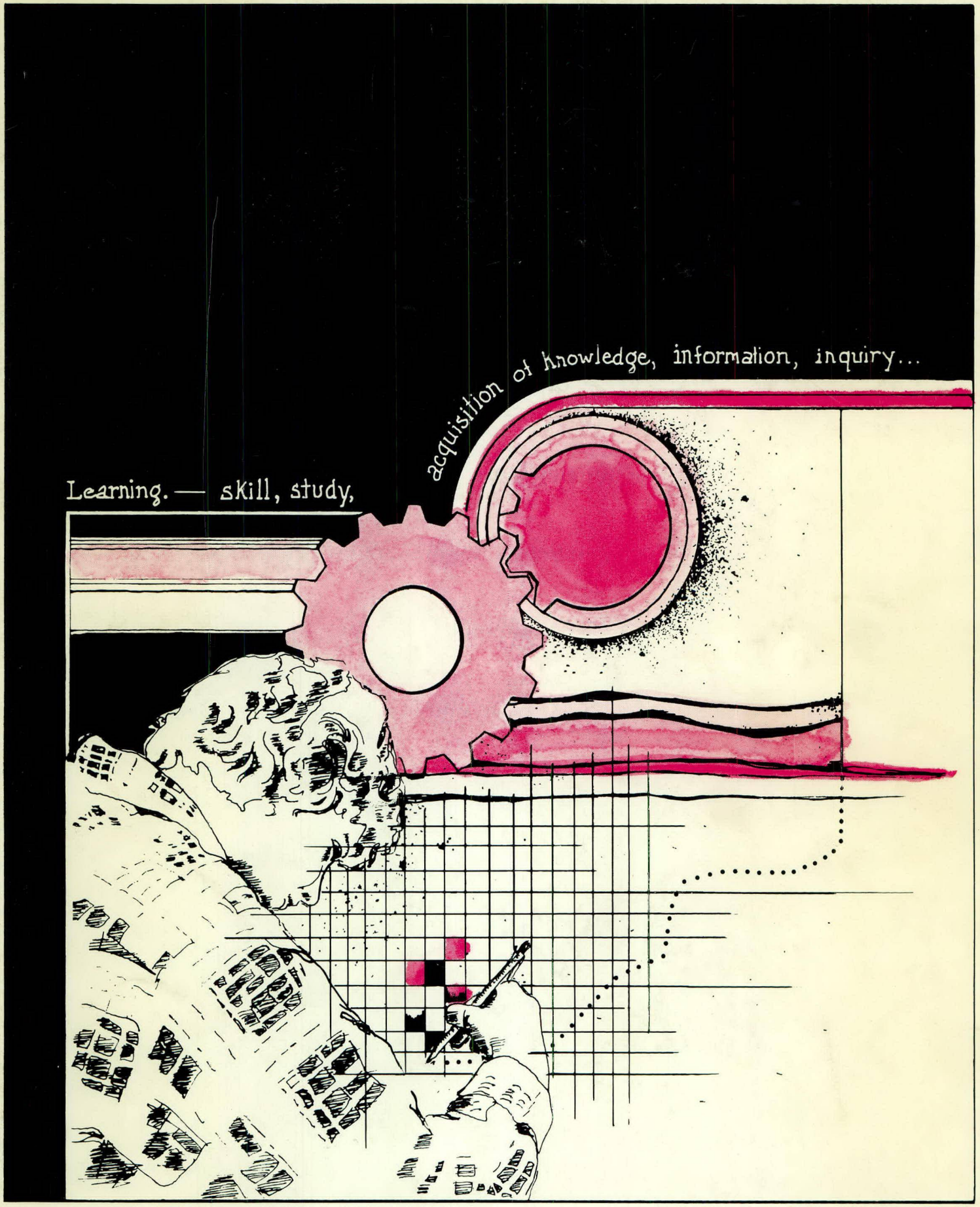
MSI Separator Sheet

MSI2010

1979-1980



AIMS COMMUNITY COLLEGE

1979–1980 CATALOG

AIMS COMMUNITY COLLEGE

Established 1967

1979-1980 CATALOG

A COLLEGE SERVING
NORTH-CENTRAL COLORADO

P.O. Box 69 GREELEY, COLORADO 80632
Telephone (303) 353-8008

Vol. XIII

April 1979

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ACADEMIC CALENDAR

1979-1980

SUMMER SESSION, 1979

June 18 ..... Registration
June 19 ..... Classes Begin
June 28 ..... Last Day to Drop Classes with Refund
July 4 ..... Holiday (College Closed)
July 16-20 ..... Mid-Term Week
August 29-30 ..... Examination Days
August 30 ..... End of Quarter
September 3 ..... Labor Day Holiday (College Closed)

Note: No Pre-Registration for Fall Quarter, 1979

FALL QUARTER, 1979

September 24 ..... Returning Student Orientation, Advising and Registration
September 25 ..... New Student Orientation, Advising and Registration
September 27 ..... Classes Begin
October 8 ..... Last Day to Drop Classes with Refund
October 29-November 2 ..... Mid-Term Week
November 9 ..... Staff Development
November 20-24 ..... Pre-Registration for Winter Quarter
November 28-30 ..... Thanksgiving Holiday (College Closed)
December 12-13 ..... Examination Days
December 13 ..... End of Quarter
December 24-28 ..... Christmas Holiday (College Closed)

WINTER QUARTER, 1980

January 1 ..... New Year's Holiday (College Closed)
January 2 ..... Registration
January 3 ..... Classes Begin
January 14 ..... Last Day to Drop Classes with Refund
February 4-8 ..... Mid-Term Week
March 3-7 ..... Pre-Registration for Spring Quarter
March 13-14 ..... Examination Days
March 14 ..... End of Quarter

SPRING QUARTER, 1980

March 24 ..... Registration
March 25 ..... Classes Begin
April 3 ..... Last Day to Drop Classes with Refund
April 21-25 ..... Mid-Term Week
May 26 ..... Memorial Day Holiday (College Closed)
June 4-5 ..... Examination Days
June 5 ..... End of Quarter
June 6 ..... Graduation

Note: No Pre-Registration for Summer Session, 1980

GENERAL INFORMATION

HISTORY

In the summer of 1966, after several months of study, a citizens committee representing Weld County school districts, recommended formation of a junior college district. In January, 1967, voters gave overwhelming approval. Two months later a governing committee was elected which chose Dr. Ed Beaty as president. In September, 1967, Aims Community College opened with 900 students enrolled in day and evening programs.

Enrollment during Fall Quarter 1977 reached over 4,500. Diverse needs of students have resulted in an increased number of classes and programs: the college offers the Associate Degree in Arts and Sciences, the Associate Degree in Applied Science in eighteen program areas and the Certificate in Occupational Education in twelve program areas, as well as a variety of developmental, public service, adult interest and Area Vocational School programs.

The Aims Community College 175 acre campus site was purchased in 1970. In 1971, the college purchased a 50,000 square-foot industrial building on ten acres adjacent to the campus, bringing the present campus size to 185 acres. This building serves as the college's General Studies Building.

The first new building, the Trades and Industry Building, was constructed in 1971. The Office Occupations and Technical Building opened in 1973. In 1975, the Center for the Arts and Crafts/Skill Center was completed. And opening for Winter Quarter 1976 was the Physical Education Building.

In 1975 Aims Community College completed a Five-year Educational Master Plan, and in 1976 a comprehensive facialities study.

The first building constructed under the new facilities plan, Ed Beaty Hall, opened for Fall Quarter 1978. This facility provides over 60,000 square feet of laboratory and classroom space for the college.

PHILOSOPHY

Three concepts are fundamental to the educational philosophy of Aims Community College: Every individual possesses intrinsic worth; an educational environment should foster development of intellectual, social and physical skills appropriate to the individual's abilities; and in our complex and dynamic society, ideas are as essential as facts. The student should have available an environment which stimulates the discovery and exchange of ideas. He may then use creatively the body of knowledge and technical skills attained in realizing significant specific values and goals.

PURPOSES

Aims Community College was founded in order to meet a wide variety of educational needs in north-central Colorado. Very broadly, the purposes of Aims Community College are to provide:

1. College parallel courses to enable students to transfer credits earned to a four-year college or university.
2. Occupational education to help prepare students for initial employment, or advancement in their areas of development.
3. General and developmental education for those who wish to achieve a higher educational level.
4. Counseling and guidance, both personal and career, to enable the student to more clearly define his goals.
5. Community services for the entire area to insure that the total population, young and old, receives full benefit from the college.

APPROVAL

The operation of Aims Community College is approved by the State of Colorado. It is governed by a five-member College 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.

ACCREDITATION

Aims Community College has been granted full accreditation and membership in the North Central Association of Colleges and Schools.

Students who plan to transfer to baccalaureate programs at four-year institutions can be confident that college parallel credits earned at Aims Community College will transfer without difficulty.

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 Dean of Student Services, 4901 W. 20th Street, Greeley, Colorado 80631.

AFFIRMATIVE ACTION

Aims Community College is committed to equal opportunity in employment and education regardless of race, color, religion, sex or national origin. 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.

COMPUTER CENTER

Computing service is available to a variety of users at Aims Community College. Secondary, post-secondary vocational and general studies students have access to eight computer languages on the IBM 370 computer. The computer is equipped with magnetic tape and disk, and 192,000 characters of primary memory. In addition, instructional and administrative interactive terminals are supported. Computer Assisted Instruction (CAI) is available for testing, computer language instruction, and statistical problem solving. Student employees are involved in both the instructional and administrative usage of the computer.

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 AIDS OFFICE.

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 high school graduates, non-graduates of high school who are 18 years of age or older, and any other person who can profit from the instruction for which he enrolls. However, admission to the college does not assure acceptance of an individual student in a particular course or program. Some students may be requested to enroll in special courses for correction of scholastic or other deficiencies.

Students may enroll in Aims Community College any time during the quarter. It may be necessary for students to enroll in preparation or skills building courses until the end of a given quarter. In most cases it is to the advantage of the students 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.

TRANSCRIPTS

Official transcripts covering a student's previous secondary and college education, submitted to the College as part of the admissions procedures become part of the official file and cannot be returned to the student. The College does not issue or certify copies of transcripts from other institutions.

Transcripts, documented military experience, and testing scores of approved programs are evaluated in accordance with College policy, and the acceptance of this credit is documented on the student's permanent record as earned credit only, without any indication of grade or quality points.

ADMISSION REQUIREMENTS FOR FOREIGN STUDENTS

1. Complete all steps in "Application for Admission to a Degree Program."
2. Submit TOFEL scores. To be considered for admission to Aims Community College, foreign students must have a minimum of 500 on the TOEFL or Level 109 at a certified ELS Language Center.
3. Completed application and supporting credentials must be in the Office of Admissions and Records **one full quarter** before the date of anticipated enrollment.

STUDENT RECORDS AND STUDENT RIGHTS

The Office of Admissions and Records, under the direction of the Director of Admissions and Records, 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.
6. Courses, hours, and credits presently enrolled.

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 inactive for two years. If the student does not re-enroll 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 is also 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 Admissions and Records Office. In the event students feel their records are in error, they may initiate the following appeal prodecure:

1. Appeal to the Director of Admissions and Records to review the records.
2. If needed, appeal to the Dean of Student Personnel Services.

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

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 indentifiable 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 on educational records or personally identifiable information shall not be required for the following parties:

1. Aims Community College officials.
2. Officials of other schools or colleges where the student intends to enroll.
3. State or federal educational authorities.
4. In connection with a student's application fo financial aid.
5. State and local officials requiring reporting data.
6. Organizations conducting studies for educational institutions or agencies.
7. Accrediting organizations.
8. Parent of a dependent student
9. In compliance with judicial order.
10. In case of emergency to protect the health, safety, or welfare of the student or other persons.

REGISTRATION

After the student has completed the admissions process, he must complete the following registration process at the beginning of each quarter. Consult the calendar in the front of this catalog for registration dates.

1. Academic advising
2. Course registration
3. Financial Aids (only those students having completed the FFS)
4. Pay tuition*

***NOTE:** A student is not registered until his assessed tuition 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 student or administrative initiated if a student's best interest so warrants when he or she 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. However, no adding of classes may be made 30 days prior to the end of the quarter.

Dropping Classes

Dropping of classes with full refund of fees must be done within the first eight (8) days of the class term. This is the registration adjustment period and no academic record will be generated.

How to Add and/or Drop Courses:

1. Obtain an Add/Drop form from the Admissions and Records Office, Room 208, General Studies Building.
2. Fill out form indicating complete information on course to be added or dropped and re-submit the form to Admissions and Records. It is the responsibility of the student to contact the Admissions and Records Office in order to be officially added or dropped from the records. Faculty members may initiate a withdrawal of a student from their class rolls for failure to meet established course requirements.

In cases of emergency the student should write to the Office of Admissions and Records, 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 POLICY

During the first eight (8) days of each quarter the student will receive a 100 percent refund for a complete withdrawal from school or for classes dropped. After the first 8 days of classes, the student will not receive a refund for complete withdrawals or dropping of classes. The student may drop and add an equal number of credit hours at any time during the quarter without charge provided the drop/add cards are processed simultaneously.

SPECIAL REFUND POLICY FOR VETERANS

The government through VA Regulation 14254 (C) (13) has established a special refund policy for veterans which has been adopted by Aims Community College. This policy states that the amount charged to the veteran for tuition, fees and other charges for a portion of a course shall not exceed the approximate prorated portion of the total charges for tuition, fees and other charges. This policy is subject to the following limitations:

1. An established registration fee in an amount not to exceed $10.00 is not subject to proration.
2. A breakage fee and consumable instructional supplies which the student might buy will not be prorated.
3. All books and equipment bought personally by the student will not be prorated as part of the refund.

The percentage refund policy for veterans based on the guidelines provided above is as follows:

1st two weeks of quarter	100%
3rd week of quarter	60%
4th week of quarter	40%
5th week of quarter	20%

TUITION

Tuition charges at Aims Community College are dependent upon the student's residency status, determined in accordance with Colorado Statute (CRS '63).

In-State, In-District Students	$6.00 per credit hour
In-State, Out-of-District Students	$8.00 per credit hour
Out-of-State Students	$32.00 per credit hour

ALL TUITION AND FEE CHARGES ARE SUBJECT TO CHANGES BY THE GOVERNING BOARD OF THE COLLEGE AS CIRCUMSTANCES MAY REQUIRE, WITHOUT NOTICE.

If a student classified as out-of-state believes he is eligible for in-state classification, he may obtain a Change of Residency petition from the Director of Admissions and Records. The final decision regarding residence classification rests with the College. All questions concerning residency should be directed to the Director of Admissions and Records.

TUITION DEFERMENTS

Under certain extenuating circumstances, Aims Community College will defer a student's tuition payment. This deferment privilege will be extended only to students who are residents of the state of Colorado and who are enrolled for 12 or more credit hours. A down payment of one-third of the total tuition cost plus insurance fee of $1.75, must be made at the time an eligible student assumes this obligation. A student who requests tuition deferment must demonstrate the ability to pay the deferred balance of his tuition during that same quarter. Application for deferment must be made at the Office of Financial Aid.

STUDENT INSURANCE FEE

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 non-mandatory for part-time students (11 credit hours or less), and is $2.25 per quarter.

ESTIMATED ACADEMIC YEAR BUDGETS (9 Mo.)*

Single Resident		**Single Non-Resident**	
Tuition & Fees	$ 275.00	Tuition & Fees	$1445.00
Room & Board	1890.00	Room & Board	1890.00
Books & Supplies	175.00	Books & Supplies	175.00
Personal Expenses	450.00	Personal Expenses	450.00
Transportation	270.00	Transportation	270.00
	$3060.00		$4230.00

Married Resident		**Married Non-Resident**	
Tuition & Fees	$ 275.00	Tuition & Fees	$1445.00
Room & Board	3015.00	Room & Board	3015.00
Book & Supplies	175.00	Books & Supplies	175.00
Personal Expenses	750.00	Personal Expenses	750.00
Transportation	270.00	Transportation	270.00
	$4485.00		$5655.00

*These budgets are current as of the publication date. Check with the Student Financial Aid Office for most recent estimates.

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 graduated or receive transcripts of courses completed unless all financial obligations to the college have been met.

STUDENT FINANCIAL AIDS

Aims Community College participates in a wide variety of federal, state and local programs designed to assist students in meeting the costs of education. Applications and information concerning all the programs described below are available in the Financial Aid Office, General Studies Bldg., Room 217.

ELIGIBILITY

Most financial aid is awarded to students on the basis of NEED. In determining NEED in a consistent way for all aid candidates, Aims Community College requires all financial aid applicants to submit the ACT Family Financial Statement to the ACT Program in Iowa City. 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.

APPLICATION PROCEDURES

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

1. Colorado Student Data Form.
2. Family Financial Statement (FFS) of the American College Testing Program (ACT)
3. Affidavit of Nonsupport (Independent Students only).

These forms may be obtained from the Office of Student Financial Aid and/or local high schools.

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 ..... April 13, 1979
Fall Quarter ..... June 8, 1979
Winter Quarter ..... October 31, 1979
Spring Quarter ..... January 31, 1980

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 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 processing will depend on the availability of funds at the time.)

STUDENT FINANCIAL ASSISTANCE PROGRAMS

Loans

National Direct Student Loan (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 $2,500. Repayment of the NDSL begins nine months after the student ceases to be a half-time (6 hours) student. NDSL funds are to be repaid at a minimum of $30 per month. The period of repayment cannot exceed ten years. The NDSL has cancellation provisions. Information regarding cancellation may be obtained from the Student Financial Aid Office.

Principal and interest payments are deferrable during periods of at least part-time study.

Federally Insured Student Loans (FISL)

The College cooperates with banks in making information available to students. Undergraduates may borrow up to $2,500 in a single year, but not more than $7,500 during their undergraduate career. A student not already on full financial aid may apply through his own or local banks. Applications are accepted throughout the school year. Forms and information are available at the Office of Financial Aid.

Grants

Basic Educational Opportunity Grant (BEOG):

Available to **all eligible undergraduate** students. All Basic Educational Opportunity 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 office of Financial Aids **must** have the original set of the Eligibility Report Forms (not just one copy or a photo copy) on hand before payment can be made. All financial aid applicants must establish their eligibility for this program before other aid can be awarded.

Supplemental Educational Opportunity Grant (SEOG):

Available to the most "needy" **undergraduate** students. Allocated after all other sources of aid are awarded and the applicant still has unmet need. SEOG awards must be matched with an equal or greater award from another source.

Colorado State Grant:

State funds made available to resident students with financial need. Awards vary from $100 to $1,000, dependent upon the financial need of individual students, and the amount of funds allocated to the college by the State of Colorado.

Colorado Student Incentive Grant (CSIG):

Grants of up to $1,500 are made to exceptionally financially needy students. Recipients must be 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 program are made to financially needy students. Wages are paid on an hour's pay for an hour's work basis. Students may not earn over the maximum authorized earning figure, as allocated from the Office of Student Financial Aid.

State College Work-Study Program:

Allocations from college work-study program are made to financially needy students. Wages are paid on an hour's pay for an hour's work basis. Students may not earn over the maximum authorized earning figure, as allocated from the Office of Student Financial Aid.

Campus Employment Program:

This is not a need based program. Students participating in a need based Federal or State financial aid program will, however, be limited in the amount of campus employment funds they may earn within the given academic year. Authorization for employment under the campus employment program is through the securing of a campus work permit from the Office of Financial Aids. Students not receiving financial assistance from the need-based programs may secure an unlimited authorization for employment.

Tuition Waivers

Tuition waivers are available to in-district students whose financial status is such that they qualify as low-income under the Department of Labor. Waivers are made to cover the costs of tuition and textbooks.

On a space available basis and only in credit courses, a senior citizen's tuition waiver is available for Weld County residents who are 60 years of age or older.

Scholarships

Aims Program of Scholars:

Awards made to recognize outstanding achievement of Colorado resident students in both academic and talent areas. Maximum award $300/year. Applications made to Student Financial Aids Office; award recipients selected by Financial Aids Director only if letter of recommendation accompanies regular financial aid application. In-district students should contact their high school counselors regarding these scholarships.

Roy L. Smith Memorial Fund Award:

Annually, the two $300 scholarships from a $8000 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 Aids Office.

Eastman Kodak Scholarship:

Monies for this program are forthcoming if graduates from Aims Community College join Kodak within five years of completion of their degree and complete five years of employment at Kodak. Funds received for the scholarships are designated for use within the department indicated by the Kodak employee's degree. Monies from Kodak for this program have ranged from $250.00 to $1,500.00 per year. Further information may be obtained from the Financial Aids 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. or A.A.S. degree. Applications are due by May 15, in the Financial Aids Office. The Scholarships Committee of the Aims Faculty Association will determine the recipient of the scholarships by June 1, of each year.

Additional Scholarships:

Other scholarships are made available through local clubs and organizations in the Weld County Area.

VETERANS' BENEFITS

The Office of Financial Aids helps the Veterans Administration administer the provisions of the various programs of benefit to veterans or eligible relatives of veterans, namely Public Laws 91-219 (Cold War GI Bill), 634 (War Widows and War Orphans), 815 (Disabled Veterans).

Veterans who are eligible for Veterans Benefits should contact the Office of Veterans Affairs in the Financial Aids 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.

MONTHLY RATES — G.I. BILL

COURSE LOAD	NO DEPS.	1 DEP.	2 DEPS.	EA. ADD. DEP.
Full-Time (12 credit hrs.)	311	370	422	26
Three-Quarter (9-11 credit hrs.)	233	277	317	19
Half-Time (6-8 credit hrs.)	156	185	211	13

Students who are receiving VA benefits must report immediately to the Financial Aids 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 Office of Admissions and Records with a copy of transcript or transcripts reflecting any post-secondary educational course work.

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 who have served on active military duty during the Vietnam era, August 5, 1964, to August 5, 1973. The program intent is to give tuition assistance to Colorado veterans enrolled for post-secondary education in specified institutions. Aims students who are eligible for a tuition assistance are those who are veterans of the military services, who are currently Colorado residents and were Colorado residents prior to entry into active military service. Student veterans who apply for the tuition assistance and are determined to be eligible, may receive up to an amount of seventy-three ($73) dollars per quarter. 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 August 5, 1973.

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

AIMS VETERANS TUITION WAIVER

In addition to the Colorado Veterans Tuition Waiver Program, Aims Community College shall give in-district tution waivers for the amount not paid by the Colorado Vietnam Era Veterans Tuition Assistance Program if the veteran meets the following criteria:

1. Is a veteran of the Vietnam era (Aug. 5, 1964 - Aug. 5, 1973).
2. Was discharged and certified eligible for veterans educational benefits.
3. Was a legal resident of Aims Junior College District at the time of entering the armed services.
4. Enrolled at Aims Community College within five (5) years of separation from service.
5. Maintains satisfactory progress (2.0 GPA).

SATISFACTORY PROGRESS

All Aims Community College students who receive financial aid and/or VA benefits are required to meet the following standards of satisfactory progress to remain eligible for financial assistance. These guidelines are the minimum criteria for eligibility and may be higher for some scholarship programs.

1. Each quarter, students must complete a specified number of credit hours based upon the following schedule:
   a. Full-time students (those enrolled in 12 credit-hours or more) must complete at least 9 credit hours, with a D grade or better.
   b. Three-fourth-time students (those enrolled in 9-11 credit-hours) must complete at least 6 credit hours, with a D grade or better.
   c. Half-time students (those enrolled in 6-8 credit-hours) must complete at least three credit hours, with a D grade or better.
2. Freshmen (those students who have earned between 1 and 44 credit hours) must maintain a 1.75 grade point average (A equals 4.0) in ALL courses in which they enrolled.
3. Sophomores (those students who have earned more than 44 credit hours) must maintain a 2.00 grade point average in ALL courses in which they enrolled.
4. No student will receive financial aid for more than three academic years, total.

If a student fails to meet these standards for one quarter, he/she will be placed on probation for the next quarter. If during the following quarter a student on probation again fails to meet these standards, he/she will be terminated from financial aid. If a terminated student continues in school and during a subsequent quarter meets the standards of progress, he/she can be reinstated on financial aid.

If a student who has been terminated from financial aid, believes that there have been unusual circumstances affecting their progress, he/she has the right to appeal this decision to the Financial Aid Appeals Committee. The student interested in appealing such a decision should contact the Financial Aid Office within a week after being notified of his/her termination.

ACADEMIC INFORMATION

GRADES AND COURSE STATUS DESIGNATION

Aims Community College, in keeping with its announced 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 recording of a course status designation 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. Grades and course status designations and the associated grade points are awarded on the following basis:

Grades

- A Superior work — 4 grade points per credit hour
- B Above average work — 3 grade points per credit hour
- C Average work — 2 grade points per credit hour
- D Minimum passing work — 1 grade point per credit hour
- 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 courses

Course Status Designations

- W Withdrawal — no grade points (administrative and/or student initiated)
- I Incomplete work — no grade points
- IP In-Progress (Insufficient Progress) — no grade points — student must re-enroll if credit is desired.
- AU Audit — (non-credit courses only)

An instructor may choose not to record a grade when the student has, for good reason, been delayed in completing the required work. In such cases he may record a course status designation reflective of the student's status in the course at the end of the quarter.

INCOMPLETES are to be made up according to an agreement between the instructor and the student which is to be filed with the registrar who will place the agreement in the student's permanent file. An INCOMPLETE designation will be changed to an IN-PROGRESS designation if the student fails to complete the course requirements within the subsequent four academic quarters.

IN-PROGRESS means that the student must re-enroll in the class to effectively meet the objectives of the course and receive a grade for credit. (Veterans receiving benefits should be aware that re-enrollment in a course for which they initially received an IP or I does nor normally qualify for benefits.)

Learning accomplishment at a level judged to be inadequate receives no credit but is made a part of the permanent record. Additionally, all courses which receive course status designations of I, AU, or IP are not calculated in a students cumulative grade-point average.

HONORS

Full-time students who complete at least 12 degree hours of credit during a quarter and who earn a grade-point average of 4.0 (straight A) will be listed on the President's List. Full-time students who earn a grade-point average of 3.5, but less than 4.0, will be listed on the Dean's List. The President's List and the Dean's List will be published at the end of each quarter.

ADVANCED STANDING

Aims Community College gives college credit, according to its policy, for CLEP (College Level Examination Program), 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 institution. Students who wish to take advantage of this service must formally request a review of their individual files by contacting the Aims Admission Office.

ATTENDANCE

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

Students listed on the class roster during the first eight class days of the quarter, and identified by the instructor as non-attenders during that time, are subject to disenrollment from the class without prior notice.

COURSE CHALLENGING

A student may challenge a course for which he believes his 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 Office of Admissions and Records and pay in advance the challenge fee of $5.00 per challenged course at the Business Office. Whether or not credit is allowable for challenged courses will be determined by the instructor. A student who sucessfully completes the challenge will receive a letter grade and credit for the course, and appropriate entries will be made on his permanent academic record.

COURSE LOAD

The normal course load for a full-time student is from 12 to 18 credit hours. An employed student should vary his course load according to the number of hours he works. It is recommended that such a student consult with a counselor or faculty advisor about his schedule. Written permission must be obtained from the appropriate instructional dean if a student's course load exceeds twenty-four (24) credit hours of vocational training courses or twenty (20) credit hours of general education courses.

COURSE NUMBERING

- 0- 99 Pre-college level courses not designed for transfer to other institutions.
- 100-199 Courses normally taken by freshmen.
- 200-299 Courses normally taken by sophomores.

AUDITING OF COURSES

Any person may elect to enroll in a non-credit course on an audit basis if space is available. Such individuals will pay the regular tuition assessed for courses taken under this option. Auditors need not take examinations nor do they receive college credit.

GRADUATION REQUIREMENTS

The general requirements for receipt of an Associate Degree in Applied Science, an Associate Degree in Arts and Sciences, or Certificates in Occupational Education programs are outlined in the curricula section of this catalog. A minimum cumulative grade point average of 2.00 is required for receipt of either 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 Office of Admissions and Records or the Counseling Center.

The student's last 24 quarter hours of course work prior to graduation must be taken in residence at Aims Community College.

Students must make application for graduation by mid-term week of the quarter preceding the anticipated quarter of graduation. Graduation applications are available from the Office of Admissions and Records. Completed graduation applications must be returned to the Office of Admissions and Records 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 prior to his last quarter.

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. However, a student may elect 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 can not re-enroll in that program.

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

ADVISING

Each student is assigned a faculty advisor who becomes conversant with his background, aptitudes, and educational objectives, and who takes a personal interest in his education and welfare. Generally his advisor is associated with the student's major field of study. Each student must accept the responsibility to:

1. Meet with his advisor to discuss career objectives.
2. Discuss program and class schedule prior to each registration or pre-registration.
3. Make an appointment with his advisor when problems arise in his program or if class changes are necessary.

LEARNING DEVELOPMENT CENTER

The Aims Community College Learning Development Center is located in the General Studies Building. Instructional Centers, which are extensions of the LDC, are located within each classroom building on the campus. The LDC personnel work with instructors as well as with students in order to help students achieve their educational, career and personal goals.

INSTRUCTIONAL CENTERS

The Instructional Centers incorporate the concept of individualized learning as a possible means to achieve educational success in all areas of learning.The Centers provide tutorial services for the basic skills of reading, writing, grammar, spelling and arithmetic, as well as for enrichment of subject matter courses. Some mini-courses and complete individualized courses in academic subjects are also available through the Centers. A variety of learning experiences for the students are offered through the use of print materials, filmstrips, tapes, slides, and television programming.

MEDIA PRODUCTION CENTER

The Media Production component of the Learning Development Center supports through its services the total instructional program at Aims Community College. Instructional materials are produced utilizing such graphics as charts, posters, graphs and overhead transparencies; other graphics are employed for video, film, and slide productions. Non-graphic materials vary from photograph print, slide and film strip production, to instructional television. Also available for the production and duplication of instructional materials are a two-camera black and white television studio and an audio production board.

AUDIO VISUAL EQUIPMENT CENTER

The Audio Visual Equipment Center provides preventive maintenance and repair service for the college's visual equipment. The Center has also designed the media delivery systems which provide students and staff better access to learning media for both group and individualized instruction. Equipment is made available for both day and evening classes through a centralized distribution program. Through an efficient checkout system users have easy access to a variety of equipment in order to review audio tapes, video tapes, films, film strips, slides and other instructional media. Instruction is given to any person who requires assistance in the operation of audio visual equipment with which he or she is not familiar. The Audio Visual Equipment Center functions in close harmony with the Media Production Center to ensure the availability of compatible equipment in sufficient quantity.

LIBRARY

The LDC Library houses a collection of both print and non-print materials which complement the curricula of Aims Community College. The collection consists of more than 29,000 items and more than 200 subscriptions to periodicals and newspapers. Non-print materials include audio tapes, records, 16mm and 8mm films, videotapes, filmstrips and microfilm. Microfilm readers, self-service copy equipment and audio-visual equipment are available. The Library uses a computerized circulation system for checking out materials. Students may obtain a library card at the main desk in the Library. The Library is open 8:00 A.M. to 9:00 P.M. Mondays through Thursdays and from 8:00 A.M. to 5:00 P.M. on Fridays. The Library is closed on weekends.

DIAGNOSTIC CENTER

Located within the Learning Development Center, the Diagnostic Center has the services of two staff members who have received special training in diagnostic testing and remediation. The Center is based upon a three-area approach: 1) the cognitive, which includes academic, achievement and aptitude testing; 2) the affective, which includes testing to aid students to better understand themselves and their needs; and 3) the perceptual-motor, which includes the assessment of those learning difficulties which interfere with the student's academic progress.

COUNSELING AND GUIDANCE SERVICES

While attending Aims Community College, students will discover that many new and important decisions confront them. In general, counseling provides students with the opportunity for assistance in making more objective and adequate decisions relative to vocational and educational plans, including personal-social concerns related to these decisions. The Aims Community College Counseling 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 Counseling Center is an entirely confidential service and operates under ethical codes established by the American Psychological Association and the American Personnel and Guidance Association. Confidential information is never given to anyone without consent from the student. Any student enrolled at Aims Community College may avail himself of these services. Emphasis is placed on helping all students with any problems that interfere with achieving success at the college. Since the service is entirely voluntary, the student must initiate contact, or be referred by a member of the professional staff, in order to receive assistance. Students seeking assistance may contact the LDC.

The counseling staff assists students in the following areas:

1. Educational planning.
2. Career planning.
3. Diagnostic evaluation (interest, aptitude, personality and learning disabilities.)
4. Personal, family, or marriage counseling.
5. Self-exploration and interpersonal relations.
6. Vocational counseling.

No entrance examinations or tests are required for admission to the college. However, individuals contemplating transfer to another college are encouraged to take the ACT required by institutions and have a copy of results sent to Aims Community College. With this data, counselors and advisors are able to aid the individual student in planning his/her educational program and to make the most appropriate use of resources available to him/her.

STUDENT GOVERNMENT

The student body of Aims Community College is represented by student government officers drawn from its members during each academic year. This government will supervise and coordinate the various student activities as established by the student government constitution adopted by the student body. Some of the general functions of the Associated Students of Aims Community College include:

1. Participating in the decision making of the college community by providing student input into the areas of classroom education, student needs, school policies and community services.
2. Chartering student organizations which members of the Aims Community College student body organize to further develop a particular interest.

STUDENT ACTIVITIES

A diversified activities program is being developed by the student government and the administrative staff of Aims Community College. This program will include a variety of cultural, intellectual, and career related programs. Lectures, films, seminars, and displays are all an integral part of the general activities program. Each student of the college is encouraged to develop interest in a particular activity. Student-initiated activities are an important aspect of the college experience.

STUDENT ORGANIZATIONS

Student organizations may be chartered after interested students complete the procedures set up by the student government for establishing organizations. Each organization must be rechartered annually to assure continuing interest on the part of the students and to provide for re-evaluation of objectives and performance.

ASSOCIATED STUDENTS FEES

The representation, activities and services of the Associated Students are supported by a non-mandatory student fee of $.25 per college credit hour per quarter.

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 which he feels warrants such action, the college president may summarily suspend all persons involved in a violation of these standards, pending final dispensation of the case by the appropriate body. 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.

HEALTH SERVICES

Aims Community College provides a Health Center in the Trades and Industry Building, Room 106. The facility is staffed and directed by a registered nurse. Health counseling, first aid, referral services, health education, part-time physician services and a limited testing program are offered through the service. All students with health questions or difficulties are encouraged to contact the Health Center.

CHILD DEVELOPMENT CENTER

Aims Community College Child Care Program offers to students, for a nominal fee, a Child Development Center. The purposes of the Center are to:

1. Provide children the opportunity to gain social relationships with other children.
2. Provide play experiences that contribute to the physical, social, and emotional needs of the child.
3. Provide an environment where each child's learning experiences may be enriched.

The Center is staffed by a licensed Day Care Director, as well as serving as a laboratory for Aims students enrolled in the Child Care Program.

HOUSING

Since the College does not provide student housing, it is the student's responsibility to make arrangements for his 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 pointed out that most parties who have facilities to rent to college students will require that a security deposit be paid when the final arrangements are made.

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

PLACEMENT SERVICE

Aims Community College maintains a placement service for students who wish to secure part-time or full-time employment while attending college, during vacations, or after graduation. Contact the Placement Officer in the Trades and Industry Building.

PART-TIME EMPLOYMENT

Aims Community College cooperates with local businesses to assist students in securing part-time employment. An effort is made to place students in fields which relate to their college programs. Placement information may be secured from the Placement Officer in the Trades and Industry Building.

REQUESTS 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 Office of Admissions and Records. The first transcript for an Aims Community College student is supplied free of charge. A charge of $1.00 is made for each additional transcript. All accounts with the college must be settled before a transcript may be issued.

BOOKSTORE

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

GENERAL STUDIES PROGRAMS

General Studies 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 in order to earn a two-year liberal arts degree; or a student may be preparing for a baccalaureate program at a four-year institution to which he plans to transfer. In addition, these offerings serve the special and the developmental education interests of the community.

Students in Occupational Education programs may enroll in General Studies courses in order to meet the specific requirement of a particular occupational curriculum and to select desired elective courses.

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

For the student who desires to begin work towards a particular major while at Aims Community College, the General Studies instructional divisions have developed programs which offer "areas of emphasis." Some of these programs are described within this section of the catalogue.

Aims General Studies also provides specific developmental course offerings which make available educational options for adults in the areas of language and communication skills; reading, computation, science, consumer economics and social studies.

The General Studies program provides adult and evening courses as part of its regular instruction. The curriculum consists of general studies 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 DEGREE IN ARTS AND SCIENCES

Students seeking the Associate Degree in Arts and Sciences must earn minimum credits in the following subject areas:

	Credits
Communications	15
Humanities	15
Behavioral and Social Science	15
Mathematics and Science	15
Physical Education	5
Electives	31
TOTAL	**96**

ALTERNATIVE ASSOCIATE DEGREE PROGRAM

Students who plan to transfer to a particular four-year college or university need not follow the Arts and Sciences degree requirements listed above. They may instead, substitute the first two-years' requirements of the four-year institution to which they will transfer. The Associate of Arts and 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."

ASSOCIATE DEGREE IN ARTS AND SCIENCES TOTAL MINIMUM REQUIREMENTS

COMMUNICATIONS — 15 Credits

Basic requirement is the following five hour course:

		Credits
CON 102	Introduction to Writing	5

As a result of a placement test, the student may be required to take Fundamentals of Composition, CON 101, for elective credit (Five hours).

Students are encouraged to take the above courses within the first two quarters of their degree program.

Five credits selected from the following:

SPE 115	Speech Communications	5
SPE 116	Public Speaking	3
SPE 117	Oral Interpretation	3
SPE 118	Interpersonal Communications	3
SPE 119	Introduction to Semantics	2

Five credits selected from any combination of courses listed in the COMMUNICATIONS Section: journalism, literature, logic, reading, other speech courses, and other writing courses are acceptable except any course below the 100 level.

HUMANITIES — 15 Credits

Basic requirement is the following five hour course:

		Credits
HUM 100	Introduction to the Humanities	5

Additional ten hours of credit are to be selected from the following:

HUM 101	Introduction to the Greek and Roman period	5
HUM 102	Introduction to the Middle Ages and Renaissance Period	5
HUM 103	Introduction to the Modern Period to World War II	5
HUM 104	Contemporary Culture	5
HUM 105	Myth, Legend, and Folk Tales	5
HUM 106	Introduction to World Religions	5
HUM 108	Oriental Culture	5
HUM 109	Modern American Culture	5
ART 100	Survey of Visual Arts and Design	5
MAS 120	Cultural Heritage of Mexico and South America	5
LIT 208	Foundations of Modern British Literature	5
MUS 100	Music Appreciation	5
PHI 105	Introduction to Philosophy	5
	OR	
PHI 108	Introduction to Modern Philosophy	5
THE 100	Survey of Drama	5

MATHEMATICS AND SCIENCE — 15 Credits

Fifteen credits of mathematics and/or science are required for the AA Degree. Any combination of courses is acceptable except those numbered below the 100-level. Students who are transferring to the University of Northern Colorado should complete MAT 101 or a higher numbered course (excluding MAT 107, MAT 109, and MAT 115) to meet the institution's requirements.

BEHAVIORAL AND SOCIAL SCIENCE — 15 Credits

Five credits selected from one of the following two courses:

		Credits
PSY 101	General Psychology	5
SOC 101	Introduction to Sociology	5

And ten credits selected from two of the following five areas:

ANTHROPOLOGY

ANT 101	Introduction to Anthropology	5
ANT 205	Environment and Culture Behavior	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	Hang-ups from Way Back — Ancient Civilization	5
HIS	102	Hang-ups from Way Back — Medieval Civilization	5
HIS	103	Hang-ups from Way Back — Modern Civilization	5
HIS	105	History of the United States to 1877	5
HIS	106	History of the United States from 1865 - 1945 — Myth and Reality in America's Past	5
HIS	107	History of the United States Since 1945	5
HIS	108	Modern Russian Civilization — Individualized	5
HIS	205	History of England	5
HIS	209	History of Colorado and the Rocky Mountain West	5
MAS	161	History of Mexico I	3
MAS	162	History of Mexico II	3

POLITICAL SCIENCE

POS	100	Introduction to Political Science	5
POS	101	American Government	5
POS	102	Comparative Foreign Government	5
POS	107	State Government	2-5
POS	108	The American Presidency	5
POS	109	Contemporary Political Issues	5
POS	116	International Politics Since 1945	5
POS	118	State and Local Governments	5
POS	205	International Relations	5
POS	206	American Foreign Policy	5

GEOGRAPHY

GEO	105	World Geography	5
GEO	205	Geography of North America	3
GEO	206	Geography of Colorado	3
GEO	207	Urban Geography	3

PHYSICAL EDUCATION **Credits**

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 general education.

Veterans who have fulfilled their physical education requirements or students with a doctor's excuse may have their physical education requirement waived. However, they must still meet the 96 credit requirement for the AA Degree. Students who desire a physical education waiver must contact the Guidance Office.

AREAS OF EMPHASIS

The programs which are described below are designed to assist those students who are interested in pursuing particular majors or careers within the General Studies curriculum at Aims Community College.

BILINGUAL TEACHER AIDE PROGRAM

Core Requirements:			**Credits**
DST	115	Field Experience in Teacher Aide Education	5
DST	116	Methods for Teaching the Bilingual I	5
DST	117	Introduction to Teacher Aide Training Program	3
DST	119	Concepts of Bilingual Education	3
CCT	162	Child Growth and Development II	3
SPA	101	Elementary Spanish (or proficiency in Spanish)	5
			24

Recommended for A.A. Degree Requirements:

Communications: 15 credits selected from the following:

CON	101	Fundamentals of Composition	(5)	
CON	102	Introduction to Writing	(5)	
REA	101	Reading and Study Skills for College	(5)	15
MAS	206	Chicano Literature	(3)	
SPE	115	Speech Communications	(5)	

Humanities:

HUM	100	Introduction to the Humanities	5
MAS	120	Cultural Heritage of Mexico and South America	5
		Elective as appropriate	5

Mathematics and Science:

CHE	105	Introductory Nutrition	5
MAT	100	Survey of Mathematics	5
		Elective as appropriate	5

Behavioral and Social Science:

One of the following three courses:

ANT	101	Introduction to Anthropology	(5)	
PSY	101	General Psychology	(5)	5
SOC	101	Introduction to Sociology	(5)	
		Electives as appropriate		10
		Physical Education requirement		5
				65

Recommended Electives:

SPA	101	Elementary Spanish I	(5)	
SPA	102	Elementary Spanish II	(5)	
MAS	105	Mexican Music	(3)	
MAS	116	Bilingual Skills	(3)	
MAS	155	Mexican Dance	(1)	7
MAS	165	Chicano History	(3)	
BUS	101	Beginning Typewriting	(3)	
CCT	150	Skills in Classroom Equipment	(3)	
		Total Credits for Program		**96**

BEHAVIORAL AND SOCIAL SCIENCE DIVISION

HUMANISTIC PSYCHOLOGY EMPHASIS

Basic requirements in the following areas:

	Credits
Humanities	15
Science & Mathematics	15
Social Science (to include General Psychology, 5 credits)	15
Communications	15
Physical Education	5

In addition to the basic requirements, 31 hours of electives to include the following courses:

PSY	115	Humanistic Psychology	5
PSY	248	Child Psychology	5
PSY	207	Principles of Meditation & Consciousness Alteration	3
PSY	211	Parapsychology I	3
SOC	105	Sociology of Marriage and the Family	5
PSY	241	Biofeedback I: Biofeedback & the Psychology of Health	3

And one course selected from the following:

PSY	107	I'm OK, You're OK — Psychology of Personal Relations	(3)	
		OR		3
PSY	111	Basic Human Potential Seminar	(3)	

And one course selected from the following:

SOC	106	Contemporary Social Problems	(3)	
SOC	115	Sociology of Education	(3)	
SOC	117	Sociology of Leisure	(3)	3-4
PSY	242	Biofeedback II: EEG & EMG	(4)	

PARAPROFESSIONAL COUNSELING EMPHASIS

Basic requirements in the following areas:

	Credits
Humanities	15
Science & Mathematics	15
Social Science (to include General Psychology, 5 credits)	15
Communications	15
Physical Education	5

In addition to the basic requirements, 31 hours of electives to include the following courses:

PSY	249	Counseling and Crisis Intervention	3
PSY	248	Child Psychology	5
PSY	221	Abnormal Psychology	3
PSY	111	Basic Human Potential Seminar	3
PSY	241	Biofeedback I: Biofeedback & the Psychology of Health	3
PSY	107	I'm OK, You're OK — Psychology of Personal Relations	3
SOC	111	Social Services I	3

And one course selected from the following:

PSY	231	Psychology of Dreams	(3)	
PSY	237	Assertiveness Training	(3)	
PSY	205	Psychology of Adolescence	(3)	3-4
PSY	242	Biofeedback II: EEG & EMG	(4)	

BIOFEEDBACK EMPHASIS

Basic requirements in the following areas:

			Credits
Humanities			15
Science & Mathematics			
BIO	101	Biological Concepts	5
BIO	211	Human Anatomy: Physiology I	5
BIO	212	Human Anatomy: Physiology II	5
Social Sciences (to include General Psychology, 5 credits)			15
Communications			15
Physical Education (to include Yoga I and Yoga II)			5

In addition to the basic requirements, 31 hours of electives to include the following courses:

PSY	221	Abnormal Psychology	3
PSY	249	Counseling & Crisis Intervention	3
PSY	241	Biofeedback I: Principles	3
PSY	242	Biofeedback II: Practicum	4
PSY	243	Biofeedback III: Internship	4
PSY	231	Psychology of Dreams	3
PSY	107	I'm OK, You're OK, Psychology of Personal Relations	3
PSY	207	Principles of Meditation & Consciousness Alteration	3
PSY	212	Holistic Health	3

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 Bill Shell, 353-8008, ext. 213.

Students choosing this program should structure the 15 hours of required social science credits taken as follows:

				Credits
POS	101	American Government		5
POS	118	State and Local Governments		5
PSY	101	General Psychology	(5)	
		OR		5
SOC	101	Introduction to Sociology	(5)	

In addition, from the 31 hours to be taken for the A.A. degree, required credits totaling 25 hours are to be taken in the following courses:

ACC	101	Principles of Accounting I	5
ACC	102	Principles of Accounting II	5
EDP	101	Introduction to Data Processing	5
ECO	201	Principles of Economics — Macroeconomics	5
MGT	215	Personnel Management	5

Students preparing for a major in this field should insure proper preparation in writing and composition skills. Students lacking such skills, which are essential to careers in this major area, can expect to be required to successfully complete remedial programs in grammar, punctuation, spelling, and essay writing before receiving certification as a major in the Governmental Career Field.

JUDICIAL-LEGAL ADMINISTRATION EMPHASIS

This flexible dual emphasis is designed for students interested in careers as court managers or as legal administrators in law firms or governmental agencies. The judicial administrator is responsible for scheduling cases, managing some court personnel and court reporting systems, and supervision of routine legal procedures related to cases.

The legal administrator prepares legal papers, performs legal research, and counsels clients under the direction of a law firm's legal staff. The legal administrator may perform similar services for governmental agencies heavily involved in legal matters.

Students completing a JLA emphasis may choose to move directly into jobs in these fields upon receipt of the A.A. Degree, or may wish to transfer into similar programs in four-year institutions, such as the Judicial-Legal Administration Concentration at Colorado State University. Further information on careers and study in this area may be obtained from Bill Shell, Political Science, 353-8008, ext. 213.

Students emphasizing JLA should select and complete the following courses to fulfill requirements in Math-Science, Communications, Social Science and Electives for the A.A. Degree:

Math-Science:

			Credits
MAT	112	College Algebra	5
		(Preceded by MAT 111, Intermediate Algebra, if necessary)	
STA	201	Statistics for Business, Science and Social Science I	5
STA	202	Statistics for Business, Science and Social Science II	5

Communications:

SPE	116	Public Speaking	3
		Additional hours as required	12

Social Science:

PSY	101	General Psychology	(5)	
		OR		5
SOC	101	Introduction to Sociology	(5)	
POS	101	American Government		5
ECO	201	Principles of Economics — Macroeconomics		5

Electives:

ACC	101	Principles of Accounting I	5
ACC	102	Principles of Accounting II	5
POS	118	State and Local Governments	5
EDP	101	Introduction to Data Processing	5
BUS	255	Business Law	5
ECO	202	Principles of Economics	5
		Additional hours as desired	2

Students preparing for a major in this field should insure proper preparation in writing and composition skills. Students lacking such skills, which are essential to careers in this major area, can expect to be required to successfully complete remedial programs in grammar, punctuation, spelling, and essay writing before receiving certification as a major in Judicial-Legal Administration.

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. The social sciences provide the most

frequent undergraduate field for the prelaw student, but all require sufficient English to insure competence in grammar, composition, spelling and speech. Mathematics and philosophy both promote the capacity to think analytically. In some instances, students who wish to provide a base for later 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. See Bill Shell, Room 207, General Studies Building, ext. 213.

Additional information may be obtained through the current ***Prelaw Handbook***. Write Educational Testing Service, Princeton, New Jersey, 08540, for this guide to preparation, application and study of law, along with information on most U.S. law schools.

POLITICAL SCIENCE 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 Bill Shell, 353-8008, ext. 213.

Students choosing this emphasis should structure the 15 hours of required social science credits taken as follows:

				Credits
PSY	101	General Psychology	(5)	
		OR		5
SOC	101	Introduction to Sociology	(5)	
HIS	103	Hangups from Way Back—Modern Civilization		5
ECO	100	Introduction to Economics	(5)	
		OR		5
ECO	201	Principles of Economics — Macroeconomics	(5)	

In addition, from the 31 elective hours to be taken for the A.A. Degree, required credits totaling 20 hours are to be taken in the following courses:

HIS	105	History of the United States from 1877	5
HIS	106	History of the United States from 1865-1945	5
POS	101	American Government	5
POS	118	State and Local Governments	5

Finally, two additional courses are to be chosen from any of the following:

POS	116	International Politics Since 1945	5
HIS	107	History of the United States Since 1945	5
POS	102	Comparative Foreign Government	5
POS	108	The American Presidency	5
POS	109	Contemporary Political Issues	5
POS	107	State Government	2-5
POS	205	International Relations	5
POS	206	American Foreign Policy	5

The remaining hours of electives required for graduation (1 to 4 credit hours) may be selected as desired.

Students preparing for a major in this field should insure proper preparation in writing and composition skills. Students lacking such skills, which are essential to careers in this major area, can expect to be required to successfully complete remedial programs in grammar, punctuation, spelling, and essay writing before receiving certification as a major in Political Science.

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, pre-law, law enforcement, government and other fields where an understanding of human beings and human institutions is highly desirable if not required.

Required Courses:			**Credits**
PSY	101	General Psychology	5
POS	101	American Government	5
POS	118	State and Local Government	5
SOC	101	Introduction to Sociology	5
SOC	111	Social Services I	3
HIS	107	History of the U.S. since 1945	5
GEO	105	World Geography	5
GEO	206	Geography of Colorado	3
ECO	201	Principles of Economics — Macroeconomics	5

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, education, economic security, housing and mental 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 degree in Arts and Sciences (AA 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.

Basic requirements in the following areas:

				Credits
Humanities:				
PHI	105	Introduction to Philososphy		5
MUS	100	Music Appreciation		5
ART	100	Survey of Visual Arts and Design		5
One course selected from the following:				
HUM	100	Introduction to Humanities	(5)	
HUM	101	Introduction to the Greek and Roman Period	(5)	5
HUM	102	Introduction to the Middle Ages and Renaissance Period	(5)	
Science and Mathematics:				
MAT	112	College Algebra		5
BIO	101	Biological Concepts		5
STA	201	Statistics for Social Science I	(5)	
		OR		5
CHE	105	Introduction to Nutrition	(5)	
Behavioral and Social Sciences:				
SOC	101	Introduction to Sociology		5
ANT	101	Introduction to Anthropology		5
POS	101	American Government		5
Communications:				
CON	102	Introduction to Writing		5
CON	103	Communication and Research		5
SPE	115	Speech Communications		5
Physical Education				5

In addition to the basic requirements, a minimum of 31 hours of electives to include the following courses:

SOC	111	Social Services I		3
SOC	112	Social Services II		3
SOC	113	Social Services III		5
SOC	106	Contemporary Social Problems		3
ECO	100	Introduction to Economics		5
MAS	106	Psychology of the Mexican American		3
MAS	161	History of Mexico I	(3)	
		OR		3
MAS	162	History of Mexico II	(3)	
PSY	101	General Psychology		5
Select four credits from the following courses:				
PSY	118	Psychology of Adulthood	(3)	
PSY	205	Psychology of Adolescence	(3)	4
PSY	248	Child Psychology	(5)	

DESIGN AND CREATIVE STUDIES
(Design, Fine Arts, Music, Theatre and Movement, Textiles and Clothing)

The Associate of Arts Degree includes 96 credits. 65 credits are required in several academic areas and are outlined in the catalogue. (Students choosing a Fine Arts Emphasis are advised to complete the humanities requirement with HUM 100 and selections from ART 100, or MUS 100, or THE 100, as appropriate.)

Students may select an area of emphasis from the remaining 31 credits. Two such areas of concentration are available within the Design and Creative Studies curriculum: Fine Arts (including teacher preparation) and Design and Visual Communication. The curriculum for each concentration is developed with the aid of advisory committees representing the University level programs to which students may transfer, and firms in Northern Colorado involved in work related to the offerings.

Those students who have specific plans for transfer should consult with faculty in the 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.

DESIGN AND VISUAL COMMUNICATION EMPHASIS

31 Credits

The emphasis in Design and Visual Communication includes two courses for a total of 10 hours of credit to be selected from the following courses:

		Credits
AAD 101, 102, 103	Fundamentals of Art & Design I, II, III	(each) 5

One course for a total of 3 hours of credit to be selected from the following:

AAD 221, 222	Graphic Design I, II	(each) 3
AAD 223	Design III	3

Six courses for a total of 18 hours of credit to be selected from the following courses:

ARS 131	Drawing I	3
ARS 231	Figure Drawing	3
ARS 243	Water Media I	3
AAD 100	Survey of Architecture	3
AAD 225, 226	Photography I, II	(each) 3
AAD 227, 228	Interior Design I, II	(each) 3
FTC 100	Survey of Clothing Design and Selection	3
FTC 105	Introduction to Textiles	3

FINE ARTS EMPHASIS

The emphasis in Fine Arts (can be directed towards teacher preparation) may be completed in the following ways:

(Students may emphasis Art, Music, or Theatre.)

ART **30 Credits**

Three courses for a total of 15 hours of credit to be selected from the following:

		Credits
AAD 101, 102, 103	Fundamentals of Art & Design I, II, III	(each) 5
ART 111, 112	Art History I, II	(each) 5

Five courses for a total of 15 hours of credit to be selected from the following:

ARS 131, 132	Drawing I, II	(each) 3
ARS 231	Figure Drawing	3
ARS 241	Painting I	3
ARS 243	Water Media I	3
ARS 251	Sculpture I	3
ARS 261	Jewelry and Metalwork I	3
ARS 271	Pottery and Ceramic Design I	3
ARS 281	Weaving and Textile Design I	3

MUSIC **30 Credits**

Complete a total of 14 hours of credit from the following courses:

		Credits
MUS 105	Fundamentals of Music	5
MUS 106	Music Theory	4
MUS 220	Children's Music	3
MUS 299	Music Practicum	Variable

Complete a total of 7-8 hours of credit from the following courses:

MUP 131, 132	Piano I, II	(each) 3
MUP 171, 172, 173	Classical Guitar I, II, III	(each) 3
MUP 151, 152, 153	Applied Voice I, II, III	(each) 1
MUP 299	Music Practicum	Variable

Complete a total of 8-9 hours of credit from the following related courses:

ARS 285	Elementary Craft Techniques	3
THE 220	Children's Theatre	3
THE 135	Introduction to Theatre Arts	3
THE 275	Art of Dance and Movement	3

THEATRE **30 Credits**

Complete the following courses for a total of 15 hours of credit:

		Credits
THE 135	Introduction to Theatre Arts	3
THE 145	Stagecraft	3
THE 220	Children's Theatre	3
THE 255	Directing	3
THE 275	Art of Dance and Movement	3

Complete four practicum studies in theatre for a total of 7-8 hours of credit (to be involved in theatrical productions):

THE 299	Theatre Practicum	Variable

Three courses for a total of 8-9 hours of credit to be selected from the following related courses:

AAD 102	Fundamentals of Art & Design II	5
ARS 285	Elementary Craft Techniques	3
MUS 105	Fundamentals of Music	5
MUS 220	Children's Music	3

MATHEMATICS AND SCIENCE DIVISION

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

Areas of Emphasis: The Division of Mathematics and Science offers students the option of an area of emphasis in life science, chemistry, chemical testing technology, computer science, mathematics, or science and mathematics. An area of emphasis requires divisional approval and a minimum of 30 quarter hours (45 quarter hours in the case of a Science and Mathematics Area of Emphasis) 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. degree program. Fifteen credit hours of any combination are acceptable. None can be numbered below the 100 level.
3. Satisfy the specific requirements for the alternative A.A. degree program. This is generally a contractual arrangement with a receiving four-year institution.
4. Satisfy the specific requirements for an area of emphasis in the Math/Science Division. This is in conjunction with the A.A. degree.

If option 4 is selected, it should be noted that the general 96 hour requirement for the A.A. 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 programming, and mathematics.

Typical Programs: These are typical programs which may be followed by students wishing to transfer to a four-year institution, complete an area of emphasis in the division, or strengthen and broaden their academic background. Many variations are possible within each program.

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.

Initial Course Block:		**Credits**
CHE 101, 102, 103	General Chemistry I, II, III	(each) 5
MAT 112, 113	College Algebra, Trigonometry	(each) 5
MAT 161	Calculus with Analytic Geometry I	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 Courses	(each) 5
COS 101	Introduction to Computer Programming and the Fortran IV Language	4
	Electives (as appropriate)	

Note: This program 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

Potential opportunities: This program 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 laboratory testing involving physical and chemical analysis. If desired, students may transfer to universities or to the University of Wyoming to obtain a Bachelor of Science degree in Chemical Technology.

Initial Course Block:		**Credits**
CHE 101, 102, 103	General Chemistry I, II, III	(each) 5
CHE 205	Creative Glassblowing	2
GEY 101	Physical Geology	5
PHY 100	Fundamentals of Physics	5
MAT 111	Intermediate Algebra	5
HEN 106	Safety and First-Aid	3
	Electives (as appropriate)	

Terminal Course Block:		
CHE 201, 202, 203	Organic Chemistry I, II, III	(each) 5
CHE 215, 216, 217	Instrumental Analysis I	(each) 1
CHE 225, 226, 227	Instrumental Analysis II	(each) 1
CHE 235, 236, 237	Instrumental Analysis III	(each) 1
STA 201	Statistics for Business, Science and Social Science I	5
COS 101	Introduction to computer programming and the FORTRAN IV Language	4
*MAT 161	Calculus with Analytic Geometry I	5
	Electives (as appropriate)	

*For students transferring to the University of Wyoming

ADVISORY COMMITTEE FOR CHEMICAL TESTING TECHNOLOGY:

Bob Carpenter
Dow Chemical

Ed Lee
Monfort of Colorado

John Yule
Ideal Cement Research

Bob Steener
Eastman Kodak

John Hatchman
IBM

Larry Mounce
Colorado State Univ.

Larry Scott
Triple S. Labs, Inc.

COMPUTER SCIENCE EMPHASIS

Students who desire a career in computer science or a broad background in this area may receive training in various essential courses. This area of emphasis allows for substantial flexibility.

Initial Course Block:		**Credits**
MAT 112, 113	College Algebra, Trigonometry	(each) 5
COS 100	Introduction to Computers and the BASIC Language	3
COS 101	Introduction to Computer Programming and the FORTRAN IV Language	4
COS 102	Advanced Topics in Computer Programming	4
EDP 102, 103	Computer Concepts I, II	(each) 5
	Electives (as appropriate)	

Terminal Course Block:		
MAT 161, 162, 163	Calculus with Analytic Geometry I, II, III	(each) 5
MAT 261	Linear Algebra	5
STA 201, 202	Statistics for Business, Science and Social Science I, II	(each) 5
EDP 201, 202	Assembler Language Programming I, II	(each) 5
	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:			Credits
MAT	112, 113	College Algebra, Trigonometry (each)	5
MAT	161, 162, 163	Calculus with Analytic Geometry I, II, III (each)	5
COS	101	Introduction to Computer Programming and the FORTRAN IV Language	4
CHE	101, 102, 103	General Chemistry Courses (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 Course (each)	5
MAT	261	Linear Algebra	5
MAT	262	Calculus with Analytic Geometry IV	5
MAT	263	Elementary Differential Equations	5
		Electives (as appropriate)	

Note: This program 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 nursing, cellular 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
CHE	101, 102, 103	General Chemistry I, II, III (each)	5
BIO	101	Biology Concepts	5
BIO	102	Animal Biology	5
BIO	103	Plant Biology	5
MAT	112	College Algebra	5
CHE	201	Organic Chemistry I	5
BIO	207	Vertebrate Biology	5
		Electives (as appropriate)	

Terminal Course Block:			Credits
BIO	201	Ecosystems Biology	5
BIO	202	Cell Biology	5
BIO	203	Developmental Biology	5
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, business, and statistics.

Initial Course Block:			Credits
MAT	112, 113	College Algebra, Trigonometry (each)	5
MAT	161, 162, 163	Calculus with Analytic Geometry I, II, III (each)	5
COS	100	Introduction to Computers and the BASIC Language	3
COS	101	Introduction to Computer Programming and the FORTRAN IV Language	4
STA	201, 202	Statistics for Business, Science and Social Science I, II (each)	5
		Electives (as appropriate)	

Terminal Course Block:			
MAT	261	Linear Algebra	5
MAT	262	Calculus with Analytic Geometry IV	5
MAT	263	Elementary Differential Equations	5
PHY	201, 202, 203	General Physics Courses (each)	5
		Electives (as appropriate)	

Note: This program 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 program is designed for persons who want to enter various health-care positions. 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	101	Biology Concepts	5
BIO	102	Animal Biology	5
BIO	103	Plant Biology	5
BIO	207	Vertebrate Biology	5
CHE	101, 102, 103	General Chemistry I, II, III (each)	5
STA	201	Statistics for Business, Science and Social Science I	5
PHY	101, 102, 103	Introduction to College Physics Courses (each)	5
		Electives (as appropriate)	

Terminal Course Block:			
BIO	202	Cell Biology	5
BIO	203	Developmental Biology	5
BIO	211, 212	Human Anatomy — Physiology I, II (each)	5
BIO	216	Introduction to Microbiology	5
CHE	201, 202, 203	Organic Chemistry I, II, III (each)	5
		Electives as appropriate)	

MEXICAN AMERICAN STUDIES

A Mexican American Studies program also exists within the existing divisional framework. Consult MAS listings under individual divisions and departments or consult the program chairman for Mexican American Studies for specific course offerings.

			Credits
MAS	100	Introduction to Mexican American Studies	3
SPA	101	Elementary Spanish I	5
SPA	102	Elementary Spanish II	5
SPA	103	Elementary Spanish III	5
SPA	111	Intermediate Spanish	2
MAS	105	Mexican Music	3
MAS	116	Bilingual Skills	3
MAS	120	Cultural Heritage of Mexico and South America	5
MAS	125	The American System	3
MAS	155	Mexican Dance	1
MAS	161	History of Mexico I	3
MAS	162	History of Mexico II	3
MAS	165	Chicano History	3
MAS	206	Chicano Literature	3

ADULT INTEREST PROGRAMS

Classes are offered in a number of instructional areas for the person who desires to broaden his experiences in the study of subjects to a special interest to the individual. 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 are available, and a qualified instructor can be secured. Adult education classes are also 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.

Persons interested in further information should contact the Dean of General Studies and Community Service.

EVENING DIVISION

Aims Community College provides evening courses as part of its regular program of instruction. The evening curriculum consists of academic course work, vocational-technical and related instruction, basic education, and adult interest offerings. This wide variety of instruction enables adults of all ages to complete college work, acquire new skills, improve existing skills, and pursue special interest.

Evening classes are generally held Monday through Thursday between 7 and 10 p.m. Schedules for each quarter are available four to five weeks prior to the quarterly registration. Tuition for evening classes is at the same rate as for day classes.

GENERAL STUDIES COURSES

AEROSPACE STUDIES

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

Candidates are educated to assume duties as Air Force Second Lieutenants upon graduation from the University. AFROTC graduates normally go on active duty with the USAF 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, McKee Hall, University of Northern Colorado.

BEHAVIORAL AND SOCIAL SCIENCE DIVISION

ANTHROPOLOGY (ANT)

ANT 101 INTRODUCTION TO ANTHROPOLOGY

An introduction to nature and scope of anthropology, organic man, race, and the nature of culture. Five credits.

ANT 106 INTRODUCTION TO ARCHAEOLOGY

A survey of 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 205 ENVIRONMENT AND CULTURE BEHAVIOR

It is the purpose of the course to examine possible interrelationships between environmental phenomena and cultural behavior. Five credits.

ECONOMICS (ECO)

ECO 100 INTRODUCTION TO ECONOMICS

A survey course designed to give a non-business major an introduction to basic economics.

Please consult a class schedule for both classroom and "individualized" offerings in this course. The individualized form of Introduction to Economics is generally available throughout the academic year. This format requires no class attendance, allows entry at any time, and permits the student to proceed at his or own pace. Check with the Para-professional for further details. Five credits.

ECO 201 PRINCIPLES OF ECONOMICS — MACROECONOMICS

Introduction to American capitalism, national policy, economic stability, and ecnomic growth. Five credits.

ECO 202 PRINCIPLES OF ECONOMICS — MICROECONOMICS

A study of problems and principles of production, distribution, and consumption of weatlth. Five credits.

FAMILY LIFE EDUCATION (FAL)

FAL 114 EARLY PREGNANCY

Designed for those couples in the first 5 months of pregnancy. Learn about proper care of the body for optimum development of the fetus, basic nutrition, fetal development, explore changes in feelings and family relationships. Body conditioning, proper body mechanics and relaxation are taught. One credit.

FAL 115 PREPARED CHILDBIRTH I

Designed for those having their first child; an opportunity for group discussion of the physical and emotional aspects of pregnancy and postpartum period; explores new family relationships, 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 is included. Two credits.

FAL 116 PREPARED CHILDBIRTH II

Designed for those who have had one or more children; an opportunity for group discussion, putting past experiences into proper perspective. Additional information provided enabling couples to cope with present pregnancy positively; explores demand of new family relationships (sibling rivalry); sharing of ideas related to infant care. Promotes better preparation for labor and delivery processes by practicing conscious relaxation, related exercises and types of breathing techniques including the Lamaze Method. Labor and delivery film is shown and tour of the hospital obstetrical facilities is included. Two credits.

FAL 119 CESAREAN BIRTH

Designed for those anticipating a cesarean birth. The main goal is to make the cesarean delivery a good and meaningful childbirth experience. Also included are topics as outlined in the basic Childbirth Education courses as listed above. One credit.

FAL 121 HEALTH AWARENESS FOR SENIOR CITIZENS

Designed to increase awareness of the importance of taking an active role in maintaining health and provide methods of maintaining health appropriate for the senior citizen. Topics discussed include: rights and responsibilities as a consumer of health care, medicine chest, nutrition, physical aspects of aging, digestive system, stress, arthritis, back problems and exercise. One credit.

FAL 126 YOUR AMAZING INFANT

Helps parents develop their confidence in caring for their infant through group discussion about normal characteristics of infancy, growth and development, nutrition and feeding, safety, childhood illnesses, anticipating and preventing accidents. Develops ideas of how to identify and meet physical, social, and emotional needs of infants. Explores and helps with understanding of and coping with feelings regarding parenthood. Practice infant resuscitation, learn to make baby food, participate in parent-infant exercises. Postpartum exercises will be taught. Infants attend group with parents. Two credits.

FAL 127 COPING WITH YOUR ACTIVE TODDLER

Parents will become acquainted with normal characteristics of toddlers. Helps with understanding of and coping with parent and child interaction as well as feelings concerning parenthood. Discuss ways of developing your child's self esteem, language, and motor skills. Explore areas of adequate nutrition, childhood illnesses, anticipating and preventing accidents. Two credits.

FAL 128 GROWING WITH YOUR PRESCHOOLER

Parents will become acquainted with the normal characteristics of pre-schoolers. Explores philosophy of parenthood and various alternatives in family communication and discipline. Discuss ways of fostering your pre-schooler's development. Explore new ideas for nutrition, play activities and preparing your child for school. Two credits.

FAL 148 FAMILY COMMUNICATIONS

Designed to help parents explore effective ways of relating with children in hopes of enhancing the total child-parent relationship. Discussions will include realistic, sensible and practical approaches to everyday situations, and alternative ways of handling situations to enable parents to choose what is best for their family. Sharing experiences of common concern and practicing specific communication skills and techniques will also be included. Three credits.

FAL 156 FOOD, FACTS, FADS AND YOUR HEALTH

Designed to help the individual make wise food choices for good health and ultimate well being by utilizing basic principles of sound nutrition. Application of these principles will be made through class activities. Two credits.

FAL 167 PARENTING ALONE

Deals specifically 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. Three credits.

FAL 168 SEXUALITY AND YOUR TEEN

Designed to increase parent awareness and understanding of teens attitudes, concepts, conflicts and needs in this crucial stage of maturing. Two credits.

FAL 169 PERSONAL WEIGHT MANAGEMENT

A realistic approach to weight control will be presented. Topics for discussion include: reasons behind previous unsuccessful attempts to lose weight, meal planning, eating out and long-term maintenance of ideal weight. Special attention is focused on the psychology of weight control. Two credits.

FAL 175 OH, MY ACHING BACK

Learn about your back — how it is constructed and its functions. Practical application to daily activities is included. Participate in exercises designed to maintain and improve the condition of your back and/or prevent back problems. One credit.

GEOGRAPHY (GEO)

GEO 105 WORLD GEOGRAPHY

A study of the world's regions. Emphasis is on culture. Regions as well as landform, climate, vegetation, and soils of each region are examined. How these factors influence man's economic activities is also examined. Five credits.

GEO 205 GEOGRAPHY OF NORTH AMERICA

Survey of physical, cultural, and economic features of the United States and Canada. Dynamic processes (as opposed to static) are studied and analyzed. Three credits.

GEO 206 GEOGRAPHY OF COLORADO

Cultural groups and economy are examined and analyzed. Urban and rural geography are also treated. Population and economic trends are examined. Three credits.

GEO 207 URBAN GEOGRAPHY

Introductory study of geographical factors that influence development of modern urban areas: population growth, land use, environmental deterioration, and future planning. Three credits.

GEO 295 INDEPENDENT STUDY IN GEOGRAPHY

This course provides the opportunity for the serious-minded student to engage in intensive research and study on a specified topic under the direction of a qualified faculty member. Prerequisite: Five quarter hours in geography. Two credits.

HISTORY (HIS)

HIS 101 HANGUPS FROM WAY BACK — ANCIENT CIVILIZATION

A study of political, social, and cultural development of the Western world and its relationship to the contemporary world. Roman and early medieval civilizations. Study methods historical research and interpretations are integrated throughout. Five credits.

HIS 102 HANGUPS FROM WAY BACK — MEDIEVAL CIVILIZATION

Continuation of HIS 101 emphasizing the Renaissance, Reformation, absolutism, and early modern theories in politics, society, economics, and revolution, and their relationship to the world of today. Five credits.

HIS 103 HANGUPS FROM WAY BACK — MODERN CIVILIZATION

Starting with the period after 1815, concentration focuses on modern political, economic, and social events in theory and practice and their effect on today's world. Five credits.

HIS 105 HISTORY OF THE UNITED STATES TO 1877

American history from the colonial period through the Civil War and Reconstruction, emphasizing economic, political, and constitutional development of the United States.

Please consult a class schedule for both classroom and "individualized" offerings in this course. The individualized form of History of the United States to 1877 is generally available throughout the academic year. This format requires no class attendance, allows entry at any time, and permits the student to proceed at his or her own pace. Check with the Para-professional for further details. Five credits.

HIS 106 HISTORY OF THE UNITED STATES FROM 1865-1945

MYTH AND REALITY IN AMERICA'S PAST is the theme of this social, economic and political survey. Primary concern is the examination and causes of America's historical myths. Five credits.

HIS 107 HISTORY OF THE UNITED STATES SINCE 1945

A survey of events in the United States since 1945 with emphasis on background to current social, cultural, and political changes. Five credits.

HIS 108 MODERN RUSSIA CIVILIZATION

A self-paced, individualized study of contemporary Russian society is presented by Hedrick Smith's award winning book *The Russians*. The difference between the official Soviet Union and real Russia is emphasized: the ruling class and the people, Soviet and Russian institutions, the "new Soviet man" and the ordinary Russian citizen. Taped lectures and historic background showing close ties with the past by the Russian masses. Materials include text, student guide, tapes and filmstrip. Five credits.

HIS 115 OCCULT SCIENCES

An examination of the beliefs and practices of voodoo, vampirism, witchcraft, hunting magic, snake handling cults, palmistry, tarot cards, I Ching, and hysterical possession from the ancient past to the present. Five credits.

HIS 205 HISTORY OF ENGLAND

General survey of English history and England's role in European and world hsitory. Five credits.

HIS 208 COLORADO HISTORY FIELD TRIP

Combines three full days of mountain touring, hiking and camping with two weeks of classroom orientation (one hour/day). Offered twice a year — July or August, and September — students travel via bus wired for lecturing, camp two nights and share meals. Areas visited include: Decatur ghost town and mill, Georgetown loop, Leadville, and five miles of hiking along the Hagerman railroad loop or the Alpine Tunnel. Minimum fee covers meals and expenses. 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 210 REVOLUTIONARY RUSSIA (1900-PRESENT)

The course will survey Russian history leading to the revolutionary period and examine the changes in the Soviet state since the revolution. Special emphasis will be on modern cultural, economic and political theories and institutions as they pertain to the Soviet Union. Three credits.

HIS 295 INDEPENDENT STUDY IN HISTORY

This course provides the 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. Two credits.

MAS 161 HISTORY OF MEXICO I

A study of the significant aspects of Mexican history and civilization from pre-Columbian times to the end of the colonial period. Emphasis will be on the diverse Indian civilizations in Mexico, especially the Aztecs, before 1619, the Spanish conquest, significant events of the Colonial period, and the causes which led to independence. Three credits.

MAS 162 HISTORY OF MEXICO II

A study of the historical events from 1821 to the present. Emphasis will be on the growth of the Mexican nation after independence, relations with the United States before and after the Mexican-American War, the Revolution of 1910 and its aftermath. Three credits.

MAS 165 CHICANO HISTORY

An examination of the historical events in the American Southwest from the indigenous origins, through the Spanish conquest and colonization and later Anglo invasion. Emphasis will be on the circumstances which transformed the Mexican from a majority to a minority status. Three credits.

POLITICAL SCIENCE (POS)

POS 100 INTRODUCTION TO POLITICAL SCIENCE

Examines the nature of the state, basic forms of government, and the major political ideologies. Surveys the field of political science and gives the student a broad understanding of major subdivisions such as international relations and public administration. Five credits.

POS 101 AMERICAN GOVERNMENT

A study of American national government, political activities, political parties, separation of powers and purposes, philosophy and problems of the American system.

Please consult a class schedule for both classroom and "individualized" offerings in this course. The individualized form of American Government is generally available throughout the academic year. This format requires no class attendance, allows entry at any time, and permits the student to proceed at his or her own pace. Check with the Para-professional for further details, 353-8008, ext. 380. Five credits.

POS 102 COMPARATIVE FOREIGN GOVERNMENT

The governmental systems and political cultures of several representative countries outside the United States are surveyed. Five credits.

POS 107 STATE GOVERNMENT

A study of the origins, structure, and current trends in state government in the U.S. with emphasis on Colorado government. Usually offered between quarters in the Spring to allow students to spend some time at the capitol while the legislature is in session. Two-five credits.

POS 108 THE AMERICAN PRESIDENCY

An examination of America's highest elective office from Washington to Watergate. Philosophical origins, crisis, successes and failures are examined. Offered every quarter in individualized form as described under POS 101. Lectures on video- or audio-tape by Professor Walt Rostow, former advisor to Lyndon B. Johnson. Five credits.

POS 109 CONTEMPORARY POLITICAL ISSUES

Encourages students to engage in a lively examination of a variety of controversial political topics of current public interest. The course will touch on issues of national and/or international impact. Topics vary each quarter emphasizing reading and discussion. Five credits.

POS 116 INTERNATIONAL POLITICS SINCE 1945

A study of trends in world politics and an examination of a number of major crises in the postwar era, including the Cold War and the Vietnam conflict. Purposely designed to avoid prerequisites of any kind. 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 theories of international politics with a view toward understanding current international problems. Five credits.

POS 206 AMERICAN FOREIGN POLICY

An examination of America's strategy in world politics viewed from both the historical and current perspective. Factors and institutions influencing the formation of foreign policy are analyzed and discussed. Five credits.

PSYCHOLOGY (PSY)

PSY 101 GENERAL PSYCHOLOGY

Introduction of principles of human behavior, including personality development, emotions, learning, and other processes.

Please consult a class schedule for both classroom and "individualized" offerings in this course. The individualized form of General Psychology is generally available throughout the academic year. This format requires no class attendance, allows entry at any time, and permits the student to proceed at his or her own pace. Check with the Para-professional for further details. Five credits.

PSY 102 PSYCHOLOGY OF ADJUSTMENT

Application of psychological principles to problems of living. Personality integration is the primary goal. Three 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 111 BASIC HUMAN POTENTIAL SEMINAR

A personal growth workshop based on the self-actualization principals of psychologists Abraham Maslow and Herbert Otto. The activities of this course are designed to help people tap their potential for becoming more self-determining, self-motivating, self-affirming, and more understanding of others. Three credits.

PSY 112 ADVANCED HUMAN POTENTIAL SEMINAR

The advanced seminar is designed to further participant's identification of his/her personal resources and potentialities and to explore their use in setting and meeting life goals. Methods for resolving personal conflict, for long-range goal setting, and for life-style planning are developed. Prerequisite: PSY 111. Three credits.

PSY 115 HUMANISTIC PSYCHOLOGY

A survey of the 3rd force in psychology; concentrating on 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 in clarifying abilities, interests, and values; and to help with job information, vocational planning and decision making. Three credits.

PSY 118 PSYCHOLOGY OF ADULTHOOD

An exploration of 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 121 DEATH AND DYING: A HOLISTIC PERSPECTIVE

To acquaint participants with new research, alternative approaches, and psychological literature on death and dying. To explore individual views and feelings about death and dying. Three credits.

PSY 205 PSYCHOLOGY OF ADOLESCENCE

A comprehensive study of the development of adolescents in terms of physical, intellectual, emotional, and social growth. 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 207 PRINCIPLES OF MEDITATION AND CONSCIOUSNESS ALTERATION

A survey of Eastern meditational systems; meditational and bio-feedback procedures; and limitations and applications of consciousness altering techniques. Three credits.

PSY 211 PARAPSYCHOLOGY I

A broad, experimental introduction to 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 self responsibility for life and health. Three credits.

PSY 216 PSYCHOLOGICAL AND PRACTICAL ISSUES OF SEPARATION AND DIVORCE

This course is designed to assist people in sorting and working through creatively the psychological and practical issues related to separation and divorce. Prerequisite: enrollment limited to persons separated or divorced. Three credits.

PSY 221 ABNORMAL PSYCHOLOGY

To concentrate on the organic factors in mental illness, brain tumors, mental retardation, senility, head injuries, etc. Three credits.

PSY 231 PSYCHOLOGY OF DREAMS

An examination of Jungian, Freudian, Gestalt and experimental approaches to dream phenomena. Three credits.

PSY 236 HUMAN RELATIONS TRAINING

Development of communication skills, value clarification, and moral development; study of prejudice, low income problems and issues of the aged and handicapped; examination of differences of race, sex, and religion. Three credits.

PSY 237 ASSERTIVENESS TRAINING

Study and practice in asserting individual needs and feelings. Three credits.

PSY 238 ASSERTIVENESS TRAINING II

A course for those who have had a class in assertiveness training and have a working knowledge of the concepts and attitudes involved. Skill-building 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

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: EEG & EMG

An advanced seminar in biofeedback utilizing the EMG and EEG in education and health. Two hours of laboratory experience are required each week. Four credits.

PSY 243 BIOFEEDBACK III: INTERNSHIP

Practical training in biofeedback provided by studying educational and clinical problems. Two hours of laboratory experience are required each week in addition to a three hour seminar once each week. Prerequisites: Biofeedback I & II. Four credits.

PSY 248 CHILD PSYCHOLOGY

A study of emotional and physical development of the normal child from infancy through childhood. Five credits.

PSY 249 COUNSELING AND CRISIS INTERVENTION

The course 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. Actual integration of skill-building and knowledge of para-professional helping skills into practical experience through on-site work with the In Touch Helpline is also provided. Three credits.

PSY 295 INDEPENDENT STUDY IN PSYCHOLOGY

This course provides the 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. Credit hours (1-3) must be arranged with the Division Chairman and instructor.

SOCIOLOGY (SOC)

SOC 101 INTRODUCTION TO SOCIOLOGY

An introduction to the sociological analysis of social systems, culture, social stratification, population, and social change; to cultivate in the student an interest in and awareness of social change. Five credits.

SOC 105 SOCIOLOGY OF MARRIAGE AND FAMILY

A study of marriage and family relationships, with focus on social institutions, value systems, communication, mate selection, and other social/cultural factors. The course will be cross-cultural, but will emphasize courtship, marriage and conjugal life in contemporary America. Five credits.

SOC 106 CONTEMPORARY SOCIAL PROBLEMS

A study of both specific and general problems of our time. Some of the social problems that will be studied are poverty, civil liberties, social change, crime and delinquency in the context of contemporary American society. Three credits.

SOC 108 SOCIAL GERONTOLOGY

To acquaint students with the process of aging, how aging affects the individual and society, gerontological services, and gerontology as a career. Two hour practicum in field experience required. Three credits.

SOC 111 SOCIAL SERVICES I

To introduce and familiarize 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. To interrelate social and other sciences and to assist students to strengthen and integrate knowledge of human behavior and development. Three credits.

SOC 112 SOCIAL SERVICES II

This is the 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

This is the third in a sequence of three courses in which students will be given an opportunity to explore the human services fields. Objectives will be to provide students with on the job experiences in one or more human services as part of becoming familiar first-hand with skills and techniques involved. Five credits.

SOC 115 SOCIOLOGY OF EDUCATION

Analysis and discussion of various learning situations; underlying values and norms; and organizational bureaucratic structures. Analysis of the interrelationship of social and educational systems and expectations. Prerequisite SOC 101. Three credits.

SOC 117 SOCIOLOGY OF LEISURE

Analysis and discussion of non-work behavior in relationship to other social, recreational, and economic variables. New occupations, new patterns of behavior, and new opportunities may continually be created due to leisure time. Prerequisite: SOC 101. Three credits.

SOC 207 CONTEMPORARY ISSUES IN HUMAN SEXUALITY

Facilitates a deeper and more comprehensive understanding of human sexuality as it relates to our total development as individual sexual beings, as a member of a species, and our integrated functions of life. Three credits.

SOC 208 SEX-ROLE ISSUES IN MODERN AMERICA

Designed to arive at 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; obtain an awareness of sex roles and sexuality as they change with age. Three credits.

SOC 295 INDEPENDENT STUDY IN SOCIOLOGY

This course provides the 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. Credit hours (1-3) must be arranged with the Division Chairman and instructor.

MAS 100 INTRODUCTION TO MEXICAN AMERICAN STUDIES

A general course designed to provide an understanding of Mexican American Studies and the background and philosophy behind the department and its courses. Course will also analyze the relative position, differences, and commonalities of the Mexican American community to the general American society. Emphasis given to the relationship of the Chicano to the American educational system. Three credits.

MAS 125 THE AMERICAN SYSTEM

The purpose of this course is the presentation of vital information dealing with citizenship. Special emphasis will be placed on current legislation dealing with Chicanos. Three credits.

COMMUNICATIONS AND ARTS DIVISION

COMMUNICATIONS

CON 101 FUNDAMENTALS OF COMPOSITION

Designed to prepare the student for CON 102. Emphasis is on sentence building and paragraph development, culminating in short theme writing. Special areas of need such as spelling and punctuation are also treated with additional work in the Instructional Center through individualized mini-courses. Five credits.

CON 102 INTRODUCTION TO WRITING

Designed for developing communication skills and college essay writing. Emphasis is on the writing of various types of essays about themes in literature or in other expressions of the instructor or student's choice. Individualized attention may be given in the classroom. Prerequisite: CON 101 or placement test. Five credits.

CON 103 RESEARCH AND COMMUNICATION

An introduction to library organization and resources, the research process, and the communication of research information in a research paper. Prerequisite: CON 102. Five credits.

CON 107 INTRODUCTION TO LOGIC

An introduction to the principles of logic used in the construction and appraisal of arguments. Five credits.

CON 109 CREATIVE WRITING

Structured instruction in the techniques of short story and poetry writing reinforced by an informal study of professional writing in these areas. The student will receive practice in the type of writing best suited to his individual interest and talent; he will receive positive criticism for improvement; he will receive practical information on publication. Five credits.

CON 202 ADVANCED COMPOSITION

The student will have the opportunity to study styles of professional writers in order to help him refine his own writing skills; he will be given practice in persuasive writing, analytical and critical reviews, and advanced expository writing. Prerequisite: CON 102. Five credits.

CON 295 INDEPENDENT STUDY IN COMMUNICATION

The course provides the 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. Credit hours (1-3) must be arranged with the Division Chairman and instructor.

MAS 116 BILINGUAL SKILLS

A course designed primarily to meet the linguistic needs of Chicanos. Orthography, phonetics, vocabulary as well as the psychology of the language will be discussed. Comparative elements between Spanish and English, such as cognates, roots, suffixes, and prefixes will be treated. Three credits.

JOU 111 NEWSWRITING I

Fundamentals of news gathering, reportorial skills, interviewing, and news story forms. Introduction to feature writing, and press law. Some typing ability is needed. Five credits.

JOU 112 NEWSWRITING II

Principles and practice in writing news stories with emphasis on feature and editorial writing. Some typing ability is needed. Five credits.

JOU 113 MAGAZINE ARTICLE WRITING

Analyzing newspaper and magazine markets and researching and writing the longer non-fiction articles. Some typing ability is needed. Three credits.

JOU 114 INTRODUCTION TO MASS MEDIA

Study of history, ethics, current problems, and practices of the mass media within the social system, with special emphasis on newspaper, radio, and television. Five credits.

JOU 115 INTRODUCTION TO RADIO BROADCASTING

An introduction to basic radio principles and production techniques with some practical laboratory experience in the studio. Five credits.

JOU 116 INTRODUCTION TO TELEVISION BROADCASTING

A basic introduction to the use of video production equipment and processes. Emphasis will be on giving students hands-on experience with microphones, TV cameras, lights, sets, audio equipment, and the control board. Five credits.

JOU 117 MEDIA GRAPHICS

Provides student with basic skills in producing various graphic materials for use in production of television programs. Two additional lab hours arranged per week. Two credits.

JOU 120 ADVERTISING

Introduction to functions of advertising as a merchandising tool, including study of copy, media, art work, and production. Five credits.

JOU 206 PHOTOJOURNALISM

A practical, non-technical study of photography including the mechanics of cameras (both 35mm and twin lens reflex), darkroom procedures, telling a picture story, composition, and use of the camera for school publications. Prerequisite: AAD 225, Photography I. Two additional lab hours arranged per week. Three credits.

JOU 299 JOURNALISM PRACTICUM

The practicum provides the opportunity for the serious-minded student to develop his skills in writing and producing a publication or in writing and producing a broadcast program under the direction of a qualified faculty member. Credit hours 1-3 per term. May be repeated at different levels of proficiency. Must be arranged with instructor and Division Chairman.

LIT 106 INTRODUCTION TO FICTION

This is an exploration of short stories and novels as a means of extending the student's experience in understanding the inner lives of others and of understanding himself. The student will also learn to evaluate literature based on its total structure rather than on his threshold interest. Five credits.

LIT 107 INTRODUCTION TO POETRY

Exploration of forms, types, language, and philosophies underlying the works of major American and British poets in order that students may better understand humanity and themselves. Four credits.

LIT 115 SCIENCE FICTION

An examination of the genre of science fiction as it reflects social, political, psychological, and moral views of writers beginning with Jules Verne through the present. Three credits.

LIT 116 DETECTIVE FICTION

The study of the genre from its origins to now. The course will be concerned with the reading of short stories and novels and their value as entertainment and as a reflection of society. Three credits.

LIT 119 SHAKESPEARE: REPRESENTATIVE PLAYS

An 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. Five credits.

LIT 125 READING OF MASTERPIECES

This course is an intensive treatment of a great book, which has had world-wide influence. The selection of the book is made by the instructor who is teaching the course. One credit.

LIT 205 THE AMERICAN WEST

A study of the effect of the Westward Movement on American culture, beginning with James Fenimore Cooper and extending to modern writers such as John Steinbeck. Three credits.

LIT 208 FOUNDATIONS OF MODERN BRITISH LITERATURE

A study of major British writers with an emphasis on their correlation to history and the arts. This course fulfills a humanities requirement. Five credits.

LIT 217 WOMEN IN LITERATURE AND MEDIA

A study through literature and media of the variety of experiences encountered by modern women. This study will not only help women to understand the difficulties in finding fulfillment but also to understand their great potential for attaining fulfillment beyond just learning to cope with life. Five credits.

LIT 296 SEMINAR IN LITERATURE

This course is for the student who wishes to pursue a special idea, mode, or topic of interest in literature. Students meet informally with the instructor for discussion of the subject chosen by them or by the faculty member. Two credits.

MAS 206 CHICANO LITERATURE

A survey of contemporary Mexican literature of social protest from "Corky" Gonzales to Ramon Barrio and other authors who have contributed to the literary heritage of the present-day Chicano. Three credits.

REA 090 READING ESSENTIALS

A review of basic reading skills such as vowels, consonants, syllabic patterns, and dictionary skills. Prepares the student for college and vocational courses. Two credits.

REA 101 READING AND STUDY SKILLS FOR COLLEGE

The course is designed to help the student read college level texts and to give him skills necessary for success in all content areas and study situations. Five credits.

REA 106 SPEED READING

Instructor and practice concentrates on versatility in speed, vocabulary, and critical reading skills. Three credits.

REA 115 INDIVIDUALIZED PROGRAM IN VOCABULARY

A multi-media efficiency course designed to help students develop their vocabulary on an individual basis. One credit.

REA 116 INDIVIDUALIZED PROGRAM IN SPELLING

A multi-media efficiency course designed to help students develop spelling skills on an individual basis. One credit.

REA 117 INDIVIDUALIZED PROGRAM IN SPEED READING

A multi-media efficiency course designed to help students with basic speed reading techniques. One credit.

REA 118 INDIVIDUALIZED PROGRAM IN BASIC LANGUAGE SKILLS

A duo-media efficiency course designed to help students develop the basic English skills needed on an individual basis. One credit.

REA 120 INDIVIDUALIZED PROGRAM IN COMPREHENSION

A multi-media efficiency course designed to help students improve basic comprehension skills. One credit.

REA 121 PUNCTUATION

A multi-media efficiency course to aid the individual student in punctuation skills. One credit.

REA 295 INDEPENDENT STUDY IN READING

This course provides the 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. Credit hours (1-3) must be arranged with the Division Chairman and instructor.

SPE 115 SPEECH COMMUNICATIONS

The course 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. Three credits.

SPE 117 ORAL INTERPRETATION

Concentration on teaching processes whereby a reader interprets and translates the meaning of written work for an audience, understands the selection, and then projects meaning to the audience by use of the voice and suggested action to convey the author's meaning. Three credits.

SPE 118 INTERPERSONAL COMMUNICATIONS

Student focuses on communication skills used in listening, sending messages, developing self confidence and self awareness while working in pairs and small groups. Three credits.

SPE 119 INTRODUCTION TO SEMANTICS

This course is an introductory study of how persons respond to words and other symbols. The student not only looks at words and things but at the human behavior that results from using various types of symbols in different ways. Two credits.

SPE 211 COMMUNICATION WITH THE DEAF I

To acquaint the student with the alphabet, signs and skills necessary to communicate with the deaf and hard-of-hearing population. Basic aspects of the deaf will be covered. Two credits.

SPE 212 COMMUNICATION WITH THE DEAF II

To acquaint the student with more advanced techniques of effectively communicating with the deaf population through the use of deaf idioms, expressions, and signs. A portion of this class will be a more detailed discussion of psychological aspects of the deaf. Prerequisite: SPE 211 or demonstration of a knowledge of sign language. Two credits.

SPE 213 COMMUNICATION WITH THE DEAF III

This course is a continuation of SPE 212. Prerequisite: SPE 212 or demonstration of a knowledge of sign language. Two credits.

FOREIGN LANGUAGES

FRE 011 CONVERSATIONAL FRENCH

Basics of speaking French are presented, emphasizing vocabulary and sentence patterns, which a traveler might need in order to order meals, get a room in a hotel, shop, exchange money, or travel. No credit.

GRE 015 CONVERSATIONAL GERMAN

A course in conversational German intended to help the person who may be traveling in Germany. No credit.

GER 101 ELEMENTARY GERMAN I

Students develop the ability to learn German through listening, reading, writing, and speaking the language. The German in this course is standard or High German. The primary aim of this course is to give students an elementary conversational and grammatical knowledge of the language and an exposure to German culture and habits. Five credits.

GER 102 ELEMENTARY GERMAN II

Continuation of Elementary German I. Prerequisite: Elementary German I or equivalent knowledge. Five credits.

GER 103 ELEMENTARY GERMAN III

Continuation of Elementary German II. Prerequisite: Elementary German II or equivalent knowledge. Five credits.

MAS 011 CONVERSATIONAL SPANISH

A course in conversational Spanish concerned with developing the ability to understand and speak regional Spanish. No credit.

NOR 011 CONVERSATIONAL NORWEGIAN

This course gives a practical introduction to reading and speaking Norwegian for purposes of everyday usage, for travel, and for general interest. No credit.

SPA 101 ELEMENTARY SPANISH I

Students develop the ability to understand, speak, read, and write the language within the limits of vocabulary. Especially designed for the non-native speaker of Spanish. Five credits.

SPA 102 ELEMENTARY SPANISH II

Continuation of Spa 101. Five credits.

SPA 103 ELEMENTARY SPANISH III

Continuation of SPA 102. Five credits.

SPA 111 INTERMEDIATE SPANISH

The purpose of this course is to give those students who have taken their first year of elementary Spanish or those with an adequate background, either from high school or the home, an opportunity to continue their study of the language. The course will deal principally with developing oral or audible skills as well as improving their grammatical and written abilities. Two credits.

SWE 011 CONVERSATIONAL SWEDISH

A beginning course in conversational Swedish intended to give a practical introduction to the reading and speaking of Swedish and to help the person who may be traveling in the Scandinavian countries. No credit.

HUMANITIES

HUM 100 INTRODUCTION TO THE HUMANITIES

To introduce students to the creative and speculative nature of man through reading, viewing, hearing, and discussing works of art, drama, literature, music, and philosophy and the critical and ethical approaches to these areas as reflected in all cultures. Five credits.

HUM 101 INTRODUCTION TO THE GREEK AND ROMAN PERIOD

Introduces students to the classical origins of Western culture through the study of the architecture, art, literature, music and philosophy of the ancient Greeks and Romans. Five credits.

HUM 102 INTRODUCTION TO THE MIDDLE AGES AND RENAISSANCE PERIOD

Introduces students to the architecture, art, literature, music, and philosophy of Europe during the Middle Ages and Renaissance and shows the relevance to the development of our own culture. Five credits.

HUM 103 INTRODUCTION TO THE MODERN PERIOD TO WORLD WAR II

Introduces students to the architecture, art, literature, music, and philosophy of Europe and the United States from the 17th Century to World War II. Five credits.

HUM 104 CONTEMPORARY CULTURE

Study of ideas, both Eastern and Western, in the 20th Century through firsthand experience of contemporary drama, live concert performance, local films, and viewing of painting and sculpture. Five credits.

HUM 105 MYTH, LEGEND, AND FOLK TALES

Students are acquainted with myth, legend, and folk tales from many areas of world culture. Five credits.

HUM 106 INTRODUCTION TO WORLD RELIGIONS

A comparative study of the ideas, doctrines, and concepts of the world's major religions through their historical-geographical evolution and their expression in the arts, music, and literature. Five credits.

HUM 108 ORIENTAL CULTURE

An examination of the great cultural traditions of the Orient and of their expression in a diversity of the arts. Content will focus mainly on the civilizations of India, China, and Japan but will include other parts of the Orient. Emphasis will be upon philosophy and religion and their expression through the developing arts of literature, painting, sculpture, architecture, and music. Five credits.

HUM 109 MODERN AMERICAN CULTURE

A study of American thought and the problems of modern culture since the 1920's as reflected in the arts of America. Five credits.

HUM 296 SEMINAR IN HUMANISTIC STUDIES

This course is for the student who wishes to pursue a special topic of interest in the humanities. Students meet informally in various meetings to discuss and report the progress of their creative project(s), which may involve media resources. Two credits.

MAS 120 CULTURAL HERITAGE OF MEXICO AND SOUTH AMERICA

Students examine the art, music, literature, and philosophy of Mexico and South America from pre-Columbian civilizations to the present time as it relates to the Chicano culture. This course fulfills a humanities requirement. Five credits.

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. This course or PHI 108 fulfills a humanities requirement. Five credits.

PHI 108 INTRODUCTION TO MODERN PHILOSOPHY

Examination of 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 from which the student can develop his own personal philosophy. This course or PHI 105 fulfills a humanities requirement. Five credits.

DESIGN AND CREATIVE STUDIES

(DESIGN, FINE ARTS, MUSIC, THEATRE AND MOVEMENT, TEXTILES AND CLOTHING)

In a college curriculum the study of the visual and performing arts is an exciting venture with several facets. Students may work in these courses to deepen their understanding of the history of human expression and design; to extend or strengthen their sensory skills; to develop creative thinking abilities, or to learn the process of creating 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, fine arts, music, theatre and dance, or textiles and clothing. Prospective majors (or minors) meet each term with their instructor to plan course requirements appropriate to their educational goals.

Students wishing to enroll in art, music, or theatre courses solely for recreational purposes are advised to register for one of the self-supporting, non-transferrable "community" classes. These courses are not applicable to the degree programs of the College.

ART (ART)

ART 100 SURVEY OF VISUAL ARTS AND DESIGN

An introduction to art, architecture, and the several fields of design. Through visual presentations, discussions, and studio exercises, students will examine various ways in which people express themselves through manipulations of materials, including painting, sculpture, crafts, housing, and consumer goods. This course fulfills a humanities requirement. Five credits.

ART 111 ART HISTORY I
ART 112 ART HISTORY II

These courses provide students with basic historical understanding of western art forms, architecture, and relevant crafts. Art History I covers the pre-historic through the Medieval periods and Art History II covers the Renaissance through contemporary movements. Each course five credits.

ART 299 ARTS PRACTICUM

This learning structure is designed to facilitate 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 level of proficiency. This practicum may be repeated — at different levels of proficiency. Credits variable from 1-3.

ARTS FOR HUMAN DEVELOPMENT (HUD)

HUD 111-116 SENSORY INTEGRATION — MOTOR
HUD 121-126 SENSORY INTEGRATION — VISUAL
HUD 131-136 SENSORY INTEGRATION — AUDITORY

The objective of these courses is to develop or extend learning capabilities through individually designed motor, visual, auditory and dramatic sensory exercises. This learning structure is developmental in nature. Each sensory area is composed of six proficiency levels or courses. Only S grade available. 2 clock hours per week, one credit per course.

DESIGN AND VISUAL COMMUNICATION (AAD)

AAD 100 SURVEY OF ARCHITECTURE

This course includes an historical survey of architectural and interior styles; an introductory study of architectural vocabulary forms; materials and methods of construction. The purpose of the class is to provide a fuller understanding of the fields of architectural design and planning. Three credits.

AAD 101 FUNDAMENTALS OF ART & DESIGN I
AAD 102 FUNDAMENTALS OF ART & DESIGN II

These courses include the study of light, space and perception; study and work with the process of creative thinking and expression; work with the fundamental visual elements and principles of organization; and a survey of the application of these fundamentals to problems in the fine arts and design fields. The first course concentrates on two-dimensional situations and the second course focuses on three-dimensional conditions. Each course is five credits.

AAD 103 FUNDAMENTALS OF ART & DESIGN III

This course is designed to provide the serious student of fine arts or design an opportunity to apply the principles of perception, invention, and design to problems in selected design and fine arts fields. Students select projects from areas such as graphic design, advertising, interior design, industrial design and packaging, landscape and environmental design, and fine arts and crafts. Eight studio hours. Five credits.

AAD 131 DRAWING I
AAD 132 DRAWING II

These courses are designed to introduce students to drawing as a means of visual thinking and expression. Drawing I assignments cover development of visual perception, basic drawing techniques, skills, and composition. Students may choose to emphasize descriptive or personally expressive drawing approaches. Drawing II includes a survey of expressive drawing styles, study of formulating ideas for drawing, further experience with developing and expressing concepts in terms of drawing, and an exploration of a variety of drawing mediums. Each course six studio hours—three credits.

AAD 221 GRAPHIC DESIGN I
AAD 222 GRAHIC DESIGN II

The purpose of these courses is to introduce students to graphic applications of drawing, painting and photographic techniques and creative design with letter forms and composition. Graphics Design I also surveys the application of visual arts techniques to several practical or applied situations (e.g. illustrations, architectural rendering, advertising and product design, interior design, and the crafts). Graphic Design II gives students an opportunity to apply, within a structured course setting, graphic design techniques to specific problems (e.g. architectural rendering, fashion illustration, advertising, design and packaging, display, signs and posters). Each course six studio hours — three credits.

AAD 223 DESIGN III

This course includes a survey of graphic preparations for packaging, product design, and interior and architectural planning; the study of elements and principles relevant to the visual design of functional objects; and experiences with the processes of planning for and execution of quality packaging, product, and interior or architectural concepts. Six studio hours. Three credits.

AAD 225 PHOTOGRAPHY I
AAD 226 PHOTOGRAPHY II

Photography I includes a survey of historical and contemporary photographic styles; the study of relevant design elements and principles of organization; camera mechanics and darkroom techniques; and emphasis on the planning and execution of photographs of expressive and creative visual content. Photograph II includes a survey of functional applications of photography (e.g. photo illustration, portraiture), and work with relevant design principles and photographic techniques. Each course six studio hours — three credits.

AAD 227 INTERIOR DESIGN
AAD 228 INTERIOR DESIGN II

Interior Design I covers interior visual and spatial elements, organizing principles, materials, and their relationship to architecture. The emphasis is on the process of studying and designing for interior spaces. Interior Design II gives students an opportunity to apply, within a structured course setting, interior design concepts to specific problems (e.g. residential interiors, display spaces). Each course six studio hours — three credits.

AAD 231 FIGURE DRAWING

This course includes a survey of figure drawing, study of anatomy in terms of drawing, and instruction in the basic techniques of drawing the human figure. Six studio hours. Three credits.

AAD 232 DRAWING APPLICATIONS

This course structure allows students with previous drawing experience to explore applications of drawing to illustration, rendering or selected printmaking media. Six studio hours. Three credits.

ART STUDIO (ARS)

ARS 241 PAINTING I
ARS 242 PAINTING II

The purpose of these courses is to introduce students to the design principles, technical information and skills necessary to express ideas and feelings through painting. Painting II emphasizes the study of the figure in terms of painting, and further development of individual approaches to painting. Each course six studio hours — three credits.

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. Each course six studio hours — three credits.

ARS 251 SCULPTURE I
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; and 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. Each course six studio hours — three credits.

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, enamelling, stone cutting). Each course six studio hours — three credits.

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

The first course includes a suvey 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. The second course 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. Each course six studio hours — three credits.

ARS 281 WEAVING AND TEXTILE DESIGN I
ARS 282 WEAVING AND TEXTILE DESIGN II

These courses include a basic study of several textile design processes; instruction in weaving and the related processes of stitchery, hooking, batik and silk screen; and experience with creative design processes for textiles. Weaving and Textile Design II covers the continuation of instruction on the four harness loom with an emphasis on the basic weaves. The emphasis is on experimental and creative design within the weaving process. Each course six studio hours — three credits.

ARS 285 ELEMENTARY CRAFT TECHNIQUES

This course includes a survey of primitive craft techniques (for example, work with clay processing and elementary earthenware firing tehniques) and, when appropriate, experience with other craft materials for use in programs with children. Six studio hours — three credits.

HOME FURNISHINGS, TEXTILES CLOTHING (FTC)

FTC 100 SURVEY OF CLOTHING DESIGN AND SELECTION

This course includes the study of physical, cultural, psychological and aesthetic factors involved in the design, selection and use of clothing. Three credits.

FTC 105 INTRODUCTION TO TEXTILES

This course includes a historical survey of fiber materials, a study of uses of selected contemporary fibers, and implications of the construction of cloth products such as clothing, drapes, and upholstery. Three credits.

MUSIC (MUS)

MUS 100 MUSIC APPRECIATION

This is a non-technical course for the beginner, emphasizing listening and discussion for enjoyment and appreciation of music. This 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

Analysis of musical composition, sight singing, and ear training for potential music majors, minors, or students with musical background. Four credits.

MUS 220 CHILDREN'S MUSIC

This course includes a survey of musical materials appropriate to pre-school and elementary aged children; study and work with listening, rhythm, and creative activities; and experiences in singing and playing instruments applicable to children of their age. Students will develop a repertory of songs and guided listening for children. Three credits.

MUS 299 MUSIC PRACTICUM

This learning structure is designed to facilitate 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 his level of proficiency. This practicum may be repeated — at a different level of proficiency. Credits variable from 1-3.

MUSIC PERFORMING (MUP)

MUP 131 PIANO I
MUP 132 PIANO II

These courses designed for the student begining the study of piano, includes reading skills and techniques necessary to play simple songs and accompaniments, and a survey of selected piano works. Each course eight practice hours — three credits.

MUP 151 APPLIED VOICE I
MUP 152 APPLIED VOICE II
MUP 153 APPLIED VOICE III

Individualized or group instruction in vocal techniques for beginners or more advanced students. Each course three practice hours — one credit.

MUP 171 CLASSICAL GUITAR I
MUP 172 CLASSICAL GUITAR II
MUP 173 CLASSICAL GUITAR III

These courses will develop a basic technical and musical foundation through classical guitar, covering sight reading, technical exercises, and study of selected guitar literature. Each course eight practice hours — three credits.

THEATRE AND MOVEMENT ARTS (THE)

THE 100 SURVEY OF DRAMA

Designed to explore dramatic literature and its presentations from its beginnings and evolution in social consciousness to the present time. Emphasis is placed on the reading of plays and on performance from the standpoint of Readers Theatre. This course fulfills a humanities requirement. Five credits.

THE 135 INTRODUCTION TO THEATRE ARTS

This course includes an introduction to basic principles of acting and dramatic production, development of characterization skills, increased understanding of human behavior and relationships, imaginative encounters with one's self and others to build confidence and cooperation, and familiarization with dramatic literature. Four studio hours — three credits.

THE 145 STAGECRAFT

This course is a study of the various facets of the technical production of theatre: stagecraft, costume and scene design, make-up, stage lighting, sound, stage rigging, properties, and painting. Four studio hours — three credits.

THE 220 CHILDREN'S THEATRE

This course includes a survey of children's theatre productions, study of activities ranging from storytelling and creative playmaking to puppetry, and work with a children's theatre production. Three credits.

THE 255 DIRECTING

This course includes a survey of acting styles; study of the development of directing concepts; and work with blocking, actor coaching, and the direction of one act plays or scenes. Five studio hours — three credits.

THE 275 THE ART OF DANCE AND MOVEMENT

This course covers the appreciation of the art of dance and dramatic movement as highly developed forms of expression in terms of selected dance forms. Three credits.

THE 299 THEATRE PRACTICUM

This learning structure is designed to facilitate the development of creative talents (an interrelation of motor, affective, and cognitive skills). The particular format and content of each practicum is determined by the theatrical form the student is working in and his level of proficiency. This practicum may be repeated — at a different levels of proficiency. Credits variable from 1-3.

COMMUNITY NON-CREDIT (CNC)

The following classes in art, music, and theatre are designed to provide a non-academic, recreational experience for the citizens of the community. They are financially self supporting, and are not applicable to the degree programs of the College.

CNC 011 COMMUNITY POTTERY
This recreational class includes instruction in the various hand building techniques and an introduction to throwing on the potter's wheel.

CNC 015 COMMUNITY DRAWING & PAINTING
This recreational class covers a variety of drawing and painting techniques.

CNC 016 COMMUNITY JEWELRY & SCULPTURE
This recreational class covers selected techniques of jewelry and stained glass design and small sculpture.

CNC 017 COMMUNITY FABRIC CRAFTS
This recreational class covers selected techniques of fabric design (e.g. batik, macrame, hooking, silk screen, hand weaving, and stitchery and applique).

CNC 018 COMMUNITY PHOTOGRAPHY
This recreational class covers black and white photography, cameras, lenses, films, and papers.

CNC 019 COMMUNITY HOME DECORATING
This recreational class covers the visual design and aesthetic aspects of remodeling and interior decorating.

CNC 020 COMMUNITY NEEDLE ARTS
This recreational class covers several needle arts techniques: knitting, crocheting, counted cross stitch, needlepoint.

CNC 025 COMMUNITY SEWING
This recreational class is for those persons learning to sew and also for those needing more advance instruction.

CNC 051 COMMUNITY GUITAR I
A non-academic experience with guitar for the community.

CNC 075 COMMUNITY THEATRE APPRECIATION
This recreational class covers the study and appreciation of drama for the citizens of the community.

DEVELOPMENTAL STUDIES DIVISION

The Developmental Studies Division, offers classes in English as a Second Language (ESL), Adult Basic Education (ABE), and General Education Development (GED). The division exists to provide educational options for adults in the areas of language and communication skills, reading, computation, science, consumer economics, and social studies. These subject areas range from beginning skills levels to twelfth grade. Upon entering the program, a student's academic skills are analyzed in terms of the student's educational and occupational goals as well as social living needs and an individualized program of instruction is designed to meet that student's educational needs.

FUNDAMENTAL EDUCATION — (ESL) ENGLISH AS A SECOND LANGUAGE

This class is for students who need to learn to speak, read, and write in English or who would like to become more proficient in these skills. The purpose of the English as a Second Language (ESL) program is to assist students in the transfer of their native communication skills to communication skills in English. The class will emphasize bilingual/bicultural grammatical and conversational skills. The ability to communicate in areas relevant to the adult learner, such as the areas of consumer education, employment, education and with the community at large will be covered in the class.

Elementary to intermediate reading and writing will be taught. As a part of the curriculum, the student will be exposed to community agencies and introduced to people in the community. Participation in field trips and listening to speakers from the various areas of the community will be a part of the total scope of the ESL class.

EDUCACIÓN FUNDAMENTAL — (ESL) APRENDER INGLÉS COMO SEGUNDA LENGUA

La clase de inglés como segunda lengua es para aquellos estudiantes que necestian aprender o mejorar su inglés. La clase tratará de aumentar el modo de communicación de la lengua nativa al inglés. La instrucción tendra énfasis en los aspectos bilingües y biculturales así como tambien en los problemas gramaticales. Los temas en la clase serán relacionados a la vida práctica del adulto como la educación del consumidor, el empleo, las instituciones y la comunidad en general.

El nivel de instrucción será desde lo más elemental hasta lo intermediario y se enseñarán ambas (las dos) la lectura y la escritura. Como parte del plan de estudios el estudiante será presentado a varias personas y facilidades de la comunidad. Tambien la participación en excursiones y tertulias (conferencias) en varias áreas de la comunidad formará parte del programa total de la clase de aprender inglés.

ADULT BASIC EDUCATION (ABE)

This class is designed to give the adult student who previously dropped out of school a basic education in reading, communication, and computation skills sufficient to each student's personal and academic needs.

Interwoven in this core curriculum are health orientation and nutrition, consumer education, parent and family life, and practical government. This class will take field trips both inside and outside of the community. Speakers will be brought in to better acquaint students with local and state services.

The class will function to prepare students for a GED class or a vocational program. Curriculum is centered around individualized learning, allowing each student to work at his own rate.

ABE READING
Emphasis is on reading comprehension skills: vocabulary, word meaning, context clues. Vowels, consonants, dipthongs and syllabication will also be studied.

ABE GOVERNMENT
The purpose of the course is to aid students to increase their knowledge of community, state and federal government, especially in the areas of voting, consumer economics, welfare and civil law.

ABE ENGLISH
In this course the student studies the fundamentals of English, including basic sentence structure, grammar, usage and punctuation.

ABE MATH
Instruction in the course will include addition, subtraction, multiplication and division of whole numbers, fractions and decimals. Measurement, formula and word problems will also be taught.

GENERAL EDUCATION DEVELOPMENT (GED)

The GED course is designed to teach students the skills necessary to pass the GED examination in the content areas of mathematics, English, reading comprehension, social studies, science, and literature. The course is individualized so that each student works at his particular level and at his own rate until he is prepared to pass the GED test. Students are also given the option in the class to study any of the content areas in greater depth than is 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 both employers and schools of higher education. The GED certificate often provides increased opportunities for future education.

GED READING

The course will aid students in gaining skills in the areas of vocabulary context clues, main idea, sequence and meaning comprehension sufficient for passing the GED test.

GED SCIENCE

The course will provide students with vocabulary, main idea and comprehension skills in science reading exercises sufficient for passing the GED test.

GED SOCIAL STUDIES

The course will provide students with vocabulary and reading skills in social studies sufficient for passing the GED test.

GED MATH

The course will provide students with math skills in fractions, decimals, formula and word problems, algebra and geometry sufficient for passing the GED test.

GED ENGLISH

The course will provide the student with skills in the areas of grammar usage, punctuation and spelling sufficient for passing the GED test.

GED LITERATURE

The course will provide instruction in the definition of terminology in the interpretation of prose, poetry and drama.

SPECIAL PROGRAMS (DST)

DST 025 BILINGUAL CITIZENSHIP

This class is designed to prepare students with bilingual background to successfully pass the test for obtaining United States citizenship. Local, state and national government funtions and procedures will be emphasized.

DST 065 BILINGUAL DRIVER'S EDUCATION

This class is designed to prepare non-English speasking persons to understand and pass the Driver's License Written Examination. The course is aimed primarily for Spanish-speaking adults. Emphasis will be on verbal understanding of sign and rules.

DST 073 JOB APPLICATION TECHNIQUES

This class is designed to introduce the basics involved in obtaining and holding a job. Covered will be a basic orientation and overview of various approaches to responding to a position opening notice. Also to be covered will be interviewing skills.resume writing. personal hygiene, and attitudes.

DST 115 FIELD EXPERIENCE IN TEACHER AIDE EDUCATION

Provides an opportunity for future teacher aides to receive practical. on-site experience in the classroom under the direction of professional teachers. Five credits.

DST 116 METHODS FOR TEACHING BILINGUAL EDUCATION

Techniques used in reading, writing, spelling, language arts, arithmetic, social studies, and science will be emphasized as they relate to the role of the teacher aide. Familiarization with typical materials used in the classroom will also be covered. Five credits.

DST 117 INTRODUCTION TO TEACHER AIDE TRAINING PROGRAM

This course is designed to help teacher aides understand the role of para-professionals in the classroom. Class discussion will include educational procedures, responsibility and classroom operations, as related to the teacher aide. Three credits.

DST 119 CONCEPTS OF BILINGUAL EDUCATION

The historical and philosophical concepts of bilingual/bicultural education are reviewed and related to bilingual curriculum, materials, and program. Three credits.

MATHEMATICS AND SCIENCE DIVISION

ASTRONOMY (AST)

AST 101 INTRODUCTORY ASTRONOMY

For the non-science student. Covers methods of observation and analysis used by astronomers; astronomers' tools; solar system; stars, galaxies and constellations of 40 degrees N. lat. Also includes observing with the telescope. Three hours lecture. Three credits.

AST 102 ASTRONOMY SEMINAR

An approach to more advanced topics in astronomy that allows students the opportunity 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.

AST 295 INDEPENDENT STUDY IN ASTRONOMY

This course provides the opportunity for the highly-motivated student to engage in intensive study and research on a specified topic under the direction of a qualified faculty member. Credit hours (1-3) must be arranged with the Division Chairman and instructor.

BIOLOGICAL SCIENCES (BIO)

BIO 101 BIOLOGY CONCEPTS

A general survey of the characteristics of life with emphasis on the basic concepts and 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. Three hours lecture, four hours lab. Five credits.

BIO 102 ANIMAL BIOLOGY

A phylogenetic approach to the Animal Kingdom with emphasis on the invertebrate phyla. The role of these organisms in ecological, economic, and medical relationships to humans is emphasized. Prerequisite: BIO 101. Three hours lecture, four hours lab. Five credits.

BIO 103 PLANT BIOLOGY

A study of the structure of plants as related to the function of each part, of the whole organism, and of the interactions with its environment. Prerequisite: BIO 101 or permission of the instructor. Three hours lecture, four hours lab. Five credits.

BIO 105 POLLUTION AND THE HUMAN ENVIRONMENT

A comprehensive examination of effects of pollution on the human environment. Emphasis is on effects of pollution on the human organism. Three hours lecture. Three credits.

BIO 106 FIELD BOTANY

A study of methods of collecting, preserving, and identifying plants. Two hours lecture, two hours lab. Three credits.

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 hours lecture. Three credits.

BIO 115 ECOLOGY OF THE NATIONAL PARKS

The basic concepts of ecology are considered using examples found in the national parks. Consideration is given to mountain ecology, arid areas, deserts and caves. Films, videotapes and slides are used as appropriate. A short term paper on one of the national parks or monuments is required. Four credits.

BIO 201 ECOSYSTEMS BIOLOGY

A study of interactions of various factors affecting composition and density of populations and communities of organisms. Included are principles of energy dynamics, populations and communities of organisms and their interactions, and population genetics. Materials developed through Bio-Co-Tie are utilized. Field trips to visit various ecosystems are required. Offered Fall Quarter only. Five credits.

BIO 202 CELL BIOLOGY

A comprehensive examination of the cell, its components and their functions. Includes studies of physiochemical properties of living systems, organelles and their bioenergetics, macromolecular synthesis, code transcription, and structure and function of specialized cells. Offered Winter Quarter only. Prerequisites: BIO 101, CHE 101. Three hours lecture, four hours lab. Five credits.

BIO 203 DEVELOPMENTAL BIOLOGY

An introduction to changes occurring during higher plant and animal development and differentiation; gene action, biochemical regulation, and environmental factors stressed. Offered Spring Quarter only. Prerequisites: BIO 101, BIO 102. Three hours lecture, four hours lab. Five credits.

BIO 205 ELEMENTARY RADIATION BIOLOGY

A study of use of ionizing radiation in biological studies and effects of ionizing radiation on living tissues. Three hours lecture. Three credits.

BIO 207 VERTEBRATE BIOLOGY

A continuation of BIO 102, this course emphasizes the comparative morphology, ecology, and economic importance of the vertebrate classes. Adult morphology of lampreys through mammals is considered for laboratory study. Prerequisites: BIO 101, 102. Three hours lecture, four hours lab. Five credits.

BIO 208 INTRODUCTION TO ENTOMOLOGY

An 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. Prerequisites: BIO 101, 102. Three hours lecture, four hours lab. Five credits.

BIO 209 BIOLOGY OF VASCULAR PLANTS

A study of the evolution of plants using embryological and phylogenetic relationships. Included are the basic aspects of plant genetics, plant ecology, and the relationships of these mechanisms in the evolutionary process. Prerequisite: BIO 101 or permission of the instructor. Three hours lecture, four hours lab. Five credits.

BIO 211 HUMAN ANATOMY — PHYSIOLOGY I

This is a beginning class in human physiology with emphasis on broad general biological principles and anatomical structures of the human body and the relationship of structure to body functions. Part I will cover the following: chemical composition, cellular and tissue organization, and integumentary skeletal, muscular, and nervous systems. Prerequisite: BIO 101 or equivalent. Three hours lecture, four hours lab. Five credits.

BIO 212 HUMAN ANATOMY — PHYSIOLOGY II

This is a beginning class in human physiology with emphasis on broad general biological principles and anatomical structures of the human body and the relationship of structure to body functions. Part II will cover the following: digestive, urinary, reproductive, endocrine, respiratory, and circulatory systems. Prerequisite: BIO 211 or permission of the instructor. Three hours lecture, four hours lab. Five credits.

BIO 216 INTRODUCTION TO MICROBIOLOGY

A foundation course in microbiology with emphasis on structure, function, development and classification of protists, including both protocaryotic and eucaryotic micro-organisms. Emphasis is on organisms with medical and economic impact on human populations. Major laboratory emphasis is on laboratory safety in the study of micro-organisms and staining techniques. Prerequisites: BIO 101, 102. Offered Fall Quarter only. Three hours lecture, four hours lab. Five credits.

BIO 217 INTRODUCTION TO ORNITHOLOGY

An introduction to the study of birds. Lecture on the classification and natural history of birds. Field identification of birds is emphasized with field trips to different habitats to observe behavior and adaptations. Offered Spring or Summer Quarters. Prerequisites: BIO 101, 102, or 207. Field trips required. Six clock hours. Four credits.

BIO 218 SPECIAL TOPICS IN ANATOMY AND PHYSIOLOGY

This course will introduce students in certain occupational programs to the anatomy and physiology of the skeletal, muscular, nervous, endoctrine, circulatory, respiratory, and integumentary systems. Three hours lecture, two hours laboratory. Four credits.

BIO 295 INDEPENDENT STUDY IN BIOLOGY

This course provides an opportunity for the highly motivated student with previous academic experience or work in an area to engage in intensive study and research in a specified topic under the direction of a qualified faculty member. Prerequisites: Permission of the instructor and the Division Chairman. One to three credits. The student will be limited as to the number of independent study credits taken per quarter.

CHEMISTRY (CHE)

CHE 100 FUNDAMENTALS OF CHEMISTRY

A preliminary college chemistry course designed to be the basis of a thorough preparation for the higher level college chemistry courses 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 or MAT 016. Three hours of lecture, four hours lab. Five credits.

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. This 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 or one year of college chemistry, or CHE 100, or written permission of instructor. Corequisite: MAT 111 or MAT 112 or written permission of instructor. Three hours lecture, four hours lab. Five credits.

CHE 102 GENERAL CHEMISTRY II

This course is a continuation of CHE 101 and 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, air pollution problems, and acids and bases. Prerequisites: CHE 101 or written permission of instructor. Three hours lecture, four hours lab. Five credits

CHE 103 GENERAL CHEMISTRY III

This course is a continuation of CHE 102 and includes a study of the chemical principles and mathematical operations involving precipitation reaction, complex ions (coordination compounds), electrochemistry, transition metals, non-metallic elements, nuclear reactions, olymers and proteins, and instrumental analysis; laboratory is predominantly semi-micro qualitative analysis and instrumental analysis. Prerequisite: CHE 102. Three hours lecture, four hours lab. Five credits.

CHE 105 INTRODUCTORY NUTRITION

Basic principles and necessary food requirements involved in human nutrition and the treatment of disease through diet. Enable students to discriminate the scientific from pseudo scientific and fact from fallacy in vast literature of both lay and scientific press. Five credits.

CHE 201 ORGANIC CHEMISTRY I

This course includes a study of atomic and molecular structures, nomenclature, chemical bonding reactions and reaction mechanisms of hydrocarbons, aromatics, alcohols, phenols, and organic reactions, structural and geometric isomers, electrophilic and neucleophilic reactions and stereochemistry is also included with industrial and biological applications. The laboratory will cover fundamental operations of simple and fractional distillation, melting points, recrystallization, nitration of aromatic compounds, hydrocarbon reactions, Grignard and alkyl halide reactions. Prerequisite: CHE 102 or CHE 100 with written permission of instructor after successful completion of a pretest. Three hours lecture, four hours lab. Five credits.

CHE 202 ORGANIC CHEMISTRY II

This course will examine 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. The 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. Three hours lecture, four hours lab. Five credits.

CHE 203 ORGANIC CHEMISTRY III

This course is the third quarter of the organic chemistry sequence and deals with the structure, nomenclature, reaction mechanisms, industrial and biological applications of fats and other lipids, terpense, carbohydrates, proteins, amino acids, catalysis and enzymes, metabolism of carbohydrates, lipids and proteins. The laboratory consists of an examination of sugars and amino acids with synthesis, qualitative organic chemistry and structural determination of known and "unknown" compounds. Prerequisite: CHE 202 or written permission of instructor after successful completion of a pretest. Three hours lecture, four hours lab. Five credits.

CHE 205 GLASSBLOWING

Instruction and practice in methods of repair and construction of laboratory apparatus. Techniques used are applicable to glassblowing for diversion as a hobby or for a craft. Prerequisite: Permission of instructor. Four hours lab. Two credits.

INSTRUMENTAL ANALYSIS I: CHE 215, 216, 217

This course consists of three modules which may be taken separately.

CHE 215 UV-VISIBLE SPECTROSCOPY

A concentrated study of instrumentation, applications and analysis in ultraviolet and visible absorption spectra. Prerequisite: CHE 102. Twenty hours lab. One credit.

CHE 216 INFRARED SPECTROSCOPY

A concentrated study of instrumentation, sample preparation, applications and interpretation of infrared absorption spectra. Prerequisite: CHE 102. Twenty hours lab. One credit.

CHE 217 ATOMIC ABSORPTION SPECTROSCOPY

A concentrated study of applications, theory, operation and adjustment of instrumentation, preparation of solutions and interpretation of analytical data. Prerequisite: CHE 102. Twenty hours lab. One credit.

INSTRUMENTAL ANALYSIS II: CHE 225, 226, 227

This course consists of three modules which may be taken separately.

CHE 225 VISCOMETRY

A laboratory course in the use of calibration and applications of viscosity measuring devices. Prerequisite: CHE 201. Twenty hours lab. One credit.

CHE 226 REFRACTOMETRY, RADIOACTIVITY MEASURING

A laboratory course of study concentrating on scaler and scintillater monitoring, refractive indices of liquid, solid and molten substances, applications, analysis and interpretation of analytical data. Prerequisite: CHE 201. Twenty hours lab. One credit.

CHE 227 OPTICAL ACTIVITY AND ELECTROPHORESIS

Electrophoretic separations will be studied. Use of a polorimeter in the study of opitcally active compounds will also be covered. Prerequisite: CHE 201. Twenty hours lab. One credit.

INSTRUMENTAL ANALYSIS III: CHE 235, 236, 237

This course consists of three modules which may be taken separately.

CHE 235 GAS CHROMOTOGRAPHY

Column preparation, instrumentation and applications will be investigated using thermoconductivity detection on single and multicolumn instruments. Prerequisite: CHE 201. Twenty hours lab. One credit.

CHE 236 PH, MILLIVOLT TITRATIONS AND SPECIFIC ION ELECTRODES

An intensive investigation of pH meters electrode construction and use for acid/base and redox titrimetry. Theory and application of specifics ion electrodes will be investigated. Prerequisite: CHE 102. Twenty hours lab. One credit.

CHE 237 NUCLEAR MAGNETIC RESONANCE SPECTROSCOPY

A concentrated study of instrumentation, theory, instrument operation and adjustment, sample preparation, application and interpretation of analytical data. Prerequisite: CHE 201. Twenty hours lab. One credit.

CHE 295 INDEPENDENT STUDY IN CHEMISTRY

This course provides the opportunity for the highly-motivated student to engage in intensive study and research on a specified topic under the direction of a qualified faculty member. Credit hours (1-3) must be arranged with the Division Chairman and instructor. Students must have had previous academic study or experience in the area.

COMPUTER SCIENCE (COS)

COS 100 INTRODUCTION TO COMPUTERS AND THE BASIC LANGUAGE

Introduction to computer programming through uses of the BASIC language. Various concepts relating to computer hardware and software presented. Students will attain necessary computing techniques which can be applied to their work in physical science, mathematics, business, biological sciences, social sciences, and engineering. Four clock hours per week. Three credits.

COS 101 INTRODUCTION TO COMPUTER PROGRAMMING AND THE FORTRAN IV LANGUAGE

Introduction to computer programming through the use of FORTRAN IV. Various concepts relating to computer hardware and software will be presented. Students will attain necessary computing techinques which can be applied to their work in physical science, mathematics, business, biological science, social science, and engineering. Five clock hours per week. Four credits.

COS 102 ADVANCED TOPICS IN COMPUTER PROGRAMMING

Continuation of BASIC and FORTRAN IV as they apply to more sophisticated and extensive problems. Concepts of permanent files, magnetic tape, data structures, and other selected topics will also be presented. Prerequisite: COS 100 or COS 101, or permission of instructor. Five clock hours per week. Four credits.

EARTH SCIENCE (EAS)

EAS 105 EARTH SCIENCE

Designed for non-science majors and prospective teachers. Depicts earth orientation in space and how weather results from this. Various facets of weather related to their effects on the solid earth and introductory features of physical geology are presented with reference to historical geology. Four hours lecture. Two hours lab. Five credits.

EAS 295 INDEPENDENT STUDY IN EARTH SCIENCE

This course provides the opportunity for the highly-motivated student to engage in intensive study and research on a specified topic under the direction of a qualified faculty member. Credit hours (1-3) must be arranged with the Division Chairman and instructor. Students must have had previous academic study or experience in the area.

GEOLOGY (GEY)

GEY 101 PHYSICAL GEOLOGY

This course is designed to promote the physical awareness and observations of the student by a study of our physical surroundings, including the rocks, minerals, and landforms. Emphasis is placed on the processes that shape our ever-changing landscape. Field trips required. Offered Fall Quarter only. Three hours lecture, four hours lab. Five credits.

GEY 102 HISTORICAL GEOLOGY

A course designed to study the prehistorical earth and prehistoric life, using influences from the physical geology of the earth to determine the paleogeography, paleoclimate, and paleo-ology of past ages. Prerequisite: GEY 101 or permission of instructor. Field trips required. Offered Spring Quarter only. Three hours lecture, four hours lab. Five credits.

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 hours lecture. Four credits.

MATHEMATICS (MAT)

MAT 015 INTRODUCTORY MATHEMATICS

Provides the student with enough arithmetic skills to enter business mathematics courses or beginning algebra. Three credits.

MAT 100 SURVEY OF MATHEMATICS

This course is designed for students not majoring in science or mathematics. The student will study addition, subtraction, multiplication, and division of whole numbers as well as fractions. Further study will cover decimals, percentages, proportions and some coverage of the metric system. The solution of linear equations and basic concepts of plane geometry will be covered and if time permits, additional topics of various interests will be included. Prerequisite: A knowledge of basic arithmetic. An entrance exam may be requested. Five credits.

MAT 101 BEGINNING ALGEBRA

The student will be exposed to integer arithmetic, linear equations with applications and linear inequalities. He will also learn to perform 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. An entrance exam may be requested. Five credits.

MAT 105 COLLEGE PLANE GEOMETRY

This course is designed for students with little or no background in plane geometry. The student will study some logic and deductive reasoning as well as congruent triangles, parallel and perpendicular lines and parallelograms. Emphasis will be placed on the properties of circles, similarity of triangles, areas and volumes with introductions to inequalities, constructions and loci. Prerequisite: MAT 101 or one year of high school algebra. Five credits.

MAT 107 MATHEMATICS FOR FAMILY FINANCIAL PLANNING

Upon completion of the course the student should be able to mathematically determine or describe investment procedures, inflationary trends, rates of return, annuities, interest rates, the college formula and tax-sheltered investments. Other topics may include leasing formulas, values of stocks and insurance programs. Three credits.

MAT 109 METRIC SYSTEM

This course is designed for the student who desires a working knowledge of metric measurements of length, area, volume, mass, and temperature. This is a self study, individualized course to be completed in an average of 10-15 hours. Help is provided on request. One credit.

MAT 111 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 101 or one year of high school algebra. An entrance exam may be requested. Five credits.

MAT 112 COLLEGE ALGEBRA

A short review is given covering fractions, factoring, laws of exponents, radicals, and the development of the real number system. The student is then exposed to relations, functions, inequalities in one and two variables, absolute value and progressions — both arithmetic and geometric. Second degree functions, relations, graphing, inequalities, variation, and conic sections are covered in depth. The remainder of the time is spent studying systems of equations and inequalities, permutations, combinations, binomial theorem, mathematical induction, complex numbers and polynomial functions of degree. If time permits, an introduction to matrix theory is presented. Prerequisite: MAT 111 or consent of instructor. An entrance exam may be requested. Five credits.

MAT 113 COLLEGE TRIGONOMETRY

The wrapping function is used to develop the trigonometric functions and identities with applications to both right and oblique triangles. The student will also study the exponential and logarithmetic functions and trigonometric applications to complex numbers. Graphing of all the above will be included. Prerequisite: MAT 112 or consent of the instructor. An entrance exam may be requested. Five credits.

MAT 115 SLIDE RULE/CALCULATOR

This course is an independent study on slide rule and calculator operation with assistance available in the Aims College Math Laboratory. Students will be tested on ordinary multiplication and division. Square and cube roots, mixed multiplication and division by decimals, powers and roots are also covered. Applications using logs are also available. One credit.

MAT 161 CALCULUS WITH ANALYTIC GEOMETRY I

This course begins with a review of functions and functional notation. Limits, continuity and the derivative are studied including the mean and 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 areas. Prerequisite: MAT 112 or consent of the instructor. An entrance exam may be requested. Five credits.

MAT 162 CALCULUS WITH ANALYTIC GEOMETRY II

Logarithm, exponential, trigonometric and hyperbolic functions, techniques of integration, conic sections and applications of the definite integral to work, volume, pressure, etc. Prerequisites: MAT 161 and MAT 113. Five credits.

MAT 163 CALCULUS WITH ANALYTIC GEOMETRY III

Polar coordinates, sequences, improper integrals, infinite series and vector calculus. Prerequisite: MAT 162. Five credits.

MAT 261 LINEAR ALGEBRA

This course shall include an introduction to matrices and determinants with solutions to systems of equations by matrix methods. Emphasis is placed on 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 consent of instructor. Five credits.

MAT 262 CALCULUS WITH ANALYTIC GEOMETRY IV

Funcations of several variables, partial derivatives, double and triple integrals, line integrals. Prerequisites: MAT 163 and MAT 261. Five credits.

MAT 263 ELEMENTARY DIFFERENTIAL EQUATIONS

Those ordinary differential equations which fall into the categories of variable separable, homogeneous coefficients, exact equations and those to be made exact with simple integration factors are treated along with some applications. The solutions of linear equations by the methods of undetermined coefficients, variation of parameters, differential and inverse differential operators and Laplace transforms are studied. Systems of equations and nonlinear equations are included if time permits. Prerequisite: MAT 262. Five credits.

MAT 295 INDEPENDENT STUDY IN MATHEMATICS

This course provides the opportunity for the highly motivated student to engage in intensive study and research on a specified topic under the direction of a qualified faculty member. Credit hours must be arranged with the Division Chairman and the instructor. One to three credits.

PHYSICS (PHY)

PHY 100 FUNDAMENTALS OF PHYSICS

A qualitative survey of the basic conceptual aspects of physics. Designed for the nonscience 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. Four hours lecture, two hours lab. Five hours credit.

INTRODUCTORY COLLEGE PHYSICS COURSES: PHY 101, 102, 103

An introductory sequence of courses for students in pre-professional disciplines. It is recommended that this sequence be transferred to other academic institutions as a block of three quarters.

PHY 101 INTRODUCTORY COLLEGE PHYSICS-MECHANICS

This course is a study of the concepts of mechanics and relativity. Prerequisite: Two years of high school algebra or MAT 112 or permission of instructor. Three hours lecture, four hours lab. Five credits.

PHY 102 INTRODUCTORY COLLEGE PHYSICS — ELECTRICITY AND MAGNETISM

A study of the concepts of electricity and magnetism and nuclear physics. Prerequisite: PHY 101 or permission of instructor. Three hours lecture, four hours lab. Five credits.

PHY 103 INTRODUCTORY COLLEGE PHYSICS — HEAT, LIGHT AND SOUND

A study of the concepts of thermal dynamics, light and sound. Prerequisite: PHY 102 or permission of instructor. Three hours lecture, four hours lab. Five credits.

GENERAL PHYSICS COURSES: PHY 201, 202, 203

The purpose of this sequence of courses is to provide 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 a block of three quarters.

PHY 201 GENERAL PHYSICS — MECHANICS

The first quarter is an analytical and comprehensive treatment of mechanics, mechanical waves and heat, including basics of relativistic mechanics. Prerequsites: MAT 161 (or may be taken concurrently), or permission of instructor. Three hours lecture, four hours lab. Five credits.

PHY 202 GENERAL PHYSICS — ELECTRICITY AND MAGNETISM

The second quarter is an analytical and comprehensive treatement of electricity and magnetism. Prerequisites: MAT 162 (or may be taken concurrently), PHY 201 or permission of instructor. Three hours lecture, four hours lab. Five credits.

PHY 203 GENERAL PHYSICS — HEAT, LIGHT AND SOUND

The third quarter is an analytical and comprehensive treatment of heat, light, and sound, quantum effects and basic of nuclear physics. Prerequisite: PHY 202 or permission of the instructor. Three hours lecture, four hours lab. Five credits.

PHY 295 INDEPENDENT STUDY IN PHYSICS

This course provides the opportunity for the highly-motivated student to engage in intensive study and research on a specified topic under the direction of a qualified faculty member. Credit hours (1-3) must be arranged with the Division Chairman and the instructor. Students must have had previous academic study or experience in the area.

SCIENCE (SCI)

SCI 100 MAN — HIS TECHNOLOGY AND HIS WORLD

Introduction to a series of significant current problems concerned with technology which surrounds students and influences their lives. In each case an attempt is made to determine the magnitude and nature of problems, ascertaining why they arose and discover positive alternatives available to society and government. IBM 370 computer is used as an instructional aid. Five credits.

SCI 101 EDUCATION FOR AVIATION AGE

General education course for students desiring a knowledge of aviation topics. Includes airports, airways, airline transportation, history of the space age, navigation, weather, power of aircraft and aircraft in flight. Three credits.

SCI 105 INTRODUCTION TO PRINCIPLES OF SOLAR ENERGY

Topics to 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.

STATISTICS (STA)

STA 201 STATISTICS FOR BUSINESS, SCIENCE AND SOCIAL SCIENCE I

Emphasis on concepts and applications of selected topics from descriptive and inferential statistics. Topics include organization of data, computation and interpretation of descriptive measures, linear correlation and regression, simple aspects of probablility, the normal and binomial distributions and sampling distributions. Calculators and the IBM 370 Computer are used as aids in computation. Prerequisite: MAT 111 is highly recommended. Five credits.

STA 202 STATISTICS FOR BUSINESS, SCIENCE AND SOCIAL SCIENCE II

Topics include tests of statistical hypothesis based upon the z, t, chi-square and F distributions. Other selected topics may include curve fitting, the relationship between correlation and regression, and analysis of variance. Calculators and the IBM 370 will be used as aids in computation. Prerequisite: STA 201 or consent of instructor. Five credits.

MEXICAN AMERICAN STUDIES (MAS & SPA)

MAS 011 CONVERSATIONAL SPANISH

A course in conversational Spanish concerned with developing the ability to understand and speak regional Spanish. No credits.

MAS 100 INTRODUCTION TO MEXICAN AMERICAN STUDIES

A general course designed to provide an understanding of Mexican American Studies and the background and philosophy behind the department and its courses. Course will also analyze the relative position, differences, and commonalities of the Mexican American community to the general American society. Emphasis given to the relationship of the Chicano to the American educational system. Three credits.

SPA 101 ELEMENTARY SPANISH I

Students develop the ability to understand, speak, read, and write the language within the limits of vocabulary. Especially designed for the non-native Spanish speaker. Emphasis is on language and culture of the Southwest. Five credits.

SPA 102 ELEMENTARY SPANISH II

Continuation of SPA 101. Five credits.

SPA 103 ELEMENTARY SPANISH III

Continuation of SPA 101 & 102. Five credits.

MAS 105 MEXICAN MUSIC

An examination of selected works in Mexican and Mexican American music from the pre-Columbian time to the present, concentrating on regional works and on 20th century composers and their relationship to Chicano and Anglo American society. Three credits.

MAS 106 PSYCHOLOGY OF THE MEXICAN AMERICAN

The purpose of this course is to identify and examine the various psychological traits which make up the unique, and seldom understood, world view of the Mexican American. Among the topics covered will be the psychology of the Mexican American male and female and related social problems. Three credits.

SPA 111 IMTERMEDIATE SPANISH

The first two weeks will consist of a review of Elementary Spanish I, II and III. The final eight weeks will be concerned with improving oral conversation and written composition. Prerequisite: One year of college Spanish, two years of high school Spanish, or consent of the instructor. Two credits.

MAS 116 BILINGUAL SKILLS

A course designed primarily to meet the linguistic needs of Chicanos. Orthography, phonetics, vocabulary as well as the psychology of the language will be discussed. Comparative elements between Spanish and English, such as cognates, roots, suffixes, and prefixes, will be especially treated. Three credits.

MAS 120 CULTURAL HERITAGE OF MEXICO AND SOUTH AMERICA

Students examine the art, music, literature and philosophy of Mexico and South America from pre-Columbian civilizations to the present time as it relates to the Chicano culture. This course fulfills a humanities requirement. Five credits.

MAS 125 THE AMERICAN SYSTEM

The purpose of this course is the presentation of vital information dealing with citizenship. Special emphasis will be placed on current legislation dealing with Chicanos. Three credits.

MAS 155 MEXICAN DANCE

Mexican dances and background on origin of dances are presented. Two clock hours per week. One credit.

MAS 161 HISTORY OF MEXICO I

A study of the significant aspects of Mexican history and civilization from pre-Columbian times to the end of the colonial period. Emphasis will be on the diverse Indian civilizations in Mexico especially the Aztecs, before 1519, the Spanish conquest, significant events of the Colonial period, and the causes which led to independence. Three credits.

MAS 162 HISTORY OF MEXICO II

A study of the historical events from 1821 to the present. Emphasis will be on the growth of the Mexican nation after independence, relations with the United States before and after the Mexican-American War and the Revolution of 1910.Three credits.

MAS 165 CHICANO HISTORY

An examination of the historical events in the American Southwest from the indigenous origins, through the Spanish conquest and colonization and later Anglo invasion. Emphasis will be on the circumstances which transformed the Mexican from a majority to a minority status. Three credits.

MAS 206 CHICANO LITERATURE

A survey of contemporary Mexican literature of social protest from "Corky" Gonzales to Ramon Barrio and other authors who have contributed to the literary heritage of the present-day Chicano including: examination through literature; Chicano image literature; analysis of Anglo literature about Chicanos and Chicano literature itself. Three credits.

PHYSICAL EDUCATION DIVISION

HEALTH EDUCATION (HEN)

HEN 105 PERSONAL HEALTH

A study of problems involved in personal and community health. Special emphasis is on actions an individual can take to maintain the highest degree of mental and physical health. Three clock hours per week. Three credits.

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 services of a physician can be secured. (The official First Aid Standard Senior Certificate is granted to students who satisfactorily pass the American Red Cross examination.) Three clock hours per week. Three credits.

HEN 107 WILDERNESS FIRST AID

To enable the student to obtain a standard first aid card (A.R.C. certification) along with the knowledge of treatment of first aid in regions beyond the trailhead. Objectives include preventive and support techniques for accidents frequent to the remote regions. Three clock hours per week. Three credits.

HEN 108 LEISURE EDUCATION

To give students the opportunity to examine their values regarding work and leisure, and to develop the ability to make wise leisure lifestyle choices. Three clock hours per week. Three credits.

HEN 109 NUTRITION — PRACTICAL — APPLICATION

The course will cover nutritional principles which will aid students in developing and implementing their own nutritional requirments. The class will cover food labeling, additives, the hows and whys of weight control, and how foods are utilized as fuels. Three clock hours per week. Three credits.

PHYSICAL EDUCATION ACTIVITIES (PEA)

PEA 101 ARCHERY I

Designed to teach the techniques and fundamentals of archery. Two clock hours per week. One credit.

PEA 102 ARCHERY II

The students will further their knowledge of the basic skills they learned in Archery I. More time will be spent on correction of errors and acacuracy in shooting. Two clock hours per week. One credit.

PEA 103 ARCHERY III

Designed for those who want to continue their improvement in the skills and techniques of archery. Two clock hours per week. One credit.

PEA 111 BADMINTON I

To introduce the basic skills of badminton, game rules and score keeping. Two clock hours per week. One credit.

PEA 112 BADMINTON II

To further advance the students skills and techniques of badminton. Two clock hours per week. One credit.

PEA 113 BADMINTON III

A class designed for those students who desire advanced knowledge, skills and techniques in badminton. Two clock hours per week. One credit.

PEA 115 HORSEMANSHIP

Students will learn the proper methods of riding for pleasure, show, equitation and trails. Instruction in horse anatomy and knowledge of equipment will be taught. Also the planning, promotion and execution of show management will be covered. Two clock hours per week. One credit.

PEA 121 BASKETBALL I

An activity class designed to allow the student maximum pareticipation on an intraclass team organizational basis. Two clock hours per week. One credit.

PEA 122 BASKETBALL II

A class designed to give ther student additional training in the skills, fundamentals, and the team play of basketballl. Two clock hopurs per week. One credit.

PEA 131 BOWLING I

Rules, skills, strategy, and courtesies of individual and team bowling are covered. Two clock hours per week. One credit.

PEA 132 BOWLING II

To continue the basic skills of bowling and to aquire the techniques of tournament bowling. Two clock hours per week. One credit.

PEA 133 BOWLING III

Designed for bowleers who wish to improve skills while working on rules, strategy, and techniques of team bowling. Two clock hours per week. One credit.

PEA 141 FLAG FOOTBALL I

A class designed to allow students to participate on a team level. Participants are divided into teams and records are maintained throughout the season. Two clock hours per week. One credit.

PEA 142 FLAG FOOTBALL II

A class designed to allow students to participate on a team level basis and to give them additional opportunities in leadership experience. Two clock hours per week. One credit.

PEA 151 SOCCER I

To expose the student to a popular team sport which demands skill, endurance, teamwork, and fast thinking. Two clock hours per work. One credit.

PEA 152 SOCCER II

Designed to teach additional skills, strategies, rules, regulations and game tactics. Basic coaching and referee techniques will be introduced. Two clock hours per week. One credit.

PEA 153 SOCCER III

Teaching of advanced methods of game planning, strategy and tactics. Rule interpretation and application will be stressed. More advanced coaching and refereeing techniques will be studied. Two clock hours per week. One credit.

PEA 161 SWIMMING I

Instruction provided for non-swimmers under the American Red Cross swimming program. Designed to teach basic strokes of swimming. Two clock hours per week. One credit.

PEA 162 SWIMMING II

Incorporation of basic sequence of skills taught in the American Red Cross intermediate and advanced swimmer classifications. Two clock hours per week. One credit.

PEA 171 SKIING I

Designed to expose students to basic skills and techniques of skiing. Two clock hours per week. One credit.

PEA 172 SKIING II

To increase the students basic skills. Instruction on advanced techniques will be taught to provide the student with a confident attitude for a more pleasurable and safe sport. Two clock hours per week. One credit.

PHYSICAL EDUCATION BALL SPORTS (PEB)

PEB 101 GOLF I
Designed to develop a knowledge of rules, courtesies and skills in golf as well as instill an appreciation of the game. Two clock hours per week. One credit.

PEB 102 GOLF II
Designed to further develop the techniques of grip, stance, swing, and follow through. Individual play and putting will be stressed. Two clock hours per week. One credit.

PEB 103 GOLF III
Students develop advanced techniques of golf. Two clock hours per week. One credit.

PEB 111 HANDBALL I
An activity class designed to teach the basic movements, skills, and rules of handball. Two clock hours per week. One credit.

PEB 112 HANDBALL II
Designed to improve the player skills and strategies of Handball I. More individual play will be stressed. Two clock hours per week. One credit.

PEB 113 HANDBALL III
Designed for student who want to further their skills and knowledge of handball. Two clock hours per week. One credit.

PEB 121 PICKLE-BALL I
A fast moving game which utilizes the basic skills of eye-hand coordination, quickness of feet, and perception. Two clock hours per week. One credit.

PEB 122 PICKLE-BALL II
To further the student's skills and knowledge of pickle ball. To increase the student's ability to play a more challenging game. Two clock hours per week. One credit.

PEB 123 PICKLE-BALL III
To further develop the agility to play a more competitive game. To have a better knowledge of rules, regulations and officiating. Two clock hours per week. One credit.

PEB 131 PILLO POLO I
A team game played with 6 players per team. Students are exposed to team play and the skills and strategies for competitive play. Two clock hours per week. One credit.

PEB 132 PILLO POLO II
To further advance the students skills and techniques of the team sport. Instructions for officiating the game. Two clock hours per week. One credit.

PEB 133 PILLO POLO III
Students will be involved in specific responsiblities, maneuvering, with planned and strategic offensive and defensive patterns through intraclass competition. Two clock hours per week. One credit.

PEB 141 RACQUETBALL I
An activity designed to teach the basic movements, skills, and rules of racquetball. Two clock hours per week. One credit.

PEB 142 RACQUETBALL II
Designed to improve the player skills and strategies of Racquetball I. More individual play will be stressed. Two clock hours per week. One credit.

PEB 143 RACQUETBALL III
Designed for students who want to further skills and knowledge of racquetball. Two clock hours per week. One credit.

PEB 151 SOFTBALL I
Designed to teach various skills, techniques, rules, and regulations of softball. Two clock hours per week. One credit.

PEB 152 SOFTBALL II
To further the knowledge of the fundamentals, skills, rules, and regulations of softball. Two clock hours per week. One credit.

PEB 161 TENNIS I
Introduction to theory and practice of tennis. Skills taught include serve, forehand, and backhand drives; volleying; footwork; and scoring rules. Two clock hours per week. One credit.

PEB 162 TENNIS II
Designed to improve the player's skills and strategies. More individual play will be stressed. Two clock hours per week. One credit.

PEB 163 TENNIS III
Designed for improvement and advancement of skills in tennis. Two clock hours per week. One credit.

PEB 171 VOLLEYBALL I
Designed to teach basic skills of volleyball. Team play is stressed and some intrasquad competition is provided. Two clock hours per week. One credit.

PEB 172 VOLLEYBALL II
Designed to teach the finer skills and strategies of Volleyball I. More time will be devoted to team play and intrasquad competition. Two clock hours per week. One credit.

PEB 173 VOLLEYBALL III
Improvement of skills, strategies, and knowledge of volleyball stressed. Two clock hours per week. One credit.

PHYSICAL EDUCATION DANCE (PED)

PED 101 CLASSICAL BALLET I
To develop poise, grace, agility and rhythm through learning the classical Cecchette form of ballet. Two clock hours per week. One credit.

PED 102 CLASSICAL BALLET II
To increase the students' poise, agility and rhythm that they achieved in Ballet I. To develop an appreciation of ballet as an art form. Two clock hours per week. One credit.

PED 103 CLASSICAL BALLET III
To further develop the student's poise, grace, agility and rhythm, and to increase the student's personal enjoyment of ballet. Two clock hours per week. One credit.

PED 106 FOLK DANCING I
To develop international understanding of other cultures and how their heritage has blended with our own. Two clock hours per week. One credit.

PED 111 FUNDAMENTALS OF DANCE I
A kinesthetic perception of movement and the relationship between body movement and emotional expression. Two clock hours per week. One credit.

PED 112 FUNDAMENTALS OF DANCE II
To increase the awareness of kinesthetic perception of movement and the relationship between body movement and emotional expression. Two clock hours per week. One credit.

PED 121 JAZZ DANCE I
Introduction of the basic jazz techniques. Teaching of terminology, jazz movement, and routines. Two clock hours per week. One credit.

PED 122 JAZZ DANCE II

To continue exposing the student to the indigenous dance form of the United States. Providing a rewarding and satisfying pleasure of movement experienced in jazz dancing. Two clock hours per week. One credit.

PED 123 JAZZ DANCE III

To continue exposing the student to the indigenous dance form of the United States. Providing a rewarding and satisfying pleasure of movement experienced in jazz dancing. To develop a greater knowledge and proficiency in jazz as a form of dance. Two clock hours per week. One credit.

PED 131 MIDDLE-EASTERN DANCE I

Designed to teach the skills and techniques of movements for the graceful performance of body action. The course will also include body movements of Middle-Eastern dancing. Two clock hours per week. One credit.

PED 132 MIDDLE-EASTERN DANCE II

Designed for those who want to further their skills of movement for the graceful performance of body action. The course will include more complex movements of Middle-Eastern dancing. Two clock hours per week. One credit.

PED 141 SOCIAL DANCE I

To learn a variety of social dances such as the rumba, cha cha, and waltzes. To experience pleasure in dance with others and develop the ability to lead as well as to follow your partner. Two clock hours per week. One credit.

PED 142 SOCIAL DANCE II

An advanced class in social dance for those students who desire to further their skills and abilities in social dancing. Two clock hours per week. One credit.

PED 151 SQUARE DANCING I

Teaching the basic steps and other dancing skills that formulate a reasonably comprehensive introduction to square dancing. Two clock hours per week. One credit.

PED 152 SQUARE DANCING II

Square dancing patterns and fundamentals will be taught along with square dances past and present. Two clock hours per week. One credit.

PED 161 TAP DANCE I

Formal instruction in tap techniques and movements. To expose the student to the special mix of rhythm, sound, and style that constitutes the American tap dance form. Two clock hours per week. One credit.

PED 162 TAP DANCE II

To further expose the student to more difficult steps, movements, and routines. Two clock hours per week. One credit.

PED 171 CREATIVE MOVEMENT DANCE I

To develop and improve coordination, strength, flexibility, endurance and rhythm. To increase awareness of kinesthetic perception of movement and the relationship between body movement and emotional expression. Two clock hours per week. One credit.

PED 172 CREATIVE MOVEMENT DANCE II

To continue the awareness of kinesthetic perception and a more advanced relationship between body movement and emotional expression. Two clock hours per week. One credit.

PED 173 CREATIVE MOVEMENT DANCE III

Continuation of Ped 172, with more advanced techniques and routines. Two clock hours per week. One credit.

PED 181 DISCO DANCING I

To expose the student to the disco dance routines and giving them the satisfaction and pleasure of dancing the modern steps. Two clock hours per week. One credit.

PED 182 DISCO DANCING II

The student will be exposed to more difficult dance routines and learn to improvise their own steps and routines. Two clock hours per week. One credit.

PED 191 DANCE AEROBICS I

This course is designed to help students gain cardiovascular efficiency through a variety of dance routines. Two clock hours per week. One credit.

PED 192 DANCE AEROBICS II

This course will involve the student in more strenuous and difficult dance routines. The student will develop better cardiovascular efficieny and proficiency. Two clock hours. One credit.

PED 193 DANCE AEROBICS III

Dance Aerobics III will continues to aid the student in maintaining greater cardiovascular efficiency. Routines will be more difficult. Two clock hours per week. One credit.

PHYSICAL EDUCATION FITNESS (PEF)

PEF 101 KARATE I

Students learn basic blocks, kicks, and punches of karate. Two clock hours per week. One credit.

PEF 102 KARATE II

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

PEF 105 JUDO

Designed to teach the basic fundamentals, movements, skills and rules of judo. Mannerisms and terminology of judo, and the proper techniques of falling. Two clock hours per week. One credit.

PEF 107 PHYSICAL EDUCATION

Designed to teach skills of various individual and team sports, improve physical fitness, develop endurance and provide recreational activities useful in later life. Two clock hours per week. One credit.

PEF 108 SELF DEFENSE

Designed to teach various skills and techniques of self defense. Two clock hours per week. One credit.

PEF 111 PHYSICAL FITNESS I

A variety of exercises are taught to improve students' physical fitness. Students will also have the opportunity to jog a few miles each week. Two clock hours per week. One credit.

PEF 112 PHYSICAL FITNESS II

To continue exposing the student to a variety of exercises to develop endurance and a higher level of physical fitness. Two clock hours per week. One credit.

PEF 115 ADULT FITNESS

This course is designed to place a student on his own exercise program according to the results of the testing program. Individuals will be administered an electrocardiogram and skinfold and stress tests. The exercises will help maintain strength, flexibility, muscle tone, muscular endurance, and cardiovascular fitness. Two clock hours per week. One credit.

OCCUPATIONAL EDUCATION PROGRAMS AND COURSES

Aims Community College offers selected vocational-technical education curricula designed to prepare high school and post-high school youth and adults for useful and gainful employment. Persons seeking to prepare for initial employment, persons who are employed but may need to improve their skills, and persons who wish to re-train will find a variety of programs from which to choose.

To best service each individual under our "Open Door Policy," we have a tutorial service which allows us to work with individuals, sometimes on a one-to-one basis, to insure that they may leave our institution with an employable skill.

Many opportunities exist for the person who can perform essential semi-professional, technical and other tasks competently. As a community college, Aims Community College has adapted to these new and demanding requirements by developing programs to supply trades, business, and industry with competent workers who have pride in craftsmanship and who are taught to understand their responsibilities to community, state, and nation.

Since the purpose of vocational-technical programs is to prepare students for entry-level employment, programs are developed on the basis of detailed study of existing and potential needs of business, industry, and government. Advisory committees are formed to aid in determining what trained personnel are needed in a particular occupational field, and to assist in planning programs of study and training.

Any person enrolling in and successfully completing an occupational course may request a certificate of competency. Whilemany of the following programs result in an Associate in Applied Science degree, it is not always necessary for a person to complete the degree in order to be employable.

VOCATIONAL GUIDANCE

Guidance Services are available through the Vocational Guidance Specialist for students who need assistance in selecting a career goal. To assist students in career directions, there are available: interest surveys; assessments for hand/eye coordination, dexterity and apptitude.

JOB PLACEMENT

Each year a large number of students qualify for employment upon graduating 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 efforts in assisting students to obtain full-time employment in occupations for which they have been prepared.

The Job Placement Office is located in the Trades and Industry Building. Students interested in full and part-time jobs should contact the Placement Office and complete an appliccation for employment. This is a free service available to all past and present students of Aims Community College

BUSINESS DIVISION PROGRAMS

Desirable characteristics in all business programs are the ability to take responsibility, average English and mathematical skills, and spelling ability. Neaatness in work and appearance is necessary for the successful job applicant.

The Business Division is flexible in order to create any specific training needed in the business community; members of the division will work individually or collectively with employers to offer in-service or up-grading training. The training could be limited to a number of hours, one or more quarters, or to a one-year (certificate) or to a two-year (AAS Degree) program.

The Business Division offers the following programs:

ACCOUNTING DEPARTMENT

Accounting (two-year AAS Degree)

ELECTRONIC DATA PROCESSING DEPARTMENT:

Data Processing (two-year AAS Degree)

GENERAL BUSINESS DEPARTMENT:

Clerk-Bookkeeper (one-year certificate)
Clerk Typist (one-year certificate)
Office Supervision (two-year AAS Deegree)

MID-MANAGEMENT DEPARTMENT:

(two-year AAS Degree)

Specialties: Industrial/Institutional Management; Small Business Management; Sales.

Real Estate Classes for Colorado Licensing.

SECRETARIAL DEPARTMENT:

Business Secretary (two-year AAS Degree)
Clerk Steno (two-year AAS Degree)
Judicial/Legal Secretary (two-year AAS Degree)
Medical Clerk Typist (one-year certificate)

ACCOUNTING

(Betty Buxman, Marilyn Matthews, Kerry Colton — 353-8008)

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Required Courses:			**Credits**
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	201	Intermediate Accounting I	5
ACC	202	Intermediate Accounting II	5
ACC	205	Accounting Systems	4
ACC	211	Cost Accounting I	5
*BUS	115	Business Mathematics	5
BUS	116	Adding and Calculating Machines	2
****BUS	155	Business Communications I	5
BUS	156	Business Communications II	3
BUS	157	Business Communications III	3
ACC	246	Financial Management	5
BUS	255	Business Law	5
EDP	101	Introduction to Data Processing	5
		General Requirements	70
		**Electives (As agreed by student and advisor)	26
		TOTAL	**96**

(For Asterisked Courses, See End of Business Division Section.)

ADVISORY COMMITTEE FOR ACCOUNTING

Sue Brown
City of Greeley

Arlin Disselkoen
Greeley National Bank

Jon Ewert
Agland, Incorporated

Larry Heinze
Monfort of Colorado

Linda Kadlecek
Kruchten and Company

Allen McConnell
University of
Northern Colorado

Edward J. Nusbaum
State Farm Insurance Company

Bill Sleigh
Eastman Kodak

Paul Thompson
Thompson and Hoover, CPA's

Ken Whitney
Anderson & Whitney

ELECTRONIC DATA PROCESSING

(Thelma Stephenson, Sandra Neary — 353-8008)

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Potential Opportunities: The two-year program is designed to prepare the student for employment in three major areas: computer operations; computer programming; and systems analysis and design.

Logical reasoning, problem solving ability, perseverance, and inquisitiveness are definite assets. Jobs which relate to these areas would include: computer programmer, program coder, computer operator, machines operator, console operator, systems analyst, operations manager, programming manager, and data processing manager.

Required Courses:

			Credits
EDP	101	Introduction to Data Processing	5
EDP	102	Computer Concepts I	5
EDP	103	Computer Concepts II	5
EDP	105	Computer Operations	5
EDP	121	COBOL Programming	5
EDP	122	Advanced COBOL Programming	5
EDP	126	Report Program Generator II (RPG II)	5
EDP	201	Assembler Language Programming	5
EDP	211	New Issues and Developments in Data Processing	5
EDP	237	Systems Analysis and Data Management	5
ACC	101	Principles of Accounting I	5
ACC	102	Principles of Accounting II	5
ACC	103	Principles of Accounting III	5
*BUS	115	Business Mathematics	5
****BUS	155	Business Communications I	5
BUS	156	Business Communications II	3
		General Requirements	78
		***Electives (As agreed by student and advisor	18
		Total	**96**

(For Asterisked Courses, See End of Business Division Section.)

ADVISORY COMMITTEE FOR ELECTRONIC DATA PROCESSING

William Hoffman
District Six Administration

Leon Overbeck
State Farm Insurance Company

Gordon Sheets
City of Greeley

William Stitt
Hensel Phelps
Construction Company

Marcus N. Valerio
Diversified Computer Systems
of Colorado

MID-MANAGEMENT

(Jim Adams, Elmer Kiekhaefer, Cal McKibbin, Mary Webster — 353-8008)

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

The Mid-Management degree (Associate in Applied Science) requires 99 credits. To meet these requirements, the student must complete 38 credit hours of required core courses. The remaining 61 credit hours may be selected from one of the suggested programs described below.

While the programs described below are designed to assist those management students who are interested in pursuing a particular major or career preparation, these suggested programs should be used as only 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.

A student seeking an Associate in 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/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 requirements of the Associate in Applied Science Degree in Mid-Management.

Required Core Courses:

The following courses are required for all management students:

			Credits
*BUS	115	Business Mathematics	5
****BUS	155	Business Communications I	5
BUS	156	Business Communications II	3
MGT	101	Salesmanship	5
MGT	215	Personnel Management	5
MGT	235	Principles of Management	5
MGT	145	Management Human Relations	5
ACC	101	Principles of Accounting I	5
		Total	**38**

Upon completion of the required core courses, the management student has three options from which to choose:

(1) Industrial/Institutional Management

(2) Small Business Management

(3) Sales

(For Asterisked Courses, See End of Business Division Section.)

INDUSTRIAL/INSTITUTIONAL MANAGEMENT

			Credits
Required Core Courses (see above)			38
MGT	245	Organizational Environment	5
MGT	255	Labor Law	5
MGT	256	Supervisory Management	5
MGT	258	Production Management	5
MGT	259	Purchasing	5
MGT	281	Personal Adjustment to Business	5
MGT	282	Personal Adjustment to Business	5
MGT	283	Personal Adjustment to Business	5
BUS	255	Business Law	5
		General Requirements	83
		*Electives	16
		Total	**99**

Suggested Electives:

ECO	201	Principles of Economics	5
ECO	202	Principles of Economics	5
VTR	105	Industrial Communications	3
VTR	106	Industrial Economics	3
POS	101	American Government (Institutional Mgt. only)	5
POS	118	State & Local Government (Institutional Mgt. only)	5
MGT	116	Management Activity I	2
MGT	117	Management Activity II	2
MGT	118	Management Activity III	2
TRA	101	Transportation Terms & Documentation	4
TRA	102	Transportation Functions & Regulations	4
TRA	103	Transportation Freight Rates & Tariffs	4
VTI	101	Safety & First Aid	2
VTR	115	Basic Quality Control	3

SMALL BUSINESS MANAGEMENT		Credits
Required Core Courses (see above)		38
MGT 106	Principles of Retailing	5
MGT 107	Principles of Advertising	5
MGT 108	Small Business Management	5
MGT 116	Management Activity I	2
MGT 117	Management Activity II	2
MGT 118	Management Actvity III	2
MGT 205	Credit Management	5
MGT 221	Principles of Marketing	5
MGT 281	Personal Adjustment to Business	5
MGT 282	Personal Adjustment to Business	5
MGT 283	Personal Adjustment to Business	5
ACC 107	Managerial Use of Accounting	5
BUS 255	Business Law	5
	General Requirements	94
	Electives	5
	Total	**99**

Suggested Electives:

ECO 201	Principles of Economics	5
ECO 202	Principles of Economics	5
ACC 246	Financial Management	5
BUS 100	Introduction to Business	5
BUS 247	Business & Banking	5
EDP 105	Computer Operations	5
MGT 222	Marketing Management	5
MGT 245	Organizational Environment	5

SALES		Credits
Required Core Courses (see above)		38
MGT 102	Advanced Salesmanship	5
MGT 107	Principles of Advertising	5
MGT 116	Management Activity I	2
MGT 117	Management Activity II	2
MGT 118	Management Activity III	2
MGT 201	Sales Management	5
MGT 221	Principles of Marketing	5
MGT 245	Organizational Environment	5
MGT 281	Personal Adjustment to Business	5
MGT 282	Personal Adjustment to Business	5
MGT 283	Personal Adjustment to Business	5
BUS 255	Business Law	5
BUS 157	Business Communications III	3
	General Requirements	92
	Electives	7
	Total	**99**

Suggested Electives:

ECO 201	Principles of Economics	5
ECO 202	Principles of Economics	5
EDP 105	Computer Operations	5
MGT 106	Principles of Retailing	5
MGT 108	Small Business Management	5
MGT 205	Credit Management	5
PSY 101	General Psychology	5
PSY 107	I'm Ok, You're Ok	3
PSY 237	Assertiveness Training	3

ADVISORY COMMITTEE FOR MID-MANAGEMENT

Richard Erwin
Denver Dry Goods Co.

George Evans
Northwestern Mutual Life

Rollard Higgins
Higgins Sentry Hardware

Jack Jerome
Jerome Company

Bill Walters
Sears Realty

Jack Weber
Woolco Department Store

Herb Zimmerman
Hewlett-Packard

ADVISORY COMMITTEE FOR REAL ESTATE

Carl Campbell
Time Realty

Edwin Dyer
Wheeler Realty Company

Richard Gazlay
Realty World
Clift-McComb Realty

Paul Haugen
Scott Realty Company

Roland McKinley
Scott Realty Company

Chuck Neal
RE/MAX of Greeley

SECRETARIAL

BUSINESS SECRETARY

(Trulene Page, Maxine Marquez, Judy Leusink — 353-8008)

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Desirable Characteristics: Possess above average English skills.

Potential Opportunities: This program is designed for persons interested in learning basic knowledge and skills necessary for a secretarial position in business, education, or government.

Required Courses:			Credits
BUS 100	Introduction to Business		5
**BUS 101	Beginning Typewriting		3
**BUS 102	Intermediate Typewriting		3
BUS 103	Advanced Typewriting		3
SEC 105	Machine Transcription		3
**SEC 151	Gregg Shorthand Theory I	(5)	
	OR		5
**SEC 161	Alphabet Shorthand Theory I	(5)	
**SEC 152	Gregg Shorthand Theory II	(5)	
	OR		5
**SEC 162	Alphabet Shorthand Theory II	(5)	
SEC 153	Intermediate Shorthand		5
SEC 154	Advanced Shorthand		5
*BUS 115	Business Mathematics		5
BUS 116	Adding and Calculating Machines		2
**BUS 141	College Bookkeeping I		5
BUS 142	College Bookkeeping II		5
BUS 145	Human Relations and Supervision		3
****BUS 155	Business Communications I		5
BUS 156	Business Communications II		3
BUS 157	Business Communications III		3
BUS 165	Filing		3
BUS 175	Office Procedures		5
EDP 101	Introduction to Data Processing		5
***SEC 281	Cooperative Office Occupations I		5
***SEC 282	Cooperative Office Occupations II		5
	General Requirements		91
	Electives (As required by student and advisor)		5
	Total		**96**

(For Asterisked Courses, see end of Business Division Section.)

CLERK-STENO

(Trulene Page, Maxine Marquez — 353-8008)

Course Length: Usually four (4) quarters for Certificate in Occupational Education.

Desirable Characteristics: Possess above average English skills.

Required Courses:			Credits
**BUS	102	Intermediate Typewriting	3
BUS	103	Advanced Typewriting	3
SEC	105	Machine Transcription	3
**SEC	152	Gregg Shorthand Theory II (5)	
		OR	5
**SEC	162	Alphabet Shorthand Theory II (5)	
SEC	153	Intermediate Shorthand	5
SEC	154	Advanced Shorthand	5
*BUS	115	Business Mathematics	5
BUS	145	Human Relations and Supervision	3
****BUS	155	Business Communications I	5
BUS	156	Business Communications II	3
BUS	157	Business Communications III	3
BUS	165	Filing	3
BUS	175	Office Procedures	5
		Total	**51**

(For Asterisked Courses, See End of Business Division Section.)

JUDICIAL / LEGAL SECRETARY

(Maxine Marquez, Trulene Page, Judy Leusink — 353-8008)

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Desirable Characteristics: Possess above average English skills.

Potential Opportunities: This program is designed for persons interested in learning basic skills of judicial/legal secretarial personnel who work in law offices, savings and loan, real estate, and insurance offices with maintenance and custody of legal records.

Required Courses:			Credits
BUS	100	Introduction to Business	5
*BUS	102	Intermediate Typewriting	3
BUS	113	Legal Typewriting	3
SEC	106	Legal Terminology	3
SEC	141	Legal Machine Transcription I	3
**SEC	151	Gregg Shorthand Theory I (5)	
		OR	5
**SEC	161	Alphabet Shorthand Theory I (5)	
**SEC	152	Gregg Shorthand Theory II (5)	
		OR	5
**SEC	162	Alphabet Shorthand Theory II (5)	
SEC	153	Intermediate Shorthand	5
SEC	215	Legal Shorthand	5
*BUS	115	Business Mathematics	5
BUS	116	Adding and Calculating Machines	2
BUS	141	College Bookkeeping I	5
BUS	145	Human Relations and Supervisiion	3
BUS	165	Filing	3
****BUS	155	Business Communications I	5
BUS	156	Business Communications II	3
BUS	157	Business Communications III	3
SEC	277	Legal Office Procedures	5
***SEC	281	Cooperative Office Occupations I	5
***SEC	282	Cooperative Office Occupations II	5
		General Requirements	81
		Electives (As agreed by student and advisor)	15
		Total	**96**

Two of the following courses will be required upon the recommendation of the Business Division advisor:

BUS	255	Business Law	5
SEC	275	Real Estate Office Procedures	3
SEC	177	Insurance Terminology and Procedures	3
BUS	247	Business and Banking	5
EDP	101	Introduction to Data Processing	5

(For Asterisked Courses, See End of Business Division Section.)

MEDICAL CLERK TYPIST

(Maxine Marquez, Trulene Page, Judy Leusink — 353-8008)

Course Length: Usually three-four (3-4) quarters for Certificate in Occupational Education.

Required Courses:			Credits
**BUS	102	Intermediate Typewriting	3
BUS	114	Medical Typewriting	3
**BUS	141	College Bookkeeping I	5
BUS	145	Human Relations/Supervision	3
****BUS	155	Business Communications I	5
BUS	156	Business Communications II	3
BUS	157	Business Communications III	3
BUS	165	Filing	3
HLH	131	Medical Terminology	3
SEC	136	Applied Medical Terminology	3
SEC	143	Medical Machine Transcription I	3
SEC	276	Medical Office Procedures	5
		General Requirements	42
		Electives (as agreed by student and advisor)	8
		Total	**50**

(For Asterisked Courses, See End of Business Division Section.)

ADVISORY COMMITTEE FOR SECRETARIAL

Jane Barta
Weld County General Hospital

Paula Barber
Western Temporary Services, Inc.

Kathy Curtis
Flood & Peterson Insurance Agency

Jennie Gibson
Wheeler Realty Company

Pat Kinson
Colorado Rural Legal Services

Pat Morimoto
University of Northern Colorado

Mary Osaki
Hensel Phelps Construction Co.

Fred Otis
Attorney-at-Law

GENERAL BUSINESS

CLERK-BOOKKEEPER

(Miriam Peterson — 353-8008)

Course Length: Usually three (3) quarters for Certificate in Occupational Education.

Required Courses:			Credits
**BUS	101	Beginning Typewriting	3
**BUS	102	Intermediate Typewriting	3
*BUS	115	Business Mathematics	5
BUS	116	Adding and Calculating Machines	2
**BUS	141	College Bookkeeping I	5
BUS	142	College Bookkeeping II	5
BUS	145	Human Relations and Supervision	3
****BUS	155	Business Communications I	5
BUS	165	Filing	3
BUS	175	Office Procedures	5
ACC	105	Payroll Accounting	3
EDP	101	Introduction to Data Processing	5
		General Requirements	47
		Electives (as agreed by student and advisor)	3
		TOTAL	**50**

(For Asterisked Courses, See End of Business Division Section.)

CLERK-TYPIST

(Lucille Eckhardt, Jerry Goddard — 353-8008)

Course Length: Usually four (4) quarters for Certificate in Occupational Education.

Required Courses:			**Credits**
**BUS	101	Beginning Typewriting	3
**BUS	102	Intermediate Typewriting	3
BUS	103	Advanced Typewriting	3
SEC	105	Machine Transcription	3
*BUS	115	Business Mathematics	5
BUS	116	Adding and Calculating Machines	2
BUS	145	Human Relations and Supervision	3
****BUS	155	Business Communications I	5
BUS	156	Business Communications II	3
BUS	157	Business Communications III	3
BUS	165	Filing	3
BUS	175	Office Procedures	5
		General Requirements	41
		Electives (As agreed by student and advisor)	9
		Total	**50**

(For Asterisked Courses, See End of Business Division Section.)

OFFICE SUPERVISION

(Jerry Goddard, Lucille Eckhardt, Melba Kriegel — 353-8008)

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Required Courses:			**Credits**
BUS	100	Introduction to Business	5
**BUS	101	Beginning Typewriting	3
**BUS	102	Intermediate Typewriting	3
*BUS	115	Business Mathematics	5
BUS	116	Adding and Calculating Machines	2
BUS	145	Human Relations and Supervision	3
****BUS	155	Business Communications I	5
BUS	156	Business Communications II	3
BUS	157	Business Communications III	3
BUS	165	Filing	3
BUS	175	Office Procedures	5
ACC	246	Financial Management (5)	
		OR (Selection with approval of advisor)	5
BUS	247	Business and Banking (5)	
BUS	255	Business Law	5
***BUS	281	Cooperative Office Occupations I	5
***BUS	282	Cooperative Office Occupations II	5
ACC	101	Principles of Accounting I	5
ACC	102	Principles of Accounting II	5
ACC	105	Payroll Accounting	3
EDP	101	Introduction to Data Processing	5
MGT	205	Credit Management	5
MGT	215	Personnel Management	5
		General Requirements	88
		Electives (as agreed by student and advisor)	8
		Total	**96**

(For Asterisked Courses, See Below.)

GENERAL BUSINESS ADVISORY COMMITTEE

Kay Alvarez
City of Greeley

Gene Brauer
C-E Maguire

Lowell Johnson
Kodak of Colorado

Pat McCloskey
University Relations
Board of Trustees, UNC

Larry Neuschwanger
Cache National Bank

Edward Nusbaum
State Farm Insurance

Joanne Weinmeister
Office of the President, UNC

Lorena Wetz
Job Service of Colorado

*Students in Business Mathematics 115 are required to take a pre-test and may be referred into BUS 109, Basic Business Math, for elective credit prior to enrollment in BUS 115.

**Students entering Aims with high school credit in typewriting, bookkeeping, and/or shorthand may substitute other courses or challenge equivalent courses. Shorthand students may elect to take Gregg or Alphabet Shorthand.

***For Accounting and Data Processing students, Cooperative Office Occupations may be a recommended elective.

With the approval of the advisor, students who have previous work experience may substitute other classes in programs requiring Cooperative Office Occupations.

****Students in Business Communications I are required to take a pre-test and may be required to take BUS 153, Principles of Business Communications A (5 credits) and BUS 154, Principles of Communications B (5 credits) in lieu of Business Communications I.

BUSINESS DIVISION

ACCOUNTING (ACC)

ACC 101 PRINCIPLES OF ACCOUNTING I

Fundamentals of accounting theory and practice, including a study of the entire accounting cycle, the use of accounting in management decisions. Five credits.

ACC 102 PRINCIPLES OF ACCOUNTING II

A continuation of ACC 101 emphasizing the study of assets and their valuation and an introduction to accounting for partnerships and corporations. Prerequisite: ACC 101. Five credits.

ACC 103 PRINCIPLES OF ACCOUNTING III

A continuation of ACC 102 emphasizing long-term liabilities; investments; departmental, manufacturing, and cost accounting; flow of funds; standard cost and capital budgeting; and statement analysis. Prerequisite: ACC 102. Five credits.

ACC 105 PAYROLL ACCOUNTING

An in-depth study of various payroll systems using government requirements. Includes projects in actual payroll preparation. Prerequisite: ACC 101 or permission of instructor. Three credits.

ACC 106 CAREERS IN ACCOUNTING

An exploratory class for accounting students who wish to learn of the specific job opportunities in accounting, the entry level skills needed, and the possibilities for advancement. Prerequisite: ACC 101 or permission of instructor. One credit.

ACC 107 MANAGERIAL USE OF ACCOUNTING

Using financial statements to develop ratios and comparisons to train the student in the use of accounting information for making managerial decisions. Prerequisites: ACC 101 or permission of instructor. Five credits.

ACC 109 CREDIT COLLECTING

A course giving guidelines for extension of credit, the rules that enhance or limit collections, and the methods used to collect accounts for small businesses. One credit.

ACC 115 FARM RECORDS AND TAX

A course giving guidelines for keeping farm records and using thhem for filing tax forms. The course also provides information on determining the need for increasing capital assets and methods of financing them. Depreciation and investment credit will be discussed. Five credits.

ACC 121 INCOME TAX ACCOUNTING

A study of the important income tax code provisions as they affect individuals and business enterprise. A study of code preparations for tax planning and minimization for individuals and business enterprise. Prerequisite: ACC 102 or permission of instructor. Five credits..

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 operatimg 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.

ACC 201 INTERMEDIATE ACCOUNTING I

An in-depth study of the basic principles and concepts of accounting, giving special attention as to how they apply to cash and temporary investments, receivables, and cost and valuation procedures for inventories. Prerequisite: ACC 103 or permission of instructor. Five credits.

ACC 202 INTERMEDIATE ACCOUNTING II

Continuation of ACC 201 with emphasis on long-term assets and liabilities. Prerequisite: ACC 201 or permission of instructor. Five credits.

ACC 205 ACCOUNTING SYSTEMS

A study of flow accounting information within an organization with special emphasis on integration of accounting sub-systems. Prerequisite: ACC 202 or permission of instructor. Four credits.

ACC 211 COST ACCOUNTING I

A study of fundamental elements of direct and indirect costs of an organization. Emphasis on preparation of cost data for management use. Prerequisite: ACC 103 or permission of instructor. Five credits.

ACC 246 FINANCIAL MANAGEMENT

Deals with conceptual alternatives of financial management with emphasis on preparation and analysis of source and uses of short- and long-term capital and an in-depth analysis of financial statements. Prerequisite: ACC 103 or permission of instructor. Five credits.

ACC 299 ACCOUNTING PRACTICUM

A course in which the students complete a practice set commensurate with the level of accounting theory to which they have been exposed. Course may be repeated as different levels for additional credit. Principles of Accounting I, sole proprietor-merchandising set; Principle of Accounting I, corporate merchandising set; Principles of Accounting III, corporate manufacturing set; Cost Accounting I, corporate manufacturing set using either job or process cost; Intermediate Accounting, practice set, working papers from incomplete records. For more information, see instructor. Minimum Prerequisite: ACC. One credit.

BUSINESS (BUS)

BUS 100 INTRODUCTION TO BUSINESS

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

BUS 101 BEGINNING TYPEWRITING

An introduction to typewriting, emphasis on 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. Three credits.

BUS 102 INTERMEDIATE TYPEWRITING

Further development of typing techniques for building speed and control. Production emphasis on basic business letters, business letters with special features, communications forms, tabulated reports, business forms, and special reports. Prerequisite: BUS 101 or one year high school typewriting or speed of at least 30 wpm. Three credits.

BUS 103 ADVANCED TYPEWRITING

Further development of typing speed and accuracy; production problems on business letters and forms, tabulations, reports, legal papers, and problems related to accounting, medical, and technical offices. Additional lab hours may be needed. Prerequisites: BUS 102 or two years high school typewriting or speed of at least 40 wpm. Three credits.

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, or one year of high school typewriting, or 25 wpm. Three credits.

BUS 107 MEMORY TYPEWRITING

To instruct the student through independent study in the basic operations of the memory typewriter. At completion of cburse, the student will be able to produce one-page letters, memos, and reports. Prerequisite: BUS 102 or equivalent. Two credits.

BUS 109 BASIC MATHEMATICS

A class designed to help the student develop the ability to accurately perform the fundamental mathematical operations required in business activities. Five credits.

BUS 113 LEGAL TYPEWRITING

Production practice in the preparation of legal documents. Typewriting and spelling accuracy of legal terminology are emphasized. Prerequisite: BUS 102 and 60 wpm. Three credits.

BUS 114 MEDICAL TYPEWRITING

Production practice in the preparation of medical reports, articles,case histories, etc. Medical spelling and medical terminology are emphasized. Prerequisite: BUS 102 and 50 wpm. Three credits.

BUS 115 BUSINESS MATHEMATICS

A study of mathematical procedures in business and aspects of personal activities (percent, checkbook records, payroll, discounts, markup, interest, depreciation, overhead, taxes, insurance, etc.). Five credits.

BUS 116 ADDING AND CALCULATING MACHINES

Instruction in operating procedures for printing and electronic calculators. Emphasis is on machine application of mathematical problem solving in business. Lab hours are required. Prerequisite: BUS 115. Two credits.

BUS 117,118, 119 BUSINESS LEADERSHIP ACTIVITY

These courses are designed to encourage growth and development through activities in a student organization with professional goals. Two credit hours per course.

BUS 125 MONEY MANAGEMENT

A basic economics course covering personal finance, problems of consumer credit, taxes, insurance, mortgages, social security, Medicare, and related topics. Three credits.

BUS 127 PERSONAL DEVELOPMENT FOR CAREER WOMEN

Designed to assist women in realizing their potential in both career and personal life by developing poise, confidence, and an attractive appearance. Two credits.

BUS 141 COLLEGE BOOKKEEPING I

Fundamentals of bookkeeping including basic concepts of double entry bookkeeping, journals, ledgers, payroll, accounting for personal enterprises on a cash basis, and mercantile enterprises on an accrual basis with special emphasis on single proprietorship form of business ownership. Five credits.

BUS 142 COLLEGE BOOKKEEPING II

Continuation of BUS 141 with further development of special journals, emphasizing partnership form of ownership. Study of inventory valuation, prepaid expenses, long-lived assets, owner's equity for single proprietorships, partnerships and corporations, annual reports, and interim financial statements. Prerequisite: BUS 141 or permission of instructor. Five credits.

BUS 145 HUMAN RELATIONS AND SUPERVISION

A study of personal development and adjustment in business. Also studies attitudes and working relationship with co-workers and supervisors in order that the office can be organized and run in an efficient manner. Three credits.

BUS 153 PRINCIPLES OF BUSINESS COMMUNICATIONS A

This course helps students learn grammar usage as it should be appied to business communication. Five credits.

BUS 154 PRINCIPLES OF BUSINESS COMMUNICATIONS B

Punctuation, spelling, capitalization, word division — correct and effective use of each in business correspondence is learned in this class. Major emphasis is given to development of business vocabulary. Five credits.

BUS 155 BUSINESS COMMUNICATIONS I

Students develop more extensive vocabularies with emphasis on business terminology. They learn parts of speech, sentence structure, punctuation, spelling and word division as they are used in current business usage. Five credits.

BUS 156 BUSINESS COMMUNICATIONS II

Students develop communication skills to function efficiently in business positions and write with clarity and confidence. Each student's ability to communicate facts, ideas and opinions is improved. Students work toward precise, powerful business writing. Prerequisite: BUS 155. Three credits.

BUS 157 BUSINESS COMMUNICATIONS III

Students prepare to transmit and receive oral information in business situations. Particular areas of oral communication skill improvement include one-to-one conversation, telephone technique, dictation expertise, group leadership, and listening. (A special section of Business Communications III will be offered for Mid-Management majors selecting the Sales option. Persuasive communication will be emphasized on a one-to-one basis, in small group sessions, and before an audience.) Prerequisite: BUS 155. Three credits.

BUS 165 FILING

The course acquaints students with the rules, procedures, techniques, and control of filing. Three credits.

BUS 175 OFFICE PROCEDURES

A study of general business office duties and problems, job interviewing and application, purchasing office supplies, payroll and financial procedures, reception and messenger work, mail handling, pulling together previously acquired office knowledge and skills. Prerequisite: Ability to type or BUS 101. Five credits.

BUS 247 BUSINESS AND BANKING

An introductory course in finance with special emphasis on various types of financial institutions and roles they play in economy and society. Five credits.

BUS 225 BUSINESS LAW

An introduction to law with analysis of its origin and development and interaction with business. Five credits.

BUS 281, 282 COOPERATIVE OFFICE OCCUPATIONS I & II

Supervised employment in an office occupations position. Intended to provide practical experience for students preparing for careers in a business office. It is the responsibility of the student to secure employment in approved work station for minimum of 15 hours per week during the two quarters of enrollment. Prerequisite: Student must be in fifth and sixth quarters of an Office Occupations program, have salable office skills, and be approved for admission by his advisor and supervising instructor in the quarter prior to enrollment. Five credits per course.

BUS 295 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.

ELECTRONIC DATA PROCESSING (EDP)

EDP 101 INTRODUCTION TO DATA PROCESSING

A survey of information processing systems and computer technology. Topics include a non-technical description of "how a computer works," business uses of computers, business sytem design process, and introduction to computer programming. Five credits.

EDP 102 COMPUTER CONCEPTS I

A study of the basic computer concepts to provide the proper framework for the further study of computer systems and programming languages. Topics include internal storage, "computer math" operating systems and program flowcharting. Prerequisite: EDP 101 or permission of instructor. Five credits.

EDP 103 COMPUTER CONCEPTS II

A study of advanced computer concepts with emphasis on how components relate to an integrated data processing system. Topics will include software components and their functions, computer design and virtual computing systems. Prerequisite: EDP 102 or permission of instructor. Five credits.

EDP 105 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 101 or permission of instructor. Five credits.

EDP 106 KEYPUNCH

A course which provides knowledge of keying operation as it relates to encoding data for automated processing. Primary emphasis will be placed on developing keying skills acceptable for employment. Prerequisite: BUS 101 or permission of instructor. Three credits.

EDP 121 COBOL PROGRAMMING

Fundamentals of business-oriented programming language. Topics parallel those covered in EDP 201 with addition of debugging routines. Prerequisite: EDP 102 or permission of instructor. Five credits.

EDP 122 ADVANCED COBOL PROGRAMMING

Continuation of EDP 121. Students will learn advanced COBOL techniques and efficiencies and will utilize magnetic tape and disk storage media. Prerequisite: EDP 121. Five credits.

EDP 126 REPORT PROGRAM GENERATOR II (RPG II)

A 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 102 or permission of instructor. Five credits.

EDP 127 PL/I (PROGRAMMING LANGUAGE I)

An elective course in PL/I programming language and its application to both business and scientific problems. Topics parallel EDP 102. Prerequisites: EDP 102 or permission of instructor. Five credits.

EDP 201 ASSEMBLER LANGUAGE PROGRAMMING

Programming concepts learned in EDP 102 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 102 or permission of instructor. Five credits.

EDP 202 ADVANCED ASSEMBLER LANGUAGE PROGRAMMING

Continuation of EDP 201. Topics parallel EDP 102 with addition of program overlays and basic physical I/O coding. Prerequisite: EDP 201. Five credits.

EDP 211 NEW ISSUES AND DEVELOPMENTS IN DATA PROCESSING

A course to familiarize students with new hardware and software developments in all types of systems and to give students the opportunity to research some of these new developments. Prerequisite: EDP 201 or permission of instructor. Five credits.

EDP 237 SYSTEMS ANALYSIS AND DATA MANAGEMENT

To familiarize the student with the organization of data files utilized in business data processing, the physical characteristics of the storage media, and information flows. Additionally these topics will be incorporated into practical student projects in the area of systems analysis and design. Prerequisite: EDP 122 or permission of instructor. Five credits.

EDP 281, 282 COOPERATIVE WORK EXPERIENCE I AND II

Supervised employment in a data processing position. Intended to provide practical experience for students preparing for a career in electronic data processing. It is the responsibility of the student to secure employment in an approved work station for a minimum of 15 hours per week during the two quarters of enrollment. Prerequisites: Student must be in the fifth and sixth quarters of a Data Processing Program, must have salable skills, and in the quarter prior to enrollment be approved for admission by his advisor and the supervising instructor. Five credits per course.

MID-MANAGEMENT (MGT)

MGT 101 SALESMANSHIP

An interpretation of the psychological development of people. Emphasis is on the art of making friends and the development of a successful relationship between customer and salesman. Five credits.

MGT 102 ADVANCED SALESMANSHIP

The course is designed to further the skills of the professional salesperson through role playing situations and studies of advanced closing techniques. Prerequisites: MGT 101 and employment in a sales position. Five credits.

MGT 106 PRINCIPLES OF RETAILING

A study of fundamental principles and practices of retail merchandising, including displays. Organization and methods of retail outlets, including independent, department and chain stores. Five credits.

MGT 107 PRINCIPLES OF ADVERTISING

An introduction to functions of advertising as a merchandising tool including study of copy, media, art work and production. Five credits.

MGT 108 SMALL BUSINESS MANAGEMENT

A study of the environment, management policies, marketing and control problems in small business. Emphasis will be on solving problems and recognizing and evaluating business opportunities. Practice will be given in making decisions under conditions of uncertainty and incomplete knowledge. Five credits.

MGT 116, 117, 118 MANAGEMENT ACTIVITIES

Designed to encourage growth and development through activities in a professional organization. Two credits per course.

MGT 145 MANAGEMENT AND HUMAN RELATIONS

A study of the behavioral sciences as they apply to management. Included are motivation, leadership, perceptions, attitudes, and values as they affect management decisions and actions. Five credits.

MGT 201 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. Prerequisites: MGT 102 and MGT 221 Five credits.

MGT 205 CREDIT MANAGEMENT

A study of principles in credit extension, investigation, charge accounts, and collections in selling organizations. Five credits.

MGT 215 PERSONNEL MANAGEMENT

A survey of principles of personnel management and industrial relations policies, with emphasis on theories of work, organization, administration, manpower, management, staffing and work incentives. Special emphasis on art of supervision. Five credits.

MGT 216, 217, 218 MID-MANAGEMENT SEMINAR

Contemporary problems are explored as they relate to students' goals and aspirations. One credit per course.

MGT 221 PRINCIPLES OF MARKETING

A study of fundamental organization of systems of distribution from manufacturer to consumer. Special emphasis at retail level. Prerequisite: Sophomore standing. Five credits.

MGT 222 MARKETING MANAGEMENT

The study of marketing decision making by computer simulation using various combinations of the "marketing mix." Prerequisite: MGT 221. Five credits.

MGT 226, 227, 228 INDIVIDUAL STUDIES IN MARKETING

These courses provide the opportunity for students to engage in intensive study and research beyond the stated prerequisites. Course must be arranged with a Mid-Management instructor. Prerequisite: MGT 221. One-three credits per course.

MGT 235 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 studied in formulating and carrying out the objectives, policies, methods and procedures in managing a successful business enterprise. Five credits.

MGT 236, 237, 238 INDIVIDUAL STUDIES IN MANAGEMENT

These courses provide the opportunity for students to engage in intensive study and research beyond the stated prerequisites. Course must be arranged with a Mid-Management instructor. Prerequisite: MGT 235, Principles of Management. One-three credits per course.

MGT 245 ORGANIZATIONAL ENVIRONMENT

To provide an understanding of human behavior, management theory, and leadership as they relate to the student's success in the work environment. Prerequisites: MGT 215 and MGT 235. Five credits.

MGT 255 LABOR LAW

This course is designed to give the student an understanding of the various laws that govern employer/employee relationships, unfair labor practices, strikes, boycotts, bargaining units, anti-trust, anti-injuction, etc. Five credits.

MGT 256 SUPERVISORY MANAGEMENT

A course designed to assist the potential or newly appointed supervisor in becoming acquainted with the many problems which will confront him, and to offer practical advice for their solution. The experienced supervisor should benefit by a re-examination of his position and how it relates to other levels in the organization. Five credits.

MGT 258 PRODUCTION MANAGEMENT

This course is designed to show the relationship of the production function to the fundamental business functions; help the student gain experience in solving production problems; give the sutdent an understanding of some of the problems in industry management; and give the student exposure to the theory of industrial management as a "systems concept." Five credits.

MGT 259 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. The course will follow the recommendations of the National Association of Purchasing Management, and will stress the significance of purchasing as a management function. Prerequisite: Approval of instructor. Five credits.

MGT 281, 282, 283 PERSONAL ADJUSTMENT TO BUSINESS

Designed to bridge the gap between classroom instruction and work experience for the management-oriented student. Attention is given to specific on-the-job problems encountered by the student. Student will formulate work objectives and attend a weekly one-hour seminar. Prerequisite: (1) declared Mid-Management Major, (2) consent of a Mid-Management advisor, (3) enrolled in one or more of the Mid-Management program courses each quarter, (4) enrollment permitted only after successful completion of all Freshman level courses in Mid-Management program, (5) employed part-time or seeking part-time employment in an acceptable job, (6) application for enrollment in this course must be made to the Mid-Management advisor the quarter before actual enrollment. Five credits per course.

REAL ESTATE (RES)

RES 105 REAL ESTATE PRACTICE

This course is designed to provide 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.

RES 106 REAL ESTATE LAW

This course is designed to provide the student with an understanding of the rights and obligations of the real estate agent regarding his contractual and fiduciary duties owed to the parties he represents. Prerequisite: RES 105 or employment in realty field. Three credits.

RES 107 INTERNSHIP IN REAL ESTATE

This course is designed to provide the student with the opportunity to explore and observe the practices and procedures carried on in an active real estate office, to become familiar with the flow of paper and work common to real estate agents, and to work with practicing agents in all areas of real estate practice, excluding actual sales. Prerequisite: RES 105. Five credits.

RES 108 REAL ESTATE LICENSE PREPARATION

This course is designed to assist students in preparation for the Colorado Real Estate License Examinations in order that they may enter the field of real estate sales. Prerequisite: RES 105, RES 106. Three credits.

RES 109 REAL ESTATE CLOSINGS

A course providing an in-depth study of real estate closings, including understanding of the contract and precipitating the closing, various problems in completing closing statements, documents related to closings, and an understanding of 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. Prerequisites: RES 105 and RES 106 or permission of instructor. Three credits.

RES 205 REAL ESTATE FINANCE

This course is designed to provide the student with a 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. Prerequisites: RES 105, RES 106 or permission of instructor. Three credits.

RES 206 REAL ESTATE APPRAISAL

This course is dedsigned to assist the student to understand and arrive at an estimate of real property value for his principals. The course will emphasize the three traditional approaches to value and the rationale of the three approaches. Prerequisites: RES 105, RES 106, or permission of instructor. Three credits.

SECRETARIAL (SEC)

SEC 105 MACHINE TRANSCRIPTION

Instruction in the use of transcribing machines in preparing business letters and correspondence. Three credits.

SEC 106 LEGAL TERMINOLOGY

A study of the language of law. This course is basic to the preparation of the secretary training for work in a legal office. Emphasis is placed on understanding terminology as well as being able to spell and use the terms correctly. Three credits.

SEC 136 APPLIED MEDICAL TERMINOLOGY

A course designed to prepare the student to apply basic medical words by reading, discussing, and transcribing medical records, such as, case histories, medical letters, surgical rerports, hospital admission and discharge summaries, and xray reports. Prerequisites: BUS 102 (or concurrent enrollment), BUS 156, HLH 131. Three credits.

SEC 141 LEGAL MACHINE TRANSCRIPTION I

Provides the student with in-depth practice in transcribing legal material using legal terminology and legal forms. Prerequisites: BUS 102, SEC 106, BUS 155. Three credits.

SEC 142 LEGAL MACHINE TRANSCRIPTION II

A continuation of Legal Machine Transcription I. Prerequisite: SEC 141. Three credits.

SEC 143 MEDICAL MACHINE TRANSCRIPTION I

Accuracy and speed in transcribing medical dictation and the ability to produce accurate medical data through a broad knowledge of medical terms. Prerequisite: SEC 136. Three credits.

SEC 144 MEDICAL MACHINE TRANSCRIPTION II

A continuation of Medical Machine Transcription I. Prerequisite: SEC 143. Three credits.

SEC 151 GREGG SHORTHAND THEORY 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 a minute; develops the ability to transcribe at the typewriter. This course is intended for students who have had no previous Gregg Shorthand instruction. Prerequisites: BUS 101 or equivalent. Five credits.

SEC 152 GREGG SHORTHAND THEORY II

Thorough 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 a minute; further develops the ability to transcribe at the typewriter. Prerequisites: SEC 151 or previous Gregg Shorthand instructions. Five credits.

SEC 153 INTERMEDIATE SHORTHAND

Develops shorthand writing of unfamiliar material to speeds of 80-100 words a minute. A review is provided in punctuation, spelling, letter styles, and business vocabulary improvement. Emphasis is on production of mailable letters. Prerequisites: SEC 152 or SEC 162 or two years of high school shorthand and the ability to write at 60 words a minute, plus a thorough knowledge of all Gregg or Alpha Shorthand theory. Five credits.

SEC 154 ADVANCED SHORTHAND

Develops shorthand writing of unfamiliar material to speeds of 80-120 words a minute. Total business proficiency is expected, and attention is directed to the ability to transcribe mailable letters at employable production rates. Prerequisites: SEC 153 or two years of high school shorthand, a thorough knowledge of all Gregg or Alpha Shorthand theory, and knowledge of punctuation, spelling, letter styles, and business vocabulary. Five credits.

SEC 161 ALPHABET SHORTHAND THEORY I

A beginning course introducing the first three-fourths of the theory of Forkner Alphabet Shorthand, a system of rapid writing using longhand letters and a few symbols. This is for those students preferring an alphabetic rather than a symbolic system. Develops reading speeds from handwritten notes; develops shorthand writing of familiar and unfamiliar material to speeds of 50-60 words a minute; develops the ability to transcribe at the typewriter. Prerequisites: BUS 101 (or be enrolled concurrently). Five credits.

SEC 162 ALPHABET SHORTHAND THEORY II

Thorough review of the first three-fourths of the theory of Forkner Alphabet Shorthand; introduces the last one-fourth of the theory of Forkner Aphabet Shorthand; develops reading speed from handwritten notes; develops shorthand writing of familiar and unfamiliar material to speeds of 60-80 words a minute; further develops the ability to transcribe at the typewriter. Prerequisite: SEC 161. Five credits.

SEC 177 INSURANCE TERMINOLOGY AND PROCEDURES

Designed to acquaint the student with the routine of an insurance office. A study of basic principles in insurance terminology, kinds of insurance, daily reports, policies, agency files and records, expiration notices, cancelled policies, claims, etc. Primarily for legal secretarial students. Prerequisite: BUS 101 or ability to type. Three credits.

SEC 215 LEGAL SHORTHAND

Specialized course for legal reporting and transcription. Students continue to build mastery of legal terminology and forms. Individual tape, programmed dictation is used extensively. Lab hours may be required. Prerequisite: SEC 153. Five credits.

SEC 231 CPS REVIEW I

A review course highlighting six areas of business, business law, accounting, typing and shorthand, office procedures, management, and economics of business. Designed to prepare the student for Certified Professional Secretary test. Two credits.

SEC 232 CPS REVIEW II

A continuation of CPS Review I. Prerequisite: SEC 231. Two credits.

SEC 275 REAL ESTATE OFFICE PROCEDURES

A course designed to acquaint the student with the routine of a real estate office. A study of real estate terminology and basic legal forms required in real estate transactions. Prerequisite: BUS 101 or ability to type. Three credits.

SEC 276 MEDICAL OFFICE PROCEDURES

Introduction to routine of a medical office. A study of medical receptionist techniques, medical records and files, and instruction in billing. Designed for medical secretarial students. Prerequisites: BUS 102, SEC 131. Five credits.

SEC 277 LEGAL OFFICE PROCEDURES

A study of the routines common to legal offices. Intensive practice in preparing many types of legal documents. Designed for legal secretarial students. Prerequisites: BUS 102, SEC 106. Five credits.

SEC 281, 282 COOPERATIVE OFFICE OCCUPATIONS I AND II

Supervised employment in an office occupation position. Intended to provide practical experience for students preparing for careers in a business office. It is the responsibility of the student to secure employment in an approved work station for a minimum of 15 hours per week during the two quarters of enrollment. A student with three months of previous full-time office employment or 500 hours or previous part-time office employment may elect to waive SEC 281. A student with six months of previous office employment or 1,000 hours of previous part-time employment may elect to waive SEC 281 and SEC 282. Confirmation of previous office employment will be requested. Prerequisite: Student must be in the fifth and sixth quarters of an Office Occupations program, have salable office skills, and be approved for admission by his advisor and supervising instructor in the quarter prior to enrollment. Five credits per course.

SEC 295 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.

TRANSPORTATION (TRA)

TRA 101 TRANSPORTATION TERMS & DOCUMENTATION

This course is designed to assist the student in understanding the meanings and terms used in transportation such as SL&C, FOB, etc.; understanding the Bill of Lading contractual obligations; learning to read and interpret the National Motor Freight Classification rules and regulations. Prerequisite: Interest in transportation. Four credits.

TRA 102 TRANSPORTATION FUNCTIONS AND REGULATIONS

This course is designed to examine loss and damage and the responsibilities and duties of both the shipper and carrier when loss and damage occur; to trace and expedite shipments by the different modes of transportation; to understand the differences between private, contract and common carriage; and to understand the federal and state regulations which control common carriers. Prerequisites: TRA 101 or work experience and permission of instructor. Four credits.

TRA 103 TRANSPORTATION FREIGHT RATES AND TARIFFS

This course is designed to identify the rate bureaus and see how they function in the rail and motor industry; to check rail and motor rates by using actual published rail and motor tariffs; and to understand the basic considerations used to determine transportation rates. Five credits.

PUBLIC SERVICE DIVISION PROGRAMS

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

The training or classes may be conducted in-plant or on campus, and may range in length of time from a number of hours or quarters to a one or two-year certificate program or to the Associate in Applied Science Degree.

The Public Service Division offers the following programs:

Criminal Justice	(two-year AAS Degree)
Emergency Medical Technician	(16-week certificate)
Fire Science	(two-year AAS Degree)
Nurse Assisting	(one-quarter certificate)
Radiologic Technology	(two-year AAS Degree)
Respiratory Therapy	(one-year certificate)
Other Health Services	

CRIMINAL JUSTICE

COURSE LENGTH: Usually two (2) years for Associate in Applied Science Degree.

Potential Opportunities: The program is designed to prepare qualified persons to work in the law enforcement field, performing duties and tasks in the areas of public safety, human relations, crime prevention, and criminal investigation. The officers may find employment in city police departments, sheriff's offices, as a highway patrolman, U.S. Marshall, or border patrolman. 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.

Core Courses:			**Credits**
CRJ	101	Introduction to Criminal Justice	2
CRJ	115	Traffic Control Accident Investigation	4
CRJ	130	Community Relations	3
CRJ	135	Report Writing	3
CRJ	140	Juvenile Procedures	3
*CRJ	150	Law Enforcement Basic Training	20
CRJ	200	Criminal Law Procedures	5
CRJ	210	Criminal Investigation	3
***CRJ	215	Evidence I	3
***CRJ	225	Evidence II	3
***CRJ	231	Court Procedures	5
CRJ	240	Constitutional Law Seminar	3
		Total Core Courses	**57**

Recommended Elective for Candidates:			
CRJ	158	Forensic Photography	3
CRJ	251-251	Police Cadet Co-operatives	1-5

General Courses:

Communication Skills **10**

Basic requirements are the following:

CON	102	Introduction to Writing	(5)
SPE	115	Speech Communications	(5)

As a result of a diagnostic test, the student may be required to take CON 101 for elective credit (5 credits).

Social Sciences **15**

POS	118	State and Local Government	(5)
PSY	101	General Psychology	(5)

One course from among the following:

ECO	100	Introduction to Economics	(5)
HIS	209	History of Colorado and Rocky Mountain West	(5)
SOC	101	Introduction to Sociology	(5)
HIS	105	History of the United States to 1877	(5)

Science and Mathematics **10**

BIO	101	Biology Concepts	(5)

One of the following courses:

CHE	100	Fundamentals of Chemistry	(5)
PHY	100	Fundamentals of Physics	(5)

Science and Mathematics Elective

(May be Mathematics, Biological or Physical Sciences	5
**Electives	5
Total General Courses	**45**
Total	**102**

*This requirement may also be met by certification indicating completion of the Basic Recruit Seminar, Colorado Law Enforcement Training Academy (CLETA).

**Cadet Co-operative or Forensic Photography, or other advisor-approved courses may be used to meet this requirement.

***CRJ 215, CRJ 225, CRJ 231 are sequential courses.

ADVISORY COMMITTEE FOR CRIMINAL JUSTICE

Sheriff Harold Andrews
Weld County Sheriff's Dept.

Judge Donald Carpenter (Retired)

Captain Martin Stefanic
Greeley Police Dept.

Chief Walter Teel
Windsor Police Dept.

Robert N. Miller
District Attorney
19th Judicial District

Chief Bob Edington
Greeley Police Dept.

FIRE SCIENCE

Course Length: Usually two (2) years for Associate in Applied Science Degree.

Potential Opportunities: The protection of life and property from fire is the primary function of a fireman; however, with today's sophisticated techniques, training, and equipment, modern firefighters must be well educated in physics, chemistry, other sciences, and state and city laws and codes applicable to fire science. High school diploma or 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 obatained from the appropriate fire protection agency.

The following courses are required for the Associate in Applied Science Degree:

			Credits
FS	100	Introduction to Fire Science and Suppression	3
FS	104	Fire Company Organization and Procedure	3
FS	106	Fire Fighting Tactics and Strategy	3
FS	108	Fire Hydraulics	3
FS	110	Fire Apparatus and Equipment	3
FS	190	Administration of Justice and Court Procedures	3
FS	202	Fundamentals of Fire Prevention	3
FS	204	Related Codes and Ordinances I	3
FS	205	Related Codes and Ordinances II	3
FS	206	Rescue Practice	3
FS	207	Applied Chemistry for Firemen	5
FS	208	Hazardous Materials I	3
FS	209	Hazardous Materials II	3
FS	212	Fire Protection Equipment and Systems	3
FS	214	Fire Department Administration	3
FS	216	Private Fire Protection Systems	3
FS	218	Fire Investigation	3
FS	220	Fire Insurance	3
FS	230	Building Construction/Blueprint Reading for Firefighters	3
BUS	101	Beginning Typewriting (will be waived if student can type 40 wpm)	3
SPE	115	Speech Communications	5
BUS	155	Business Communications I	5
BUS	156	Business Communications II	3
VTR	101	Basic Technical Math	6
VTR	108	Industrial Physics I	5
VTR	109	Industrial Physics II	5
POS	118	State and Local Governments	5

Select two of the following courses with advisor approval:

VTR	206	Industrial Relations	(3)
HLH	105	Emergency Medical Technician	(9)
PSY	101	General Psychology	(5)
POS	101	American Government	(5)
SOC	101	Introduction to Sociology	(5)
		Total	**104-110**

ADVISORY COMMITTEE FOR FIRE SCIENCE

William Bailey
Western Hills
Fire Protection District

Jack Cockran
Civil Service Commission

James Edwards
Super Vacuum Mfg. Co.

Verne Einspahr
Greeley Fire Department

Bruce Forbes
Greeley Fire Department

Tom Hauss
Kodak Colorado

Barbara Iwata
Student Representative

Donna King
Community Representative

Gerald Ward
Berthoud Fire Department

Chuck Willis
Poudre Valley
Rural Fire Department

HEALTH OCCUPATIONS: NURSE ASSISTING

Course Length: One (1) quarter for Certificate in Occupational Education. 15 credit hours. 180 clock hours.

Formal classroom teaching correlated with clinical experience in nursing homes and hospitals.

Potential Opportunities: Entry level employment as nurse aide in public hospitals, private hospitals, nursing homes, veterans hospitals, private homes, and home health agenices. Additionally, it offers opportunity for nursing career exploration, self-improvement, and satisfaction. High school diploma not required. Education will be evaluated. Tenth grade reading level is recommended. Minimum age is 16 years. Good health, physical examination required. Interest in working with people and reliable transportation are necessary.

Additional Student Cost: Uniform, white shoes, wrist watch with sweep second hand.

			Credits
NA	100	Nurse Aide	15

ADVISORY COMMITTEE FOR NURSE ASSISTING

Mrs. Peggy Davis, R.N.
Bonell
Good Samaritan Center

Diana Hunter, R.N.
Windsor Health Care

Mrs. Gloria Green, R.N.
Kenton Manor
Health Care Facility

Mrs. Linda Wood, N.A.
Program Graduate

Mrs. Jean Kidd, R.N.
Memorial Hospital

Joyce Crutchfield, R.N.
Weld County General Hospital

Mrs. Susan Freese, R.N.
Eventide of Greeley

Mrs. Laura Worksham, R.N.
New Life Center

Mr. La Vern Weber
Fairacres Manor

HEALTH OCCUPATIONS: EMERGENCY MEDICAL TECHNICIAN

Course Length: Normally sixteen (16) weeks; 9 credit hours, 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 certificate issued by the Emergency Medical Services Division of the Colorado Department of Health. The certificate must be renewed every three years. EMT Refresher course length: Normally 8 weeks, 4 credit hours, 40 clock hours.

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.

			Credits
HLH	105	Emergency Medical Technician (for initial certificate)	9
HLH	108	EMT Refresher	4

ADVISORY COMMITTEE FOR EMERGENCY MEDICAL TECHNICIAN

Norman Carlson
Weld County Commissioner

John Cullen, M.D.
Family Practice Medical Center

James B. Edwards
Loveland, Colorado

Dennis Elo, M.D.
Loveland Memorial Hospital

Craig Gallagher
Weld County Ambulance Service

Elaine Gilmore
Poudre Valley Memorial Hospital

Robert Kohrmann
Loveland Fire Department

Tom Loser, Ph.D.
Larimer County Voc-Tech Center

John McMaster
Loveland Ambulance Service

Larry Mitchel
Greeley Fire Department

Marian Montoya
Tri-Area Ambulance Service

Jim Seery
Eastman Kodak Company

Pat Walden
GHC Ambulance

Gerald J. Ward
Berthoud Fire Department

Jerry Wones
Weld County Ambulance Service

RADIOLOGIC TECHNOLOGY

(The curriculum for this program is presently under review and is subject to change.)

Course Length: Eight (8) quarters for Associate in Applied Science Degree.

Course Description: This program is designed to train individuals in the art and science of Radiologic Technology. Upon successful completion of the twenty-four month curriculum and registration by the American Registry of Radiologic Technology, the student will be a registered radiologic technologist.

Potential Opportunities: Employment may be in medical hospitals, private doctor's offices, community health agencies, or in industrial concerns where radiation is used for quality control.

First Year

Summer Quarter			Credits
XRT	100	Introduction to Radiologic Technology	1
XRT	101	Radiographic Positioning Laboratory I	4
XRT	106	Medical Ethics	1
XRT	107	Patient Care	2
XRT	111	Clinical Experience I	5
BIO	211	Human Anatomy — Physiology I	5
			18

Fall Quarter			
XRT	102	Radiographic Positioning Laboratory II	4
XRT	112	Clinical Experience II	5
XRT	121	Radiographic Exposure I	3
BIO	212	Human Anatomy — Physiology II	5
HLH	131	Medical Terminology	3
			20

Winter Quarter			
XRT	103	Radiographic Positioning Laboratory III	4
XRT	105	Radiation Protection	2
XRT	108	Medical Terminology	3
XRT	113	Clinical Experience III	7
XRT	122	Radiographic Exposure II	3
			19

Spring Quarter			
XRT	104	Radiographic Positioning IV	4
XRT	114	Clinical Experience IV	10
XRT	115	Film Evaluation I	2
XRT	116	Processing Theory	2
			18

Total First Year **75**

Second Year

Summer Quarter			Credits
XRT	201	Film Evaluation II	2
XRT	209	Special Procedures	3
XRT	211	Clinical Experience I	12
XRT	221	X-Ray Physics I (Atomic Theory, Elec. & Mag.)	2
			19

Fall Quarter			
XRT	202	Film Evaluation III	2
XRT	205	Pathology	2
XRT	212	Clinical Experience II	13
XRT	222	X-Ray Physics II — Applications	2
			19

Winter Quarter			
XRT	206	Radiation Biology	2
XRT	207	Imaging	1
XRT	213	Clinical Experience III	14
XRT	231	Radiological Sciences I	2
			19

Spring Quarter			
XRT	208	Ultrasound, Nuclear Medicine and Radiation Therapy	3
XRT	214	Clinical Experience IV	14
XRT	232	Radiological Sciences II	2
			19

Total Second Year **76**

Total for Two Year Program **151**

ADVISORY COMMITTEE FOR RADIOLOGIC TECHNOLOGY PROGRAM

John Guy
Weld County
General Hospital

Jon Lapp
Weld County
General Hospital

Glenn Hewitt, M.D.
Weld County
General Hospital

Kevin Powers, B.S., R.T.
Weld County
General Hospital

Dennis Kiethly
Weld County
General Hospital

Linda Shupe
Radiology Student Member

RESPIRATORY THERAPY TECHNICIAN PROGRAM

Course Length: Four (4) quarters for Certification of Completion.

Course Description: Respiratory Therapy is an allied health specialty that deals with the treatment, control and care of patients with problems associated with the process of breathing. The technician must be an expert in the therapeutic uses of such things as medical gases, oxygen-administration apparatus, aerosols, mechanical ventilators, chest physiotherapy, resuscitation, and artificial airways.

Potential Opportunities: The technician will be working in small and large respiratory therapy departments in hospitals. Also there is an increasing employment opportunity as home care consultants.

Fall Quarter			Credits
INT	105	Respiratory Therapy Pharmacology	2
SCI	106	Respiratory Therapy Orientation	6
BIO	216	Microbiology	5
BIO	218	Special Studies in Human Anatomy and Physiology	4
MAT	109	Metric System	1
			18

Winter Quarter			
INT	108	Cardiopulmonary Anatomy and Physiology	4
INT	109	Gas, Aerosol, and Humidity Therapy	4
INT	107	Respiratory Science	4
INT	115	Airway Management and Cardiopulmonary Resuscitation	1
INT	101	Clinical Practice I	5
INT	126	Basic E.K.G.	2
			20

Spring Quarter			
INT	111	Clinical Medicine I	4
INT	116	Pulmonary Rehabilitation	1
INT	117	Artificial Ventilation	4
INT	118	Acid Base Balance	2
INT	102	Clinical Practice II	6
			17

Summer Quarter			
INT	112	Clinical Medicine II	4
INT	119	Pulmonary Function Testing	1
INT	103	Clinical Practice III	12
			17

Total **72**

ADVISORY COMMITTEE FOR RESPIRATORY THERAPY TECHNICIAN PROGRAM

Robert Cash, M.D.
Greeley Clinic

Harold Chadwick
Consumer Representative

John Guy
Weld County
General Hospital

Michael Hartnett, CRTT
Brighton Community Hospital

Dora Johnson
University of
Northern Colorado

Diann Lemon, RT
Poudre Valley
Memorial Hospital

Charles Rybar, RRT
Weld County
General Hospital

Ruth Sens, R.N.
Weld County
General Hospital

Irene Tutak
Longmont United hospital

PUBLIC SERVICE DIVISION

CRIMINAL JUSTICE (CRJ)

CRJ 101 INTRODUCTION TO CRIMINAL JUSTICE

An overview of functions and jurisdictions of law enforcement agencies, career opportunities and requirements, curriculum and requirements of program; study and practice in application for employment process. 20 clock hours. Two credits.

CRJ 115 TRAFFIC CONTROL AND ACCIDENT INVESTIGATION

Model traffic ordinance, state laws enforcement, selective enforcement, parking problems, types of traffic accidents, injuries, fire aid, facts, measurements, citations, court procedures, control, pedestrian, etc. Prerequisite: CRJ 135, 150 or permission of instructor. 50 clock hours. Four credits.

CRJ 130 COMMUNITY RELATIONS

Public relations, minority groups, rumors, prejudice, public support, problem areas, meetings, parades, marches, gatherings. 30 clock hours. Three credits.

CRJ 135 REPORT WRITING

Importance of note taking, accurate typewritten reports, forms; use of sketches, diagrams, charts, photos; modus operandi, basic essentials of notes, labeling. 30 clock hours. Three credits.

CRJ 140 JUVENILE PROCEDURES

A study of organization, functions and jurisdiction of juvenile agencies, juvenile statutes, detention court procedure and case dispositions and Colorado Children's Code; methods to combat juvenile crime. 30 clock hours. Three credits.

***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 successful candidates requesting one. 246 clock hours. 29 additional hours are provided to sworn peace officers. Twenty credits.

*The requirement for this course can be alternately met by certification of successful completion of the basic recruit seminar at the Colorado Law Enforcement Training Academy (CLETA).

CRJ 158 FORENSIC PHOTOGRAPHY

Study of basic principles of photography, application of principles of photography to traffic accidents, fire, crimes against persons, crimes against property. Infra-red and video tape techniques, and preparation of photographic evidence for court testimony are included. 40 clock hours. Three credits.

CRJ 200 CRIMINAL LAW AND PROCEDURES

An analysis of origin and structure of common law crimes; federal, state, and local laws and ordinances; recognition and elements of criminal acts; Colorado criminal statutes; interrogation, arrest, search and seizure. 60 clock hours. Five credits.

CRJ 210 CRIMINAL INVESTIGATION

A study of investigation from receipt of complaint through approach to scene, search, collection, and preservation of evidence; recording of data, preparation of reports, and case follow-up. Includes surveillance, sources of information, methods of tracing and locating alleged fugitives, and case investigations. Prerequisite: CRJ 225. 40 clock hours. Three credits.

CRJ 215 EVIDENCE I

A study of law evidence; matters of opinion, fact, expert opinion, physical and oral evidence; rules of evidence including relevancy, competency, direct and circumstantial evidence; hearsay. Prerequisite: CRJ 150, 200 or permission of instructor. 40 clock hours. Three credits.

CRJ 225 EVIDENCE II

Continuation of CRJ 215, collection, identification, and preservation of evidence; and submissions of evidence for lab examination and presentation in court. 40 clock hours. Three credits.

CRJ 231 COURT PROCEDURES

Procedural aspects of courts particularly as law enforcement office is involved. A courtroom setting is employed for presentation of evidence. Includes testifying in court, court practices, cross-examination by defense attorneys, court rulings on admission of evidence, testimony; execution of search warrants; affidavits, etc. Prerequisite: CRJ 225 or permission of instructor. 50 clock hours. Five credits.

CRJ 240 CONSTITUTIONAL LAW SEMINAR

A review of recent Supreme Court rulings relating to performance and responsibilities of law enforcement functions. 30 clock hours. Three credits.

CRJ 251-255 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-five credits.

FIRE SCIENCE (FS)

FS 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. 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. 30 clock hours. Three credits.

FS 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. 30 clock hours. Three credits.

FS 106 FIRE FIGHTING TACTICS AND STRATEGY

Review of fire chemistry, equipment and manpower; basic fire fighting tactics and strategy; methods of attack, preplanning fire problems. 30 clock hours. Three credits.

FS 108 FIRE HYDRAULICS

Review of basic mathematics, hydraulic laws and formulas as applied to the fire service, application of formulas and mental calculation to hydraulic problems, water supply problems, underwriters' requirements for pumps. 30 clock hours. Three credits.

FS 110 FIRE APPARATUS AND EQUIPMENT

Driving laws, driving techniques, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment; apparatus maintenance. 30 clock hours. Three credits.

FS 190 ADMINISTRATION OF JUSTICE AND COURT PROCEDURES

Study of processes of criminal justice and procedures of local, state, and federal courts; organization and jurisdiction. Criminal justice in Colorado, conduct of trials, right of accused, motions and appeals studied. 30 clock hours. Three credits.

FS 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, public relations as affected by fire prevention. Prerequisite: FS 100. 30 clock hours. Three credits.

FS 204 RELATED CODES AND ORDINANCES I

Familiarization with national, state and local laws and ordinances which influence the field of fire prevention, with emphasis on building codes. 30 clock hours. Three credits.

FS 205 RELATED CODES AND ORDINANCES II

Continuation of Related Codes and Ordinances I with an emphasis on life safety and fire prevention codes. Prerequisite: FS 204. 30 clock hours. Three credits.

FS 206 RESCUE PRACTICES

Rescue practices, rescue skills and techniques; rescue tools and equipment with emphasis on auto accident extraction; building collapse, cave-in and landslide and other rescue problem procedures. 30 clock hours. Three credits.

FS 207 APPLIED CHEMISTRY FOR FIREMEN

A basic practical course in chemistry designed specifically for firemen. Various materials which the firemen encounter will be discussed. 50 clock hours. Five credits.

FS 208 HAZARDOUS MATERIALS I

A review of basic chemistry, storage, handling, laws, standards and fire fighting practices pertaining to hazardous materials. Prerequisite: FS 207. 30 clock hours. Three credits.

FS 209 HAZARDOUS MATERIALS II

Continuation of the study of hazardous materials covering storage, handling laws, standard and fire fighting practices with emphasis on fire fighting and control at the company officer level. Prerequisite: FS 208. 30 clock hours. Three credits.

FS 212 FIRE PROTECTION EQUIPMENT AND SYSTEMS

Portable fire extinguishing equipment requirements. Sprinkler systems, types, installation and maintenance and special protection systems for various hazards. 30 clock hours. Three credits.

FS 214 FIRE DEPARTMENT ADMINISTRATION

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

FS 216 PRIVATE FIRE PROTECTION ALARM SYSTEM

An analysis of private protection and alarm systems. Course covers organization and operation of private fire brigades and complete water system layouts. A study and evaluation of fire detection, alarm and supervisory systems. Prerequisite: FS 212. 30 clock hours. Three credits.

FS 218 FIRE INVESTIGATION

Introduction to arson and 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. 30 clock hours. Three credits.

FS 220 FIRE INSURANCE

An analysis of the fire insurance rating structure. Elements involved in establishing insurance rates. The grading system for cities and town, the classification of cities and town, and hazard factors in occupancy, construction and exposures. 30 clock hours. Three credits.

FS 230 BUILDING CONSTRUCTION/BLUEPRINT READING FOR FIREFIGHTERS

This course will give the student a working knowledge of blueprint reading and sketching as applied to the construction industry. Building terms and abbreviations are taught along with symbols and conventions for other major trades. Construction features, beginning with details of component parts and advancing to a complete set of working drawings. Load principles, shear forces, stress and weakening due to fires are discussed. 30 clock hours. Three credits.

HEALTH OCCUPATIONS

NA 100 NURSES' AIDE

Designed to cover a basic core of knowledge and skills to prepare students for hospital, nursing home, and private home employment. Basic personal care stressed emphasizing meeting physical and emotional needs of patients; orientation to advanced patient care, and home health aide duties. 180 clock hours, theory and clinical application. Fifteen credits.

HLH 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; and legal aspects of emergency care, the ambulance and its equipment, cardiopulmonary resuscitation. 93 clock hours. Nine credits.

HLH 108 EMT REFRESHER

An eight-week course for refreshing and re-certifying holders of Colorado Basic EMT certificates. 40 clock hours. Four credits.

HLH 127 CARDIOPULMONARY RESUSCITATION (CPR)

Designed to qualify the successful student for the Basic Rescuer certificate issued by the American Heart Association. Covers basic cardiopulmonary rescuscitation and emergency cardiac care from the theory and practice standpoints. Included are: one man CPR, two man CPR, infant resuscitation and choking. 10 clock hours. One credit.

HLH 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. 14 clock hours. One credit.

HLH 131 MEDICAL TERMINOLOGY

Builds skills in verbal and written communication of medical terms. A basic study of medical words, including defining, spelling, pronouncing, as well as analysis of component parts. Practical use of words developed through audio-visual aids and discussion. 30 clock hours. Three credits.

The following classes are offered upon the request of 12 students or more: (Additional courses could be designed to meet continuing education needs of the community.)

HLH 106 PHARMACOLOGY REVIEW FOR NURSES

Offers a review of the therapeutic uses, actions, side effects, dosages, and routes of administration of selected drugs. Reinforces competent research technique for drug administration information, knowledge of nursing implications, and desired patient teaching. Prerequisite: Licensed nurse. 40 clock hours. Four credits.

HLH 115 DEALING WITH BEHAVIORAL PROBLEMS IN THE AGED

Promotes understanding of the social-emotional needs of the aged, and the ability to differentiate between normal and abnormal behavior. Opportunity is given to discuss particular behavioral problems seen in the aged in health care settings. Designed particularly for nursing home staff; approved for educational credit toward license renewal for nursing home administrators. 20 clock hours. Two credits.

HLH 116 NURSES AND THE LABORATORY

Strengthens understandings of the nurses' role in laboratory tests, with emphasis on the most commonly ordered tests in each laboratory department. Methodology is not taught. Prerequisite: Licensed nurse or instructor's permission. 20 clock hours. Two credits.

HLH 117 TEAM LEADING IN THE NURSING HOME

Designed especially for the Licensed Practical Nurse with team leading responsibilities in the nursing home.

Instruction given in the planning, supervision, and evaluation of patient care using principles of problem solving and of leadership and group dynamics. Prerequisite: Licensed nurse. 20 clock hours. Two credits.

HLH 125 SURGICAL ASEPSIS I

Basic techniques are taught, such as might be used in a physician's office, to prevent contamination of dressings, solutions, and instruments. Laboratory practice in surgical scrub, gown, mask techniques, and handling of sterile packs, instruments, etc. 10 clock hours. One credit.

HLH 126 INTRODUCTION TO AUDIOLOGY

Provides a basic understanding of the anatomy, physiology, and pathology of the hearing mechanism, as well as teaching basic audiometric testing skills. 35 clock hours, including 5 laboratory practice hours. Three credits.

RADIOLOGIC TECHNOLOGY (XRT)

(The curriculum for this program is presently under review and is subject to change).

XRT 100 INTRODUCTION TO RADIOLOGIC TECHNOLOGY

Introduces the student to radiologic technology; program guidelines, history of radiology, health care delivery, organizational structure of clinical facilities, professional organizations, accreditation — certification — licensure, and professional development. Ten clock hours. One credit.

XRT 101 RADIOGRAPHIC POSITIONING/LABORATORY I

Designed to ensure the student gains the ability and confidence he/she needs to perform the radiographic examination he/she will be expected to handle in the clinical setting; fundamentals of positioning, positioning nomenclature, positioning of the thoracic contents, abdomen and contents, and cranium. 50 clock hours. Four credits.

XRT 102 RADIOGRAPHIC POSITIONING/LABORATORY II

A continuation of Radiographic Positioning/Laboratory I. Consideration will be given to the structure and positioning of the vertebral column. 50 clock hours. Four credits.

XRT 103 RADIOGRAPHIC POSITIONING/LABORATORY III

A continuation of Radiographic Postioning/Laboratory I and II. Consideration will be given to the structure and positioning of the upper and lower extremities, shoulder and pelvic girdles. 50 clock hours. Four credits.

XRT 104 RADIOGRAPHIC POSITIONING/LABORATORY IV

A continuation of Radiographic Positioning I, II and III. Consideration will be given to the structure and positioning of the boney thorax and skull. 50 clock hours. Four credits.

XRT 105 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. 20 clock hours. Two credits.

XRT 106 MEDICAL ETHICS

To acquaint the student with good ethical principles, definition of ethics, confidentiality of information, interpersonal relationships, and medicolegal implications. Ten clock hours. One credit.

XRT 107 PATIENT CARE

To acquaint the student to aspects of patient care; the technologist and the patient, specific nursing procedures, contrast medias, and patient preparations. 20 clock hours. Two credits.

XRT 108 MEDICAL TERMINOLOGY

This course is designed to develop skills in medical terminology as applied to the specialty of radiology. 30 clock hours. Three 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 allowed to participate in this course. 150 clock hours. Five credits.

XRT 112 CLINICAL EXPERIENCE II

Continuation of supervised clinical education under the direct supervision of a qualified radiologic technologist. 150 clock hours. Five credits.

XRT 113 CLINICAL EXPERIENCE III

Continuation of supervised clinical education under the direct supervision of a qualified radiologic technologist. 210 clock hours. (210 clinical hours are required — may be scheduled over a 12 week period.) Seven credits.

XRT 114 CLINICAL EXPERIENCE IV

Continuation of supervised clinical education under the direct supervision of a qualified radiologic technologist. 300 clock hours. (300 clinical hours are required — may be scheduled over a 12 week period.) Ten credits.

XRT 115 FILM EVALUATION I

This course is designed to develop 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. 20 clock hours. Two credits.

XRT 116 PROCESSING THEORY

Designed to identify 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. 20 clock hours. Two credits.

XRT 121 RADIOGRAPHIC EXPOSURE I

To give the student a thorough understanding of the theory of the radiographic prime factors, factors influencing radiographic qualities, conditions influencing exposure values and review of mathematics applied to radiographic exposure and to correlate this knowledge to practical application. 30 clock hours. Three credits.

XRT 122 RADIOGRAPHIC EXPOSURE II

A continuation of Radiographic Exposure I, to include beam restricting devices, attenuating devices, accessory equipment, technique charts and their formation, and to correlate this knowledge to practical application. 30 clock hours. Three credits.

XRT 202 FILM EVALUATION II

The student will present radiographs for group evaluation. Emphasis will be placed on radiographic quality, positioning, and anatomy demonstrated. 20 clock hours. Two credits.

XRT 202 FILM EVALUATION III

A continuation of Film Evaluation II. 20 clock hours. Two credits.

XRT 205 PATHOLOGY

Designed to give the student a basic understanding of the definition and types of diseases. Consideration will be given to common illnesses of the body systems and their effect on the production of a diagnostic radiograph. 20 clock hours. Two credits.

XRT 206 RADIATION BIOLOGY

This course is designed to assure that the student has an understanding of the effects of ionizing radiation in biologic systems, and the public right to minimal radiation exposure. 20 clock hours. Two credits.

XRT 207 IMAGING

A study of image intensification, recording media, and special techniques in radiography. Ten clock hours. One credit.

XRT 208 ULTRASOUND, NUCLEAR MEDICINE AND RADIATION THERAPY

This course is designed to give the student a basic understanding of diagnostic and therapeutic principles of ultrasound, nuclear medicine and radiation therapy. 30 clock hours. Three credits.

XRT 209 SPECIAL PROCEDURES

Designed to acquaint the student with the theory, equipment and methodology of selected special procedures. 30 clock hours. Three credits.

XRT 211 CLINICAL EXPERIENCE I

The student in the clinical setting will perform radiographic procedures under the direct supervision of a technologist or radiologist.

Unsatisfactory clinical performance will result in the student being terminated from the curriculum. Only full-time radiologic technology students are allowed to participate in this course. 360 clock hours. (360 total hours are required — may be scheduled over a 12 week period). 12 credits.

XRT 212 CLINICAL EXPERIENCE II

Continuation of XRT 211. 390 clock hours. (390 total hours are required — may be scheduled over a 12 week period). 13 credits.

XRT 213 CLINICAL EXPERIENCE III

Continuation of XRT 212. 420 clock hours. (420 total hours are required — may be scheduled over a 12 week period). 14 credits.

XRT 214 CLINICAL EXPERIENCE IV

Contination of XRT 213. 420 clock hours. (420 total hours are required — may be scheduled over a 12 week period). 14 credits.

XRT 221 X-RAY PHYSICS I

Designed to impart an understanding of basic x-ray physics to include: unit of measurement, mechanics, structure of matter, electrostatics, magnetism and electrodynamics. 20 clock hours. Two credits.

XRT 222 X-RAY PHYSICS II — APPLICATIONS

A continuation of x-ray Physics I. Consideration will be given to electromagnetism, rectification, production and properties of x-rays, x-ray tubes and x-ray circuits. 20 clock hours. Two credits.

XRT 231 RADIOLOGICAL SCIENCES I

Designed to be a review of all courses and clinical work in radiologic technology in preparation for the American Registry of Radiologic Technologists' examination. Diagnostic examination will be given to identify weak academic areas followed by recommendations for remedial study programs. 20 clock hours. Two credits.

XRT 232 RADIOLOGICAL SCIENCES II

Continuation of Radiological Sciences I with completion of remedial study programs. Also, theories of employment will be discussed. 20 clock hours. Two credits.

RESPIRATORY THERAPY (INT)

INT 101 CLINICAL PRACTICE I

To demonstrate physiologic rationale and indications for gas, aerosol, and humidity therapy. Also to know safe, effective, sterile endotracheal and nasotracheal suctioning techniques, and to acquire skills necessary to artificially ventilate and circulate patients in respiratory-cardiac failure. Prerequisite: INT 106. 150 clock hours. Five credits.

INT 102 CLINICAL PRACTICE II

Students will acquire skills and understanding necessary to administer proper and effective artificial ventilation. They will be able to give assistance to medical staff in initiation and maintaining continuous ventilation therapy. Students will be able to do proper arterial blood gas punctures and know the possible contraindications, complications and adverse reactions. Prerequisite: INT 101. 180 clock hours. Six credits.

INT 103 CLINICAL PRACTICE III

Continuation of Clinical Practice II. Prerequisite: INT 102. 360 clock hours. Twelve credits.

INT 105 RESPIRATORY THERAPY PHARMACOLOGY

Designed to acquaint students with the awareness of primary pharmacological effects, adverse reactions and administration of R.T. drugs. 20 clock hours. Two credits.

INT 106 RESPIRATORY THERAPY ORIENTATION

Students will be able to give basic care to in-hospital patients, and be aware of techniques and vocabulary in communicating. 140 clock hours. Six credits.

INT 107 RESPIRATORY SCIENCE

Students will be able to achieve an understanding of methods of measurements, preparation of solutions, and interpretation of statistical terms used in the practice of respiratory therapy. The student will also demonstrate an understanding of applied math, physics, and chemistry relating to respiratory therapy. Prerequisites: MAT 109, INT 105. 40 clock hours. Four credits.

INT 108 CARDIOPULMONARY ANATOMY & PHYSIOLOGY

Specialized course for knowing and applying the anatomy and physiological functions of the heart, lungs, and circulatory systems as they relate to respiratory therapy. Prerequisites: BIO 218. 40 clock hours. Four credit hours.

INT 109 GAS, AEROSOL, AND HUMIDITY THERAPY

To familiarize students with the indications, contradications, and safe administration procedures for the following medical gases: oxygen, carbon dioxide, helium and oxygen mixtures and their physical properties. 40 clock hours. Four credits.

INT 111 CLINICAL MEDICINE I

To have students become acquainted with the basic concepts of medical practices as they relate to respiratory care and to know basic pathological processes as it applies to all diseases covered in this course. The students will be able to understand each disease from an etiological, symptomatic, diagnostic, therapeutic, and prognostic viewpoint. Prerequisite: INT 108. 36 clock hours. Four credits.

INT 112 CLINICAL MEDICINE II

Continuation of Clinical Medicine I. Prerequisite: INT 111. 36 clock hours. Four credits.

INT 115 AIRWAY MANAGEMENT AND CARDIOPULMONARY RESUSCITATION

A study of the most common forms of upper airway obstruction and its correction. Also this course will give an understanding to the immediate assessment of patient needs and the institution of life-saving procedures. Prerequisites: BIO 218. 10 clock hours. One credit.

INT 116 PULMONARY REHABILITATION

To know and apply methods of chest physical therapy, breathing exercises, postural drainage, percussion and vibration and related home care of the patients. 12 clock hours. One credit.

INT 117 ARTIFICIAL VENTILATION

To understand basic concepts of ventilation, the rationale, indications and contraindications for artificial ventilation. Prerequisite: INT 109. 40 clock hours. Four credits.

INT 118 ACID/BASE BALANCE

To know and relate the concepts of pH, PaCO2 and PaO2, and abnormalities related to acid base disturbances such as acidoses and alkaloses. The students will be able to operate blood gas machines and related equipment of acid base balance. Prerequisite: INT 108. 20 clock hours. Two credits.

INT 119 PULMONARY FUNCTION TESTING

Students will have an understanding of the indications for pulmonary function testing in regard to diagnoses, disability evaluation and Public Health. They will acquire abilities to demonstrate basic spirometry, lung volumes and diffusion capacities testing techniques. Prerequisite: INT 108. 12 clock hours. One credit.

INT 126 BASIC E.K.G.

Students will be able to explain a normal electrocardiographic tracing and its relationship to the hemodynamic activity of the heart. Also the junctional anatomy, hemodynamic activity, and the neuromuscular pathways of the heart will be reviewed. Prerequisites: BIO 218. 20 clock hours. Two credits.

TECHNICAL DIVISION PROGRAMS

The Technical Division, in addition to the programs listed below, has the capability to work individually or collectively with employers to offer in-service or upgrading training.

The training or classes may be conducted in-plant or on campus, and may range in length of time from a number of hours or quarters to a one or two-year certificate program or to the Associate in Applied Science Degree.

The Technical Division offers the following programs:

Agriculture Co-operative Sales & Service Technology	(two-year AAS Degree or four-quarter certificate)
Aviation Technology	(two-year AAS Degree or three-quarter certificate)
Electro-Mechanical Technology	(two-year AAS Degree)
Electronics Technology	(two-year AAS Degree)
Mechanical/Civil Engineering Technology	(two-year AAS Degree)

AGRICULTURE CO-OPERATIVE SALES & SERVICE TECHNOLOGY

Course Length: Four (4) quarters for Certificate of Completion. Seven (7) quarters for Associate in Applied Science Degree.

Potential Opportunities: This program is designed to give the student the necessary skill and knowledge to begin work and to advance to the limits of his capacities. There are over 2,000 active agriculture cooperatives in and around Colorado. Many of these need mid-managers and also some need top management. It will admittedly take several years of hard work and study after going on-the-job to become a manager of an agriculture cooperative. However, for the qualified person, the potential in agriculture cooperatives is only limited by that individual's ambition.

First Year:

Fall Quarter:			**Credits**
AGR 111	Agriculture Co-op Careers I		3
AGR 116	Introduction to Cooperative Organization		5
BUS 155	Business Communications I		5
BUS 141	College Bookkeeping I	(5)	
	OR		
ACC 101	Principles of Accounting	(5)	
	Total Fall Quarter		**18**
Winter Quarter:			
AGR 115	Agriculture Economics		5
AGR 112	Co-op Careers II (Agriculture Sales & Customer Relations)		5
BUS 156	Business Communications II		3
MGT 101	Salesmanship	(5)	
	OR		5
MGT 106	Principles of Retailing	(5)	
	Total Winter Quarter		**18**
Spring Quarter:			
AGR 135	Agriculture on the job training — 10 Lecture, 325 OJT		10
	Individualized Course		2
	Total Spring Quarter		**12**
Summer Quarter:			
AGR 136	Agriculture on the job training — 10 Lecture, 325 OJT		10
	3 Individualized Courses		6
	Total First Year		**64**

Individualized Courses: During the spring and summer quarters, the student will complete at least eight credits of individualized instruction. These courses will be selected with the approval of his advisor. The following list of courses is given as a sample of the types of courses which are available to the student. Other courses may be added as the need arises.

AGR 126	Petroleum	(2)	
AGR 127	Tires, Batteries and Accessories	(2)	
AGR 128	L.P. Gas	(2)	
AGR 129	L.P. Carburetion	(2)	
AGR 137	Agriculture Chemicals	(2-3)	
AGR 138	Paint	(2)	
AGR 139	Fertilizer	(3)	
AGR 145	Fertilizer Bulk Blending	(2-3)	
AGR 146	Anhydrous Ammonia	(2-3)	
AGR 147	Corn Production	(3)	
AGR 148	Feed	(2)	
AGR 149	Profitable Pork Production	(2)	
AGR 155	Cooperative Organizations	(2)	
AGR 156	Basic Management	(2)	
AGR 157	Modern Salesmanship	(2)	
AGR 159	Animal Health	(2)	

After the student successfully completes the program, he will be awarded a certificate of completion. If a student wishes to receive the Associate in Applied Science Degree, he must successfully complete the following:

Second Year			**Credits**
AGR 118	Fertilization and Soils		5
MGT 205	Credit Management		5
MGT 215	Personnel Management		5
MGT 221	Principles of Marketing (service area)	(5)	
	OR		5
BUS 247	Business and Banking (credit area)	(5)	
MGT 235	Principles of Management		5
AGR 235	Agriculture on the job training		10
	Additional 2 individualized courses		5

Two courses to be selected from the following with advisor approval:

EDP 101	Introduction to Data Processing	(5)	
ACC 101	Principles of Accounting I	(5)	
ACC 102	Principles of Accounting II	(5)	
AGR 117	Feeds and Feeding	(5)	10
AGR 119	Feed Processing and Grain Handling	(5)	
AGR 125	Farm Chemicals	(5)	
BUS 255	Business Law	(5)	
BUS 246	Financial Management	(5)	
	Total Second Year		**50**

ADVISORY COMMITTEE FOR AGRICULTURE COOPERATIVE SALES & SERVICE TECHNOLOGY

Doug Burr
Agland, Inc.

Clarence Carlson, Director
Adams County Co-op

Don Dreyer, Director
Adams County Co-op

Gerald Mueller
Farmland Industries

Z. G. Spaulding
Agland, Inc.

Bob Wilcox
Agland, Inc.

AVIATION TECHNOLOGY

Course Length: Usually three (3) quarters for Certificate Program or six (6) quarters for Associate in Applied Science Degree. (May be shorter if student is eligible for 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 in corporation flying, charter work, and the airlines.

Note: Additional charges are made for rental of aircraft for flight labs. Aims Community College does not own airplanes but makes arrangements for flight experience at the Weld County Airport. (See Course Descriptions for the various flight labs). The Aviation Department will have information detailing the flying expense of the courses.

Credit for previous flying experience:

With the approval of the Aviation Department credit may be awarded as listed below:

FAA License	**Aims Courses**
Private Pilot License	AVT 105 Aviation Seminar AVT 106 Private Ground School I AVT 107 Private Ground School II AVT 115 Private Flight Simulator AVT 116 Private Flight Lab
Instrument Rating	AVT 117 Commercial Flight Lab I AVT 118 Commercial Flight Lab II AVT 205 Instrument Ground School AVT 215 Instrument Flight Simulator AVT 216 Instrument Flight Lab
Commercial Pilot License	AVT 206 Commercial Ground School AVT 217 Commercial Flight Lab III
Certified Flight Instructor	AVT 218 Certified Flight Instructor
Instrument Flight Instructor	AVT 219 Instrument Flight Instructor
Multi-Engine Rating	AVT 225 Multi-Engine Transition Lab
Basic Ground Instructor	AVT 207 Basic Ground Instructor
Advanced Ground Instructor	AVT 208 Advanced Ground Instructor
Instrument Ground Instructor	AVT 209 Instrument Ground Instructor

ONE YEAR CERTIFICATE IN AVIATION

Classroom: (3 quarters)		**Credits**
AVT 105	Aviation Seminar	2
AVT 106	Private Ground School I	3
AVT 107	Private Ground School II	3
AVT 205	Instrument Ground School	6
AVT 206	Commercial Ground School	3
Flight Courses (Conducted at Airport):		
AVT 116	Private Flight Lab	5
AVT 117	Commercial Flight Lab I	5
AVT 118	Commercial Flight Lab II	5
AVT 216	Instrument Flight Lab	5
AVT 217	Commercial Flight Lab III	5
AVT 218	Certified Flight Instructor	5
Flight Simulator Courses:		
AVT 115	Private Flight Simulator	5
AVT 215	Instrument Flight Simulator	5
	Total	**57**

ASSOCIATE IN APPLIED SCIENCE DEGREE IN AVIATION TECHNOLOGY

Classroom:		**Credits**
AVT 105	Aviation Seminar	2
AVT 106	Private Ground School I	3
AVT 107	Private Ground School II	3
AVT 205	Instrument Ground School	6
AVT 206	Commercial Ground School	3
Flight Courses (Conducted at Airport):		
AVT 116	Private Flight Lab	5
AVT 117	Commercial Flight Lab I	5
AVT 118	Commercial Flight Lab II	5
AVT 216	Instrument Flight Lab	5
AVT 217	Commercial Flight Lab III	5
AVT 218	Certified Flight Instructor	5
AVT 219	Instrument Flight Instructor	3

Flight Simulator Courses:

AVT	115	Private Flight Simulator	5
AVT	215	Instrument Flight Simulator	5

Aviation Electives:

AVT	119	Conventional Gear Transition Lab	(2)
AVT	207	Basic Ground Instructor	(2)
AVT	208	Advanced Ground Instructor	(2)
AVT	209	Instrument Ground Instrucor	(2)
AVT	225	Multi-Engine Transition Lab	(3)

General Courses:

CON	102	Introduction to Writing	5
EAS	105	Earth Science	5
PSY	101	General Psychology	5

One course to be selected from the following communications courses:

CON	103	Research and Communication	(5)	
JOU	111	Newswriting I	(5)	
REA	101	Reading and Study Skills for College	(5)	
REA	106	Speed Reading	(3)	3-5
SPE	115	Speech Communications	(5)	
SPE	116	Public Speaking	(3)	
SPE	117	Oral Interpretation	(3)	
VTR	105	Industrial Communications	(3)	
VTR	107	Elements of Technical Writing	(3)	
		Any Literature Course	(3-5)	

Two courses to be selected from the following math courses:

MAT	111	Intermediate Algebra	(5)	
MAT	112	College Algebra	(5)	
MAT	113	College Trigonometry	(5)	5-6
VTR	101	Basic Technical Math	(6)	
VTR	102	Applied Technical Math	(6)	

One course to be selected from the following physics courses:

PHY	100	Fundamentals of Physics	(5)	
PHY	101	Introductory College Physics	(5)	5
VTR	108	Industrial Physics I	(5)	

	Physical Education	5
	Electives	6
	Total Required Aviation Courses	**60**
	Total Electives and General Courses	**44-48**
	Total	**104-108**

ADVISORY COMMITTEE FOR AVIATION TECHNOLOGY

Robert Anderson
Greeley National Bank

Edward Beegles
Beegles Aircraft

George Hopper
FAA Designated Pilot Examiner

Bud Johnson
United Airlines

Dr. Roy Shore, M.D.
FAA Medical Examiner

Joe Thompson
Top Notch Aerial Applicator

ELECTRO-MECHANICAL TECHNOLOGY

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Potential Opportunities: This program is designed to produce an employable person trained in electro-mechanics who can work effectively with tradesmen, engineers, and production and customer service personnel in business and industry. Primary emphasis will be to prepare the graduate for activities relating to installation, troubleshooting and maintenance of electrical/electronic devices and their associated mechanical devices. Previous experience with mathematics will be helpful, but may be obtained through preparatory classes within the college. This program is intended as an option to the Electronics Technology program, but includes courses offered from the Mechanical and Civil Engineering Technology program and courses unique to either of the aforementioned programs.

First Year:			**Credits**
ELT	121	DC Fundamentals	5
ELT	23	AC/DC Circuit Analysis	5
*ELT	143	Electronic Circuits and Applications	10
ELM	101	Print Reading I	3
ELM	102	Print Reading II	3
VTR	101	Basic Technical Mathematics	6
VTR	102	Applied Technical Mathematics	6
ELM	105	Mechanisms and Components	6
VTR	107	Elements of Technical Writing	3
VTR	108	Industrial Physics I	5
VTR	109	Industrial Physics II	5
		Total First Year	**57**

Second Year:				**Credits**
MCE	206	Hydraulics and Pneumatics		5
ELM	205	AC-DC Machinery and Controls		5
MCE	207	Materials and Processes		4
*ELT	281	Computers I		5
ELM	206	Instrumentation and Controls		5
ELM	207	Electro-Mechanical Machines and Systems		8
ELT	266	Electronic Design and Fabrication		3
ELT	267	Introduction to New Electronic Industry Developments		3
VTR	106	Industrial Economics		3
VTR	206	Industrial Relations		3
VTR	208	Computer Systems and Applications	(4)	
		OR		4-5
*ELT	282	Computers II	(5)	
		(Student may take this course in lieu of VTR 208)		
		Total Second Year		**48 or 49**
		Total		**105 or 106**

*Credit for the asterisked courses may be obtained via adult (evening) offerings. See the course descriptions for details. High School electronics programs (depending upon content) may also obtain credit.

ADVISORY COMMITTEE FOR ELECTRO-MECHANICAL TECHOLOGY

Robert Anderson
Woodward Governor

Russ Dieterle
Eastman Kodak

Ron Fazzio
Hewlett-Packard

Lloyd McConnell
Raincat Irrigation

Robert Shey
Hydraulics Unlimited

ELECTRONICS TECHNOLOGY

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Potential Opportunities: Students can expect to secure entry level positions as research and development technicians, engineering aides, field service representatives, production test technicians, electronic tooling maintenance technicians, design and fabrication technicians, metrology laboratory technicians, or systems technicians for computers, controls, and communications. A good mathematics background through algebra is recommended. Advanced standing is possible if the applicant has had high school electronics, adult school electronics, or military electronics schooling. Advanced standing is determined on an individual basis.

First Year:			**Credits**
ELT	141	Introduction to Electronics (or ELT 120, 121)	10
ELT	142	AC/DC CKT Analysis (or ELT 122, 123)	10
ELT	143	Circuits and Applications (or ELT 124, 125)	10
ELT	146	Electronics Print Reading & Sketching	3
*VTR	105	Industrial Communications	3
VTR	107	Elements of Technical Writing	3
COS	100	Introduction to Computers/Basic Language	3
		Electives (Advisor approved Math/Science, Physics generally recommended.)	10
		Total First Year	**52**

Second Year:

ELT	255	Linear IC's and Sensors	5
*ELT	266	Electronic Design and Fabrication	3
*ELT	267	Introduction to New Electronic Industry Developments	3
*ELT	268	Practical Solid-State Troubleshooting	3
ELT	271	Communications I	5
ELT	272	Communications II	5
ELT	281	Computers I	5
ELT	282	Computers II	5
*VTR	106	Industrial Economics	3
*VTR	206	Industrial Relations	3
		Electives (May be Computers III, Communications III, Math/Science, other ELT, ELM, MCE, EDP offerings with advisor approval.)	10
		Total Second Year	**50**
		Total	**102**

*May be waived if applicant has 3-5 years appropriate experience in Electronics or closely related industry. Assessed on an individual basis. Advisor approved courses are selected in lieu of waived courses. Advanced standing is possible if the applicant has had high school electronics, adult school electronics or military electronics schooling. Advanced standing is determined on an individual basis.

ADVISORY COMMITTEE FOR ELECTRONICS TECHNOLOGY

Howard Coffman
Woodward Governor Co.

Wes Byers
Kodak of Colorado

Clarence Laber
Hewlett-Packard Co.

Harold Swanson
Mountain Bell

Roland Carl
International Business Machines (IBM)

DRAFTING

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

A special Introduction to Drafting course, DRA 100, is offered to help students determine their aptitude as well as their interest in the drafting field.

A series of six (6) courses are offered as part of the two-year Mechanical-Civil Engineering Technology (MCE) 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 basic skills and his subject matter objective before selecting a particular course. These particular courses have equal counterparts in evening course offerings. Descriptions of these courses may be found in the MCE program section of the catalog.

Specialty offerings are available in the area of Architectural Drafting. There are three architectural courses, DRA 107 and DRA 110, and DRA 113, usually conducted during the evening hours. By meeting minimum enrollment requirements, many courses may be offered during evening hours.

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

Courses in the Aims Drafting program are also available through the secondary Area Vocational School. These courses are offered during the regular high school afternoon 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.

MECHANICAL AND CIVIL ENGINEERING TECHNOLOGY

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Potential Opportunities: The program is designed to prepare a student for activities of a technical nature, usually associated with civil and mechanical engineering. These activities may include drafting, estimating, data gathering, technical reports, structural systems design, surveying, laboratory testing, and other engineering assistance skills. The student will develop design skills; understanding of mathmatics and materials; and techniques relative to human relations, leadership, and obtaining a position. Previous experience in mathematics is helpful, but may be obtained through preparatory courses within the college. Good eyesight, hand dexterity, and a sense of size and shape are also helpful.

Note: The block of Evening Courses, MCE 101, 102, 103 and 104 (16 credits), is equivalent to the block, MCE 111, 112 and 113 (15 credits). MCE 221, 222, 223 and 224 (16 credits) is equivalent to the block MCE 201, 202, and 203 (15 credits).

First Year:

Fall Quarter			**Credits**
MCE	111	Drafting I	5
VTR	105	Industrial Communications	3
VTR	106	Industrial Economics	3
VTR	101	Basic Technical Mathematics	6
		Total Fall Quarter	**17**

Winter Quarter:

MCE	112	Drafting II	5
VTR	107	Elements of Technical Writing	3
VTR	108	Industrial Physics I	5
VTR	102	Applied Technical Mathematics	6
		Total Winter Quarter	**19**

Spring Quarter:

MCE	113	Drafting III	5
MCE	105	Statics & Mechanics	5
VTR	115	Basic Quality Control I	3
VTR	109	Industrial Physics II	5
		Total Spring Quarter	**18**
		Total First Year	**54**

Second YEAR:

Fall Quarter:

MCE	201	Drafting IV	5
MCE	206	Hydraulics & Pneumatics	5
MCE	207	Materials and Processes	4
VTR	205	Industrial Electricity	3
		Total Fall Quarter	**17**

Winter Quarter:

MCE	202	Drafting V	5
MCE	208	Strength of Materials	4
MCE	211	Basic Field Surveying I	2
VTR	206	Industrial Relations	3
VTR	207	Cost & Material Estimating	3
		Total Winter Quarter	**17**

Spring Quarter:

MCE	203	Drafting VI	5
MCE	209	Engineering Problems	5
MCE	212	Basic Surveying II	4
VTR	208	Computer Systems & Applications	4
		Total Spring Quarter	**18**
		Total Second Year	**52**
		Total	**106**

ADVISORY COMMITTEE FOR MECHANICAL AND CIVIL ENGINEERING TECHNOLOGY

James Moore
Kodak of Colorado

Herb Davidson
Zoyiopoulos & Associates

Danny Graham
Colorado Highway Dept.

Herb Peralez
Miner & Miner
Consulting Engineers

Art Uhrich
C-E Maguire

Mike Robnett
Miner & Miner
Consulting Engineers

Bob Thomas
C-E Maguire

TECHNICAL DIVISION

AGRICULTURE COOPERATING SALES & SERVICE TECHNOLOGY (AGR)

AGR 111 AGRICULTURE CO-OP CAREERS I

Designed to give students basic knowledge about various areas in cooperative business, to help students decide in which way they wish to concentrate. Fertilizer and agriculture credit will be covered. 30 clock hours. Field trips included. Three credits.

AGR 112 AGRICULTURE CO-OP CAREERS II (Agriculture Sales & Customer Relations)

Continuation of AGR 111. Feeds, tires, batteries and accessories will be covered briefly. The major emphasis will be sales procedure and management styles needed by a co-op employee. 50 clock hours. Five credits.

AGR 115 AGRICULTURE ECONOMICS

Approaches agriculture economics from a practical standpoint. Covers law of supply and demand as related to farm prices, water rights and regulation, independents, cooperative organization, buy-sell, futures hedging, etc., and land banks and other credit organizations. 50 clock hours. Field trips included. Five credits.

AGR 116 INTRODUCTION TO COOPERATIVE ORGANIZATIONS AND AGRI-BUSINESS

Topics include orientation to prospective employment, organization and structure of cooperatives and corporations, history, impact on American business, and opportunities in cooperatives. 50 clock hours. Field trips included. Five credits.

AGR 117 FEEDS AND FEEDING

General introduction to basic feeds and their properties and basic livestock and feeding methods. Evaluation of animals relative to weight gain, health, etc. 50 clock hours. Five credits.

AGR 118 FERTILIZATION AND SOIL

General overview of soil and nutrients and their makeup. Soil testing and analyzing included. 50 clock hours. Five credits.

AGR 119 FEED PROCESSING AND GRAIN HANDLING

Basic feed mill operation, feed and grain storage and handling, delivery, and safety procedures. 50 clock hours. Five credits.

AGR 125 FARM CHEMICALS

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

AGR 126 PETROLEUM

This course covers petroleum products sold by most co-ops. It defines the role and job responsibility of a co-op petroleum sales specialist. The four stroke cycle of a spark ignition engine and four cycle diesel engine are briefly covered. The course mainly covers product information, storage, care and operation of equipment and plant, warranties and selling. Two credits.

AGR 127 TIRES, BATTERIES AND ACCESSORIES

Product knowledge is a very important part of a good employee's training. This gives the product knowledge needed in tires, batteries, belts, hoses, shocks needed by a service center or station operator. Replacement warranties and customer relations are also covered. Two credits.

AGR 128 LP GAS

This course contains basic LP gas information pertaining to bulk plant operations, transportation, and product transfer as well as safety procedures. Two credits.

AGR 129 LP CARBURATION

This course provides an overview of the nature, origin and use of LP gas. The carburation system is taught beginning with engine operation covering fuel and combustion. The parts of the carburation system covered are the air cleaner, ventilation, governors, ignition circuit, adjustments, tests and trouble shooting. Two credits.

AGR 135, 136, 235 AGRICULTURE ON THE JOB TRAINING

Students work a minimum of 325 hours in an approved work program. Ten credits per course.

AGR 137 AGRICULTURE CHEMICALS

Agriculture Chemicals is designed to give students a basic understanding of farm chemical terminology, contents of a chemical label, safety rules and factors which influence the performance of some chemicals. 20 or 30 clock hours. Two or three credits.

AGR 138 PAINT

This course is designed to enable the student to correctly assist the customer in selecting paint, wallcoverings, and tools to complete a finishing job. The student will also learn methods of estimating material required and how to diagnose common paint problems. Two credits.

AGR 139 FERTILIZER

This course is designed to lead the student to a basic understanding of soil and soil nutrients. Using this knowledge, combined with soil test results, a proper combination of fertilizer nutrients can be recommended. This course makes use of filmstrip, cassette, and student manual. 30 clock hours. Three credits.

AGR 145 FERTILIZER BULK BLENDING

This course covers the blending of fertilizer to use on a per acre basis, consolidating plant equipment, inventory and mathematics used in formulating blends. For a usable understanding, students should spend lab time observing the actual process at a fertilizer plant. This time can be arranged with instructor. Prerequisite: AGR 139. 20 or 30 clock hours. Two or three credits.

AGR 146 ANHYDROUS AMMONIA

This course begins with the history of ammonia and progresses through the chemistry, production and application of the most widely used nitrogen fertilizer today. Consideration is given to use of ammonia in growing the following crops: corn, wheat and sugar beets. Safety in handling and preventive maintenance of equipment is also covered. Prerequisite: An understanding of soils or AGR 139. 20 or 30 clock hours. Two or three credits.

AGR 147 CORN PRODUCTION

Designed to give the student an understanding of how the corn plant grows and how it fits into the farming system. Seed selection and seedbed preparation are also covered. Application of fertilizer on maximum yields coupled with water and soil fertility management gives the student a basic understanding of production of corn for profit. Use of corn as a feed and protection from insects and diseases are also covered. 30 clock hours. Three credits.

AGR 148 FEED

This course makes use of cassette and filmstrips to cover basic feed use. Feed utilization and basic rations for livestock are figured using the Pearson Square Method. The correct use of minerals and additives marketed by most co-ops are covered. Two credits.

AGR 149 PROFITABLE PORK PRODUCTION

This course covers the overall swine program. Special emphases are given to economics, facilities and herd management. The capital needed to conduct a swine enterprise is figured by the student. Two credits.

AGR 155 COOPERATIVE ORGANIZATION

This is a beginning course study of the operation of co-ops. The structure, organization, and operation of co-ops are explained. Questions concerning taxation, board operation, management and patronage refunds are adequately explained. The course requires a text and completion of ten unit tests and a final. Two credits.

AGR 156 BASIC MANAGEMENT

The use of a manager's time is the core of this course. Decisions by the student as to priorities and employee management are briefly covered. Two credits.

AGR 157 MODERN SALESMANSHIP

Modern salesmanship includes price book use, product information, sales procedures recommended for use by agriculture cooperatives. Two credits.

AGR 159 ANIMAL HEALTH

This course covers basic animal care practices, common livestock diseases and how these diseases are normally treated. The co-op line of animal health products is covered. Common animal health terms, internal and external parasites control, wounds and wound treatment, poisons, and veterinary products are a few of the areas covered. Two credits.

AVIATION TECHNOLOGY (AVT)

AVT 105 AVIATION SEMINAR

A general study of the field of aviation which includes theory of flight, history of aviation, radio communication, aviation in today's economy and aviation careers. Designed for students who wish to be commercial pilots. 20 clock hours. Two credits.

AVT 106 PRIVATE GROUND SCHOOL I

AVT 106 and 107 make up the FAA private pilot ground school. Includes basic aerodynamics, airplane systems, air traffic control & communications, aircraft weight and balance, meteorology, and Federal Air regulations. 30 clock hours. Three credits.

AVT 107 PRIVATE GROUND SCHOOL II

By the end of this course the student should be able to pass FAA Private Written test. Includes: basic navigations & radio navigation, Airman's Information Manual, medical factors of flight and review for the FAA test. 30 clock hours. Three credits.

AVT 115 PRIVATE FLIGHT SIMULATOR

The student will be able to demonstrate a high level of skill in basic attitude instrument flying in the flight simulator upon completion of the course. Students will be expected to complete the flight syllabus for this course. Five credits.

AVT 116 PRIVATE FLIGHT LAB

Designed for completion of private pilot license. Includes: pre-solo and supervised solo, cross country, emergency procedures and basic instrument flying. The student will have necessary skill and knowledge to pass FAA private check ride upon successful completion of course. Five credits.

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. The student will have necessary skill and knowledge to pass a phase I flight check upon successful completion of the course. Five credits.

AVT 118 COMMERCIAL FLIGHT LAB II

Continuation of Commercial Flight Lab I with a greater emphasis on cross country flying. The student must complete the solo, night and cross country requirements for the FAA Instrument rating during this lab. The student will have the necessary skill and knowledge to pass a phase II flight check upon the successful completion of the course. Five credits.

AVT 119 CONVENTIONAL GEAR TRANSITION LAB

Includes orientation to tail wheel aircraft including principles of "P" factor and torque. The student will be able to solo a tail wheel aircraft upon successful completion of course. Two credits.

AVT 205 INSTRUMENT GROUND SCHOOL

Course includes advanced meteorology, IFR procedures, flight and navigation instruments, IFR regulations and procedures and other necessary information necessary for passing FAA instrument test. The student should be able to pass the FAA instrument test upon successful completion of the course. 60 hours. Six credits.

AVT 206 COMMERCIAL GROUND SCHOOL

Includes: A review of material for commercial flying and FAR part 135. The student should be able to pass the FAA commercial written test upon the successful completion of the course. 30 hours. Three credits.

AVT 207 BASIC GROUND INSTRUCTOR

Fundamentals of instruction, theory, and practice of classroom presentation of all flight subjects. 20 clock hours. Two credits.

AVT 208 ADVANCED GROUND INSTRUCTOR

Students practice experience in classroom presentation, advanced theory, and practice of classroom presentation, advanced meterology, weight balance, and transport-type aircraft. 20 clock hours. Two credits.

AVT 209 INSTRUMENT GROUND INSTRUCTOR

Instruments and systems, instrument flight charts, IFR regulations, instrument instructing techniques. 20 clock hours. Two credits.

AVT 215 INSTRUMENT FLIGHT SIMULATOR

All phases of advanced instrument flying including: IFR procedures, use of transponder, IFR approaches and radio communications will be covered. The student will be able to demonstrate that he can successfully complete the above maneuvers. Five credits.

AVT 216 INSTRUMENT FLIGHT LAB

This course includes necessary flight instruction to qualify the student to receive the FAA instrument rating. The student will have the necessary skill and knowledge to pass the FAA instrument check ride upon successful completion of the course. Five credits.

AVT 217 COMMERCIAL FLIGHT LAB III

This is the final flight lab in preparation for the commercial license. The student will have the necessary knowledge to pass the FAA commercial flight check upon successful completion of the course. Five credits.

AVT 218 CERTIFIED FLIGHT INSTRUCTOR

Instructional methods theory, and practice, fundamentals of instruction and preparing a lesson plan. A review of flight maneuvers. The student will be able to pass the FAA CFI check ride upon successful completion of the course. Five credits.

AVT 219 INSTRUMENT FLIGHT INSTRUCTOR

Theory and practice of teaching basic attitude instrument flying. Instrument flight planning and instructional techniques. The student will be able to take the FAA IFI check upon successful completion of the course. Three credits.

AVT 225 MULTI-ENGINE TRANSITION LAB

Principles and procedures of light twin-aircraft, complicated systems, orientation and familiarization with emergency situations. The student will have the necessary skill and knowledge to pass the multi-engine check ride upon successful completion of the course. Three credits.

ELECTRO-MECHANICAL TECHNOLOGY (ELM)

ELM 101 PRINT READING I

The student will be introduced to the system of lines and use of the basic tools for sketching. The student will perform pictorial sketching dealing with orthographic and isometric projections. The majority of his effort will be reading prints as they deal with machine parts, gears, pulleys, bearings, linkages and cams, and assembly and production drawings. 40 clock hours. Three credits.

ELM 102 PRINT READING II

The student will perform sketchings as they relate to electrical/electronic symbols, schematics, and wiring connections, interconnection, and printed circuit board layouts. He will again devote his major efforts to reading and interpreting prints about the above with additional exposure to welding and structual drawings. Prerequisite: Print Reading I or permission of the instructor. 40 clock hours. Three credits.

ELM 105 MECHANISMS AND COMPONENTS

Continued study of mechanical elements of electro-mechanical systems first introduced in VTR 108, Industrial Physics I. Individual components and mechanisms are studied in terms of functional and operational characteristics. Considered will be torque, inertia, work, power and efficiency as they relate to gears, pulleys, belts, chains, sprockets, cams, cam followers, levers, linkages and bearings. 80 clock hours. Six credits.

ELM 115 MECHANISMS
ELM 116 COMPONENTS

To assist night time students, ELM 105 has been divided into two courses, one titled Mechanisms and one titled Components. Subject matter in total is identical to that of ELM 105. Completion of each class will fulfill the requirements of ELM 105. ELT 115 and ELT 116 each are 40 clock hours. Three credits each.

ELM 205 AC-DC MACHINERY AND CONTROLS

A study of AC and DC motors and generators and their individual characteristics. Single phase and three phase characteristics will be compared. Electrical and mechanical controls will be studied for application to business and industry. Practical applications of these principles will be performed in the laboratory. Lubrication, alignment and coupling problems of rotating equipment will be studied. Prerequisites: ELT 100 and ELT 101 or permission of the instructor. 70 clock hours. Five credits.

ELM 206 INSTRUMENTATION AND CONTROLS

A study of sensing devices and components used in industry for measuring temperature, pressure, flow, counting and various other functions. The use of electronic digital devices for monitoring these functions and performing control functions in conjunction with other electro-mechanical devices will be coordinated with ELT 265. The accompanying laboratory will stress application of these principles. 70 clock hours. Five credits.

ELM 207 ELECTRO-MECHANICAL MACHINES AND SYSTEMS

Ties together all aspects of electro-mechanical curriculum. The study of electro-mechanical devices is expanded to permit the student to analyze various electronic, mechanical, and electro-mechanical devices as they interface into complete systems for specific applications. The student will exercise personal initiative in problem solving and report techniques, both oral and written. Where appropriate, the student will analyze and trouble-shoot operational systems where faults are intentionally introduced. Safety will become an important aspect of trouble-shooting and design. Prerequisites: ELM 265, ELM 205 and ELM 206, or permission of instructor. 100 clock hours. Eight credits.

ELECTRONICS TECHNOLOGY (ELT)

ELT 120 SURVEY OF ELECTRONICS

A broad introduction for the beginning student stressing fundamentals but also examining systems in block diagram form. An overview of the penetration of electronics in commercial, industrial, medical and military applications. 60 clock hours. Five credits.

ELT 121 DC FUNDAMENTALS

Direct current applications in passive linear networks. Network laws and theorems, mathematical analysis and laboratory experiments including attention to measurements and troubleshooting. Note: ELT 120 and 121 obtain credit for ELT 141. 60 clock hours. Five credits.

ELT 122 ELECTRONICS MATH I

An applied math course designed to build proficiency in solving electronic problems, algebraic operations, equations, quadratic equations, determinants, graphic relationships, exponentials, logarithms, right angle trigonometry, vectors, phasors, J-operator. Math exercises emphasize typical electronic applications. 60 clock hours. Five credits.

ELT 123 AC/DC CIRCUIT ANALYIS

A continuation of the study of passive circuits emphasizing analysis of AC and time-varying conditions, practice in measurement and analysis, and troubleshooting. Note: ELT 122 and 123 obtain credit for ELT 142. 60 clock hours. Five credits.

ELT 124 SOLID-STATE CIRCUITS I

Introduction to active circuits. Development of analytical and graphic tools for practical application to commonly encountered solid state circuits. Attention to measurements and troubleshooting. 60 clock hours. Five credits.

ELT 125 SOLID-STATE CIRCUITS II

Continuation of ELT 124. Extends development of analytical tools to increase complex solid state circuits including some integrated circuits. Note: ELT 124 and 125 obtain credit for ELT 143. 60 clock hours. Five credits.

ELT 141 INTRODUCTION TO ELECTRONICS

Physics of electricity, basic circuits and systems are studied. Using mathematics and laboratory experiments, students discover fundamental concepts governing currents in passive circuits and the systems in which they will be functioning. Note: ELT 120 and 121 obtain credit for this course. Prerequisite: none. 120 clock hours. Ten credits.

ELT 142 AC/DC CIRCUIT ANALYSIS

A continuation of the study of passive circuits with emphasis on analysis of AC and time varying conditions. Similar to ELT 141, students develop practical measurement and analysis skills and become more aware of systems applications. Note: ELT 122 and 123 obtain credit for this course. Prerequisite: ELT 141 or ELT 120/121 or permission of instructor. 120 clock hours. Ten credits.

ELT 143 CIRCUITS AND APPLICATIONS

Emphasizes active electronic devices and the systems where they are employed. Students study a variety of integrated circuits and solid state devices where further emphasis is given to measurement considerations and fault isolation methods as well as the basic analysis of operation. Note: ELT 124 and ELT 125 obtain credit for this course. Prerequisite: ELT 142 or ELT 122/123 or permission of the instructor. 120 clock hours. Ten credits.

ELT 146 ELECTRONICS PRINT READING AND SKETCHING

Familiarizes the student with drafting documentation encountered in the electronics industry. Presentation of terms and techniques employed in industry. Practice in sketching, reading/interpreting industry prints. Includes circuit board layout. 40 clock hours. Three credits.

ELT 255 LINEAR IC'S AND SENSORS

Study of 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. 60 clock hours. Five credits.

ELT 266 ELECTRONIC DESIGN AND FABRICATION

Proper chassis layout and equipment arrangements (packaging), soldering and other assembly or re-work techniques. Building a functional unit of an approved type is undertaken. 40 clock hours. Three credits.

ELT 267 INTRODUCTION TO NEW ELECTRONIC INDUSTRY DEVELOPMENTS

New devices, including new developments in general. Students assist in current literature search and presentation of findings. Current hiring practices and conditions, desirable employee attitudes, proper conduct during an interview, and typical entrance exam questions are discussed. 30 clock hours. Three credits.

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. 40 clock hours. Three credits.

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. 60 clock hours. Five credits.

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. 60 clock hours. Five credits.

***ELT 273 COMMUNICATIONS III**

Intent is to assist the students in obtaining the FCC second class radio telephone license. Based on typical FCC license examination questions, study of FCC regulations and review of electronic circuit theory. Prerequisite: ELT 272 or permission of instructor. 60 clock hours. Five credits.

***ELT 281 COMPUTERS I**

Digital fundamentals beginning with the block diagram of a general purpose digital computer. Number systems, IC gates, Boolean algebra, flip-flops and applications including arithmetic circuits. Some software attention. Reference is made to systems (micro-processor) at appropriate points. Prerequisite: ELT 143 or permission of instructor. 60 clock hours. Five credits.

***ELT 282 COMPUTERS II**

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

***ELT 283 COMPUTERS III**

Micro-processors are employed to obtain systems experience and application of fundamentals. Hardware and software studies and trade offs between hardware/software. Organization of a micro-processor; clock, CPU, I/O, bus concepts, EPROM, RAM, programming and peripherals. Prerequisite: ELT 282 or permission of instructor. 60 clock hours. Five credits.

***ELT 284 COMPUTERS IV**

Special studies in computer systems. Studies can include new micro-processor types, interfacing, hardware/software development. Projects can be instructor assigned or student proposed (and instructor approved). May be taken concurrently with ELT 283. 60 clock hours. Five credits.

***Electronics electives** — Additional courses may be designed or permitted in the elective area.

MECHANICAL AND CIVIL ENGINEERING TECHNOLOGY (MCE)

The block of courses MCE 101, 102, 103 and 104 (16 credits) is equivalent to the block of MCE 111, 112 and 113 (15 credits).

MCE 101 DRAFTING 1A (EVENING)

Initial development of basic drafting skills, lettering, understanding and display of line symbols in pencil and ink, use of scales and conventional instruments. 60 clock hours. Four credits.

MCE 102 DRAFTING 1B (EVENING)

Continuation of basic skill development (MCE 101), line symbols, lettering, etc. Primary purpose is the introduction and practice of pictorial drawing, when combined with auxiliaries and associated dimensioning and detailing. Shadow and shading are introduced. 60 clock hours. Four credits.

MCE 103 DRAFTING 1C (EVENING)

Continuation of basic skill development (MCE 102) within the following areas of concentration: sectioning, auxiliary views, revolution and rotation and working drawings. 60 clock hours. Four credits.

MCE 104 DRAFTING 1D (EVENING)

Continuation of basic skill development (MCE 103) within the following areas of concentration: mechanical posture, intersection and development, and charts and graphs. 60 clock hours. Four credits.

MCE 105 STATICS AND MECHANICS

Basic principles of analytic mechanics. Simple stresses analyzed with reference to design criteria. Structures and joining members studies relative to available strength. 60 clock hours. Five credits.

MCE 111 DRAFTING I

Development of basic drafting skills, emphasizing elementary care and use of instruments and equipment. Principles of descriptive geometry emphasizing accepted industrial practices and applications in orthographic multi-view engineering drawings studied. 80 clock hours. Five credits.

MCE 112 DRAFTING II

Continuation of MCE 111, emphasizing pictorial and multi-view drawing. Technical sketching, auxiliary views, shadow and shading, revolution and detail working drawings studied. 80 clock hours. Five credits.

MCE 113 DRAFTING III

Continuation of MCE 112 emphasizing sectioning, mechanical fasteners, intersections and developments, charts and graphs, and applications of these in working and production drawings. 80 clock hours. Five credits.

MCE 201 DRAFTING IV

Continuation of MCE 113 or MCE 104 emphasizing working drawings in architecture, structural, electronic and electrical, welding and topographic areas. 80 clock hours. Five credits.

MCE 202 DRAFTING V

Continuation of MCE 201 emphasizing basic engineering design problems primarily of a civil and mechanical nature. Emphasis is on design and procedures and graphic solutions to production drawing. 80 clock hours. Five credits.

MCE 203 DRAFTING VI

Continuation of MCE 202 utilizing knowledge of mathematics and sciences to solve practical problems of machine component design (gears, cams, shafts, etc.). Elements designed are analyzed regarding function, geometry and cost of manufacture. 80 clock hours. Five credits.

MCE 206 HYDRAULICS AND PNEUMATICS
Basic study of components of hydraulic and pneumatic systems. Emphasis on application of power transmission and control. Subject areas treated scientifically emphasizing mathematical analysis required for practical application. 60 clock hours. Five credits.

MCE 207 MATERIALS AND PROCESSES
Ferrous and non-ferrous materials in industry studied from manufacturing and application standpoints. Processing and manufacturing backgrounds developed. 60 clock hours. Four credits.

MCE 208 STRENGTH OF MATERIALS
A study of physical properties of material, stress and strain, tension, compression and shear, and their effects. 50 clock hours. Four credits.

MCE 209 ENGINEERING PROBLEMS
Practical solutions to various manufacturing and construction problems developed. Investigative techniques determinant in problem solutions developed. Multi-industry concern emphasized with applicable engineering approaches developed. 50 clock hours. Five credits.

MCE 211 BASIC FIELD SURVEYING I
Basic surveying equipment and its uses presented. Comparable data gathering and presentation skills developed. Computations relative to surveying studied and practiced. 30 clock hours. Two credits.

MCE 212 BASIC FIELD SURVEYING II
This course is a continuation of MCE 211. The student will become proficient in fundamental surveying techniques, as well as in care and maintenance of equipment involved. Prerequisite: MCE 211 or permission of instructor. 60 clock hours. Four credits.

MCE 221 DRAFTING 2A (EVENING)
Continuation of MCE 104. Engineering drafting problems are developed and solved in the areas of architectural, structural, electronic, electrical, and topographic drafting. 60 clock hours. Four credits.

MCE 222 DRAFTING 2B (EVENING)
Continuation of MCE 221 in the areas of topographic, tool, patent, welding and fluid power drafting problems. Beginning design concepts and procedures are discussed. 60 clock hours. Four credits.

MCE 223 DRAFTING 2C (EVENING)
Continuation of MCE 222 emphasizing basic engineering problems primarily of a civil and mechanical nature. Emphasis is on design, procedures and graphic solutions to production drawing. 60 clock hours. Four credits.

MCE 224 DRAFTING 2D (EVENING)
Continuation of MCE 223 utilizing knowledge of mathematics and sciences to solve practical problems of machine component design. 60 clock hours. Four credits.

VOCATIONAL TECHNICAL RELATED (VTR)

VTR 101 BASIC TECHNICAL MATHEMATICS
A basic arithmetic review with introduction to applied algebra and formula application. 70 clock hours. Six credits.

VTR 102 APPLIED TECHNICAL MATHEMATICS
Continuation of VTR 101 with treatment of applied algebra, geometry and introduction of applied trigonometry. 70 clock hours. Six credits.

VTR 105 INDUSTRIAL COMMUNICATIONS
Students recognize importance of communication in industry, good and poor practices and improvement of communication abilities with emphasis on oral communications. 30 clock hours. Three credits.

VTR 106 INDUSTRIAL ECONOMICS
A study of basic principles of industrial management relating to economics, with emphasis on practical applications in business and industry. 30 clock hours. Three credits.

VTR 107 ELEMENTS OF TECHNICAL WRITING
Effective technical communication is stressed in proper maintenance of engineering notebooks, trip reports, experimental findings, technical procedures, specifications, resumes, applications and formal technical reports. 30 clock hours. Three credits.

VTR 108 INDUSTRIAL PHYSICS I
Principles of precision measurement and applied mechanics are studied. Forces, motion, work, energy, power, friction and rotation and their applications are presented. Mathematical proficiency in solving problems involving all principles examined is developed. Two hours lab. 70 clock hours. Five credits.

VTR 109 INDUSTRIAL PHYSICS II
Fundamentals of heat, light, sound and properties of solids, liquids and gases, understanding principles involved and mathematics proficiency in industrial applications. 70 clock hours. Five credits.

VTR 115 BASIC QUALITY CONTROL I
A study of the application of statistical methods in the control of processes and product. The student will examine and design methods of facilitating maintenance of production quality and improvement of product quality. 30 clock hours. Three credits.

VTR 204 ELECTRONICS DRAFTING
Initial development of basic electronic drafting skills: lettering, line symbols, component outlines, electrical diagrams, pictorials and electro-mechanical design, and scales and drawing instruments use. 40 clock hours. Three credits.

VTR 205 INDUSTRIAL ELECTRICITY
A study of the basics of electricity as applied to industrial motors, generators and power distribution. Prerequisite: Basic Technical Math, Applied Technical Math, or instructor permission. 40 clock hours. Three credits.

VTR 206 INDUSTRIAL RELATIONS
Basic industrial relations examined from the employee perspective relative to management expectations as well as the responsibilities of front line supervision. 30 clock hours. Three credits.

VTR 207 COST AND MATERIAL ESTIMATING
Techniques and procedures are studied and applied relative to technical projects for construction and manufacturing. 40 clock hours. Three credits.

VTR 208 COMPUTER SYSTEMS AND APPLICATIONS
A study of business and industrial applications of fundamental computer systems and associated hardware and software. The student will become proficient in the basic techniques of planning a computer program associated with engineering calculations. Prerequisite: Sophomore preferred or permission of instructor. 50 clock hours. Four credits.

SPECIALTY OFFERINGS

DRA 100 INTRODUCTION TO DRAFTING
This course is designed to introduce students to the basics of drafting. It will allow students a full quarter to observe and use drafting tools and equipment and to learn some basic techniques of drafting before committing themselves to a complete program or course of study. 30 clock hours. Two credits.

DRA 107 ARCHITECTURAL DRAFTING I

Initial development of basic skills, i.e.: Print interpretation, basic line symbols, sketching, and introduction to multi-view projection. Basic construction details and terms are discussed. Thirty clock hours. Two credits.

***DRA 110 ARCHITECTURAL DRAFTING II (EVENING)**

Continuation of Architectural Drafting I (DRA 107) with emphasis on residential site planning, room planning and floor plans, foundation and basement plans, and exterior elevation drawings. Forty clock hours. Three credits.

***DRA 113 ARCHITECTURAL DRAFTING III (Evening)**

Continuation of Architectural Drafting II (DRA 110) with emphasis on residential changes and updates, electrical planning and layout, heat planning and layout, wall and cross sections, stair details, cabinet details, fireplace details, and plot plan. Forty clock hours. Three credits.

***Note:** Completion of DRA 110 and 113 will take the student through a complete set of residential working drawings.

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 are also committed to provide advanced training for students who are already working in a trade. The Trades and Industry Skill Center provides the student, who falls behind the class, with the opportunity to catch up and provides introductory classes for the student who needs training prior to enrollment in the regular programs.

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 from a group of students.

The Trades and Industry Division offers the following programs:

Auto Body Repair	(two-year AAS Degree)
Auto Body Refinishing	(one-year Occupational Certificate)
Automotive Mechanics	(two-year AAS Degree)
Building Construction	(two-year AAS Degree)
Child Care Teacher	(two-year AAS Degree or one-year Occupational Certificate)
Graphic Technology	(two-year AAS Degree or one-year Occupational Certificate)
Industrial Mechanics	(two-year AAS Degree)
Welding	(two-year AAS Degree)

AUTO BODY REFINISHING

Course Length: Usually three (3) quarters for Certificate in Occupational Education.

Potential Opportunities: This is a specialized 3 quarter certificate program to help develop the knowledge and skill used by an automotive or truck refinisher. The program will include materials, equipment, and their uses to qualify the trainee 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 it could 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 from a group of students.

Fall Quarter			**Credits**
ABR	151	Auto Refinish I	12
VTI	101	Safety and First Aid	2
		Total Fall Quarter	**14**
Winter Quarter			
ABR	152	Auto Refinish II	12
VTI	124	Service Management	3
		Total Winter Quarter	**15**
Spring Quarter			
ABR	153	Auto Refinish III	12
VTI	103	Industrial Communications	3
		Total Spring Quarter	**15**
		Total	**44**

AUTO BODY REPAIR

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Potential Opportunities: Opportunities for the tradesman range from the actual repair of the damaged auto to the 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 of dents, welding and brazing of torn panels, and preparing for the application of the modern automotive finishes. This course is designed to give the student skill and knowledge for job entry-level employment.

When the students enter into the third quarter, they will be required to provide some very basic hand tools for use in the Body Shop. These tools will aso be needed to acquire a job in the trade after completion of the course.

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 from a group of students.

First Year:

Fall Quarter			**Credits**
ABR	141	Auto Body Repair I	12
VTI	101	Safety and First Aid	2
		Total Fall Quarter	**14**
Winter Quarter			
ABR	142	Auto Body Repair II	12
VTI	121	Shop Math	3
		Total Winter Quarter	**15**
Spring Quarter			
ABR	143	Auto Body Repair III	12
AMT	233	Air Conditioning and Comfort Control	5
		Total Spring Quarter	**17**
		Total First Year	**46**

Second Year:

Fall Quarter			
ABR	241	Auto Body Repair IV	12
VTI	105	Industrial Organizations & Institutions	3
		Total Fall Quarter	**15**
Winter Quarter			
ABR	242	Auto Body Repair V	12
VTI	124	Automotive Service Management	3
		Total Winter Quarter	**15**
Spring Quarter			
ABR	243	Auto Body Repair VI	12
VTI	103	Industrial Communications	3
		Total Spring Quarter	**15**
		Total Second Year	**45**
		Total	**91**

Evening Program Option:

ABR 101	Auto Body Welding	4
ABR 102	Basic Straightening	4
ABR 103	Basic Refinishing	4
	Total	**12**

Note: ABR 101, ABR 102, and ABR 103 are the equivalent of ABR 141.

ABR 111	Damage Repair	4
ABR 112	Panel Replacement	4
	Total	**8**

Note: ABR 111 and ABR 112 are the equivalent of ABR 142.

ABR 121	Electrical and Alignment	4
ABR 122	Advanced Refinishing	4
ABR 123	Damage Appraisal (Estimating)	4
	Total	**12**

Note: ABR 121, ABR 122, and ABR 123 are the equivalent of ABR 143.

ABR 201	Quarter Panel Replacement	4
ABR 202	Basic Sheet Metal Replacement	4
ABR 203	Advanced Sheet Metal Replacement	4
	Total	**12**

Note: ABR 201, ABR 202, and ABR 203 are the equivalent of ABR 241.

ABR 211	Basic Frame Repair	4
ABR 212	Conventional Frame Repair	4
ABR 213	Unitized Frame Repair	4
	Total	**12**

Note: ABR 211, ABR 212, and ABR 213 are the equivalent of ABR 242.

ABR 221	Auto Body Rebuilding I	4
ABR 222	Auto Body Rebuilding II	4
ABR 223	Auto Body Rebuilding III	4
	Total	**12**

Note: ABR 221, ABR 222, ABR 223 are the equivalent of ABR 243.

Total **68**

Supporting Course

ABR 100	Introduction to Auto Body	2

ADVISORY COMMITTEE FOR AUTO BODY

Harly Bjoralt
Auto Alignment & Frame Ser.

Art Butheras
State Farm Insurance Co.

Mike Gundes
Garney & Wheeler Co.

Harold Mothershed
Garnsey & Wheeler Co.

Earl Nicks
Edwards Chevrolet

AUTOMOTIVE MECHANICS

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

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

We are designated as a testing center for Auto Mechanics Certification. We also offer a refresher 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 from a group of students.

First Year:

Fall Quarter		**Credits**
AMT 131	Brakes, Transmissions and Final Drives — A	12
VTI 101	Safey and First Aid	2
VTI 136	Shop Practice	3
	Total Fali Quarter	**17**
Winter Quarter		
AMT 133	Fuel Systems and Tune-up — A	12
AMT 136	Emission Control	5
	Total Winter Quarter	**17**
Spring Quarter		
AMT 132	Steering and Suspension Systems — A	12
VTI 135	Industrial Math and Science	5
	Total Spring Quarter	**17**
	Total First Year	**51**

Second Year:

Fall Quarter		
AMT 231	Automotive Engines — A	12
VTI 125	Colorado State Safety Inspection	2
VTI 103	Industrial Communications	3
	Total Fall Quarter	**17**
Winter Quarter		
AMT 232	Advanced Electrical — A	12
VTI 124	Automotive Service Management	3
	Total Winter Quarter	**15**
Spring Quarter		
AMT 234	Automatic Transmission and Service Practice — A	12
AMT 233	Air Conditioning and Comfort Control	5
	Total Spring Quarter	**17**
	Total Second Year	**49**
	Total	**100**

On-the-Job Training Courses

AMT 141	Brakes, Transmissions and Final Drives — B (equivalent to AMT 131 - A)	12
AMT 142	Steering and Suspension Systems — B (equivalent to AMT 132 - A)	12
AMT 143	Fuel Systems and Tune Up — B (equivalent to AMT 133 - A)	12
AMT 241	Automotive Engines — B (equivalent to AMT 231 - A)	12
AMT 242	Advanced Electrical — B (equivalent to AMT 232 - A)	12
AMT 244	Automotive Transmissions and Service Practice — B (equivalent to AMT 234 - A)	12

Supporting Courses:		**Credits**
AMT 100	Introduction to Automobile Mechanics	2
AMT 104	Brake Repair	4
AMT 105	Advanced Electrical	4
AMT 106	Tune-Up	4
AMT 107	Advanced Engine Tune Up	4
AMT 108	Automatic Transmissions	4
AMT 115	Foreign Car Tune Up	4
AMT 116	Auto Emissions Control	4
AMT 125	Auto Certification Refresher	2
AMT 206	Advanced Diagnosis	4
AMT 207	Introduction to the Diesel Engine	4

ADVISORY COMMITTEE FOR AUTOMOTIVE MECHANICS

Louis Bartlett
Bender Auto Sales

Ernest Kallsen
Student Representative

Walt Loftus
Centennial Motor Co.

Jerry Park
Silver Star Service

George Richards
Edwards Chevrolet

Dale Rowe
Dale's Texaco

Bill Walter
16th Street Conoco

BUILDING CONSTRUCTION

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Potential Opportunities: This program is geared to students in all areas of building construction. These include layout, framing, exterior and interior finish, and cabinet construction. Concrete construction is another major area of training, which includes essential layout, forming, handling, placing, and finishing of concrete. Masonry as it applies to building foundations and veneer is presented. Plumbing and electrical are approached through practical application as required by the training project. Experience in drywall construction, painting, and finishing are provided. Basic training in architectural plans and estimating is included. This program will provide an opportunity for the student to prepare for apprentice-type work in the general area of building construction.

Previous construction experience is not necesarry, but may enhance individual progress. Good hand and eye coordination and a background or potential ability in simplified mathematics is necessary to achieve the advanced objectives of this course.

A few basic tools will be required for the building construction program, such as: 16 oz. finish hammer, combination square, 12 foot tape measure, tool pouch or carpenter's coveralls, utility knife, 1/32 - 3/32 nail set, and pencil.

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 from a group of students.

Course content of all skill classes may vary depending upon projects, but in the six quarters the student will acquire skills in all phases indicated in the course descriptions.

First Year:

Fall Quarter:			**Credits**
BCS	111	Building Construction I	9
BCT	121	Framing I	3
BCT	160	Orientation to Building Construction	1
BCT	117	Basic Tools and Materials	2
BCT	141	Basic Architectural Drafting and Print Reading	2
		Total Fall Quarter	**17**
Winter Quarter:			
BCS	122	Building Construction II	9
BCT	125	Exterior	2
BCT	126	Masonry	2
BCT	127	Interior Finish	2
VTI	101	Safety and First Aid	2
		Total Winter Quarter	**17**
Spring Quarter:			
BCT	115	Concrete	2
BCS	133	Building Construction III	9
BCT	135	Interior Trim and Cabinets	2
BCT	136	Painting and Finishing	1
BCT	131	Basic Math and Estimating	3
		Total Spring Quarter	**17**
		Total First Year	**51**

Second Year:

Fall Quarter:			
BCS	211	Building Construction IV	9
BCT	215	Preparation and Layout	2
BCT	221	Framing II	3
VTI	105	Industrial Organizations & Institutions	3
		Total Fall Quarter	**17**
Winter Quarter:			
BCS	222	Building Construction V	7
BCT	236	Building Codes	2
BCT	241	Architectural Drafting II	4
BCT	230	Construction Estimating I	3
		Total Winter Quarter	**16**
Spring Quarter:			
BCS	233	Buiilding Construction VI	7
BCT	237	Legal Procedures and Practices	3
BCT	231	Construction Estimating II	4
VTI	103	Industrial Communications	3
		Total Spring Quarter	**17**
		Total Second Year	**50**
		Total	**101**

Supporting Courses:

BCS	100	Introduction to Building Construction	2
BCS	102	Basic Cabinetry	4
BCS	104	Cabinetry II	4

ADVISORY COMMITTEE FOR BUILDING CONSTRUCTION

John Cowart
Moore Realty

Jack Coy
Realtor

Mel Geist
Geist Homes

Dennis Gibson
Gibson Construction

Gary Martin
Economy Lumber

Pat Ormbsby
Or-Mac Builders

Patrick Roche
Roche Constructors, Inc.

Tom Tooker
Building Inspection Dept.
City of Greeley

CHILD CARE TEACHER (Early Childhood)

Course Length: Usually three (3) quarters for Certificate in Occupational Education. Usually six (6) quarters for Associate in Applied Science Degree.

Prerequisites: A physical examination will be required of each student who initially enrolls in a student participation class. 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 (T.B. tests are available free of charge from the Aims Student Health Services.)

Potential Opportunities: Group leader or Director in: Private Preschools, Small and Large Day Care Centers, Nursery Schools, Child Development Centers, Head Start and Follow through Programs, Preschool Centers for the Handicapped, Summer Fun Day Camps.

ASSOCIATE IN APPLIED SCIENCE DEGREE

First Year - Vocational Certificate - Preschool Group Leader

Fall Quarter			**Credits**
CCT	100	Introduction to Early Childhood Education	2
CCT	101	Written Communication for the Preschool Teacher	2
CCT	131	Practice Teaching I	4
CCT	161	Child Growth and Development I	3
HEN	105	Personal Health	3
		Electives	2
		Total Fall Quarter	**16**

Winter Quarter

CCT	102	Oral Communication for the Preschool Teacher	3
CCT	105	First Aid	2
CCT	132	Practice Teaching II	4
CCT	141	Activities for Young Children	4
CCT	162	Child Growth and Development II	3
		Total Winter Quarter	**16**

Spring Quarter

CCT	106	Children's Literature	3
CCT	133	Vocational Teaching Experience	4
CCT	151	Nutrition for Young Children	4
PSY	101	General Psychology	5
		Total Spring Quarter	**16**
		Total First Year	**48**

Second Year

Fall Quarter

CCT	201	Business Management for Child Care Centers	3
CCT	231	Practice Teaching III	4
CCT	241	Methods of Teaching the Young Child	4
SOC	101	Introduction to Sociology	5
		Total Fall Quarter	**16**

Winter Quarter

CCT	232	Human Relations in the Classroom	5
CCT	251	Creative Foods and Nutrition	3
CCT	255	Science for Preschool Teachers	5
CCT	261	New Concepts and Practices in Child Development	3
		Total Winter Quarter	**16**

Spring Quarter

CCT	202	Administration of Child Care Centers	4
CCT	233	Family and Community Relations	5
		Electives	7
		Total Spring Quarter	**16**
		Total Second Year	**48**
		Total	**96**

Recommended Electives:

CCT	265	Playground Development	4
SOC	105	Marriage and the Family	5

STATE SOCIAL SERVICES CERTIFICATION

Educational courses acceptable for State Social Services Certification for Director of a Child Care Center, Child Development and Nursery Education:

CCT	100	Introduction to Early Childhood Education	2
CCT	105	First Aid	2
CCT	106	Children's Literature	3
CCT	141	Activities for Young Children	4
CCT	161	Child Growth and Development I	3
CCT	162	Child Growth and Development II	3
CCT	241	Methods of Teaching the Young Child	4
CCT	255	Science for Preschool Teachers	5
CCT	261	New Concepts and Practices in Child Development	3
		Sub-Total	**29**

Related Subjects:

CCT	151	Nutrition for Young Children	4
CCT	201	Business Management for Child Care Centers	3
CCT	202	Administration of Child Care Centers	4
CCT	251	Creative Foods and Nutrition	3
PSY	101	General Psychology	5
SOC	101	Introduction to Sociology	5
		Sub-Total	**24**
		Total	**53**

ADVISORY COMMITTEE FOR CHILD CARE/TEACHER AIDE

Mrs. John Althoff
First Congregational Church

Ann Heiman
Greeley Parent-Child Center

Keith McNeil
Head Start Director

Mrs. Jeannine Truswell
16th Street Preschool and Day Care Center

GRAPHIC TECHNOLOGY

Course Length: Usually three (3) quarters for certificate in Occupational Education. Usually six (6) quarters for Associate in Applied Science Degree.

Potential Opportunities: This program is designed to provide a student with two options, either one year of training leading to a Certificate in Occupational Education or two years of training leading to an Associate in Applied Science Degree.

The first year of the program provides the student with a basic core of fundamental knowledge and machine skills in all phases of the offset printing process. Included in this core of training is photo and strike-off copy composition, paste-up, process camera production of line and halftone negatives, offset plate making techniques, duplicator size offset press operation and bindery functions.

All students entering the second year of the program must have completed this first year core program or have had work experience equal to the scope of the first year program.

During the second year of training the student has an option to specialize in either pre-press or production work. The pre-press specialization emphasizes advanced techniques of photo compostion, process camera, layout and design. The production specialization emphasizes press and advanced bindery equipment operation and techniques which will provide the student with entry level skills for apprentice-type work in commercial print shops or in-house copy centers.

Placement possibilities are found in business offices, insurance companies, manufacturing plants, educational institutions, church offices, commercial print shops and newspapers. Additionally this core may, with experience, lead to a specialization in such related careers as technical illustrating, commercial art, writing, photography, sales, services and repair or management.

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 from a group of students.

First Year: Core Program — Vocational Certificate

Fall Quarter:			**Credits**
*GRT	111	Graphic Technology I	10
VTR	106	Industrial Economics	3
BUS	101	Beginning Typewriting (3)	
		OR	3
BUS	105	Speed and Accuracy Development in Typewriting (3)	
		Total Fall Quarter	**16**

Winter Quarter

GRT	112	Graphic Technology II	10
VTI	103	Industrial Communications	3
VTR	206	Industrial Relations	3
		Total Winter Quarter	**16**

Spring Quarter

GRT	113	Graphic Technology III	10
VTR	105	Industrial Organizations and Institutions	3
		Electives	5
		Total Spring Quarter	**18**
		Total First Year	**50**

****Recommended Electives:**

BUS	107	Memory Typewriting	2
MCE	111	Drafting I	5
DRA	100	Introduction to Drafting	2
AAD	101	Fundamentals of Art and Design I	5
ART	100	Survey of Visual Arts and Design	5

*Students who do not have high school credit in typing MUST enroll concurrently in Beginning Typing.

Second Year: Production Option — AAS Degree

Fall Quarter

GRT	214	Graphic Technology VII	10
MGT	108	Small Business Management	5
		Electives	3
		Total Fall Quarter	**18**

Winter Quarter

GRT	212	Graphic Technology V	10
GRT	210	Graphic Materials Acquisition	3
		Electives	3
		Total Winter Quarter	**16**

Spring Quarter

GRT	215	Graphic Technology VIII	10
		Electives	6
		Total Spring Quarter	**16**
		Total Second Year	**50**

****Recommended Electives:**

BUS	155	Business Communications I	5
VTR	107	Elements of Technical Writing	3
JOU	114	Introduction to Mass Media	5
AAD	225	Photography I	3
JOU	111	Newswriting I	5
JOU	106	Photojournalism	3
MGT	107	Advertising	5
BUS	255	Business Law	5

Second Year: Pre-Press Option — AAS Degree

Fall Quarter

GRT	211	Graphic Technology IV	10
AAD	221	Graphic Design I	3
BUS	105	Speed and Accuracy Development in Typewriting	3
		Total Fall Quarter	**16**

Winter Quarter

GRT	212	Graphic Technology V	10
AAD	222	Graphic Design II	3
AAD	225	Photography I	3
		Total Winter Quarter	**16**

Spring Quarter

GRT	213	Graphic Technology VI	10
AAD	223	Graphic Design III	3
		Electives	5
		Total Spring Quarter	**18**
		Total Second Year	**50**

****Recommended Electives:**

BUS	155	Business Communications I	5
VTR	107	Elements of Technical Writing	3
JOU	114	Introduction to Mass Media	5
JOU	111	Newswriting I	5
JOU	106	Photojournalism	3
MGT	107	Principles of Advertising	5
MGT	108	Small Business Management	5
MGT	215	Personnel Management	5

**Electives will be chosen by the student after receiving counseling and guidance from a Graphic Technology advisor, individual objectives, interest and abilities will be considered.

Supporting Courses:

GRT	100	Introduction to Graphic Technology	2

ADVISORY COMMITTEE FOR GRAPHIC TECHNOLOGY

Stafford Gnadt
Shef Enterprises

Jerry Hoff
Journal Publishing Co.

Lee Lenhart
State Farm Insurance

Jim Poppe
Greeley Printing Co.

Ron Shefflen
Shef Enterprises

INDUSTRIAL MECHANICS

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Potential Opportunities: There are a variety of career opportunities in Industrial Mechanics, and this program is designed to prepare the student for entry into any number of career fields. The opportunities are almost unlimited in this family of occupations. Key occupational areas involve: service, sales, manufacturing, and management. Some of the more specific jobs this training will help you prepare for are: general two and four stroke cycle gasoline engine repair, small bore diesel engine mechanic, fuel systems and ignition tune up specialist, utility powered equipment mechanic, recreational vehicle mechanic, industrial construction equipment repair and maintenance, industrial electrical systems repairmen, shop management, and parts counterman. These are only a few of the major occupations. If you are interested in power and its many applications, a position in this popular field is available to you with proper training and practical experience.

First Year

Fall Quarter

			Credits
INM	105	Industrial Mechanics I	12
VTI	101	Safety and First Aid	2
		Total Fall Quarter	**14**

Winter Quarter

INM	106	Industrial Machanics II	12
VTI	137	Parts Management	3
		Total Winter Quarter	**15**

Spring Quarter

INM	107	Industrial Mechanics III	12
VTI	135	Industrial Math and Science	5
		Total Spring Quarter	**17**

Second Year

Fall Quarter

			Credits
INM	205	Industrial Mechanics IV	12
VTI	105	Industrial Organizations and Institutions	3
		Total Fall Quarter	**15**

Winter Quarter

INM	206	Industrial Mechanics V	12
VTI	124	Service Management	3
		Total Winter Quarter	**15**

Spring Quarter

INM	207	Industrial Mechanics IV	12
VTI	103	Industrial Communications	3
		Total Spring Quarter	**15**

Supporting Courses:

INM	100	Introduction to Industrial Mechanics	2

ADVISORY COMMITTEE FOR INDUSTRIAL MECHANICS

Don Eckhardt
George's Repair Shop

Bill Hoff
Hoff Motor

Ron Gieck
McCann's Rental

Neal McElrath
Oliver Construction Company

Carl Mekelburg
Golf Course Supt.

Carl Minnig
Minnig Cycle Center

Richard Roth
Steven's Automotive

WELDING

Course Length: Usually six (6) quarters for Associate in Applied Science Degree.

Potential Opportunities: The welding program is designed to develop the skills necessary to pass the welder qualification tests. Qualifications 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 earthmoving equipment. Wherever metal is to be joined, welding is usually 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 from a group of students.

First Year:

Fall Quarter		**Credits**
WLT 141	Oxygen/Acetylene Welding	12
VTI 101	Safety and First Aid	2
VTI 105	Industrial Organizations & Institutions	3
	Total Fall Quarter	**17**
Winter Quarter		
WLT 142	Shielded Metal Arc I	12
VTI 181	Basic Blueprint Reading	3
	Total Winter Quarter	**15**
Spring Quarter		
WLT 143	Shielded Metal Arc II	12
VTI 103	Industrial Communications	3
VTI 182	Welding Layout	3
	Total Spring Quarter	**18**
	Total First Year	**50**

Second Year:

Fall Quarter		
WLT 241	Shielded Metal Arc III	12
VTI 183	Welding Industry	3
	Total Fall Quarter	**15**
Winter Quarter		
WLT 242	Shielded Metal Arc Pipe Welding	12
VTI 121	Shop Math	3
WLT 135	Metallurgy	5
	Total Winter Quarter	**20**
Spring Quarter		
WLT 243	Tig & Mig Welding	12
VTI 175	Welding Certification and Employment	5
	Total Spring Quarter	**17**
	Total Second Year	**52**
	Total	**102**

Evening Program Option:

WLT 101	Oxy-Acetylene Welding I	4
WLT 102	Oxy-Acetylene Welding II	4
WLT 103	Oxy-Acetylene Welding III	4
	Total	**12**

Note: WLT 101, WLT 102, and WLT 103 are the equivalent of WLT 141.

WLT 111	Shielded Metal Arc I-A	4
WLT 112	Shielded Metal Arc I-B	4
WLT 113	Shielded Metal Arc I-C	4
	Total	**12**

Note: WLT 111, WLT 112, and WLT 113 are the equivalent of WLT 142.

WLT 121	Shielded Metal Arc II-A	4
WLT 122	Shielded Metal Arc II-B	4
WLT 123	Shielded Metal Arc II-C	4
	Total	**12**

Note: WLT 121, WLT 122, and WLT 123 are the equivalent of WLT 143.

WLT 201	Shielded Metal Arc Pipe-A	4
WLT 202	Shielded Metal Arc Pipe-B	4
WLT 203	Shielded Metal Arc Pipe-C	4
	Total	**12**

Note: WLT 201, WLT 202, and WLT 203 are the equivalent of WLT 242.

WLT 211	Shielded Metal Arc III-A	4
WLT 212	Shielded Metal Arc III-B	4
WLT 213	Shielded Metal Arc II-C	4
	Total	**12**

Note: WLT 211, WLT 212, and WLT 213 are the equivalent of WLT 241.

WLT 221	Mig Welding I	4
WLT 222	Mig Welding II	4
WLT 223	Mig Welding III and Tig Welding	4
	Total	**12**

Note: WLT 221, WLT 222, and WLT 223 are the equivalent of WLT 243.

Supporting Courses:

WLT 100	Introduction to Welding	2
WLT 236	Special Problems in Welding	12

ADVISORY COMMITTEE FOR WELDING

Dr. R. Joe Goddard
Self Employed

Murray Hill
Lundvall Manufacturing

Fred W. Hine
Farmhand, Inc.

Gene Johnson
Research Cottrell

Dale Majors
Majors Welding Supply

Floyd Scofield
Hensel Phelps Construction Co.

Bob Shear
Hydraulics Unlimited

Gene Terry
Self-employed Welder

TRADES AND INDUSTRY DIVISION COURSES

AUTO BODY REPAIR (ABR) AND AUTO BODY REFINISHING (ABR)

ABR 100 INTRODUCTION TO AUTO BODY

The course will introduce the student to modern shop tools, methods and procedures. Emphasis will be on safety and an understanding of the automobile body repair profession. Upon completion students will have basic auto body skills. 30 clock hours. Two credits.

ABR 101 AUTO BODY WELDING

The student will be able to properly set up a gas welding unit and be able to make lap, butt and T-joints in the flat position and lap and butt in the vertical position. 60 clock hours. Four credits.

ABR 102 BASIC STRAIGHTENING

The students will be able to identify types of damage and use the hand tool and power equipment necessary for repairing minor damage and major door damage. They will use plastic filler on the larger areas of repair. Prerequisite: ABR 101 or instructor's approval. 60 clock hours. Four credits.

ABR 103 BASIC REFINISHING

The students will become familiar with refinish material, equipment, and their uses. They will prime, sand, and apply top coats using proper methods. 60 clock hours. Four credits.

ABR 111 DAMAGE REPAIR

The students will be able to identify auto panels and use power tools and equipment necessary to repair the damage on an auto. They will remove and replace interior and exterior trim as needed to complete the repair. Prerequisite: ABR 102, ABR 141, or instructor's approval. 60 clock hours. Four credits.

ABR 112 PANEL REPLACEMENT

The students will remove, replace and align damaged panels, using proper tools and equipment. Prerequisite: ABR 111 or instructor's approval. 60 clock hours. Four credits.

ABR 121 ELECTRICAL AND ALIGNMENT

The students will be able to diagnose minor electrical malfunctions resulting from collision damage using a continuity light. They will also be familiar with the use of the front end alignment equipment and methods of aligning a front end. 60 clock hours. Four credits.

ABR 122 ADVANCED REFINISHING

The students will properly sand, prime, mask and seal a car. They will also refinish the car with finishes currently used by industry. Prerequisite: ABR 103, or instructor's approval. 60 clock hours. Four credits.

ABR 123 DAMAGE APPRAISAL (ESTIMATING)

The students will become familiar with the manuals, forms and procedures for writing damage estimates. Prerequisite: ABR 121. 40 clock hours. Four credits.

ABR 141 AUTO BODY REPAIR I

The students will learn to weld lap, butt, and tee joints in the flat and vertical positions. They will be able to remove small dents with the pick and file method without the use of fillers, progressing to a severe or major door damage using power equipment and fillers to repair damage. They will also repair the damaged area using proper priming, sanding and color application techniques. 150 clock hours. Twelve credits.

ABR 142 AUTO BODY REPAIR II

The 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. They will also refinish partial and complete panels. 150 clock hours. Twelve credits.

ABR 143 AUTO BODY REPAIR III

The students will learn to diagnose minor electrical malfunctions in circuits using continuity lights. The students will properly sand, prime, mask, and seal a car. They will also refinish the car with finishes currently used by industry. They 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 adjustments to automotive glass. They will also become familiar with the manuals and procedures of writing estimates. 150 clock hours. Twelve credits.

ABR 151 AUTO REFINISH I

The students will become familiar with the refinish materials, solvents, primers, sand papers, top coats and the uses of each. They will become familiar with the tools, spray gun, sanders, transformers, air compressors and accessories. 150 clock hours. Twelve credits.

ABR 152 AUTO REFINISH II

The students will sand, prime, mask, seal and apply top coats to partial and complete panels with proper color matching using acrylic enamels and acrylic lacquer paints. 150 clock hours. Twelve credits.

ABR 153 AUTO REFINISH III

The students will prep and apply top coats to the entire car using both lacquers and enamels. 150 clock hours. Twelve credits.

ABR 201 QUARTER PANEL REPLACEMENT

The students will learn to remove and replace a quarter panel and to repair panels and reinforcements. They will align the sheet metal and complete the job including refinishing. Prerequisites: ABR 123, ABR 143, or instructor's approval. 60 clock hours. Four credits.

ABR 202 BASIC SHEET METAL REPLACEMENT

The students will learn to remove and replace a door skin and front sheet metal. They will also do the alignment and refinishing. Prerequisites: ABR 201 or instructor's approval. 60 clock hours. Four credits.

ABR 203 ADVANCED SHEET METAL REPLACEMENT (continuation of ABR 201 and ABR 202)

The students will learn to remove and replace the door skin and the front sheet metal. They will also do the alignment and refinishing. They will also remove and replace a quarter panel and repair inner panels and reinforcements. They will align the sheet metal and complete the job including refinishing. Prerequisites: ABR 201, or ABR 202 or instructor's approval. 60 clock hours. Four credits.

ABR 211 BASIC FRAME REPAIR

The students will learn to identify and diagnose types of frames and damage. They will be familiar with reinforcement and replacement methods. Prerequisites: ABR 203, ABR 242 or instructor's approval. 60 clock hours. Four credits.

ABR 212 CONVENTIONAL FRAME REPAIR

The students will become familiar with the equipment and methods used to repair and align conventional frames. Prerequisites: ABR 211 or instructor's approval. 60 clock hours. Four credits.

ABR 213 UNITIZED FRAME REPAIR

The students will become familiar with the equipment and repair methods used in the alignment of the unitized body. Prerequisites: ABR 212 or instructor's approval. 60 clock hours. Four credits.

ABR 221 AUTO BODY REBUILDING I

The students will learn to repair an auto with severe damage "total" and do the operations required to make the auto road worthy. Prerequisites: ABR 213, ABR 242, or instructor's approval. 60 clock hours. Four credits.

ABR 222 AUTO BODY REBUILDING II

The students will learn to repair an auto with severe damage "total" and do the operations required to make the auto road worthy. Prerequisites: ABR 221. 60 clock hours. Four credits.

ABR 223 AUTO BODY REBUILDING III (continuation of ABR 222)

The students will learn to repair an auto with severe damage "total" and do the operations required to make the auto road worthy. 60 clock hours. Four credits. Prerequisite: ABR 221 and ABR 222.

ABR 241 AUTO BODY REPAIR IV

The 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. 150 clock hours. Twelve credits.

ABR 242 AUTO BODY REPAIR V

The students will learn to identify and diagnose types of frames and damages. They will be familiar with the repair methods and equipment used in the alignment of conventional and unitized frames and bodies. Students will also be able to write an accurate estimate. 150 clock hours. Twelve credits.

ABR 243 AUTO BODY REPAIR VI

The students will learn to repair an auto with severe damage "total" and do the operations required to make the auto road worthy. 150 clock hours. Twelve credits.

AUTOMOTIVE MECHANICS TECHNOLOGY (AMT)

AMT 100 INTRODUCTION TO AUTOMOBILE MECHANICS

The course will introduce the student to modern shop tools, methods and procedures. Emphasis will be on safety and an understanding of the automotive mechanics profession. Upon completion the student will have a basic knowledge of automobile mechanics. 30 clock hours. Two credits.

AMT 104 BRAKE REPAIR

This course is designed to prepare the student for the specialty work of modern automobile brake repair and adjustment. Conventional as well as disc systems are studied and worked on. 60 clock hours. Four credits.

AMT 105 ADVANCED ELECTRICAL

This course is designed to give the student the theoretical and practical knowledge necessary to test and repair electrical units on modern cars. 60 clock hours. Four credits.

AMT 106 TUNE-UP

This course is designed to give the student the basic skills and knowledge in tune-up and service procedures as related to the automobile. Upon completion of the course the student will be able to diagnose and service the components of the conventional point and electronic ignition systems. 60 clock hours. Four credits.

AMT 107 ADVANCED ENGINE TUNE-UP

This course is designed to give the student basic skills and knowledge in fuel systems and service procedures as related to the automobile. Upon completion of the course the student will be able to diagnose and repair or overhaul the various types of carburetors found in American and most foreign cars. 60 clock hours. Four credits.

AMT 108 AUTOMATIC TRANSMISSIONS

This course is designed to give the student the basic skills and knowledge in automatic transmission services as it relates to the automobile. Upon completion of the course the student will be able to diagnose and service automatic transmissions (minor repairs, including seal replacement, band adjustment, linkage adjustment, and transmission removal.) 60 clock hours. Four credits.

AMT 115 FOREIGN CAR TUNE-UP

This course is designed to develop the skills and knowledge necessary to correctly tune the engines on foreign cars. 60 clock hours. Four credits.

AMT 116 AUTOMOTIVE EMISSION CONTROL

This course is designed to develop the skills and knowledge to enable the student to make repairs and adjustments on all makes of vehicle emission controls. 60 clock hours. Four credits.

AMT 125 AUTO CERTIFICATION REFRESHER

To prepare professional auto mechanics for certification tests given by National Institute for Automobile Service Excellence. 24 clock hours. Two credits.

AMT 131 BRAKES, TRANSMISSIONS AND FINAL DRIVES — A

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 they will overhaul standard transmission, clutches, drive shafts, and differentials. 150 clock hours. Twelve credits.

AMT 132 STEERING AND SUSPENSION SYSTEMS — A

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. They also perform complete chassis lubrication and make car body service adjustments, such as doors, hoods, and truck lids, normally performed by automotive mechanics. 150 clock hours. Twelve credits.

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 systems, and ignition systems are covered. Use of modern scientific test equipment in diagnosis of performance problems is stressed. Equipment such as vacuum gauge, tachometer, dwell meter, ohmmeter, distributor strobscrope, oscilloscope, exhaust analyzer, and all types of engine testers are used. 150 clock hours. Twelve credits.

AMT 136 EMISSION CONTROL

This course provides a basic knowledge and understanding of the various emission control systems and how they function on the automobile to aid in reducing emissions. Such polutants 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 or AMT 133-A or AMT 143-B or instructor's permission. 50 clock hours. Five credits.

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 they will overhaul standard transmission, clutches, drive shafts, and differentials. Six hours of class required a week. Work experience credit will be given for approved full-time current work as an auto mechanic. (This is equivalent to AMT 131-A). 12 credits.

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. They also perform complete chassis lubrication and make car body service adjustments, such as doors, hood, and trunk lids, normally performed by automotive mechanics. Six hours of class required a week. Work experience credit will be given for approved full-time current work as an auto mechanic. (This is equvialent to AMT 132-A). 12 credits.

AMT 143 FUEL SYSTEMS AND TUNE UP — B

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 systems, and ignition systems are covered. Use of modern scientific test equipment in diagnosis of performance problems is stressed. Equipment such as vacuum gauge, tachometer, dwell meter, ohmmeter, distributor strobscope, oscilloscope, exhaust analyzer, and all types of engine testers are used. Six hours of class required a week. Work experience credit will be give for approved full-time current work as an auto mechanic. (This is equivalent to AMT 133-A). Twelve credits.

AMT 206 ADVANCED DIAGNOSIS

This course is designed to advance experienced mechanics in the field of automotive diagnosis and troubleshooting. 60 clock hours. Four credits.

AMT 207 INTRODUCTION TO THE DIESEL ENGINE — A

Students will learn the basic theory of the diesel engine. Comparison is made between the gasoline and diesel engine in respect to block design, fuel systems, and electrical units. Emphasis is placed upon components, such as the turbocharger, blower, injector, fuel-pumps, and their function on the diesel engine. 60 clock hours. Four credits.

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 actual automobiles. They begin with minor jobs like valve adjustment or gasket replacement and progress to a complete engine overhaul. 150 clock hours. Twelve credits.

AMT 232 ADVANCED ELECTRICAL — A

Students learn theory, diagnosis, and repair of all automotive electrical units including batteries, starters, generators, alternators, regulators, electrical accessories, wiring, and instruments. Students learn how to use fastest electrical testing equipment to diagnose problems in automotive electrical units and circuits. 150 clock hours. Twelve credits.

AMT 233 AIR CONDITIONING AND COMFORT CONTROLS

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

AMT 234 AUTOMATIC TRANSMISSIONS AND SERVICE PRACTICE — 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 of each component. All late model types of automobile transmission covered. 150 clock hours. Twelve credits.

AMT 241 AUTOMOTIVE ENGINES — B

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 actual automobiles. They begin with minor jobs like valve adjustment or gasket replacement and progress to a complete engine overhaul. Six hours of class required a week. Work experience credit will be given for approved full-time current work as an auto mechanic. (This is equivalent to AMT 231-A). 12 credits.

AMT 242 ADVANCED ELECTRICAL — B

Students learn theory, diagnosis, and repair of all automotive electrical units including batteries, starters, generators, alternators, regulators, electrical accessories, wiring, and instruments. Students learn how to use latest electrical testing equipment to diagnose problems in automotive electrical units and circuits. Six hours of class required a week. Work experience credit will be given for approved full-time current work as an auto mechanic. (This is equivalent to AMT 232-A). 12 credits

AMT 244 AUTOMATIC TRANSMISSIONS AND SERVICE PRACTICE — B

Students learn principles of hydraulics, planetary gear sets, and power flow through modern automatic transmissions. Students gain experience in disassembly, inspection, replacement of defective parts, and complete diagnosis of functions of each component. All late model types of automobile transmission covered. Six hours of class required a week. Work experience credit will be given for approved full-time current work as an auto mechanic. (This is equivalent to AMT 234-A). Twelve credits.

BUILDING CONSTRUCTION (BCS) & (BCT)

BCS 100 INTRODUCTION TO BUILDING CONSTRUCTION

The course will introduce the student to the building trades profession. Emphasis will be on safety and an introduction to building trades tools, equipment, methods and procedures. Upon completion the student will have a basic knowledge of building construction. 30 clock hours. Two credits.

BSC 102 BASIC CABINETRY

This course will provide the student with necessary instruction for skill development and understanding in the area of basic cabinet construction. 60 clock hours. Four credits.

BCS 104 CABINETRY II

Students will learn to construct detailed cabinets using intermediate techniques in machine and hand tool joining. They will be able to analyze and design cabinets for home, office, and shop use. 60 clock hours. Four credits.

BCS 111 BUILDING CONSTRUCTION I

Upon completion of this course the student will be proficient in the use of tools as required in the following areas. The student will be able to cut and assemble concrete forms as well as place and finish the concrete. He will be able to cut, assemble, erect, and brace various members of sections of floor frames, stud walls, and roof frames. He should be able to layout and cut common rafters. The student will be able to cut and install cornice members, set windows, and lay shingles. 120 clock hours. Nine credits.

BCT 115 CONCRETE

Upon completion of this course the student will be able to define concrete and list the materials and proportions of a workable mix, define placing and finishing terms, identify the methods and tools used in both formed and flat work. He will be able to define and give the purposes for foundation and forming terms, identify the parts of a form and the types of foundations with different footings. 20 clock hours. Two credits.

BCT 117 BASIC TOOLS AND MATERIALS

Upon completion of this course the student will be able to recognize various tools and make selections for their general use; maintain safe efficient storage habits; be able to sharpen chisels, bits, and planes; and retip screwdrivers. He will be able to identify various work products and describe their general uses according to grade and quality, identify the various builders hardware and describe their uses, and identify and give general uses for construction adhesives and glue. 20 clock hours. Two credits.

BCT 121 FRAMING I

Upon completion of this course the student will be able to identify the various framing members of a house and the most commonly used materials for these members. He will possess the knowledge necessary to list materials and cut and install any member of a floor or wall frame common to residential construction. He will possess the knowledge required to measure and layout a common rafter in the construction of a roof. 30 clock hours. Three credits.

BCS 122 BUILDING CONSTRUCTION II

Upon completion of this course the student will be able to apply siding, install insulation, hang and finish gypsum wall boards, lay masonry units as a part of the exterior finish, lay concrete walls and other exterior surfaces. He will be able to paint and finish the exterior trim and siding of a house. 120 clock hours. Nine credits.

BCT 125 EXTERIOR

Upon completion of this course the student will be able to identify the different cornices and their members and list the materials needed for a cornice, recall various roofing materials and determine the proper roofing to use, list the materials needed for a roof, identify various siding materials and list the siding materials for

a house. He will be able to identify the basic styles of windows and their purposes, determine the rough opening sizes of windows according to manufacturer's specifications, and be familiar with the methods of installing windows. He will be required to identify the styles, uses, and sizes of doors with rough opening sizes for each. 20 clock hours. Two credits.

BCT 126 MASONRY

The student will learn the types of masonry and be able to list the uses of each. He will know the mortar requirements and mixes for various masonry units or jobs, be able to list the methods and techniques involved in laying bonds with various materials and units. The student will have knowledge relating to the use and care of masonry tools. He will be required to list the masonry materials needed for a building project. 20 clock hours. Two credits.

BCT 127 INTERIOR FINISH

The student will be able to define terms used in insulation, drywall, and interior flooring. He will identify the materials and their purposes in these three areas. He will become familiar with the tools and techniques used in installing insulation, doing drywall work, and laying interior floors. He will list the materials needed in each of these three areas for a construction project. 20 clock hours. Two credits.

BCT 131 BASIC MATH AND ESTIMATING

The student will cover basic math in whole numbers, fractions, decimals, percentages, and measurements. He will solve problems relating to carpentry and other construction trades continuing into material estimating for various phases of residential construction. 30 clock hours. Three credits.

BCS 133 BUILDING CONSTRUCTION III

Upon completion of this course the student will be able to set door jambs, hang doors, install hardware, install paneling, case openings and install base trim, cut, assemble, and install cabinets and built-ins, paint and finish interior walls and trim. He will be able to do final touch up to the exterior portions of a building. 120 clock hours. Nine credits.

BCT 135 INTERIOR TRIM AND CABINETS

The student will list the materials needed in the following areas. He will know the various styles and purposes of interior doors, be able to determine rough opening sizes, and become familiar with the techniques of installing doors and hardware. He will be required to identify various moldings and trim, and be familiar with the techniques of fitting them. He will know the basic measurements used in closets, cabinets, and other built-ins. The student will sketch and give detailed measurements for various cabinets. He will become familiar with the styles and methods used in cabinet design and construction. 20 clock hours. Two credits.

BCT 136 PAINTING AND FINISHING

The student will learn the types of paints and finishes to be used and will list the materials needed for both exterior and interior work in this area. He will learn proper mixing and application techniques, as well as proper use and care of equipment. 10 clock hours. One credit.

BCT 141 BASIC ARCHITECTURAL DRAFTING AND PRINT READING

The student will be able to analyze building plans and their requirements; learn basic drafting procedures including lettering line work, methods of projection, dimensioning systems and graphic symbols; sketch floor plans and elevations; do instrument drawings. 30 clock hours. Two credits.

BCT 160 ORIENTATION TO BUILDING CONSTRUCTION

Upon completion of this course a new student in the Building Construction Program will be aware of the intent and areas of training to be covered. He will be aware of the purposes and objectives of the Building Construction Program, and know the student requirements and the procedure which his training will follow. The student in this course will be required to score at least 85 percent on a written test in the knowledge of safety basic to the training program. Upon completion the student will be assigned to a training class which best suits his individual needs. 10 clock hours. One credit.

BCS 211 BUILDING CONSTRUCTION IV

Upon completion of this course the student will be proficient in laying out a building site, locating foundations and setting elevations. He will be able to layout, set, and align concrete forms as well as being proficient in the placement and finishing of concrete. The student will be able to locate, layout, cut, assemble, erect and align floor, wall, and roof frames. He will be able to layout and build a roof cornice, lay shingles and set exterior doors and windows. He will be able to list, layout, and cut materials with the least possible waste. 120 clock hours. Nine credits.

BCT 215 PREPARATION AND LAYOUT

Upon completion of this course the student will be able to make judgements in the selection of building sites; proceed with the necessary preparation for building plans, permit application, and sub-bid information. He will possess the knowledge necessary to locate a building on a site; set elevations with a builders level, and locate position of the foundation forms. 20 clock hours. Two credits.

BCT 221 FRAMING II

The student will gain the knowledge necessary to layout, cut, and assemble floor frames, stud walls, and roof frames. He will be able to list the materials needed in each area of framing. He will possess the knowledge necessary in the measurement and layout of stairs, any rafter or simple roof truss; as well as locating walls, openings, and other special features in the framing of a house. 30 clock hours. Three credits.

BCS 222 BUILDING CONSTRUCTION V

After completion of this course the student will be able to layout and cut siding with the least possible waste. He will be able to form, place and finish concrete steps. He will be able to layout, cut, and install stair horses. He will be able to layout masonry veneer and build leads as well as lay caps and sills. He will be familiar with electrical and plumbing installation practices. He will be able to hang and finish gypsum wall board at an advanced level. 100 clock hours. Seven credits.

BCT 230 CONSTRUCTION ESTIMATING I

This course is a basic refresher course allowing the student to establish a set of guidelines from which a complete material take off can be prepared. 30 clock hours. Three credits.

BCT 231 CONSTRUCTION ESTIMATING II

This course is for the advanced student in Building Construction in which he will estimate the amount of material, time, and equipment required to complete a building construction project. He will study specifications, plans and codes in preparing these estimates. He will calculate the cost involved for the material, labor and special equipment in each phase of construction. 40 clock hours. Four credits.

BCS 233 BUILDING CONSTRUCTION VI

Upon completion of this course the student will know how to select interior finishes; install special interior doors and trim; install stair risers, treads, and trim; layout, build, and install kitchen cabinets, vanities, and linen closets. He will be able to lay counter tops and back splash, as well as do the final interior detail and catch up work. 100 clock hours. Seven credits.

BCT 236 BUILDING CODES

Upon completion of this course the student will know how to use the Uniform Building Code as a reference in light construction. He will be able to determine the occupancy of a building; recall general requirements of residential structures as to site, size, foundation, framing, ventilation, and other general requirements. He will be able to use the code in determining specific building requirements. 20 clock hours. Two credits.

BCT 237 LEGAL PROCEDURES AND PRACTICES

The student in this course will identify the legal procedures and responsibilites, employment practices, vocabulary, and documents used in construction and business. Basic terms in real property, and also types and procedures in loans and financing as related to proper business management. 30 clock hours. Three credits.

BCT 241 ARCHITECTURAL DRAFTING II

The student will be introduced to the techniques encountered in the preparation of working drawings for a residential or commercial structure. Students will be able to prepare floor plans, building sections, elevations, wall sections, schedules and details, building orientation and site development. 60 clock hours. Four credits.

CHILD CARE TEACHER (CCT)

CCT 100 INTRODUCTION TO EARLY CHILDHOOD EDUCATION

An orientation to the field of early childhood education. The student will investigate the different types of centers available for young children in relations to his own career goals. 20 clock hours. Two credits.

CCT 101 WRITTEN COMMUNICATION FOR THE PRESCHOOL TEACHER

The student will develop vocational applications for written communication skills basic to the field of early childhood education. The student will be able to relate a concept in simple terms, and also be able to interpret and relate specific statements and ideas. 20 clock hours. Two credits.

CCT 102 ORAL COMMUNICATION FOR THE PRESCHOOL TEACHER

The student will develop vocational applications for oral communication skills basic to the field of early childhood education. To develop an appreciation for the process of attentive listening in a variety of settings familiar to the child care worker. To develop the ability to differentiate between personal attitudes, values and beliefs and professional outcomes. 30 clock hours. Three credits.

CCT 105 FIRST AID

Follows the Standard American Red Cross First Aid course and emphasizes health and safety procedures with young children. 20 clock hours. Two credits.

CCT 106 CHILDREN'S LITERATURE

A study of the various forms of literature available for young children, with an emphasis on skills in presenting stories to children. 30 clock hours. Three credits.

CCT 131 PRACTICE TEACHING I

A practical experience in a child care center. The techniques of child study are applied to real life setting through observations and recordings. 80 clock hours. Four credits.

CCT 132 PRACTICE TEACHING II

Continuation of Practice Teaching I. Student will be responsible for making plans and working with small groups of young children. Prerequisite: CCT 131. 80 clock hours. Four credits.

CCT 133 VOCATIONAL TEACHING EXPERIENCE

The student will work as a teacher aide under the direction of a qualified teacher usually in an off campus setting for young children. Prerequisite: CCT 132. 80 clock hours. Four credits.

CCT 141 ACTIVITIES FOR YOUNG CHILDREN

Laboratory experiences in science, music, art and creative movement. A study of practical materials which will enhance a child's potential through satisfying, sensory-type activities. 40 clock hours. Four credits.

CCT 151 NUTRITION FOR YOUNG CHILDREN

The study of the essential nutrients and their function for a growing child. Student will be able to evaluate menus and snacks for the home and institutional food services and apply nutrition education in the preschool classroom. 40 clock hours. Four credits.

CCT 161 CHILD GROWTH AND DEVELOPMENT I

A study of human growth patterns from prenatal influences and conception to eight years of age. The emphasis is on physical, social, emotional, and psychological growth. 30 clock hours. Three credits.

CCT 162 CHILD GROWTH AND DEVELOPMENT II

Continuation of Child Development I. Study of child growth patterns with an emphasis on the child's learning environment and language skills. The student will investigate behavior management techniques. Prerequisite: CCT 161 or permission of instructor. 30 clock hours. Three credits.

CCT 201 BUSINESS MANAGEMENT FOR CHILD CARE CENTERS

The record-keeping procedures necessary for the successful business operation of a child care center will be studied. Students will practice with financial report forms and analyze a small service business. Prerequisites: CCT 101 & CCT 102. 30 clock hours. Three credits.

CCT 202 ADMINISTRATION OF CHILD CARE CENTERS

A study of the organization and management of the various child care programs. The student will examine the goals, staffing, planning, and administrative procedures necessary for directing an early childhood program. 40 clock hours. Four credits.

CCT 231 PRACTICE TEACHING III

Continuation of Practice Teaching II. Students will develop individual teaching skills in a guided classroom teaching experience. Unit planning for the young child's classroom will be practiced. Prerequisite: CCT 133. 80 clock hours. Four credits.

CCT 232 HUMAN RELATIONS IN THE CLASSROOM

An assessment of the teacher's role in the classroom. The emphasis of this team teaching experience is the development of a positive and constructive attitude towards self appraisal and the appraisals of others. Prerequisite: CCT 231. 100 clock hours. Five credits.

CCT 233 FAMILY AND COMMUNITY RELATIONS

A team teaching experience with an emphasis on the effects of family, class and ethnic value systems on the young child's personality. Prerequisite: CCT 232. 100 clock hours. Five credits.

CCT 241 METHODS OF TEACHING THE YOUNG CHILD

Students learn to prepare daily schedules and materials, specific techniques of teaching in a living-learning environment. Prerequisite: CCT 141 or permission of the instructor. 40 clock hours. Four credits.

CCT 251 CREATIVE FOODS AND NUTRITION

A practical course in planning, preparing and evaluating foods served to young children. Laborator experiences will include quantity cooking, preserving nutrients and exploring foods with children. 40 clock hours. Three credits.

CCT 255 SCIENCE FOR PRESCHOOL TEACHERS

A practical course designed to assist teachers in extending children's experience in both natural and applied science. 50 clock hours. Five credits.

CCT 261 NEW CONCEPTS AND PRACTICES IN CHILD DEVELOPMENT

A review of the principles of child growth and development. Practical applications of recent child management theories and techniques will be studied. Students will plan for appropriate ways to carry out parent involvement in an early childhood classroom. 30 clock hours. Three credits.

CCT 265 PLAYGROUND DEVELOPMENT

After visiting and evaluating various playgrounds, the student will plan and construct playground equipment suitable for a particular site and appropriate for young children's developing abilities. 80 clock hours. Four credits.

GRAPHIC TECHNOLOGY (GRT)

GRT 100 INTRODUCTION TO GRAPHIC TECHNOLOGY

This course will introduce the student to procedures of the printing industry. Emphasis will be on a broad overview of the duplicating processes with an emphasis on offset printing. Upon completion, the student will have a basic understanding of the printing industry. 30 clock hours. Two credits.

GRT 111 GRAPHIC TECHNOLOGY I

This course will introduce the student to the printing industry, the types of work and skills related to the industry and its history. Upon completion of this course, the student will have been given the opportunity to acquire a knowledge of typography and basic skills in the fundamentals of strike-on composition, photo composition, layout and paste-up techniques for one color reproduction by the offset printing process. 150 clock hours. Ten credits.

GRT 112 GRAPHIC TECHNOLOGY II

This course will introduce the student to process photography and plate making. Upon completion of the course, the student will have been given the opportunity to acquire a basic knowledge of the principles and fundamental practices related to the process camera, film, film processing, line and halftone photography, stripping and plate making for one color reproduction by the offset printing process. 150 clock hours. Ten credits.

GRT 123 GRAPHIC TECHNOLOGY III

This course will introduce the student to press operation and finishing procedures. Upon completion of the course, the student will have been given the opportunity to acquire a basic knowledge of the principles and fundamental practices in the operation of a variety of makes of duplicator size offset presses and manually operated bindery equipment. 150 clock hours. Ten credits.

GRT 210 GRAPHIC MATERIALS ACQUISITION

This course will introduce the student to purchasing and cost analysis. Upon the completion of the course, the student will have been given the opportunity to acquire a basic knowledge of paper, supplies and equipment purchasing; discounts, shipping charges and cost analysis. 30 clock hours. Three credits.

GRT 211 GRAPHIC TECHNOLOGY IV

This course deals with advanced photocomposing techniques and an introduction to pre-press preparation of copy for multi-page and multi-color reproduction. Upon completion of the course, the student will have been given the opportunity to acquire a basic knowledge of the principles and fundamental practices related to sophisticated photocomposer techniques and operation by data storage, layout and pasteup for multi-color reproduction and imposition of multiple pages. 150 clock hours. Ten credits.

GRT 212 GRAPHIC TECHNOLOGY V

Upon completion of this course, the student will have been given the opportunity to acquire a basic knowledge of advanced process camera techniques related to multi-color reproduction and stripping procedures related to plate making for multi-color, multi-page reproduction. 150 clock hours. Ten credits.

GRT 213 GRAPHIC TECHNOLOGY VI

Upon completion of this course, the student will have been given the opportunity to acquire a basic knowledge of duplicator size press operation as it relates to color registration. In addition, as near production type situation will be simulated requiring students to produce jobs from roughs through press proofs from customer specifications. 150 clock hours. Ten credits.

GRT 214 GRAPHIC TECHNOLOGY VII

Upon completion of this course, the student will have been given the opportunity to acquire a basic knowledge of duplicator size press operation as it relates to color and two-sided registration. In addition, pressure adjustments will be covered in detail along with minor repair, maintenance and lubing of the equipment. 150 clock hours. Ten credits.

GRT 215 GRAPHIC TECHNOLOGY VIII

This course will introduce the student to large sheet fed offset press and automated bindery equipment operation. Upon completion of this course, the student will have been given the opportunity to acquire a basic knowledge to the principles and fundamental practices in preparing and running a large offset press as well as automated binery equipment including book stitcher, folder and collator. 150 clock hours. Ten credits.

INDUSTRIAL MECHANICS (INM)

INM 100 INTRODUCTION TO INDUSTRIAL MECHANICS

The course will introduce the student to industrial engines. Emphasis will be on safety and a knowledge of the industrial engine. Upon completion the student will have a basic understanding of power mechanics and other mechanical and electrical systems as applied to modern industrial engines. 30 clock hours. Two credits.

INM 105 INDUSTRIAL MECHANICS I

Students will be given training and skill development in the use of general hand tools, basic and specialized shop equipment, measuring instruments, shop safety and procedures used and required by industries in the industrial mechanics occupational areas. Instruction in power mechanics and the four stroke cycle gas powered engine is given. Students will perform various services and repairs, including complete engine overhaul on all types of gasoline four stroke cycle industrial engines. 150 clock hours. 12 credits.

INM 106 INDUSTRIAL MECHANICS I

Students will learn the construction, design, principles of operation, and repair of the two stroke cycle gasoline engine and its many applications to industrial mechanics. This course also offers an introduction to diesel powered 2 and 4 stroke cycle engines; covering special design features, principles of operation, repair and maintenance. Service and maintenance of gas powered utility equipment such as chair saws, power-driven pumps and generators, lawn and garden equipment are included. 150 clock hours. 12 credits.

INM 107 INDUSTRIAL MECHANICS III

Students will study the concept and various systems of mechanical power transfer systems, brakes, suspension and wheels. Covered are belt, chain, shaft, gear, and fluid drives. Couplings and clutches, sprockets, gear design, power and speed ratios, and power flows for manual transmissions and final drives are learned. Types of seals, bearings, flex joints as well as service procedures are learned. Manual and hydraulic actuated brake systems, suspension, wheel lacing, truing, and balancing is included. Basic fundamentals of oxyacetylene, electric arc welding and soldering included in this course will provide the student with initial skills required in many areas of industrial mechanics. 150 clock hours. 12 credits.

INM 205 INDUSTRIAL MECHANICS IV

Students obtain an understanding and working knowledge of basic electricity (DC) in the areas of electron theory, magnetism, magnetic induction, electrical terms and properties, application of Ohm's Law, conductors, semi-conductors, insulators, and batteries. The principles of operation, complete testing, and servicing of all types of ignition systems are stressed. Systems covered include conventional battery-contact point system, flywheel, and unit type magnetos, energy transfer system and capacitor discharge ignition (CD) systems utilized by industrial, marine, motorcycle, and small gas engines. 150 clock hours. 12 credits.

INM 206 INDUSTRIAL MECHANICS V

Students learn the units of a conventional gasoline fuel system, principles of carburetion, carburetor circuits, fuel pumps, and other system components service and repair. Types of carburetors covered are the throttle valve and slide valve float type, diaphragm and combination diphragm, fuel pump carburetors. Vacuum and mechanical linkage fuel pumps and exhaust system are covered.

Diesel injection units, principles of operation and system service and repair along with a study of fuels, motor oils, additives, and lubricants are covered. Fluid power systems theory involving fundamental laws and principles, symbols, and component identification are studied. Principles of operation and servicing of hydraulic pressure pumps, water pumps, compressors, reservoirs, control valves, cylinders, and plumbing are also covered. 150 clock hours. 12 credits.

INM 207 INDUSTRIAL MECHANICS VI

Students learn construction, theory, diagnosis and repair of industrial (DC) and (AC) charging systems, lighting, and accessory circuits and components. Students will further develop their knowledge and skills in troubleshooting many common mechanical, electrical, fuel, and hydraulic systems used in industrial mechanics. The assembly, pre-delivery service, and performance testing of units such as boats, motors, power driven industrial equipment, recreational, and home utility equipment are also covered. 150 clock hours. 12 credits.

WELDING (WLT)

WLT 100 INTRODUCTION TO WELDING

The course will introduce the student to oxy-acetylene arc welding. Emphasis will be on safety and a knowledge of the welding profession. Upon satisfactory completion the student will have a basic understanding of oxy-acetylene and arc welding. 30 clock hours. Two credits.

WLT 101 OXY-ACETYLENE WELDING I

After successful completion of this course the participant will be trained to safely operate oxy-acetylene equipment and to weld the common joints used in industry in the flat, horizontal, vertical and over head positions. 60 clock hours. Four credits.

WLT 102 OXY-ACETYLENE WELDING II

After successful completion of this course the participant will be able to weld all the joints used in industry, in the horizontal and overhead positions. 60 clock hours. Four credits.

WLT 103 OXY-ACETYLENE WELDING III

After successful completion of this course the participant will be able to weld 3/16" mild steel, pipe and tubing, cast iron, and braze cast iron, mild steel in all positions — silver braze and hard surface. 60 clock hours. Four credits.

WLT 111 SHIELDED METAL ARC I-A

Upon successful completion of the course the participant should be able to operate SMAW equipment properly and safely and have the basic skill and theory needed to weld in the flat position using E-6013, E-7014, E-7024, E-6010, and E-6011; and weld fillet welds in the horizontal, vertical, and overhead positions using E-6010 and E-6011. 60 clock hours. Four credits.

WLT 112 SHIELDED METAL ARC I-B

Upon successful completion of the course the participant should be able to make multiple pass fillet welds in all positions using E-6010, E-6011, E-7018 and E-6013, downhill welding using E-6010; and show basic skill and knowledge. 60 clock hours. Four credits.

WLT 113 SHIELDED METAL ARC I-C

Upon completion of the course the participation will be able to weld sheet metal in all positions using various electrodes; weld tubing and light to heavy metal; carbon arc cutting and gauging; hard surfacing; and showing basic skills and have a knowledge of field testing; weld inspection, and quality control. 60 clock hours. Four credits.

WLT 121 SHIELDED METAL ARC II-A

Upon successful completion of the course the participant will be able to make multiple pass fillet welds in the horizontal and vertical positions to meet American Welding Society specifications. 60 clock hours. Four credits.

WLT 122 SHIELDED METAL ARC II-B

Upon successful completion of the course the participant will be able to make multiple pass welds in the vertical position using E-6010 and E-7018 electrodes to meet the American Welding Society specifications. 60 clock hours. Four credits.

WLT 123 SHIELDED METAL ARC II-C

Upon successful completion of the course the participant will be able to make multiple pass fillet welds in the overhead position using various electrodes and meeting American Welding Society specifications. 60 clock hours. Four credits.

WLT 135 METALLURGY

Students recognize raw materials, equipment and changes that occur when metals are manufactured, heat-treated, and welded. 50 clock hours. Five credits.

WLT 141 OXYGEN/ACETYLENE WELDING

Students weld and bronze all common fillet and butt joints in all positions normally used by industry; proper oxygen/acetylene cutting techniques of various thicknesses of metal will also be practiced. Proper use of equipment will be demonstrated by each participant at all times. American Welding Society standards will be the criteria used to judge objectives. 150 clock hours. Twelve credits.

WLT 142 SHIELDED METAL ARC I

Upon successful completion of the course the participant will have very basic welding skills, in all positions, using all common welding electrodes. 150 clock hours. 12 credits.

WLT 143 SHIELDED METAL ARC II

Students weld all common fillets in all positions normally used by industry, accomplished by using various types of electrodes and thicknesses of carbon steel. Students use proper and safe work habits in cutting and preparing metal. American Welding Society standards will be criteria used to determine objective completion and cutting practice. 150 clock hours. Twelve credits.

WLT 201 SHIELDED METAL ARC PIPE-A

Upon successful completion of courses number 201, 202, and 203 the participant will be able to properly bevel, fit up and weld pipe with E-6010 and 7018 electrodes in 2G, 5G, and 6G positions in accordance with American Welding Society specifications. 60 clock hours. Four credits.

WLT 202 SHIELDED METAL ARC PIPE-B

Upon successful completion of course 201, 202, and 203 the participant will be able to properly bevel, fit up and weld pipe with E-6010 and E-7018 electrodes in 2G, 5G, and 6G positions in accordance with American Welding Society specifications. 60 clock hours. Four credits.

WLT 203 SHIELDED METAL ARC PIPE-C

Upon successful completion of course 201, 202, and 203 the participant will be able to properly bevel fit up and weld pipe with E-6010 and E-7018 electrodes in 2G, 5G, and 6G positions in accordance with American Welding Society specifications. 60 clock hours. Four credits.

WLT 211 SHIELDED METAL ARC III-A

Upon successful completion of the course the participant will be able to weld beveled butt joints in the vertical and horizontal positions using E-6010 electrodes to meet American Welding Society specifications. 60 clock hours. Four credits.

WLT 212 SHIELDED METAL ARC III-B

Upon successful completion of the course the participants will be able to weld beveled butt joints in the overhead position using E-6010 electrodes and in the vertical position using E-7018 electrodes and meeting the American Welding Society specifications. 60 clock hours. Four credits.

WLT 213 SHIELDED METAL ARC III-C

Upon successful completion of the course the participant will be able to weld beveled butt joints in the horizontal and overhead welding positions using E-7018 electrodes and meeting American Welding Society specifications. 60 clock hours. Four credits.

WLT 221 MIG WELDING I

Upon successful completion of the course the participant should be able to operate GMAW equipment properly and safely, weld fillet welds with .035 wire in all positions, square groove butt joints in all positions, and the welding of various joints on sheet metal with job entry level skills. 60 clock hours. Four credits.

WLT 222 MIG WELDING II

Upon successful completion of the course the participant should be able to operate GMAW equipment properly and safely, weld vee groove butt joints in the vertical, horizontal, and overhead positions, and be able to weld various types using .045 mild wire with job entry level skills. 60 clock hours. Four credits.

WLT 223 MIG WELDING III AND TIG WELDING

Upon successful completion of the course the participant should be able to operate GMAW equipment properly and safely. They should weld using comsumable spot welding, weld various joints in the flat and horizontal positions using 1/16" flux cored wire, weld stainless steel and aluminum using the GMAW process with job entry level skill. 60 clock hours. Four credits.

WLT 236 SPECIAL PROBLEMS IN WELDING

Students improve skills in welding processes and positions as they and instructors feel necessary to meet students vocational goals. 150 clock hours. Twelve credits.

WLT 241 SHIELDED, METAL, ARC III

Students weld beveled butt joints on ¼" to ½" plate in all positions using various electrodes. American Welding Society standards will be criteria used to determine objective completion. Prerequisite: WLT 142, WLT 143, or ten hours of oxygen/acetylene safety and cutting practice. 150 clock hours. Twelve credits.

WLT 242 SHIELDED METAL ARC PIPE WELDING

Upon successful completion of the course the participant will be able to properly bevel, fit up and weld pipe with E-6010 and 7018 electrodes in 2G, 5G and 6G positions in accordance with American Welding Society specifications. 150 clock hours. Twelve credits.

WLT 243 TIG AND MIG WELDING

Students will weld all common beads and joints with MIG and TIG processes in all positions. They learn proper procedures in care and safe operation of equipment used. 150 clock hours. Twelve credits.

VOCATIONAL: TRADES AND INDUSTRY (VTI)

VTI 101 SAFETY AND FIRST AID

Student recognizes importance of good safety practices and results of poor practices. They recall hazard and methods of accident prevention related to vocational area and basic first aid procedures. 20 clock hours. Two credits.

VTI 103 INDUSTRIAL COMMUNICATIONS

Students recognize importance of communication in industry, good and poor practices, and improvement of communications abilities. 30 clock hours. Three credits.

VTI 105 INDUSTRIAL ORGANIZATIONS AND INSTITUTIONS

Students gain an overall view of development of American business and industry, recognizing relationships with companies, unions, government, and financial institutions. 30 clock hours. Three credits.

VTI 121 SHOP MATH

Student will recall concepts and solve problems relating to his vocational area of study. 30 clock hours. Three credits.

VTI 124 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. 30 clock hours. Three credits.

VTI 125 COLORADO STATE SAFETY INSPECTION

Students develop understanding, ability, and skills to perform state motor vehicle inspection properly. 20 clock hours. Two credits.

VTI 135 INDUSTRIAL MATH AND SCIENCE

The student will recall concepts and solve problems in basic math and in basic physics as they relate. 50 clock hours. Five credits.

VTI 136 SHOP PRACTICE

Students will learn and understand various shop procedures that are common to all types of automotive repair shops. Study will include the use and care of basic hand tools, shop equipment, measuring instruments, service reference materials and interpreting automotive drawings. 30 clock hours. Three credits.

VTI 137 PARTS MANAGING FUNDAMENTALS

Students will study the basic operation of typical parts departments. This will include the use of parts manuals, cross references, price manuals, micro fiche systems, and inventory control. 30 clock hours. Three credits.

VTI 175 WELDING CERTIFICATION AND EMPLOYMENT

Students are acquainted with certification requirement for different industries and possibilities in professions. Prerequisites: WLT 141, WLT 142, WLT 143, WLT 241, WLT 242. 50 clock hours. Five credits.

VTI 181 BASIC BLUEPRINT READING

Students learn to read shop drawings and standard welding symbols. Prerequisite: Welding student standing or permission of instructor. 30 clock hours. Three credits.

VTI 182 WELDING LAYOUT

Students learn layout for sheet metal, heavy plate, and pipe joints, using cardboard and plywood for simulation. Prerequisite: VTI 181. 30 clock hours. Three credits.

VTI 183 WELDING INDUSTRY

Students acquire understanding of importance of welding industry and its effect on everyday life. 30 clock hours. Three credits.

COLLEGE COMMITTEE AND FACULTY

AIMS JUNIOR COLLEGE DISTRICT COMMITTEE

Victor R. Nottingham	President
Lynn Pitcher	Secretary
Buryl Van Buskirk	Treasurer
H. Gordon Johnson	Member
Wayne Foster	Member

AIMS COMMUNITY COLLEGE FACULTY AND ADMINISTRATION

ADAMS, JAMES R. (Mid-Management)
B.A., University of Northern Colorado; Graduate Study, University of Northern Colorado; Eighteen years of business experience.

ADAMSON, WILLIAM H. (Division Chairperson, Public Service)
B.S.E.E., University of Southern California; Graduate Study, University of California, Los Angeles, Colorado State University; Eighteen years industrial and military experience.

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

ARNDT, MICHAEL W. (Respiratory Therapy)
B.S., Mount Marty College, Certified Respiratory Therapy Technician; Nine years experience in respiratory therapy.

BAILEY, GLENN E. (Building Construction)
Eighteen years construction experience.

BATMAN, LARRY G. (Mathematics)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced Graduate Study, Colorado State University.

BAY, MARVIN L. (Aviation)
B.S., Colorado State University; M.A., University of Northern Colorado; Advanced Graduate Study, University of Northern Colorado; Eight years experience in aviation industry.

BINGER, WILLIAM R. (Building Construction)
Twenty years industrial experience.

BORTHICK, GILBERT D. (Engineering Technology)
P.R.E., Colorado School of Mines; M.S., Colorado School of Mines; Nineteen years industrial experience.

BROWN, W. ARLIN (Division Chairperson, Communication/Arts)
B.A., Eastern New Mexico University; M.A., Administration, M.A., English, Western State College of Colorado; Ed.D., University of Northern Colorado.

BUXMAN, BETTY J. (Accounting)
A.A., Aims Community College; B.A., University of Northern Colorado; M.A., University of Northern Colorado; Eight years business experience.

CALLER, EDWARD G. (Engineering Technology)
Attended Rochester Technical School. Luton College of Technology; Fifteen years industrial experience.

CAMERON, ROY E. (Mathematics/Science)
B.S., University of Illinois; M.S., University of Illinois; Advanced Graduate Study, Purdue University, Illinois Institute of Technology, Eastern Illinois University, Northern Illinois University, University of California-Berkeley, University of Northern Colorado, Denver University.

COLTON, KERRY L. (Accounting)
B.A., University of Northern Colorado; M.S., University of Northern Colorado; one year business experience.

COMPESTINE, FRANCIS C. (Division Chairperson, Mathematics/Science)
B.A., Arizona State University; M.S., New Mexico Highlands University; Ph.D., University of Northern Colorado.

CRIBELLI, SUSAN (Developmental Studies)
B.A., University of Northern Colorado; M.A., University of Northern Colorado.

CROSS-CALLER, ARLINE M. (Communication/Arts)
B.A., University of Northern Colorado; Attended New England Conservatory of Music; M.A., University of Northern Colorado; Advanced Graduate Study, Arizona State University, New York University.

DABERKOW, DONALD (Graphics)
B.A., University of Northern Colorado; Graduate Study, University of Northern Colorado; Six years experience in office production work.

DALPRA, CHARLES G. (Skill Center)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Eight years industrial experience.

DARLING, DONALD W. (Engineering Technology)
A.A., Foothill College; B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced Graduate Study, Colorado State University; Fifteen years industrial experience.

DAVISSON, SUE E. (Counselor)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced Graduate Study, Kephart Clinic.

DE LA TORREE, BENITO JR. (Developmental Studies)
B.A., University of Northern Colorado; M.A., University of Northern Colorado

DUNCAN, JAMES CARROLL (Agriculture)
B.S., Abilene Christian College; M.Ed., Sam Houston State University; Seven years industrial experience.

ECKHARDT, BENJAMIN G. (Industrial Mechanic)
Thirteen years industrial experience.

ECKHARDT, 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 automotive trade experience.

EDWARDS, J. PHILLIP (Electronics Technology)
B.A., University of Northern Colorado; Graduate Study, University of Northern Colorado, Colorado State University; Nine years military and industrial experience.

FAJARDO, JOSEPH S. (Chairperson, Mexican American Studies Program)
B.A., University of Denver; M.A., University of Colorado.

FLETCHER, CHARLES W. (Veteran and Career Guidance Counselor)
A.A., Aims Community College; B.A., University of Northern Colorado; M.A., University of Northern Colorado.

FREDERICK, GENE A. (Behavioral and Social Science)
B.S., University of Missouri; M.A., Adams State College; Advanced Graduate Study, Purdue University, University of Northern Colorado, University of New York.

GAISER, PAUL W. (Dean of Occupational Education)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Eight years business experience.

GIESICK, R. ARTHUR (Division Chairperson, Technical)
B.A., University of Northern Colorado; Nationally certified as an Engineering Technician by I.C.E.T.; Graduate Study, Colorado State University, University of Northern Colorado; Ten years experience as a draftsman, designer.

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

GOMEZ, RUTH (Developmental Studies)
Undergraduate and Graduate Study, University of Northern Colorado.

GONZALEZ, DAVID (Developmental Studies)
B.A., University of Northern Colorado; M.A., University of Northern Colorado.

GORGEN, LAWRENCE A. (Developmental Studies)
B.A., Kearney State College; M.A.T., Washington State University; Ed.S., University of Northern Colorado; Advanced Study, University of Edinburgh.

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.

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

HARDIN, R. A. "JACK" (Welding)
A.S., El Paso Community College; Attended Southern Colorado State University and Colorado State University; Twelve years industrial experience.

HARRIS, DONALD T. (Science)
B.S., Western Kentucky State University; M.A., Western Kentucky State University; Advanced Graduate Study, Colorado State University; Seven years industrial experience.

HEEN, SAMUEL K. (Physical Education and Communication/Arts)
B.A., Colorado State University; M.Ed., Colorado State University.

HEIMAN, GALE E. (Business)
A.B., University of Northern Colorado; M.A., University of Northern Colorado; Ph.D., Laurence University School of Banking; Fourteen years business experience.

HEIN, B. JIM (Division Chairperson, Trade and Industry)
B.Ed., Colorado State University; M.Ed., Colorado State University. Ten years trade experience.

HICKMAN, JOHN C. (Welding)
Welding Certificate, Hobart Technical Center; Colorado State University; Eighteen years in welding media — eight years in field, consisting of production welding, bridge construction, gas pipelines and maintenance welding. Eleven years in testing and laboratory work.

HUBERT, JOSEPH L. (Auto Mechanics)
B.S., Colorado State University; Twelve years industrial experience.

JOKERST, JAMES C. (Counselor)
B.A., University of Arizona; M.A., University of Northern Colorado.

KARST, GERALD L. (Behavioral and Social Science)
B.A., University of Northern Colorado; M.Ed., Colorado State University.

KIEFER, JERRY A. (Assistant to the President)
B.A., St. Thomas College; M.A., St. Thomas Seminary; M.A., University of Northern Colorado; Post-graduate Study, Loyola University of Chicago, University of Northern Colorado.

KIEKHAEFER, ELMER A. (Mid-Management)
B.A., Valparaiso University; M.A., University of New Mexico; Advanced Graduate Study, University of Northern Colorado; Eighteen years business experience.

KILLEBREW, WILLIAM A. (Welding)
A.S., Aims Community College; Four years industrial experience.

KIPPES, CLARENCE P. (Auto Body)
Twenty-one years industrial experience.

KRIEGEL, MELBA E. (Business)
B.B.A., Texas Technological University; M.A., University of Northern Colorado; Advanced Graduate Study, Colorado State University.

LANE, E. KEITH (Mathematics)
B.S., West Texas State University; M.S., West Texas State University.

LEUSINK, JUDITH P. (Business)
B.S., Colorado State University; Graduate Study, University of Northern Colorado; Five years business and office experience.

LINNELL, SHERI (Developmental Studies)
B.A., Wellesley College; M.A.T., Harvard University.

LORENSON, M. RUTH (Health Occupations)
Nsg. Diploma, University of Oklahoma; B.S., Nursing, University of Colorado; Graduate Study, University of Northern Colorado; M.A., University of Northern Colorado.

MARQUEZ, MAXINE F. (Business)
B.A., University of Northern Colorado; M.A., Colorado State University.

MARTZ, NANCY SUE (Developmental Studies)
B.A., University of Northern Iowa; M.S.T., Wisconsin State University; Advanced Graduate Study, University of Northern Colorado.

MATHEWS, MARILYN (Business)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Eight years business and office experience.

McKIBBIN, CALVIN T. (Mid-Management)
B.S., University of Nebraska; M.A., University of Northern Colorado; Twenty-four years business experience.

MILLER, SANDRA (Developmental Studies)
B.A., University of Northern Colorado; M.A., University of Northern Colorado.

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. (Behavioral and Social Science)
B.S., Colorado State University; M.A., Colorado University.

NEARY, SANDRA S. (Data Processing)
B.B.A., University of Iowa; M.Ed., Colorado State University; four years business experience.

PAGE, TRULENE B. (Business)
B.S., Colorado State University; M.A., University of Northern Colorado; Advanced Graduate Study, University of Northern Colorado.

PECK, DANIEL D. (Trades and Industry)
Attended University of Illinois, Bradley University, Illinois State University; B.E., Colorado State University; Twelve years industrial experience.

PETERSON, MIRIAM E. (Business)
B.S., University of Northern Iowa; M.A., University of Northern Colorado; Eight years business and office experience.

PTACEK, WARREN P. (Auto Body)
B.E., Colorado State University, Dunwoody Institute (Minneapolis); Four years trade experience.

RAILE, DWANE D. (Dean of General Studies)
B.S., Western New Mexico University; M.S., Western New Mexico University; Advanced Graduate Study, University of Northern Colorado.

RANGEL, ROBERT N., JR. (Dean of Student Personnel Services)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced Graduate Study, University of Northern Colorado.

REALE, BARBARA G. (Communication/Arts)
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.

RITTER, DONALD B. (Coordinator of Arts)
B.A., Michigan State University; M.A., Michigan State University; M.A., University of Northern Colorado.

ROBINSON, JAMES (LYN) (Mathematics/Science)
B.S., University of New Mexico; M.S., University of New Mexico; Advanced Graduate Study, University of Kansas, University of Denver, Colorado State University.

SANDERS, WILLIAM J. (Dean of Business Services)
A.A., Aims Community College; B.S., University of Northern Colorado; C.P.A.

SHEARER, SANDRA L. (Business Lab)
B.A., University of Northern Colorado; two years business and office experience.

SHELL, WILLIAM L. (Behavioral and Social Science)
B.A., Trinity University (San Antonio); M.A., Johns Hopkins University; Advanced Study, University of Heidelberg, University of Munich, Goethe Institute (Germany).

SCHELLENBERGER, ROBERT (Psychology)
B.A., Bluffton College; B.D., Vanderbilt University; M.A., Northwestern University; Ph.D., Northwestern University.

SIMS, ESTHER S. (Communication/Arts)
B.A., University of Colorado; M.A., University of Colorado; Ed.S., University of Northern Colorado.

SMITH, CHARLES G. (Building Construction)
A.S., Aims Community College; Eight years industrial experience.

SMITH, ROSELYN (Psychology)
B.A., Boston University; M.S.W., Arizona State University.

SNOW, FRED M. (Automotive Mechanics)
Eighteen years industrial experience.

SPIKA, MICHAEL (Welding)
A.A., Long Beach City College; Attended California State University, San Diego, and University of California, Los Angeles; Nine years industrial experience.

STEPHENSON, THELMA J. (Data Processing)
A.S., Aims Community College; B.M.E., Indiana University. One year business experience.

STEWART, DOROTHY M. (Communication/Arts)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced Graduate Study, University of Northern Colorado, Colorado University.

SUMMERS, MAURINE (Child Care)
B.A., University of Northern Colorado; Seven years experience in field of Child Care.

TAYLOR, JAMES H. (Respiratory Therapy)
A.S., El Camino College; Southern Illinois University at Carbondale; EMT-1, Physician Assistant SP-2, Registered Respiratory Therapist; Eleven years of respiratory therapy experience.

TERRAZAS, ARTHUR (Developmental Studies)
A.A., Aims Community College; B.A., University of Northern Colorado; M.A., University of Northern Colorado; Member, National Advisory Council of Adult Education.

TRIMBLE, C. WILLIAM (Coordinator of Physical Education)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Ed. S., University of Northern Colorado.

TURNER, JOHN T. (Division Chairperson, Social Science)
B.A., Adams State College; M.A., Adams State College, Advanced Graduate Study, Colorado State University.

VANTINE, DIANE L. (Communication/Arts)
B.A., University of Wyoming; M.A., University of Wyoming; Advanced Graduate Study, Kansas State University, University of Denver.

VASA, KATHERINE (Director of Child Care)
B.S., Colorado State University; Five years experience in child care.

VELASQUEZ, MARIA B. (Division Chairperson, Developmental Studies)
B.A., University of Northern Colorado; M.A., University of Northern Colorado.

VIGIL, MARY L. (Developmental Studies)
B.A., University of Colorado.

WEBSTER, MARY E. (Mid-Management)
B.S., Colorado State University; Four years of business experience.

WERNER, DAVID D. (Communication/Arts)
B.A., University of Montana; M.A., University of Montana; M.A.L.S., University of Denver.

WRIGHT, DONNA A. (Counselor)
B.S., Colorado State University; M.S., University of Northern Colorado; Ed.S., University of Northern Colorado (Glenhaven Achievement Center).

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