 fourmile 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 AZTEC CIVILIZATION

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

## 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 104 CONTEMPORARY CAREERS AND VALUES

A study of the quality of life in a technological society. Focuses on ethical issues on the job, aesthetic values of the arts, the philosophy of work and use of leisure time.
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 ORIENTAL CULTURE

A study of the ways of the Orient and their expression in the cultures of India, China, and Japan

## 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

## MAS 120 CULTURE OF MEXICO AND SOUTH AMERICA

Examines the art, music, literature, and philosophy of Mexico and South America from pre-Columbian civilization to the present period.
Five credits

## LIT: LITERATURE

*Indicates instruction is administered by Developmental Studies Division.

## *LIT 095 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 comprehension skills of reading appropriate to the area of literature adequate to allow students to pass the literature reading section of the GED test.
Prerequisite: placement

## LIT 105 INTRODUCTION TO LITERATURE: TYPES AND THEMES

Increases the student's ability to understand others and self. The student will learn to evaluate literature based on its total structure rather than only on a threshold interest. Particular course titles will be offered based on student interest. These may be Introduction to Fiction, Introduction to Poetry, Introduction to Drama, Introduction to Writers of the British Isles, and current themes such as Religion in Literature, Death in Literature, Detective and Science Fiction, and others. Course may be taken more than once for elective credit provided titles are not repeated.

## 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 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. To include not only such themes as the setting 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 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.

## *MAT 012 DEVELOPMENTAL MATHEMATICS II

Provides students, who lack computational skills, with instruction in whole numbers in the arithmetic operations of addition, subtraction, multiplication, and division. The major objectives are to develop computational and arithmetic operational skills with whole numbers to enable the student to enter MAT 013.
Prerequisite: placement

## *MAT 013 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 with fractions and decimals to enable the student to enter MAT 014.
Prerequisite: MAT 012 or placement

## *MAT 014 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

## *MAT 095 INTRODUCTORY MATHEMATICS

The primary purpose is to provide the student with enough arithmetic skills to enter business math or beginning algebra.
Prerequisite: placement

## *MAT 096 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.) (Business Division and 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, and an introduction to the metric system. The mathematical concepts and problems can be applied by the student to his or her special area of interest.
Prerequisite: none
Five credits

## MAT 110 APPLIED BUSINESS MATHEMATICS <br> (Business Division course)

Studies mathematical procedures in business and aspects of personal activities (percent, checkbook records, payroll, discounts, markup, interest, depreciation, overhead, taxes, insurance, etc.) Pretest is required. Student may be required to take MAT 101 prior to enrollment in MAT 110.

## Five credits

## 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 Mathematics 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 MANAGEMENT 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: MAT 122 and MAT 123, or equivalent high school courses; 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

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## 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, maxima-minima 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 I

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 $p$ esented.
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

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 genera 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 art, music, literature, and philosophy of Mexico and South America from pre-Columbian civilizations to the present. Five credits

## MAS 125 THE AMERICAN SYSTEM

Present vital information dealing with citizenship. Special emphasis will be placed on current legislation dealing with Chicanos. Three credits

## MAS 161 AZTEC CIVILIZATION

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.
Three credits

## MAS 165 CHICANO HISTORY

Examines historical events in the American Southwest from the indigenous origins, through the Spanish conquest and colonization and later Anglo invasion. Emphasizes the circumstances which transformed the Mexican from a majority to a minority status.

## Three credits

## MAS 205 COUNSELING MINORITIES

Builds awareness and understanding in the area of counseling minorities. Emphasizes the Mexican American and the development of conceptual models applicable to other minorities in terms of values and cultural conflict.
Three 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 successfu 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 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 126 FASHION BUYING

This course will provide a detailed examination of the merchandising activities of a retail fashion buyer.
Five credits: 50 clock hours

## MGT 127 FASHION EVOLUTION

This course is a study of the development of male and female costumes from 3000 B.C. to present day. This includes understanding the contributions of each important era and its influence upon today's fashion.
Prerequisite: to be taken same quarter as Fashion Trends
Three credits: 30 clock hours

## MGT 128 FASHION TRENDS

The course is an explanation of today's trends in fashion. Projects on technological changes in fashion, consumer needs, fads and classics of fashion, color influence on fashion, American and European designers and modern fashion retailing trends will be conducted.
Prerequisite: to be taken same quarter as Fashion Evolution
Three credits: 30 clock hours

MGT 171 MANAGEMENT ACTIVITY I
MGT 172 MANAGEMENT ACTIVITY II
MGT 173 MANAGEMENT ACTIVITY III
A study of successful management techinques.
Two credits each: 20 clock hours each

[^2]intensive study and research beyond the stated prerequisites.
Prerequisite: MGT 211
One to three credits each: contact instructor

## MGT 205 CREDIT MANAGEMENT

A study of principles in credit extension, investigation, charge accounts, and collections in selling organizations.
Prerequisite: MAT 110
Five credits: 50 clock hours

## 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
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 skill, 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 PRODUCTION MANAGEMENT

Shows the relationship of the production function to the fundamental business functions. Helps students gain experience in solving production problems. Gives students an understanding of some of the problems in industry management. Gives students exposure to the theory of industrial management as a "systems concept."
Five credits: 50 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 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
The e courses provide an opportunity for stude ts 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 mangement-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 Mid-Management 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, scale , 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 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 repertiore of songs and guided listening for children.

## Three credits

## MUS 299 MUSIC PRATICUM

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 studen 's level of proficiency. May be repeated at different levels of proficiency.
One to three credits: contact program coordinator

## MUP 121 ENSEMBLE

This course is designed for students who have a desire to be involved in group music performances. Music repertoire for the group ranges from the Medieval Period to 20th Century. Proper technique and effective rehearsal time will be emphasized.
One credit

| MUP | 131 | PIANO I |
| :--- | :--- | :--- |
| MUP | 132 | PIANO II |
| MUP | 133 | PIANO III |

These courses are for the student beginning to study piano. Reading skills and techniques necessary to play simple songs and accompaniments are included. Selected piano works are surveyed. Three credits each: eight practice hours each

MUP 151 VOICE I
MUP 152 VOICE II
MUP 153 VOICE III
Vocal techniques for beginners or more advanced students; survey of selected vocal works included.
Three 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.
Three credits each: eight practice hours each

## OHC: ORIENTATION TO HEALTH CARE

## OHC 100 ORIENTATION TO HEALTH CARE

Introduces students to the health care delivery programs available to them; provides an opportunity to develop an understanding of health careers associated with direct patient care areas. Each student will assist/observe in the basic techniques and procedures of each health career covered in a simulated laboratory situation. Provides discussion on the five natural sciences: anatomy physiology, chemistry, physics, and biology, as applied to health fields. Students will simulate basic patient care common to all health careers, compare and examine procedures both similar and separate to each health career, and role-play as patients, physicians, and health care professionals. A minimum of 16 hours will be spent in the hospital for direct contact with health care workers and work environments.
Prerequisite: none
Four credits: 40 hours lecture, 20 hours lab

## 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 111 BADMINTON I

Introduces the basic skills of badminton, including game rules and score keeping.
One credit: 20 clock hours

## PEA 112 BADMINTON II

Improves skills and techniques of badminton.
One credit: 20 clock hours

## PEA 113 BADMINTON III

Designed for those who desire advanced badminton knowledge. 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 141 ROLLER SKATING I

Introduces the basic fundamentals and skills of roller skating. One credit: 20 clock hours

## PEA 142 ROLLER SKATING II

Continuation of PEA 141. Develops poise, grace, agility, and rhythm.
One credit: 20 clock hours

## PEA 143 ROLLER SKATING III

For those who want to continue improving the fundamentals and skills of roller skating. Couple skating dancing is included.
One credit: 20 clock hours

PEA 151 ICE SKATING I
Introduces the basic skills and fundamentals of figure or ice skating.
One credit: 20 clock hours
PEA 152 ICE SKATING II
For those who want to improve the skills and fundamentals of figure or ice skating.
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

PEA 171 SKIING I
Introduces students to basic skills and techniques of skiing.
One credit: 20 clock hours

## PEA 172 SKIING II

Increases students basic skills. Instruction of advanced techniques will provide the student with a confident attitude for a more pleasurable and safe sport.
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
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 followthrough. 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 131 PILLO POLO I

A course designed to teach the basic rules, regulations, skill, and techniques of Pillo Polo. Students will also learn the value of team play.
One credit: 20 clock hours

## PEB 132 PILLO POLO II

To expose the student to the more technical skills, rules and regulations of the team sport. Students receive instructions in advanced play and can officiate the game.
One credit: 20 clock hours

## PEB 133 PILLO POLO III

Designed to increase the students skill and strategies in Pillo Polo. Players will be involved in specific responsibilities, maneuvering in definite, planned and strategic offensive patterns through interclass competition.
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

PEB 152 SOFTBALL II
Improves knowledge of the fundamentals, skills, rules, and regulations of softball.
One credit: 20 clock hours

## PEB 157 TABLE TENNIS I

Introduces the basic skills, rules, regulations, and terminology of table tennis.
One credit: 20 clock hours

## PEB 158 TABLE TENNIS II

For students who want to continue learning fundamental skills and strategies of table tennis.
One credit: 20 clock hours

PEB 159 TABLE TENNIS III
Develops the agility to play a competitive game. The advanced player will have a better knowledge of the rules and regulations, and will officiate games
One credit: 20 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

PEB 162 TENNIS II
Improves the player's skills and strategies. More individual play will be stressed.
One credit: 20 cock hours

## PEB 163 TENNIS III

For improvement and advancement of skills in tennis.
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
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
PEB 173 VOLLEYBALL III
Improvement of skills, strategies, and knowledge of volleyball stressed.
One credit: 20 clock hours

PEB 174 COMPETITIVE VOLLEYBALL
Students are provided with an opportunity to develop their skills and strategies for competitive volleyball.
One credit: 20 clock hours

## PEB 177 WHIFFLE TENNIS I

A fast moving game which utilizes the basic skills of eye-hand coordination, quickness of feet, and perception.
One credit: 20 clock hours

## PEB 178 WHIFFLE TENNIS II

Improves skills and knowledge of whiffle tennis. Increases ability to play a more challenging game.
One credit: 20 clock hours

## PEB 179 WHIFFLE TENNIS III

Improves the agility to play a more competitive game. Students gain a better knowledge of rules, regulations, and officiating. One credit: 20 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

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

## 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

## PED 104 DANCE AEROBICS I

Helps students gain cardiovascular efficiency through a variety of dance routines.
One credit: 20 clock hours

## PED 105 DANCE AEROBICS II

Involves the student in more strenuous and difficult dance routines. Develops better cardiovascular efficiency and proficiency. One credit: 20 clock hours

## PED 106 DANCE AEROBICS III

Continues to aid the student in maintaining greater cardiovascular efficiency. Routines will be more difficult.
One credit: 20 clock hours

## PED 107 ADVANCED AEROBICS

Provides the student with advanced conditioning through accelerated aerobic training.
One credit: 20 clock hours

PED 115 COED AEROBICS I
Provides an opportunity for men and women to participate individually or as couples in a variety of Fitness Techniques designed to improve muscle flexibility and cardiovascular conditioning.
One credit: 20 clock hours

## PED 116 COED AEROBICS II

To further develop the techniques designed to improve muscle flexibility and cardiovascular conditioning.
One credit: 20 clock hours

## PED 117 COED AEROBICS III

Designed for those students who want to continue the development of the techniques designed to improve flexibility and cardiovascular conditioning.
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

## PED 122 JAZZ DANCE II

Continued instruction in jazz dance. Provides a rewarding, satisfying jazz dance experience.
One credit: 20 clock hours

## PED 123 JAZZ DANCE III

Advanced instruction in jazz dance: develops a greater knowledge of proficiency in jazz as a form of dance.
One credit: 20 clock hours

## PED 145 FOLK AND SOCIAL DANCE

To gain knowledge and appreciation of dances and music from a variety of cultures.
One credit: 20 clock hours

PED 151 SQUARE DANCING
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

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 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 101 KARATE I

Students learn basic blocks, kicks, and punches of karate.
One credit: 20 clock hours

## PEF 102 KARATE II

Advanced form of kicking, punching, and blocking. Self-defense and fighting techniques of karate examined.
One credit: 20 clock hours

## PEF 103 KARATE III

A continuation of Karate II. Students will develop a deeper understanding of the principles of Karate through the study of advanced martial arts techniques.
One credit: 20 clock hours

## PEF 104 AEROBIC CONDITIONING

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 III

Designed for those students who want to continue to increase their physical fitness and develop a better figure.
One credit: 20 clock hours

## PEF 108 SELF DEFENSE

Teaches various skills and techniques of self defense.
One credit: 20 clock hours

## PEF 109 ADVANCED KARATE

It is intended that through a wide range of experiences, students will develop and understand the advanced techniques and principles of Karate.
One credit: 20 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

## 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

## 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

## 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

## PEF 122 SLIMNASTICS II

Designed to improve the individual's figure, posture, and coordination.
One credit: 20 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

## PEF 135 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

## PEF 136 BODYBUILDING II

To allow the student to continue improvement in bodybuilding techniques and improve physical condition.
One credit: 20 clock hours

PEF 137 BODYBUILDING III
To improve lifting and bodybuilding techniques to maintain and improve physical conditioning.
One credit: 20 clock hours

## PEF 138 PSYCHOLOGY OF RUNNING

Provides information necessary to properly prepare students beginning a program of running. Jogging, running, and group awareness training sessions. Physical, mental and emotional conditioning as an approach to mental health.
One credit: 20 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 151 CONTEMPORARY TUMBLING I

Introduces basic tumbling and acrobatic skills.
One credit: 20 clock hours

## PEF 152 CONTEMPORARY TUMBLING II

Provides instruction in intermediate tumbling and develops challenging tumbling routines and acrobatic skills.
One credit: 20 clock hours

## PEF 161 GYMNASTICS I

Teaches basics of tumbling, balance beam, uneven bars, vault, pommel horse, parallel bars, rings, and high bar. Development of routines will be covered.
One credit: 20 clock hours

## PEF 162 GYMNASTICS II

Continuation of PEF 161, involving more advanced instruction and routines.
One credit: 20 clock hours

## PEF 163 GYMNASTICS III

Continuation of PEF 161 and PEF 162. Emphasizes developing the student's poise, grace, agility, and rhythm.
One credit: 20 clock hours

## PEF 171 WRESTLING I

Introduces the basic fundamentals and skills of wrestling.
One credit: 20 clock hours

## PEF 172 WRESTLING II

Allows the student to continue improving basic fundamentals and skills of wrestling.
One credit: 20 clock hours

## PEF 173 WRESTLING III

An advanced class in wrestling for those who want to improve their techniques.
One credit: 20 clock hours

## PEF 181 ADULT FITNESS I

The student will be instructed in activities which are in fulfillment with his/her individual exercise prescription. A variety of activities will be introduced as an appropriate means of attaining physical fitness. Periodic evaluations will be necessary for prescription purposes.
One credit: 20 clock hours

## PEF 182 ADULT FITNESS II

Continuation of Adult Fitness I. The student will continue activities which are in fullfillment 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

## 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

## 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

## 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, mechanics 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:

 MECHANICS AND THERMODYNAMICSStudies the concepts of mechanics, relativity, and thermodynamics 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: WAVES,

 OPTICS, QUANTUM PHENOMENAStudies the concepts of waves, optics, and quantum phenomena 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 AND MAGNETISM

Studies the concepts of electricity and magnetism using a noncalculus approach.
Prerequisite: PHY 152 or permission of instructor
Five credits: four hours lecture, two hours lab

## 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: MECHANICS AND THERMODYNAMICS

First quarter: an analytical and comprehensive treatment of mechanics, mechanical waves and heat, including basics of relativistic mechanics.
Prerequisite: MAT 161 (or may be taken concurrently) or permission of instructor
Five credits: four hours lecture, two hours lab per week

## PHY 202 GENERAL PHYSICS II: WAVES, OPTICS, AND QUANTUM PHENOMENA

Second quarter: an analytical and comprehensive treatment of waves, light, quantum effects, and basics of nuclear physics.
Prerequisite: MAT 162 (or may be taken concurrently), PHY 201, or permission of instructor
Five credits: four hours lecture, two hours lab per week

## PHY 203 GENERAL PHYSICS III: ELECTRICITY AND MAGNETISM

Third quarter: an analytical and comprehensive treatment of electricity and magnetism.
Prerequisite: MAT 163 (or may be taken concurrently), PHY 202, or permission of instructor, a research paper or physics project may be required
Five credits: four hours lecture, two 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 I'M OK, YOU'RE OK - PSYCHOLOGY OF PERSONAL RELATIONS
Enrichment of personal and family life through the application of transactional analysis.
Three credits

## PSY 110 HEALTHY PERSONALITY

A survey of major theories of personality and a study of the human potential for growth from a humanistic and existential pefspective. 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, selfaffirming, 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 CAREER PLANNING SEMINAR

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 OFLEADERSHIP AND MANAGEMENT

This course is designed to provide students with an overview of organizational leadership and management from a psychological perspective. Students will be introduced to such concepts as: the relationship between leadership and management, the psychology of individual and group change, the leading-learning styles of leadership, the use of conflict resolution and problem solving in organizations and the situational management style.

## Five credits

## PSY 121 DEATH AND DYING: A HOLISTIC PERSPECTIVE

Acquaints participants with new research, alternative approaches, and psychological literature on death and dying. Explores individual view and feelings about death and dying.
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

(This course will not satisfy minimum nor elective requirements for the A.A. or A.S. degree.) (Business Division course)
Surveys the behavioral and social sciences as they affect people at work. Includes personal development, motivation, leadership, perceptions, and attitudes as they affect employment relationships. Five credits

## PSY 149 BIOFEEDBACK AND PSYCHOTHERAPY

Major psychotherapeutic techniques are studied and practiced that supplement biofeedback therapy.
Five credits

## PSY 165 SOCIAL PSYCHOLOGY

A survey of major areas of social psychology. An examination of the factors involved in prosocial behavior, conformity, aggression, obedience to authority, interpersonal attraction, and social responsibility.
Five credits

## 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 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 prejudicia 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 212 HOLISTIC HEALTH

An investigation of the principles of high-level wellness, including stress management, mental visualization, nutritional awareness, exercise, and one's responsibility for life and health.

## 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 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 238 ASSERTIVENESS TRAINING II

For those who have had a class in assertiveness training and have a working knowledge of the concepts and attitudes involved. Skillbuilding activities and group interaction will be used to move from critical, judgmental views of ourselves and others to more open, accepting, supportive responses and attitudes.
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.

## Three credits

## PSY 242 BIOFEEDBACK II

Advanced training in EEG, EMG, imagery techniques, stress management, and cognitive behavior modification.
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.
Five 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 hours lab

## PSY 248 CHILD PSYCHOLOGY

A study of the normal child's emotional, physical, cognitive, social, and moral development from infancy through adolescence. * Five credits

## PSY 249 CRISIS COUNSELING

Consists of para-professional skill-building exercises in communication, empathy training, core-dimensions of counseling, crisis intervention information and models, suicide information, and community emergency resources. On-site work with the In-Touch Helpline provides an opportunity for the actual integration of paraprofessional helping skills with practical experience.

## Three credits

## PSY 267 BIOFEEDBACK IV: PRACTICUM

Supervised clinical education in biofeedback. Supervised trainees begin clinical work with clients.
Ten credits

## PSY 268 BIOFEEDBACK V: PRACTICUM

Supervised clinical education continued. The trainee works with a variety of clients.
Ten credits

## PSY 275 HYPERTENSION FOLLOW-UP

Continuation of the training begun in PSY 244, including biofeedbac 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 ide tity, 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

## MAS 205 COUNSELING MINORITIES

Builds awareness and understanding in the area of counseling minorities. Emphasizes the Mexican American and the development of conceptual models applicable to other minorities in terms of values and cultural conflict.

## Three credits

XRT: RADIOLOGIC TECHNOLOGY

XRT 100 INTRODUCTION TO RADIOLOGIC TECHNOLOGY/ PATIENT CARE
Introduces students to Radiologic Technology; program guidelines, history of radiology, organizational structure of clinical facilities, professional organizations, accreditation, certification, licensure, and professional development; aspects of patient care, the technologist and the patient, specific nursing procedures, contrast media, patient preparations, patient and inter-department communications, and professional ethics.
Prerequisite: majors only or permission of instructor One credit

## XRT 101 RADIOGRAPHIC POSITIONING/LABORATORY I

Designed to ensure that students gain the ability and confidence they need to perform the radiographic examination they will be expected to handle in the clinical setting; fundamentals of positioning, positioning nomenclature, positioning of the thoracic contents, abdomen and contents, and distal upper and lower extremities.
Prerequisite: majors only
Five credits

## XRT 102 RADIOGRAPHIC POSITIONING/LABORATORY II

A continuation of XRT 101. Consideration will be given to the structure and positioning of the upper and lower extremities, shoulder and pelvic girdles, lumbar and thoracic spines.
Prerequisite: XRT 101, majors only
Five credits
XRT 103 RADIOGRAPHIC POSITIONING/LABORATORY III
A continuation of XRT 101 and XRT 102. Emphasis on the structure and positioning of cranium, cervical spine, distal spine, special views of the spine and pelvis, and bony thorax.
Prerequisite: XRT 101, XRT 102, and XRT 103, majors only
Five credits

## XRT 104 RADIOGRAPHIC POSITIONING/LABORATORY IV

A continuation of XRT 101, XRT 102, and XRT 103. Emphasis on sinuses, facial bones, and special positions of the cranium. Prerequisite: XRT 101, XRT 102, and XRT 103, majors only Five 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 full-time radiologic technology students are permitted to participate in this course.
Prerequisite: majors only
Five credits

## XRT 112 CLINICAL EXPERIENCE II

Continuation of supervised clinical education under the direct supervision of a qualified radiologic technologist. Correlates skills from previous classes.
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 previous classes.
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 previous classes.
Prerequisite: XRT 113, majors only
Fourteen credits

## XRT 115 FILM EVALUATION I

Develops an understanding of the radiographic image. Consideration will be given to evaluation of completed radiographs for patients' data, technique employed, collimation and shielding, positioning accuracy, anatomy demonstrated, and radiographic quality. Emphasis on areas covered in XRT 101 and XRT 102.
Prerequisite: permission of instructor
Two credits

## XRT 116 RADIOGRAPHIC PROCESSING

Identifies the technical aspects of processing room design and function, manual and automatic processing, film characteristics, radiographic film artifacts and their causes, silver reclamation, film storage and handling.
Prerequisite: majors only or permission of instructor
Two credits

## XRT 121 RADIOGRAPHIC EXPOSURE: LECTURE

Introduces the student to the theory of radiographic prime factors, factors influencing exposure values, attenuating and restricting devices, technique charts and their application.
Prerequisite: majors only or permission of instructor
Four credits

## XRT 122 RADIOGRAPHIC EXPOSURE LAB

Provides the student with guided experiences in the laboratory setting to reinforce the theory material presented in XRT 121.
Prerequisite: XRT 121, majors only or permission of instructor Two credits

## XRT 205 SPECIAL PROCEDURES AND PATHOLOGY

Acquaints the student with the theory, equipment, and methodology of selected special procedures. Gives the student a ba ic 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
Three credits

## XRT 206 RADIATION 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 207 IMAGING

A study of image intensification, recording media, and special imaging techniques in radiography.
Prerequisite: permission of instructor
Two credits

## XRT 211 CLINICAL EXPERIENCE V

The student in the clinical setting will perform radiographic procedures under the direct suprvision 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
Ten credits
XRT 213 CLINICAL EXPERIENCE VII
Continuation of XRT 212. Orientation to minor affiliates.
Prerequisite: XRT 212, majors only
Ten credits

XRT 214 CLINICAL EXPERIENCE VIII
Continuation of XRT 213. Rotation to minor affiliates.
Prerequisite: XRT 213, majors on y
Twelve credits

## XRT 216 FILM EVALUATION II

Continuation of XRT 115 with emphasis on areas covered in XRT 103 and XRT 104.
Prerequisite: XRT 115 or permission of instructor
Two credits

## XRT 217 RADIATION PROTECTION

The student will learn the principles of radiation protection; the need for protection, interaction of radiation with matter, patient protection, personnel protection, maximum permissible dose, and personnel exposure monitoring.
Prerequisite: permission of instructor
Two 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
Three 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 231 RADIOLOGICAL SCIENCES

Reviews all courses and clinical work in radiologic technology in preparation for the American Registry of Radiologic Technologist examination. Diagnostic examination will be given to identify weak academic areas followed by recommendations for remedial study programs.
Prerequisite: majors only or permission of instructor
Three credits

## REA: READING

## REA 011 DEVELOPMENTAL READING I

Provides an English-speaking non-reader with instruction and practice in basic reading skills. Primary objectives are to equip the student with initial skills in word attack and comprehension, and to prepare the student for REA 012.
Prerequisite: placement

## 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: REA 011 or 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, to expand the variety of reading skills the student uses, and prepare the student for the REA 090 courses.
Prerequisite: REA 013 or placement

## REA 101 READING AND STUDY SKILLS FOR COLLEGE

Increases the student's ability to read college level texts and provides student with the study techniques necessary for success in content areas and study situations.
Prerequisite: 10th grade reading level
Five credits

## REA 102 MASTERING COLLEGE READING

Increases the student's ability to comprehend college level texts by providing the student with critical, affective and creative reading skills.
Prerequisite: REA 101 or Reading Level IV
Three credits

## REA 107 SPEED READING IMPROVEMENT

Increases knowledge of literal, critical, and affective comprehension skills while teaching the use of six reading speeds.
Prerequisite: REA 101 or 11th grade level on reading test Five credits

## REA 116 BASIC SPELLING SKILLS

Provides opportunity to learn and improve the basic spelling skills necessary for academic success under teacher supervision and instruction on an individual basis in a laboratory.
One credit

## REA 119 LIBRARY SKILLS

Introduces students to the resources of the Aims Library and provides instruction in its use on an individual basis.
Two credits

## RES: REAL ESTATE

## RES 101 REAL ESTATE PRACTICE

Provides the student with an understanding of real estate principles and practices, and the basic skills necessary to work in the field of real estate.
Three credits: 30 clock hours

## RES 102 REAL ESTATE LAW

Provides students with an understanding of the rights and obligations of the real estate agent regarding his or her contractual and fiduciary duties owed to the parties he or she represents.
Prerequisite: RES 101 or permission of instructor
Three credits: 30 clock hours

## 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 sales.
Prerequisite: RES 101 and RES 102
Three credits: 30 clock hours

## RES 104 REAL ESTATE CLOSINGS

Provides an in-depth study of real estate closings. Includes understanding the contract and precipitating the closing, various problems in completing closing statements, documents related to closings, and debit and credit items encountered in real estate closings. Recommended for those preparing for a profession in real estate and especially for those planning to sit for the broker's exam.
Three credits: 30 clock hours

## RES 205 REAL ESTATE FINANCE

Provides students with the history and development of real estate financing; an economic overview of the federal government's monetary and fiscal policy; a working knowledge of both primary and secondary money markets and of the contracts used in financing.
Prerequisite: RES 101, RES 102, or permission of instructor
Three credits: 30 clock hours

## RES 206 REAL ESTATE APPRAISAL

Assists the student in understanding and arriving at an estimate of real property value for his or her principals. Emphasizes the three traditional approaches to value and their rationale.
Prerequisite: RES 101 and RES 102, or permission of instructor
Three credits: 30 clock hours

## RSC: RESPIRATORY CARE

## RSC 101 INTRODUCTION TO RESPIRATORY THERAPY

This introductory course prepares students for the respiratory therapy program by giving them a realistic idea of the level of learning required for successful completion of the program. Includes the foundations of patient care, ethics, basic respiratory care procedures, limited clinical experience, and laboratory demonstration.
Three credits: 40 clock hours

## RSC 111 RESPIRATORY SCIENCE I

Introduces the student to the anatomy and physiology of the cardiopulmonary systems, examining the function and structure of the lung and heart; includes the mechanics of ventilation, muscles of respiration, the bronchosegments of the lungs, blood flow through the heart and relationship between the pulmonary and systemic circulation systems.
Three credits: 30 clock hours

## RSC 112 RESPIRATORY SCIENCE II

Discusses the indications, contraindications, hazards, precautions, and the duration of the effects of respiratory therapy medications. Includes the primary pharmacological effects and toxic side effects of medication, and the legislative regulation relating to drug administration
Prerequisite: RSC 111
Three credits: 30 clock hours

RSC 211 RESPIRATORY SCIENCE III
This introductory course prepares the student for the application of the acid-base physiology of the human body. It will define the basic principles of $\mathrm{pH}, \mathrm{PaCO} 2$ in relation to the pulmonary and renal systems. It will prepare students to perform arterial blood gas punctures and interpretation of the results.
Prerequisite: RSC 111, RSC 112
Three credits: 30 clock hours

## RSC 212 RESPIRATORY SCIENCE IV

Develops the skills and understanding necessary for advanced pharmocological agents as they relate to obstructive and restrictive respiratory diseases. Includes the indications, complications, precautions, and dosage of medications used, and an introduction to the micro-organisms causing diseases and their treatment.
Prerequisite: RSC 211
Two credits: 20 clock hours

## RSC 121 RESPIRATORY EQUIPMENT APPLICATION I

Develops techniques and skills necessary to administer the procedures of gas, aerosol, and humidity therapy in a proper and effective manner with regard to patient care.
Prerequisite: program admission
Five credits: 70 clock hours

## RSC 122 RESPIRATORY EQUIPMENT APPLICATION II

Demonstrates techniques and skills used to administer the procedures of mechanical assisted ventilation, to include the classification of ventilators, their complications and hazards, monitoring techniques, and assembly/disassembly of both the intermittent and continuous type of ventilators.
Prerequisite: RSC 121
Five credits: 70 clock hours

## RSC 221 RESPIRATORY EQUIPMENT APPLICATION III

Develops skills and techniques necessary to administer procedures of advanced mechanical assisted ventilation, to include weaning patients from continuous ventilation, monitoring patients on continuous ventilation, and adjunct respiratory maneuvers.
Prerequisite: RSC 122
Five credits: 70 clock hours

## RSC 222 RESPIRATORY EQUIPMENT APPLICATION IV

Demonstrates skills and techniques necessary to administer pulmonary function testing procedures. Includes pulmonary mechanics, lung volumes, ventilation tests, and diffusion capacities.
Prerequisite: RSC 221
Three credits: 40 clock hours

## RSC 131 RESPIRATORY PRACTICUM I

Provides for clinical atmosphere for application and demonstration of gas, aerosol, and humidity techniques and procedures in a safe and effective manner relating to patient care.
Prerequisite: program admission
Three credits: 90 clock hours

## RSC 132 RESPIRATORY PRACTICUM II

Provides the clinical atmosphere for application and demonstration of intermittent, positive pressure-breathing treatments, assisting in continuous ventilation techniques.
Prerequisite: RSC 131
Eight credits: 240 clock hours

## RSC 133 RESPIRATORY PRACTICUM III

Develops the skills and understanding necessary to properly perform arterial blood gas punctures, application of the continuous ventilator to real patient care, to include monitoring techniques of blood gas interpretation and intensive care procedures.
Prerequisite: RSC 112
Eight credits: 240 clock hours

## RSC 134 RESPIRATORY PRACTICUM IV

Provides for a clinical atmosphere for performing pulmonary function testing procedures, utilizing advanced respiratory diagnostic modalities, and demonstration of job entry practitioner requirements.
Prerequisite: RSC 133
Eight credits: 240 clock hours

## RSC 228 NEONATAL AND PEDIATRICS

Develops a working knowledge of respiratory problems associated with the premature, newborn, and/or pediatric patient. Includes the embriology and comparative anatomy and physiology of the fetus, infant and pediatric patient.
Prerequisite: none
Two credits: 20 clock hours

## RSC 241 CLINICAL EXPERIENCE I

Acquaints students with the basic concepts of medical practices as they relate to respiratory care and teaches basic pathological processes as they apply to the respiratory diseases covered in this course.
Prerequisite: RSC 211
Two credits: 20 clock hours

## RSC 251 RESPIRATORY SEMINARS I

Provides each student, on a weekly basis, with a discussion of clinical situations; understanding of techniques and procedures of patient care: comparison of patient care situations; and discussion, with the medical director, instructors, and clinical staff, concerning areas of improvement of patient care relating to respiratory care.
Prerequisite: COS 115
One credit: 10 clock hours

## OHC 100 ORIENTATION TO HEALTH CARE

Introduces general health care delivery systems, including ethics, hospital standards and policies, malpractice regulations, and comparison and examination of basic nursing care procedures in simulated situations.
Prerequisite: program admission
Four credits: 50 clock hours

## HLH 101 APPLIED SCIENCE

Provides for basic understanding of gas physics and basic applied chemical equations as they relate to respiratory care of the patient. Prerequisite: program admission
Three credits: 30 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 100 MAN: HIS TECHNOLOGY AND HIS WORLD

Introduces a series of significant, current problems concerned with technology which surround and influence students' lives. In each case an attempt is made to determine the magnitude and nature of the problems, ascertaining why they arose and discovering positive alternatives available to society and government. IBM 4331 computer is used as an instructional aid.

## Five credits

## 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: SCl 105 or permission of instructor

## Three credits

## SCI 115 PASSIVE SOLAR DESIGN

The following topics will be included in this course: elementary thermodynamics, fundamentals of solar heating, factors determining effectiveness and efficiency, design characteristics, a selection of applications and aesthetic realities.

## Three credits

## SCI 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 procedu es 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 soc al 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
Four credits

## SOC 106 CONTEMPORARY SOCIAL PROBLEMS

A study of both specific and general problems of our time. Some of the social problems studies include poverty, civil liberties, social change, crime and delinquency in the context of contemporary American society

## Three credits

## SOC 108 AGING IN AMERICA

Acquaints students with the process of aging, how aging affects the individual and society, gerontological services, and gerontology as a career.

## Three credits

## SOC 111 SOCIAL SERVICES I

Introduces and familiarizes the student with the human services field in the areas of social policy, social agencies and programs in the community, and the utilization of their services. Interrelates the social sciences with other scientific disciplines. Helps students strengthen and integrate their knowledge of human behavior and development.
Three credits

## SOC 112 SOCIAL SERVICES II

Second in a sequence of three courses in which students will be given an opportunity to explore the human services fields. Three credits

## SOC 113 SOCIAL SERVICES III

Last in a sequence of three courses in which students will be given an opportunity to explore the human services fields. Provides students with on-the-job experience in one or more human services as part of becoming familiar with skills and techniques involved.
Five credits

## SOC 115 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 117 SOCIOLOGY OF LEISURE

Analysis of the changing relationship between work and leisure (non-work). As we enter the post-industrial / high-tech society, our quest for quality of life may be affected by new occupations, new opportunities, and nonwork patterns of behavior.

## Three credits

## SOC 208 SEX-ROLE ISSUES IN MODERN AMERICA

Helps students gain a better understanding of both traditional and alternative sex roles. Facilitates the recognition of cross-cultural differences and similarities of behavior for males and females within society. Increases awareness of sex roles and sexuality as they change with age.
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.
Three credits

## SPP: SPECIAL PROGRAMS

## DST 025 BILINGUAL CITIZENSHIP

Designed to prepare students to successfully pass the test to obtain United States citizenship. Local, state, and national government functions and procedures will be emphasized. When the student is ready, an application packet issued by the Immigration and Naturalization Department will be given to the student to apply for citizenship. Spanish instruction will be provided for those who need it

## DST 065 BILINGUAL DRIVER'S EDUCATION

Designed to prepare students to understand and pass the driver's license oral or written examination. If the student cannot read or write, emphasis is given to the verbal understanding of signs, rules, and state laws. Spanish instruction will be provided for those who need it.

## DST 025 CLASES DE CIUDADANIA

Esta clase se ensē̃a para preparar estudiantes para que puedan pasar el examen de ciudadenia de los Estados Unidos. Se dara énfasis a las funciones y prodecimientos del govierno local, estatal y nacional. Cuando el estudiante estélisto, un sobre con lasaplicaciones necesaries del Departamento de Imigración y Naturalización se dara al estudiante para que pueda aplicar por ciudadania. Instruccion en español 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 será presentada oralmente si el estudiante no puede leer o escribir. Instrucción 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 117 ORAL INTERPRETATION

Public reading of prose, dramatic and poetic literature along with study of principles of aesthetics and psychology

## 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 self-confidence 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 or 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 non-parametric techniques. Maximum of seven credits allowed for STA 200 and STA 201
Prerequisite: two years high school mathematics
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: MAT 122 is highly recommended
Five credits

STA 202 STATISTICS FOR BUSINESS, SCIENCE, AND SOCIAL SCIENCE II
Includes tests of statistical hypothesis based upon the z, t, chisquare 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:

## TRA 102 TRANSPORTATION FUNCTIONS AND

 REGULATIONSStudents will examine loss and damage and the responsibilities and duties of both the shipper and carrier when loss and damage occur. Study tracing and expediting shipments by the different modes of transportation; understanding the differences between private, contracts, and common carriage; and understand the federal and state regulations which control common carriers.
Prerequisite: TRA 101 or work experience, and permission of instructor
Four credits: 40 clock hours
TRA 103 TRANSPORTATION FREIGHT RATES AND TARIFFS Identifies the rate bureaus and teaches how they function in the rail and motor industry. Students check rail and motor rates by using actual published rail and motor tariffs and learn the basic considerations used to determine transportation rates.
Four credits: 40 clock hours

## 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 arc welding equipment. They will weld common fillet welds on various gauges of material using . 035 diameter solid wire.
Four credits: 60 clock hours

## WLT 115 ADVANCED GAS METAL ARC WELDING

Students will weld beveled butt joints in all positions using . 035 solid wire. They also will receive training using flux cored wire.
Four credits: 60 clock hours

## WLT 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.
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.
Twenty-four credits: 300 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 251 WELDING FABRICATION

This course is designed to provide basic knowledge in the areas of layout, fabrication tools and equipment, and assembly of welding structures. Actual hands-on work will be provided.
Prerequisite: WLT 151 and WLT 152, or permission of instructor. Twenty-four credits: 300 clock hours


## AIMS JUNIOR COLLEGE DISTRICT COMMITTEE

Dale Majors
PresidentSecretary
James T. Turner
J. Edward Husted
Treasurer
Lynn Pitcher
MemberMember

## ADMINISTRATIVE STAFF

CONGER, DR. GEORGE R. (President) ..... 1979.
GAISER, PAUL W. (Dean/School of Occupational Education) ..... 1977
KIEFER, JERRY (Dean of the College) ..... 1974
RAILE, DR. DWANE D. (Dean/School of Arts and Sciences) ..... 1971
HILLARD, DR. WILLIAM M. (Dean/Student Personnel Services) ..... 1984
CUMMINS, DON (Associate Dean of the College and Director/South Campus) ..... 1980
RANGEL, ROBERT N. (Associate Dean of the College/Evening Program) ..... 1969
ROUSE, PHILIP (Associate Dean/School of Occupational Education) ..... 1980
BOGGS, RICHARD E.(Director/Computer Services) ..... 1977 ..... 1977
BURNS, RICHARD, C. (Director/Purchasing) ..... 1981 ..... 1981
CARR, TERRY (Director/Financial Aid) ..... 1971 ..... 1971
MARTINEZ, RALPH D. (Director/Records and Registration) ..... 1973 ..... 1973
McCOLLUM, OSGOOD (Business Manager) ..... 1982 ..... 1982
MORELLI, DR. MARGARET E. (Registrar) ..... 1981 ..... 1981
OLSON, MARK L. (Director/Public Information) ..... 1982 ..... 1982
STRAUB, JAMES K. (Director/Telecommunications) ..... 1982 ..... 1982
TINDALL, DAN (Director/Physical Plant) ..... 1980 ..... 1980
WHITE, WILSON B. (Director/Personnel and Payroll) ..... 1980 ..... 1980
*Indicates the year each joined the College.

## AIMS COMMUNITY COLLEGE FACULTY

ADAMS, JAMES R.
(Mid-Management)B.A., University of Northern Colorado; Graduate study, Universityof Northern Colorado; Eighteen years business experience.1968
ADAMSON, WILLIAM H.
(Electronics Technology)
B.S.E.E., University of Southern California; Graduate studyUniversity of California-Los Angeles; Colorado State University;Eighteen years industrial and military experience. 1968
ARNDT, MICHAEL W.
(Respiratory Care)B.S., Mount Marty College, South Dakota; Certified RespiratoryTherapy Technician; Nine years respiratory therapy exprience.1976
ARON, ANN
(Division Chair, Business)
B.S., Uni
Colorado. ..... 1978
BAILEY, WILLIAM
(Coordinator, Fire Science)
Colorado Certificate, Firefighter I; Nine years industrial experi-ence.1982
BANTIN, FREDERICK
(Electronics Technology)
B.A., University of Nebraska-Omaha; Electronic Technology
Institute, Inc., Denver; Four years industrial experience. ..... 1981
BATMAN, LARRY G.
(Mathematics and Computer Science)
B.A., University of Northern Colorado; M.A., University ofNorthern Colorado; Advanced graduate study, Colorado StateUniversity.1967
BAY, MARVIN L.
(Aviation Technology)
B.S., Colorado State University; M.A., University of NorthernColorado; Advanced graduate study, University of NorthernColorado; Eight years industrial experience.1970
BECK, ROBERT
(Electronics Technology)
Two years electronics school, U.S. Navy; Fifteen years industrialexperience.1980
BINGER, WILLIAM R.
(Building Construction)
Twenty years industrial experience. ..... 1972
BITTERMAN, R. BEN
(Auto Body)
Ten years trade experience. ..... 1982
BROWN, W. ARLIN
(Communications \& Humanities)
B.A., Eastern New Mexico University; M.A., Western State Collegeof Colorado; Ed. D., University of Northern Colorado.1968
BROWN, JAMES E., JR.
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced graduate study, University of Northern Colorado, Colorado State University; Eleven years industrial experience. ..... 1976
BUXMAN, BETTY J.
(Accounting)
A.A., Aims Community College; B.A., University of NorthernColorado; M.A., University of Northern Colorado; Eight yearsbusiness experience.1974
CAMERON, ROY E.
(Biology)
B.S., University of Illinois; M.S., University of Illinois; Advancedgraduate study, Purdue University, Illinois Institute of Technology,Eastern Illinois University, Northern Illinois University, Universityof California-Berkeley, University of Northern Colorado, Univer-sity of Denver.1967
COLTON, KERRY, L.
(Accounting)
B.A., University of Northern Colorado; M.S., University ofNorthern Colorado; One year business experience.1971
COMPESTINE, FRANCIS C.
(Division Chair, Mathematics \& Science)
B.A., Arizona State University; M.S., New Mexico Highlands University; Ph. D., University of Northern Colorado. 1968
COOPER, SAM
(Mathematics and Computer Science)
A.A., Aims Community College; B.A., University of NorthernColorado; M.A., University of Northern Colorado; Advancedgraduate study, Colorado State University.1981
CRIBELLI, SUSAN
(Coordinator, Tutorial Center)
B.A., University of Northern Colorado; M.A., University of Northern Colorado. ..... 1972
CULLINS, BILL
(Engineering Technology)
B.S., Tarleton State University, Texas; Five years industrialexperience.1982
DAGGETT, NANCY SUE
(Communications \& Humanities)
B.A., University of Northern Iowa; M.S.T., Wisconsin StateUniversity; Advanced graduate study, University of NorthernColorado.1969
DARLING, DONALD W.
(Engineering Technology)
A.A., Foothill College, California; B.A., University of NorthernColorado; M.A., University of Northern Colorado; Advancedgraduate study, Colorado State University; Fifteen years indust-rial experience.1976

## DAVISSON, SUE E.

(Coordinator, Counseling Services)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced graduate study, Kephart Clinic;
Ed.S., University of Northern Colorado.
1976

## EKHARDT, LUCILLE

## (Business)

B.A., University of Northern Colorado; Six years business experience.

## EDEL, GEORGE D.

## (Automotive Mechanics)

B.E., Colorado State University; Graduate study, Colorado State University; Eight years trade experience.

1972

FAJARDO, JOSEPH S.
(Communications \& Humanities; Program Chair, Mexican American Studies)
B.A., University of Denver; M.A., University of Colorado. 1974

## FREDERICK, GENE A.

(Economics and Geography)
B.S., University of Missouri; M.A., Adams State College; Advanced graduate study, Purdue University, University of Northern
Colorado, University of New York.
1968

## FREESE, JASPER (Jay)

(Engineering Technology)
B.S.C.E., Worchester Polytechnic Institute, Massachusetts; M.S.C.E., University of Southern California; M.E., Colorado State University; Twenty-three years industrial and military experience. 1981

## GEIST, MIKE

## (Auto Body)

B.E., Colorado State University; M.E., Colorado State University; Advanced graduate study, Colorado State University, University of Northern Colorado; Nine years industrial experience. 1979

## GIESICK, R. ARTHUR

## (Division Chair, Technical)

B.A., University of Northern Colorado; Nationally certified as an Engineering Technician by N.I.C.E.T.; Graduate study, Colorado State University, University of Northern Colorado; Twenty-six years industrial and military experience.

1970

## GODDARD, JERRY F.

(Business)
A.A., Graceland College, Iowa; A.B., University of Northern Colorado; M.A., Colorado State University.

1972

## GOMEZ, RUTH

(Division Chair, Developmental Studies)
M.A., University of Northern Colorado.

## GONZALEZ, DAVID

## (Developmental Studies)

B.A., University of Northern Colorado; M.A., University of Northern Colorado.

## GORDON, FRANK J.

(Political Science)
B.A., University of Colorado; M.A., University of Colorado; Ph.D., University of Colorado-Boulder; Post-doctoral research at Harvard University, West Berlin, Hannover, Goettingen, Marburg University-West Germany.

1982

## GORGEN, LAWRENCE A.

(Developmental Studies)

B.A., Kearney State College, Nebraska; M.A.T., Washington State University; Ed.S, University of Northern Colorado; Advanced study, University of Edinburgh.

1970

## GREEN, JUDITH

(Biofeedback)
B.A., University of Chicago; M.A., University of Iowa; Ph.D.,

Union Graduate School, Ohio.
1982

## GREEN, RALPH H.

(Electronics Technology)
B.S., Colorado State University; M.Ed., Colorado State University; Advanced graduate study, Colorado State University; Eighteen
years business and industrial experience.
1974

GUILLIAMS, CARL E.
(Auto Body)
Thirty years industrial experience.
1976

## HALL, CATHERINE

(Data Processing)
A.A.S., Aims Community College; B.S., Moorhead State College, Minnesota; M.S., University of New Mexico; Five years business experience.

1982

## HARRIS, DONALD T.

## (Chemistry)

B.S., Western Kentucky State University; M.A., Western Kentucky State University; Advanced graduate study, Colorado State University.

1970

## HEEN, SAMUEL K.

(Physical Education and Communications \& Humanities)
B.A., Colorado State University; M.Ed., Colorado State University.

1971

## HEIMAN, GALE E.

## (Business)

A.B., University of Northern Colorado; M.A., University of Northern Colorado; Ph.D., Laurence University School of Banking California; Fourteen years of business experience.

1969

## HEIN, B. JIM

(Division Chair, Trades \& Industry)
B.Ed., Colorado State University; M. Ed., Colorado State

University; Ten years trade experience.
1969
HICKMAN, JOHN C.
(Welding)
Welding Certificate, Hobart Technical Center; Colorado State
University; Eighteen years industrial experience. 1970

## JOKERST, JAMES C.

(Assistant Division Chair, Psychology)
B.A., University of Arizona; M.A., University of Northern Colorado;

Ph.D., University of Northern Colorado.
1971

## KARST, GERALD L.

## (Sociology)

B.A., University of Northern Colorado; M. Ed., Colorado State University

1970

## KIEKHAEFER, ELMER A.

## (Mid-Management)

B.A., Valparaiso University, Indiana; M.A., University of New Mexico; Advanced graduate study, University of Northern Colorado; Eighteen years business experience.

1974
KILLEBREW, WILLIAM A.
A.A.S., Aims Community College; Four years industrial experi- ence. ..... 1974
KING, DEBRA
(Graphic Technology)
Certificate in Graphic Communications, Mankato Area Vocation-
al Technical Institute; Seven years industrial experience. 1983
KNUDSON, DEBRA
(Radiologic Technology)
X-Ray Certificate from Presbyterian Hospital School of Radiology;
Registered with American Registry of Radiologic Technologists;
Seven years clinical experience. ..... 1982
LANE, E. KEITH
(Mathematics)
B.S., West Texas State University; M.S., West Texas StateUniversity.1968
LARSEN, HERBERT
(Building Construction)
A.A.S., Aims Community College; Eleven years trade experience.1982
LEUSINK, JUDITH P.
(Business)
B.S., Colorado State University; Graduate study, University ofNorthern Colorado; Five years business experience.1971
LORENSON, M. RUTH
(Health Occupations)
Nursing Diploma, University of Oklahoma; B.S., University ofColorado; M.A., University of Northern Colorado; Advancedgraduate study, University of Northern Colorado.1971
LOVELESS, RUBY
(Data Processing)B.S., Colorado State University; Six years business experience.1981
MARQUEZ, MAXINE F.
(Business)
B.A., University of Northern Colorado; M.A., Colorado State
University. ..... 1974
MARTIN, PAUL
(Business)
B.A., McNesse State University, Louisiana; M.A., University ofNorthern Colorado; Twelve years business experience. 1981
MATHEWS, MARILYN
(Accounting)
B.A., University of Northern Colorado; M.A., University ofNorthern Colorado; Eight years business experience.1968
MAXFIELD, BARBARA
(Developmental Studies)
B.A., Colorado State University; B.S., Colorado State University;M.A., University of Northern Colorado.1980
McKIBBIN, CALVIN T.
(Mid-Management)
B.S., University of Nebraska; M.A., University of NorthernColorado; Twenty-four years business experience.1976
MOONEN, JOHN
(Coordinator, Business Lab)

State University of New York-Buffalo; M.A., Colorado State University; Ten years business experience. 1980

## MOORE, GEORGE D.

## (Automotive Mechanics)

B.Ed., Colorado State University; M.Ed., Colorado State University; Advanced graduate study, Colorado State University; Certified General Mechanic, NIASE; Fourteen years trade experience.

MUELLER, JOHN P. (History)
B.S., Colorado State University; M.A., University of Colorado.

1971

## MURPHY, STEPHEN

(Coordinator, Emergency Medical Services)
Colorado Certified Paramedic; Flight Paramedic; Ten years field experience.

MYERS, CHARLES E., II
(Coordinator, Criminal Justice)
B.A.. California State University-Fresno; Graduate study, California State University-Chico; Ten years police and field training experience.

1982

## NEET, KENNETH

(Accounting)
B.A., Point Loma College, California; Seven years business experience.

1982

## PAGE, TRULENE B.

## (Business)

B.S., Colorado State University; M.A., University of Northern Colorado; Advanced graduate study, University of Northern Colorado.

1968

## PECK, DANIEL D.

(Division Chair, Public Service)
B.E., Colorado State University; Graduate study, Colorado State University; Twelve years industrial experience.

1971

## PETERSON, MIRIAM E.

(Business)
B.S., University of Northern Iowa; M.A., University of Northern Colorado; Eight years business experience.

1967
REALE, BARBARA G.
(Developmental Studies)
A.A., Colorado Women's College; B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced graduate study, University of Colorado, Eastern New Mexico University, University of Northern Colorado, Adams State College.

1969

## RICHTER, WALTER

## (Science)

B.S., Wagner College, New York; Ph.D., University of Vermont; Post-doctoral research fellow, University of Alabama Medical Center.

1980
RITTER, DONALD B.
(Assistant Division Chair, Design \& Creative Studies)
B.A., Michigan State University; M.A., Michigan State University;
M.A., University of Northern Colorado.

1971

## ROADMAN, HARRIETTE

(Mathematics and Computer Science)
B.A., Utah State University; M.A., Colorado State University.

## ROBERTS, WILILIAM

(Building Construction)
Twenty-six years industrial experience.

## ROBINSON, JAMES (LYN)

## (Physical Science)

B.S., University of New Mexico; M.A., University of New Mexico; Ed.D. University of Northern Colorado; Advanced graduate study, University of Kansas, University of Denver, Colorado State University.

1969

## RODRIGUEZ, CHARLOTTE

(Counselor)
M.A., University of Northern Colorado.

1971

## SCHOSSOW, DENNIS

## (Automotive)

B.S., Moorhead State University, Minnesota; Vocational Education Certificate, Colorado State University; Five years industrial experience

## SCOTT, LINDA

(Business)
B.S.E., North East Missouri State University; M.A. University of Northern Colorado.

## SHELLENBERGER, ROBERT

## (Psychology)

B.A., Bluffton College, Ohio; B.D., Vanderbilt University, Tennessee; M.A., Northwestern University; Ph.D., Northwestern University.1975

## SHATRAW, DIANA

(Radiologic Technology)
Radiologic Technology Certificate, Weld County General Hospital; Registered Technologist (American Registry of Radiologic Technology); Ten years clinical experience. 1979

## SIMS, ESTHER S.

(Division Chair, Communications \& Humanities)
B.A., University of Colorado; M.A., University of Colorado; Ed.S., University of Northern Colorado.

1968

## SLIWINSKI, BOB

(Auto Mechanics)
Certificate in Vocational Education, University of Maryland; Fifteen years industrial experience.

## SLOMER, RUTH

## (Communications \& Humanities)

B.S., Illinois State University; M.A., Western State College; Advanced graduate study, University of Colorado, University of Northern Colorado, Colorado State University, Denver University, Brigham Young University.

1970

## SOWDER, GLEN E.

## (Agriculture Technology)

A.A., Northeastern Junior College, Colorado; B.S., Colorado State University; M.E., Colorado State University.

1981

## SPIKA, MICHAEL <br> (Welding)

A.A., Long Beach City College, California; Advanced study, California State University-San Diego, University of California -Los Angeles; Nine years industrial experience.

1978

STEPHENSON, THELMA J.

(Data Processing)

A.A.S., Aims Community College; B.M.E., Indiana University;

One year business experience.
1976

## STEWART, DOROTHY M.

(Communications \& Humanities)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced graduate study, University of Northern Colorado, University of Colorado; Cambridge University,
England.
1967

## SUMMERS, MAURINE

(Child Care)
B.A., University of Northern Colorado; M.Ed., Colorado State University; Advanced graduate study, Pacific Oaks College, California; University of Northern Colorado; Seven years experience in child care services.

1972

## TERRAZAS, ARTHUR

## (Developmental Studies)

A.A., Aims Community College; B.A., University of Northern Colorado; M.A., University of Northern Colorado.

## TRIMBLE, C. WILLIAM

(Assistant Division Chair, Physical Education)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Ed.S., University of Northern Colorado.

1970

## TURNER, JOHN T.

(Division Chair, Behavioral \& Social Science)
B.A., Adams State College; M.A., Adams State College; Advanced graduate study, Colorado State University, University of Northern Colorado.

1968

## VANTINE, DIANE L.

(Communications \& Humanities; Program Coordinator, Music and Theatre)
B.A., University of Wyoming; M.A., University of Wyoming; Advanced graduate study, Kansas State University, University of Denver.

1969

## VASA, KATHERINE

## (Director, Child Development Center)

B.S., Colorado State University; Advanced study, University of Northern Colorado; Certified Child Care Center Director; Six years experience in child care services.

1976

## VELASQUEZ, MARIA B.

(Developmental Studies)
B.A., University of Northern Colorado; M.A., University of Northern Colorado.

1972

VIGIL, MARY L.
(Developmental Studies)
B.A., University of Colorado.

1973

## WEBSTER, MARY L.

## (Mid-Management)

B.S., Colorado State University; M.S., Colorado State University;

Five years business experience.
1978

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AIMS COMMUNITY COLLEGE
5401 W. 20 St.
NO APPLICATION FEE
REQUIRED

Greeley, Colorado 80631
(303) 330-8008

ADMISSION TYPE ( _ ) New Student $\qquad$
Transfer Student $\qquad$
Re-admit $\qquad$ coding purposes of the Admissions Office

RESIDENCY STATUS (__ )
ADMISSIONS DATA
SOCIAL SECURITY NUMBER $\qquad$

NAME $\qquad$ MAIDEN OR PREVIOUS NAME ___ MARITAL STATUS Single ___ (_) Married ___ (_)


## COLLEGE PLANS

Quarter \& Year of expected enrollment: Fall __ Winter __ Spring __ Summer __ Year 19 __ (_ _ _)
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 area of interest $\qquad$ 1
2. Associate of Applied Science Degree program title $\qquad$
3. Certificate program title $\qquad$ - $\qquad$
$\square$ 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 $\qquad$
5. Personal interest area of interest $\qquad$
6. Other: Please indicate reason for enrolling: $\qquad$ Area of interest $\quad\left(\begin{array}{l}\text { ( } \\ \hline\end{array}\right.$
$\qquad$ Day $\qquad$ Evening
Will you apply for financial aid at Aims Community College? 1. $\square$ yes $\quad 2$ no
Do you plan to transfer to another college after completing studies at Aims Community College?
7. $\square$ yes 2. no If yes, name of college $\qquad$

STATISTICAL DATA: The information below is requested for Federal and State reporting; it is not required for admission
Ethnic origin

1. $\square$ American Indian or Alaskan Native
2. $\square$ Black
3. $\square$ Asian or Pacific Islander
4. $\square$ Hispanic
5. $\square$ Caucasian
6. $\square$ Non-resident alien

Sex

1. Male
2. Female

Veterans status

1. $\square$ Receive benefits, not active duty
2. $\square$ Non-veteran, not active duty
3. $\square$ Veteran, not receiving benefits
4. On active duty

Are you handicapped or disabled?
$\square$ yes no
If yes, please indicate handicap $\qquad$
$\qquad$

## Current employment status

1. Full-time, $30+$ hours/week
2. Part-time, 1-29 hours/week
3. Unemployed

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? Mo. Day $\quad$ Mear

If married, date of marriage $\qquad$

| Have you filed a Colorado State Income Tax Return (Circle one) | No |  | Last year filed |
| :---: | :---: | :---: | :---: |
| Do you have a current motor vihicle operator's license? (Circle one) | Yes | No | State of Issue |
|  |  |  | Date of Issue |
| Have you owned a motor vehicle during the past year? (Circle one) | Yes | No |  |
| Where is vehicle registered? |  |  | Date of Issue |

Place of employment of past 12 months:


| 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
understand that if found otherwise, this misrepresentation becomes sufficient cause for rejection or dismissal.

Date


[^0]:    See A.A. degree requirements

[^1]:    Jerry Hoff
    Journal Publishing

[^2]:    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

