## MSI Separator Sheet

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## AIMS COMMUNITY COLLEGE Greeley, Galorado Gatalague $1975-78$

## AIMS COMMUNITY COLLEGE

## Established 1967



## 1975-76 CATALOG

## A COLLEGE SERVING NORTH-CENTRAL COLORADO

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## ACADEMIC CALENDAR 1975-76

## SUMMER QUARTER, 1975

June 16
June 17
July 3, 4
August 29

Advising, Registration
Classes Begin
Independence Day Holiday (College closed)
End of Summer Quarter

FALL QUARTER, 1975
September 10-12/ New Students' Interviews (Diagnostic services available in Learning Development Centèr)
September 15, 16 Advising, Registration
September 17 Classes Begin
September 30 Last day to drop classes with refund
October 20-24 Mid-Term Week
October 31
November 14
November 1719
November 26-28
December 3- End of Fall Quarter
December 22-26 Christmas Holidays (College Closed)
December 31 FULL Wo RK DAY
( 12.00 noon) -
January $1_{2} \quad$ New Year's Holiday (College Closed)
WINTER QUARTER, 1976
January 5, 6
(to noon) Advising, Registration
January 6
(afternoon)
January 6
January 7
January 20
February 9-13
March $\$ 8 \quad$ Pre-Registration for Spring Quarter
March 2 Last day to drop/add classes (Winter Quarter)
March 18 End of Winter Quarter
SPRING QUARTER, 1976
March 29, 30
(to noon)
March 30 (afternoon)
March 30
March 31
April 26-30
May 28
May 31
June 11

April 13 Last day to drop classes with refund
Advising, Registration
In-service Day (Half-day)
Evening Classes Begin
Day Classes Begin
Mid-Term Week
Last day to drop/add classes (Spring Quarter)
Memorial Day Holiday (College Closed)
End of Spring Quarter

## 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, 1974, reached over 3,700. Diverse needs of students have resulted in an increased number of classes and programs, totaling 35 occupational programs, adult interest classes, and the Associate Degree in Arts and Sciences.

Expanded programs and class offerings demanded an increased amount of campus space. In 1971, a 50,000 square-foot building was purchased (now the General Studies Building) as were ten additional acres of land bringing the campus size to 195 acres.

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. Presently under construction is a physical education facility.

## 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 skils 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 area 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 currently holds Candidate for Accreditation status in the North Central Association of Colleges and Secondary Schools, the association which accredits institutions of higher education in this area. Candidate for Accreditation is a status of affiliation with a regional accrediting commission which indicates that an institution has achieved initial recognition and is progressing satisfactorily toward accreditation. Course offerings designed for transfer and leading to the A.A. Degree are fully transferable to four-year institutions of higher education.

## 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, 5401 W. 20th Street, Greeley, Colorado 80631 (Room 201, General Studies Building)'.

## AFFIRMATIVE ACTION

Aims Community College is committed to equal opportunity in employment and education regardless of race, color, religion, sex or national origin by publicly adopting throughout the College an affirmative action policy with respect to minorities that shall assure all minorities in the college - staff, faculty, students and administrators - equal opportunities in employment and education in accordance with Executive Orders 11246 and 11374 and Revised Order No. 4.

## 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 360 computer. The computer is equipped with magnetic tape and disk, and 65,000 characters of primary memory. Besides the instructional usage, the computer is used for administrative work in which student employees are involved in selected applications.

## 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 deficiences.

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 student to enroll at the beginning of the quarter.

## APPLICATION FOR ADMISSION TO AIMS COMMUNITY COLLEGE

If a student wishes to attend Aims Community College in order to pursue a program of self-improvement or for the development of a personal interest, he may do so by completing student statistical information materials each quarter of attendance.

## APPLICATION FOR ADMISSION TO AIMS COMMUNITY COLLEGE AND DEGREE PROGRAM

If a student wishes to attend Aims Community College in order to pursue a degree, he may meet the requirements for admission to Aims Community College and the simultaneous admission to a degree program by fulfilling the following requirements:

1. Submit the Colorado general application for admission to the college.
2. Provide a complete transcript of all high school and college credits and a certified record of G.E.D. scores if applicable.
3. Submit a health form (optional).

## ADMISSION REQUIREMENTS FOR FOREIGN STUDENTS

1. Complete all steps in "Application for Admission to a Degree Program."
2. Submit TOEFL scores. Foreign students must have a minimum of 450 on the TOEFL to be considered for admission to Aims Community College.
3. Completed application and supporting credentials must be in the Office of Admissions and Records one full quarter before the date of anticipated enrollment.

## 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. Financial Aids (only those students having completed the FFS)
3. Course registration
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, or to alter them for other reasons.


## STUDENT SERVICES


Winter Quarters ..... Create
WT 132 Intermediate Welding ..... 12
VTR 181 Basic Blueprint Reading$-3$
Total Winter Quarter: ..... 15
Spring Quarter:
WT 133 Advanced Welding ..... 12
VTR 103 Industrial Communications ..... 3
VTR 182 Welding Layout ..... 3
Total Spring Quarter: ..... 18
Tonal First Year: ..... 50
Second Year
Fall Quarter:
WT 235 Pipe and Heavy Plate Welding ..... 12
VIP 183 Welding Industry ..... 3
Total Fall Quarter ..... 15
Winter Quarter:
WT 234 Tig and Mig Welding ..... 12
VTR 104 Oral Communications
WT 135 Metallurgy
Total Winter Quarter ..... 20
Spring Quarter:
WT 236 Special Problems in Welding ..... 12
VTR 175 Welding Certification E Employment ..... 17Total Spring Quarter
Total Second Year ..... 52
TOTAL ..... 102

## AREA VOCATIONAL SCHOOL

Aims College, in addition to College and adult level programs, is designated as the Area Vocational School offering occupational programs to nine school districts (ten high schools in Weld County.

The Area Vocational School is in effect an extension of each high school's curriculum thus making the following programs available to high school students: $\qquad$ Auto Body Repair le gas Auto Mechanics b gUys Aviation V 3 at rn Building Construction 6 gt os Data Processing 3 G, O. V Drafting Electronics s tho, $\nabla$ buss Graphics Techbology 3 , to Nurses Aide 1 ava $V$
M SE Nurses Aide Sorscraft Specialty Engines 3 d Tan .
While the programsjore totally administered by the College, each high school student attending earns credit toward graduaton at his own high school.
INTR TRADE \& INDUST I afr.

## ADDING AND DROPPING COURSES

In instances where a student's program of study can be improved, adds and drops may be processed after classes begin with the approval of the instructor or advisor. Program change forms may be obtained in the Office of Admissions and Records.

## WITHDRAWAL

If for some reason a student must completely withdraw from the college (complete withdrawal means dropping all classes), the student's interests are served best if the appropriate withdrawal forms are completed for the Office of Admissions and Records. Students completely withdrawing from the college will receive a "W" for each course from which they withdraw prior to the end of each quarter.

## REFUND POLICY

During the first 10 days of each quarter the student will receive a 100 per cent refund for a complete withdrawal from school or for classes dropped. After the first 10 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.

## TUITION

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

$$
\begin{aligned}
& \text { In-State, In-District Students - }
\end{aligned} \mathbf{\$ 4 . 0 0} \text { per credit hour }
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ALL TUITION AND fEE CHARGES ARE SUBJECT TO CHANGES BY THE GOVERNING BOARD OF THE COLLEGE AS CIRCUMSTANCES MAY REQUIRE, WITHOUT NOTICE.

## 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 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.

## 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.

## STUDEET FIIAAMCIIL AIDS

## STUDENT FINANCIAL AID PROGRAM

Low tuition rates and the absence of most additional fees, reduce the cost of attending the college to a minimum. Nevertheless, the College does operate an extensive financial aid program for students who find it impossible, or difficult, to enter or remain in college without some type of financial assistance. The availability of financial assistance is subject to the financial resources available to Aims Community College.

## ELIGIBILITY

Financial Aid is awarded to students on the basis of NEED. In determining NEED in a consistent way for all aid condidates, Aims Community College requires all financial aid applicants to submit the ACT Family Financial Statement to the ACT Program in lowa 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 and IDS forms from the Financial Aids Office. To assist you in completing section S of the ACT, the code for Aims Community College is 0505 .

## APPLICATION PROCEDURES

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

1. Institutional Data Sheet (IDS)
2. Family Financial Statement (FFS) of the American College Testing Program (A.C.T.)
3. Application for Determination of Family Contribution Basic Educational opportunity Grant (B.E.O.G.)
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 been complied with the Admissions Procedures listed in this catalog and have been issued an official notice of admission to the College.

While there is no absolute deadline date for submitting applications for financial assistance, students are advised that the availability of aid funds is limited. Consequently, students who are seeking financial assistance are urged to submit their completed applications at least one quarter in advance of the anticipated quarter of registration.

## SATISFACTORY PROGRESS

"Normally, satisfactory progress will be defined as maintaining a cumulative 2.0 grade point average for all completed course work taken at Aims Community College and successfully completing with a grade, a minimum of six (6) credit hours per quarter. A Financial Aids Advisory Committee will be formed to develop procedures to implement this policy and to consider individual cases where exceptions to this policy can be allowed."

The adoption of this policy means that students failing to meet the criteria established by the above policy will be in jeopardy of losing their benefits since the school cannot certify that satisfactory progress is being made by the student. All federal and state aid programs require that Aims certify satisfactory progress before allowing students to receive state or federal student assistance.

## FEDERAL GRANT PROGRAMS

1. BEOG - Basic Educational Opportunity Grant is a new grant program available to needy students enrolling in an institution of post-secondary education for the first time on or after July 1, 1973. Applications are available from high school counselors, U.S. Post Offices, Employment Offices, or the Office of Financial Aids at any accredited post-secondary institution. The student applies directly to the Basic Education Opportunity Grants analysis center and, in turn, submits his family-contribution analysis report to the financial aid officer of the college of his choice for the grant determination. Only full-time students enrolling for the first time on or after April 1, 1973, in an institution of post-secondary education, who are high school graduates or equivalent, are eligible to apply. The BEOG Program is the base program for financial aids at Aims Community College.
2. Supplemental Educational Oppotrunity Grants (SEOG) are available to exceptionally needy students who wish to attend Aims Community College. Under this program, students from low-income families who have exceptional financial need may receive an outright grant of from $\$ 200$ to $\$ 1,500$. The amount of grant is geared to the parental contribution but may not exceed one-half of the student's total financial need. Full-time and half-time students are eligible for this program.


## COLORADO STUDENT AID PROGRAMS (Available to full and half-time students)

1. Colorado Grants - Grants not to exceed $\$ 1,000$ and awarded to Colorado resident students on the basis of documented financial need. Financial aid packages which include Colorado Grants may not exceed the documented financial need of the student.
2. Colorado Scholarships - This program is an effort by the State of Colorado to recognize Colorado resident students for outstanding achievement in academic and talent areas. The award shall not exceed $\$ 300$ and need is not a factor in determining recipients.
3. State Student Incentive Grant (SSIG) - Grants made to students who have substantial need, (zero family contribution excluding summer savings). SSIG grants made must be matched $\$ 1$ State to $\$ 1$ SSIG, from Colorado State Grant funds allocated to Aims Community College.

## WORK STUDY PROGRAM

The Colorado Commission on Higher Education and the Federal government provide funding for a College Work Study Program. This program is designed to assist students with their college financing through part-time campus employment. Students approved for this program, work an average of 15-20 hours per week. Preference is given to applicants who present evidence of financial need and who demonstrate specific job skills.

Requests for additional information and necessary application forms may be directed to the Office of Student Financial Aid.

## LOANS

1. National Direct Student Loans - Long-term student loans are available to new or currently enrolled students attending at least half-time. Eligibility is based upon the student's financial need and maintenance of satisfactory
grades. Deferment on repayment is allowed if the student continues in college, enters the military or joins either the Peace Corps or VISTA. Otherwise the first payment on the loan is due, and the three per cent interest will be charged, nine months after the student graduates or leaves the College. A portion of the total debt will be cancelled if the recipient enters the teaching profession on a public or non-profit educational institution which is approved by H.E.W.
2. Federally Insured Student Loans - Federally Insured Student Loans may be obtained up to a maximum of $\$ 2,500$, but not to exceed the student need for an academic year. Applications are submitted to participating banks, savings and loans associations, and credit unions. These loans are available at seven per cent interest, repayable after the student completes his education. If the student submits a financial needs analysis report and is eligible for the federal interest benefits, the accruing interest, while the student is in school, is paid by the federal government. If the student does not qualify for the interest benefit as determined by a financial needs analysis, he may secure the loan but the interest accrues and is payable by the student while he is enrolled in post-secondary education.

## TUITION WAIVERS

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

## ADDITIONAL SCHOLARSHIPS

Other scholarships are made available through local clubs and organizations in Weld County area. Whenever a student applies for a scholarship he will be considered for all financial aid opportunities that may be currently available at Aims Community College.

## 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 Gl Bill), 634 (War Widows and War Orphans), 815 (Disabled Veterans).

Veterans who are eligible for Veterans Benefits should contact the Veterans' Representative, Office of Veterans Affairs in the Financial Aids Office, preferably one month before enrollment to assure timely payment of benefits.

Students receiving VA benefits are required to complete an enrollment form during registration for each quarter they are enrolled. To receive maximum benefits, students must register for 12 credit hours.

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 sixty ( $\$ 60$ ) 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 tuition waivers for the amount 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.
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 grades (2.0 GPA).

## ACADEMIC IIFORMATION 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 <br> Designations

W Withdrawal - no grade points (Administrative and student initiated)
I Incomplete work - no grade points
IP In-Progress - no grade points
AU Audit - no credit
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. IN-PROGRESS means the student must re-enroll in the class to achieve a grade. (Veterans receiving benefits should be aware that re-enrollment in a course for which he initially received an IP or I does not qualify for benefits.) 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. The student must re-enroll in the course if he wishes to receive credit. Learning accomplishments 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 W, 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), advanced placement, specific education experience in the armed forces, and courses completed at other collegiate institutions. The minimum grade acceptable is C for all courses transferred to Aims.

## ATTENDANCE

Regular class attendance is necessary if a student is to receive maximum benefits from his work, and students are expected to attend all sessions of the classes for which they are registered. The individual instructor may determine that the quality of student's work has been adversely affected by absence or tardiness. Students should explain the reason for absence to their instructors. The student is responsible for making up work missed because of any absence. Students who anticipate absences may profit from discussing these in advance with instructors.

## COURSE CHALLENGING

A student may challenge a course for which he believes his training and study are adequate to meet the instructor's reqiurements for successful campletion. 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.

## 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.

## 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 class 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. All changes from audit to credit or credit to audit must be made prior to midterm examination week of each quarter by contacting the instructor of the course. Veterans receiving benefits should be aware that audited courses do not qualify for benefits.

## 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. 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.

## 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 should accept the responsibility to:

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

## LEARNIIG DEVELOPMENT CENTER

The Learning Development Center is located in the Open Area of the General Studies Building at 5401 W'. 20th Street. Instructional Centers, extensions of the Learning Development Center, are located in each building on the campus. The personnel in the LDC work with teachers and students in helping students reach their educational, career and personal goals.

## AUDIOVISUAL EQUIPMENT AND COPY CENTER SERVICES

The audivisual equipment and copy center divisions provide equipment and materials in support of the total instructional program, servicing all of the day, evening, and extension classes. Graphic materials such as charts, graphs, posters, and overhead trasparencies as well as other photographic materials are produced for instructional purposes. Television production and distribution services are provided for the students and the faculty. A centralized program distribution network provides for easy access to a vast quantity of media materials both in the classroom and in individual study carrels. Spirit duplication, photocopy, and offset duplication are available for the duplication needs of the instructors and service areas of the college.

## INSTRUCTIONAL CENTERS

The Instructional Centers integrate the vestibule and individualized concept of learning for the student as a possible means of success in all types of education. (A testing service to help the student determine his needs is offered through the LDC.) The Centers provide tutorial services in the basic skills of reading, writing, grammar, spelling and arithmetic, and in enrichment of subject matter courses. Some mini-courses in academic subjects, as well as complete individual courses, are available through the Centers. Print materials, filmstrips, tapes, slides, and television programs within the Centers offer a variety of learning experiences for the student.

## 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. Orientation to college experience.
2. Educational planning.
3. Career planning.
4. Diagnostic evaluation (interest, aptitude, ability, personality and learning disabilities).
5. Personal, family, or marriage counseling.
6. Self-exploration and interpersonal relations.

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 such institutions and have a copy of the results sent to Aims Community College. With these data, counselors and advisors are able to aid the individual student in planning his educational program and to make the most appropriate use of the resources available to him.

## LIBRARY

The library maintains a collection of materials which implement the curricula at Aims Community College. Over 18,000 volumes are now in the collection. Titles reflect both the occupational and the transfer classes offered at the College.

Subscriptions to more than 200 periodicals and magazines are carried by the library. A file of back issues on microfilm as well as bound volumes are also maintained.

The library promotes usage of media by inter-shelving print materials and nonprint materials such as audio tapes, slides and filmstrips.


## 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 government 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 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.

## STUDENT FEES

The representation, activities and services of the Student Association are supported by a non-mandatory student fee of $\$ .25$ per college credit hour per quarter. ID cards are issued promptly upon payment of fees.

## STUDEIT 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 repetive pattern of poor conduct, a student may be dismissed from Aims Community College.

## HEALTH SERVICES

Aims Community College provides a Health Center in the General Studies Building at 5401 West 20th Street - Room 233. 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 DEVLOPMENT 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.

## SELECTIVE SERVICE

Male students subject to the laws administered by the Selective Service System must make a written request for deferment by completing SSS Form 104 which is available at their local board.

An SSS Form 109 (a) certifying the student's status will be sent to the student's local board only if he requests and completes the necessary forms at the designated station during registration. If a student becomes eligible for the draft after registration he should report this information to the Dean of Student Services Office. The student needs to notify his local board of his status only once each year so long as he maintains his status as a fulltime student and earns a minimum of one-fourth of the credits necessary for a Bachelor's degree (one-half of the credits for an Associate degree) in the calendar year, September through August. Because of recent changes in laws relating to Selective Service operations, deferments, appeal procedures, etc., students should consult their local board and/or the Dean of Student Services Office promptly when a question concerning their status arises.

## 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. Students who work more than 20 hours per week are advised to adjust their course loads accordingly. Placement information may be secured from the Placement Officer in the Trades and Industry Building.

## REQUESTS FOR TRANSCRIPTS

A student requesting that a transcript of his grades be sent to an educational institution or to a prospective employer must complete the appropriate form in the Office of Admissions and Records. There is no charge for this service.

## BOOKSTORE

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

## GENERAL STUDIES

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.

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 corses. 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:Communications9
Humanities ..... 15
Science and Mathematics ..... 15
Social Science ..... 15
Physical Education ..... 5
Electives ..... 37
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 Sciences 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

Basic requirement is the following three hour course:

## Credits

CON 102 Fundamentals of Writing
As a result of a diagnostic test, the student may be required to take CON 101 for elective credit ( 3 hours). Six credits selected from the following courses:

| CON | 103 | Communication and Research |  |  |
| :--- | :--- | :--- | :---: | :---: |
| CON | 107 | Introduction to Logic |  |  |
| JOU | 111 | Newswriting I |  |  |
| SPE | 115 | Speech Essentials |  |  |
| SPE | 116 | Public Speaking |  |  |
| SPE. | 117 | Oral Interpretation |  |  |
| REA | 101 | Reading |  |  |
| REA | 106 | Speed Reading |  |  |
| LIT | 109 | Creative Writing |  |  |
|  |  | Any course listed in |  |  |
|  | Ane LITERATURE Section <br> the |  |  |  |

CON 107 Introduction to Logic
JOU 111 Newswriting !
SPE 115 Speech Essentials
SPE 116 Public Speaking
SPE 117 Oral Interpretation
REA 101 Reading
REA 106 Speed Reading
LIT 109 Creative Writing Any course listed in the LITERATURE Section


HUMANITIES
15 Credits
Basic requirement is the following five hour course:

$$
\begin{array}{lll}
\text { HUM } 101 & \text { Introduction to the } & \text { Credits } \\
\text { Greek and Roman Periods } & 5
\end{array}
$$

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

HUM 102 Introduction to the Middle Ages and Renaissance

HUM 103 Introduction from the Seventeenth
to the Twentieth Centuries ..... 5
HUM 104 Contemporary Culture ..... 5
HUM 105 Myth, Legend, and Folk Tales ..... 5
HUM 106 Introduction to World Religions ..... 5
HUM $1,07{ }_{7}$ Man as Self, Society, Symbol ART 105 Introduction to the Visual Arts ..... 5and DesignCUS 106 Cultural Heritage of Africaand American Blacks5
MAS 120 Cultural Heritage of the American Southwest and Mexico ..... 5
LIT 206 Modern American Culture ..... 5
MUA 102 Conformity and Revolution in Music ..... 5
PHI 105 Introduction to Philosophy ..... 5
THE 105 Introduction to Theatre ..... 5

Fiften credits of science and/or maothematics are required for the AA Degree. Any combination of courses is acceptable except any course below the 100-level, which is not acceptable.

## SOCIAL SCIENCE

Five credits selected from the following three courses:

| ANT | 101 | Introduction to Anthropology | 5 |
| :--- | :--- | :--- | :--- |
| PSY | 101 | General Psychology | $\times$ |
| SOC | 101 | Introduction to Sociology | 5 |

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

## ECONOMICS

| ECO | 100 | Introduction to Economics | 5 |
| :--- | :--- | :--- | :--- |
| ECO | 201 | Principles of/ Economics |  |
| ECO | 202 | Principles of Economics |  |$\quad \times \quad 5.5$

## HISTORY

HIS 101 Hang-ups from Way Back Ancient Civilization 5
HIS 102 Hang-ups from Way Back Medieval Civilization X 5
HIS 103 Háng-ups from Way Back Modern Civilization


## 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 of 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 upholstery, interior decorating, income tax preparation, farm records, metal casting, and creative welding.

Persons interested in further information should contact the Associate Dean of General Studies.

## EVENING DIVISION

Aims 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 interests.

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.



## 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.
MAS 100 Introduction to Mexican-
CreditsAmerican Studies3
MAS 101 Elementary Spanish I ..... 5
MAS 102 Elementary Spanish II ..... 5
MAS 105 Music of Mexico and the Southwest ..... 3
MAS 116 Bilingual Skills ..... 3
MAS 120 Cultural Heritage of the American Southwest and Mexico ..... 5
MAS 125 The Contemporary Mexican-American ..... 3
MAS 155 Mexican Dance ..... 1
MAS 161 Mexican History to Independence ..... 3
MAS 162 Mexican History Since Independence ..... 3
MAS 165 Chicano History of the Southwest ..... 3MAS 206 Survey of Contemporary ChicanoLiterature3

## OCCUPATIONAL EDUCATION

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. While many 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.

## OCCUPATIONAL JOB PLACEMENT AND GUIDANCE

Guidance services are available through the Vocational Guidance Specialist for students who need assistance in selecting a career goal. This office is located in the Trades and Industry Building. To assist students in career directions, there are available: interest surveys; assessments for hand/eye coordination; dexterity and aptitude (the ability to catch on).

Assistance may be given to students who need financial help by direction to industry where financial sources are available.

The Job Placement Office is located in the Trades and Industry Building. Each year a large number of students qualify for employment upon graduating or upon completion of a specific course of study in one of the many vocational-technical programs. The instructors, division chairmen, and counselors in occupational education maintain close contact with business and industry concerning job opportunities and training needs, and a record of available positions, both full and part-time, is kept in the Job Placement Office. This office coordinates all of the college's efforts, along with the cooperation of the Office of Financial Aids, in assisting students in obtaining full-time employment in occupations for which they have been prepared at the College. Students interested in full and part-time jobs should contact the Placement Office and complete an application for employment. This is a free service available to all past and present students of Aims Community College.


## BUSINESS DIVISION

Desirable characteristics in all business programs are the ability to take responsibility, average English and mathematical skills, and spelling ability. Neatness in work and appearance are also helpful.

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 (certficate) or to a two-year (AAS Degree) program.

The Business Division offers the following programs:

## Accounting/Data Processing Department:

Clerk-Bookkeeper
Accounting
Office Supervision
Data Processing
Business/Office Department:
Clerk-Steno
Clerk-Typist
Stenographic-secretarial
Judicial/Legal
Medical Secretary
(one-year certificate)
(two-year AAS Degree) (two-year AAS Degree) (two-year AAS Degree)
(one-year certificate)
(one-year certificate)
(iwo-year AAS Degree)
(two-year AAS Degree)
(two-year AAS Degree)

Mid-Management Department:
(one-year certificate)
(two-year AAS Degree)


## ACCOUNTING

Course Length: Usually 6 quarters for Associate in Applied Science degree.

## REQUIRED COURSES:

ACC 101 Principles of Accounting 1- 5
ACC 102 Principles of Accounting II 5
ACC 105 Payroll Accounting 2
ACC 201 Intermediate Accounting I 5
ACC 202 Intermediate Accounting II 5
ACC 203 Intermediate Accounting III 5
ACC 205 Accounting Systems 4
ACC 211 Cost Accounting I 5
BUS 115 Business Mathematics = 5
BUS 116 Adding and Calculating Machines 3
BUS 155 Business Communications 1. 3
BUS 156 Business Communications II 3
BUS 157 Business Communications 1113
BUS 246 Financial Management 5
BUS 245 Business Statistics 4
EDP 101 Introduction to Data Processing 3
GENERAL REQUIREMENTS 65
ELECTIVES* 31 TOTAL 96
*Electives will be chosen by the student after receiving counseling and guidance from a Business Division advisor. Occupational objectives, individual interests, and abilities will be considered.

## ADVISORY COMMITTEE FOR ACCOUNTING

Arnold Disselkoen
Greeley National Bank
John Ewert
Hydraulics Unlimited
Larry Heinze
Monfort of Colorado
Edward J. Nusbaum
State Farm Insurance Co.

Bill Sleigh
Eastman Kodak
Paul Thompson
Hoover - Thompson
Ken Whitney Anderson E Whitney

## CLERK-BOOKKEEPER

Course Length: Usually 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
*Students entering Aims with high school credit in typing and/or shorthand may substitute other courses for BUS 101, BUS 102, BUS 111, BUS 121.
**Students may elect the Gregg Shorthand series (BUS 111, BUS 112, BUS 113 , BUS 114) or the Alphabet Shorthand series (BUS 121, BUS 122, BUS 123).
***Electives will be chosen by the student after receiving counseling and guidance from a Business Division advisor. Occupational objectives and individual interest and abilities will be considered.

## CLERK-TYPIST

Course Length: Usually 3 quarters for Certificate in Occupational Education.
REQUIRED COURSES:

*Students entering Aims with high school credit in typing may substitute another course for BUS 101 and BUS 102.
**Electives will be chosen by the student after receiving counseling and guidance from a Business Division advisor. Occupational objectives and individual interest and abilities will be considered.


＊Students entering Aims with high school credit in typing， shorthand，and／or bookkeeping may substitute other courses for BUS 101，BUS 102，BUS 111，BUS 112，and BUS 121.
＊＊Students may elect to take Gregg Shorthand series（BUS 111， BUS 112，BUS 113）or the Alphabet Shorthand series（BUS 121，BUS 122）．
＊＊＊Electives will be chosen by the student after receiving coun－ seling and guidance from a Business Division advisor．Objec－ tives and individual interest and abilities will be considered．

# ADVISORY COMMITTEE FOR JUDICIAL／LEGAL 

Steve Arcenauw Wheeler Realty Co．

William E．Bohlender Attorney At Law
**Students may elect to take Gregg Shorthand series (Bus 111, BUS 112 , BUS 113, BUS 114) or the Alphabet Shorthand series (BUS 121, BUS 122, BUS 123).
***Electives will be chosen by the student after receiving counseling and guidance from a Business Division advisor. Objectives and individual interest and abilities will be considered.

## ADVISORY COMMITTEE FOR MEDICAL SECRETARY

Mary Cassidy<br>Carolyn Larson, R.N. Weld County Hospital

Ernestine May<br>Greeley Clinic<br>Penny Read<br>Poudre Valley Memorial Hosp.

Grace Robins
University of Northern Colorado
Barb Swetzig
Medical Group of Greeley
Virginia VanOmen
Weld County Hospital

## STENOGRAPHIC AND SECRETARIAL

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

Desirable Characteristics: Possesses 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 a business, education, or government office.
REQUIRED COURSES:
BUS 100 American Business Systems 5
*BUS 101 Beginning Typing 3
"BUS 102 Intermediate Typing 3
BUS 103 Advanced Typing 3
BUS 105 Machine Transcription 3
SHORTHAND:** 15/20
BUS *111, *112, 113, 114 Gregg, or BUS *121, 122, 123, Alphabet

| BUS | 115 | Business Mathematics |  |
| :--- | :--- | :--- | ---: |
| BUS | 116 | Adding and Calculalating Machines | 3 |
| BUS | 141 | College Bookkeeping I | 5 |
| BUS | 142 | College Bookeeping II | 5 |
| BUS | 145 | Human Relations and Supervision | 3 |
| BUS | 155 | Business Communications I | 3 |
| BUS | 156 | Business Communications | II |
| BUS | 157 | Business Communications III | 3 |
| BUS | 165 | Filing and Records Management | 3 |
| BUS | 175 | Office Procedures | 5 |
| BUS | 281 | Cooperative Office Occupations | 5 |
| BUS | 282 | Cooperative Office Occupations II | 5 |
| EDP | 101 | Introduction to Data Processing | 3 |
|  |  |  |  |
| GENERAL REQUIREMENTS | $83-88$ |  |  |
| ELECTIVES*** |  |  |  |

> *Students entering Aims with high school credit in typing, shorthand, and/or bookkeeping may substitute other courses for BUS 101, BUS 102, BUS 111, BUS 112, AND BUS 121 .
> *Students may elect to take Gregg Shorthand series (BUS 111, BUS 112, BUS 113, BUS 114 ) or the Alphabet Shorthand series (BUS 121, BUS 122, BUS 123 ).
> ***Electives wil be chosen by the student after receiving counseling and guidance from a Business Division advisor. Objectives and individual interest and abilities will be considered.

## ELECTRONIC DATA PROCESSING

Course Length: Usually 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, perserverance, 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:

| EDP | 101 | Introduction to Data Processing | 3 |
| :--- | :--- | :--- | ---: |
| EDP | 102 | Computer Concepts | 5 |
| EDP | 121 | COBOL | 5 |
| EDP | 122 | Advanced COBOL | 5 |
| EDP | 201 | Assembler Language | 5 |
| EDP | 202 | Advanced Assembler Language | 5 |
| EDP | 281 | Cooperative Work Experience | 5 |
| EDP | 282 | Cooperative Work Experience | 5 |
| ACC | 101 | Principles of Accounting I | 5 |
| ACC | 102 | Principles of Accounting II | 5 |
| ACC | 201 | Intermediate Accounting I or |  |
| BUS | 100 | ACC 211 Cost Accounting I | 5 |
| BUS | 115 | Business Business Systems | 5 |
| BUS | 145 | Human Relations and Supervision | 5 |
| BUS | 155 | Business Communications I | 3 |
| BUS | 156 | Business Communications II | 3 |
| GENERAL REQUIREMENTS | 3 |  |  |
| ELECTIVES* | 72 |  |  |
| TOTAL |  |  |  |

## ADVISORY COMMITTEE FOR ELECTRONIC DATA PROCESSING

Larry Bohlender<br>Home Light and Power Co. State Farm Insurance Co.

*Electives will be chosen by the student after receiving counseling and guidance from a Data Processing major advisor. Occupational objectives and individual interest and abilities will be considered.


## MID-MANAGEMENT

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

## REQUIRED COURSES:

MGT 105 Salesmanship 5

MGT 107 Principles of Advertising
MGT 181 Personal Adjustment to Business)
Credits

MGT 182 Personal Adjustment to Business) 15
MGT 183 Personal Adjustment to Business)
MGT 235 Principles of Management

GENERAL REQUIREMENTS
ELECTIVES
BUS 100 American Business Systems 5
BUS 115 Business Mathematics 5
BUS 155 Business Communications I 3
BUS 156 Business Communications II


The Technical Division offers the following programs: Agriculture Co-op Premanagement (two-year AAS Degree or four-quarter certificate)

Aviation Technology
Laboratory Testing Technology
Drafting
Electronics Technology
Fire Science
Mechanical/Civil Engineering
Technology
Nurse Aide
Criminal Justice
Ward Clerk
(two-year AAS Degree or three-quarter certificate) (two-year AAS Degree or three-quarter certificate) (three-quarter certificate) (two-year AAS Degree) (two-year AAS Degree)
(two-year AAS Degree) (one-quarter certificate) (two-year AAS Degree) (one-quarter certificate)

## AGRICULTURE CO-OP PRE-MANAGEMENT

Course Length: 4 quarters for Certificate of Completion. 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 limit of his capacities. There are over $2,000 \mathrm{ac}-$ tive 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.

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

BUS 156 Business Communications II 3
BUS 157 Business Communications III 3
MGT 205 Credit Management 5
MGT 215 Personnel Management 5
MGT 225 Principles of Marketing (service area)
BUS 247 Business and Banking (credit area) 5
MGT 235 Principles of Management 5
Two courses to be selected from the following with advisor approval:

ACC 101 Principles of Accounting I 5)
ACC 102 Principles of Accounting II 5)
AGR 117 Feeds and Feeding 5)
AGR 118 Fertilization and Soil 5) 10
AGR 119 Feed Processing and Grain Handling 5)
AGR 125 Chemicals and Fertilizers 5)
BUS 255 Business Law I
AGR 235 Agriculture on the job training Rey
Additional 2 individualized courses
TOTAL Second Year 50
ADVISORY COMMITTEE FOR AGRICULTURE CO-OP PREMANAGEMENT

Clarence Carlson
Adams County Co-Op
Don Dreyer
Adams County Co-Op

## Stan Marquardts Poudre Valley Co-Op

Z. G. Spaulding Consumers Oil Co.
Bob Wilcox Agland, Inc.

## AVIATION TECHNOLOGY

Course Length: Usually 3 quarters for Certificate Program or 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. There are opportunities in corporation flying, charter work, and, with additional education and experience, in airline flying.
ONE YEAR CERTIFICATE IN AVIATION
Classroom: (3 quarters)
2
Credits
AVT 105 Aviation SeminarAVT 106 Private Ground School IAVT 107 Private Ground School II
AVT 205 Instrument Ground School
AVT 206 Commercial Ground School3
Flight Courses (Conducted at Airport) :
AVT 116 Private Flight Lab ..... 5AVT 117 Commercial Flight Lab IAVT 118 Commercial Flight Lab IIAVT 216 Instrument Flight LabAVT 217 Commercial Flight Lab IIIAVT 218 Certified Flight Instructor33AVT 206 Commercial Ground School5
Flight Simulator Courses:
AVT 115 Private Flight Simulator AVT 215 Instrument Flight Simulator
TOTAL ..... 57
ASSOCIATE IN APPLIED SCIENCE DEGREE IN AVIATION TECHNOLOGY
Classroom:
Credits
2
AVT 105 Aviation Seminar
3
AVT 106 Private Ground School I
3
3
AVT 107 Private Ground School II
AVT 107 Private Ground School II ..... 6
AVT 205 Instrument Ground School
AVT 205 Instrument Ground School ..... 3
Flight Courses (Conducted at Airport):
AVT 116 Private Flight LabAVT 117 Commercial Flight Lab IAVT 118 Commercial Flight Lab IIAVT 216 Instrument Flight Lab
AVT 217 Commercial Flight Lab IIIAVT 218 Certified Flight InstructorAVT 219 Instrument Flight Instructor 3
Flight Simulator Courses:
AVT 115 Private Flight Simulator
AVT 215 Instrument Flight Simulator ..... 5
5
Aviation Electives:
AVT 119 Conventional Gear Transition ..... 2) ..... 2)
AVT 207 Basic Ground Instructor
AVT 207 Basic Ground Instructor
AVT 208 Advanced Ground Instructor ..... 2)
AVT 209 Instrument Ground Instructor ..... 2)
AVT 225 Multi-Engine Transition Lab ..... 3)
General Courses:
Two of the following Math Courses.
MAT 106 Intermediate Algebra ..... 5)
MAT 111 College Algebra ..... 5)
MAT 112 College Trigonometry ..... 5)
VTR 111 Technical Math I ..... 5)
VTR 112 Technical Math II ..... 5)
VTR 113 Technical Math III ..... 5)

## DRAFTING

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

Potential Opportunities: Regardless of the specific assignment, the draftsman is continually representing, by drawing, the shapes of objects to be created, repaired, joined or manufactured. In most instances, work opportunities are associated with engineering groups in fields of planning, conctracting, and maintaining facilities. Specifics will be associated with mechanical, civil, chemical, electrical, and electronics engineering. Basic mathematics and drafting backgrounds are helpful.

## Fall Quarter:

Credits
DRA 121 Drafting I 7
VTR 103 Industrial Communications 3
VTR 111 Technical Mathematics I 5
VTR 151 Materials of Industry 3
TOTAL Fall Quarter 18

## Winter Quarter:

DRA 122 Drafting II 7
VTR 102 Elements of Technical Writing 3
VTR 112 Technical Mathematics II 5
VTR 202 Cost and Material Estimating 3
TOTAL Winter Quarter 18
Spring Quarter:
DRA 123 Drafting III 7
VTR 113 Technical Mathematics III 5
VTR 152 Introduction to Industry 3
VTR 153 Engineering Problems Analysis 3
TOTAL Spring Quarter 18
TOTAL 54

## ADVISORY COMMITTEE FOR DRAFTING

Andy Anderson
Farmhand, Inc.
Darrel Coble Hewlett-Packard Co.
Clifford Graham
Hydraulics Unlimited
Chester A. March
Miner $\mathcal{G}$ Miner Consulting Engineers, Inc.

Chester Szmyd
Eastman Kodak
Rex Touslee
Colorado Highway Dept.
Art Uhrich
Nelson, Haley, Patterson G Quirk
William R. Williams
Williams \& Johnson, Architects

Note: This committee also serves as Advisory Committee for the Mechanical and Civil Engineering Technology program.

## ELECTRONICS TECHNOLOGY

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

Potential Opportunities: Students should expect to secure entry level positions with progress toward research and development technician, engineering aide, field service representative, production test technician, electronic tooling maintenance technician, design and fabrication technician, metrology laboraotory technician, systems technician 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:
*ELT 131 AC and DC Fundamentals 9
*ELT 132 AC and DC Circuit Analysis 9
*ELT 133 Electronic Circuits and Applications 9
*ELT 134 Instruments and Measurements 5
VTR 102 Elements of Technical Writing 3
VTR 103 Industrial Communications 3
VTR 105 Industrial Organizations \& Institutions 3
VTR 184 Industrial Physics I

## SECOND YEAR:

*ELT 261 Industrial Electronics I 8
*ELT 262 Communication Circuits 6
*ELT 263 Introduction to Digital Computers 8
*ELT 264 Communication Systems 3
*ELT 265 Digital Computers II 6
ELT 266 Electronic Design and Fabrication 3
ELT $267 \begin{aligned} & \text { Introduction to New Electronic } \\ & \text { Industry Developments }\end{aligned}$
*ELT 268 Practical Solid-State Troubleshooting 3
*ELT 269 Industrial Electronics II 3
VTR 204 Electronics Drafting 3
VTR 205 Industrial Economics 3
VTR 206 Industrial Management 3

| TOTAL Second Year | $\frac{5}{\mathbf{5 2}}$ |
| :--- | :--- |
| TOTAL | $\frac{103}{2}$ |

*Credit for substantial elements or all of 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 substantial credit.

## ADVISORY COMMITTEE FOR ELECTRONICS TECHNOLOGY

Howard Coffman<br>Woodward Governor Co.

Conrad J. Druzynski<br>Eastman Kodak

E.A. Engemoen (ex-officio)<br>Colorado Dept. of Employment

David Jones
Mountain Bell
Clarence Laber
Hewlett-Packard Co.

## FIRE SCIENCE

Course Length: Usually 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 fire-fighters 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 obtained from the College Counseling Center.
General Required Courses: CreditsCommunication Skills
Basic Requirement is the following three hour course:
CON 102 Fundamentals of Writing. ..... 3
As a result of a diagnostic test, the student may berequired to take CON 101 for elective credit (3hours).
Three credits selected from the following courses:CON 103, JOU 111 , SPE 116 , SPE 117 , REA, 101,REA 106, or any course listed in the Literaturesection.
CHE 100 Fundamentals of Chemistry ..... 5
FS 190 Administration of Justice and Court Procedures ..... 5
MAT 100 Survey of Mathematics ..... 5
POS 118 State and Local Governments ..... 5
PHY 100 Survey of Physics ..... 5
PSY 101 General Psychology ..... 5
SOC 101 Introduction to Sociology ..... 5
SPE 115 Speech Essentials ..... 3

Potential Opportunities: This program is designed to train laboratory testing technicians who will be qualified for immediate employment as chemical technicians in the area industries such as film processing, cement manufacture, radioactive material processing, and electronic equipment manufacture. Chemical technicians are also employed in other industrial, commercial, agricultural and biological laboratories in the area.

Chemical Testing Technician: Designed for persons interested in learning basic skills necessary to gain employment in Industrial Testing Laboratories (also includes cement labs).

Agricultural Testing Technician: Designed for persons interested in basic skills necessary to gain employment in agricultural consulting Service Center laboratories.

Environmental Technician: Designed for persons desiring employment in Environmental Protection Administration Laboratories.

First Year Courses required for all programs. Certificate of Occupational Education in Laboratory Testing Technology upon successful completion of first year.

## Core Courses: <br> Credits

| CHT | 101 | Chemical Testing Technology I | 5 |  |  |
| :--- | :--- | :--- | :--- | :---: | :---: |
| CHT | 102 | Chemical Testing Technology II | 5 |  |  |
| CHT | 103 | Chemical Testing Technology III | 5 |  |  |
| VTR | 111 | Technical Math I | 5 |  |  |
| VTR | 112 | Technical Math II | 5 |  |  |
| VTR | 102 | Elements of Technical Writing | 3 |  |  |
| BUS | 101 | Beginning Typewriting | 3 |  |  |
| BIO | 101 | Biological Concepts | 5 |  |  |
| CHE | 100 | Fundamentals of Chemistry | 5 |  |  |
| ELT | 100 | Introduction to Electronics | 4 |  |  |
|  | TOTAL |  |  |  | $\mathbf{4 5}$ |

Second Year Courses in the following specialized areas leading to an Associate in Applied Science Degree (AAS).

## CHEMICAL TESTING TECHNOLOGY

Successful completion of CORE Courses (first year) plus the following are required to receive an AAS Degree.

| CHT 201 | Chemical Testing Technology IV | 5 |  |
| :--- | :--- | :--- | ---: |
| CHT | 202 | Chemical Testing Technology V | 5 |
| CHT | 203 | Chemical Testing Technology VI | 5 |
| VTR | 103 | Industrial Communications | 3 |
| VTR | 105 | Industrial Organizations \& Inst. | 3 |
| VTR | 205 | Industrial Economics | 3 |
| VTR | 184 | Industrial Physics I (Mechanics) | 5 |
| ELT | 111 | Solid State Circuits II | 5 |
| ELT | 132 | AC-DC Circuit Analysis | 9 |
| EDP | 101 | Introduction to Data Processing | 3 |
|  |  | "SUPPORTING COURSES | 6 |
|  | TOTAL | $\mathbf{5 2}$ |  |

## ADVISORY COMMITTEE FOR LABORATORY TESTING TECHNOLOGY

## Bob Carpenter

Dow Chemical
Jack D. Hutchison IBM
Ed Lee
Monfort of Colorado
Larry Mounce
Colorado State University

Paul Oaks
Industrial Laboratories
John Ruhle
Ideal Cement Research
Larry Scott
Triple S Lab, Inc.
Bob Steiner
Eastman Kodak

## MECHANICAL AND CIVIL ENGINEERING TECHNOLOGY

Course Length: Usually 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 mathematics 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' 131, 132 and 133 (15 credits).

## FIRST YEAR:

Fall Quarter CreditsMCE 131Introductory DraftingVTR 103 Industrial CommunicationsVTR 111 Technical Mathematics IVTR 184 Industrial Physics I
TOTAL Fall Quarter5

## SECOND YEAR:

## Fall Quarter:

MCE 261 Mechanical Drafting II
MCE 262 Statics and Mechanics
MCE 263 Materials and Processes 4
VTR 205 Industrial Economics
TOTAL Fall Quarter 17
Winter Quarter:
MCE 264 Strength of Materials
4
MCE 265 Applied Design and Drafting
VTR 202 Cost and Material Estimating
VTR 206 Industrial Management

Spring Quarter:

| MCE | 266 | Machine Design |
| :--- | :--- | :--- |
| MCE | 271 | Basic Surveying |
| MCE | 272 | Hydraulics and Pneumatics |
| MCE | 273 | Engineering Problems |

TOTAL Spring Quarter 18 TOTAL Second Year 50 TOTAL 104

ADVISORY COMMITTEE FOR MECHINCAL AND CIVIL ENGINEERING TECHNOLOGY
(See Advisory Committee for Drafting)


## NURSE ASSISTING AND HOME HEALTH AIDE

Course Length: 1 quarter for Certificate in Occupational Education. New class offered each quarter. 17 credit hours, 210 clock hours. Formal classroom teaching correlated with clinical experience in nursing homes, hospitals, and private homes.

Potential Opportunities: Entry level employment as nurse aide in public hospitals, private hospitals, nursing homes, veterans hospitals, private homes, and home health agencies. Additionally, it offers opportunity for nursing career exploration, self-improvement, and satisfaction. High school diploma not required. Education will be evaluated. Minimum age, 16 years. Good health, physical examination required. Interest in working with people and reliable transportion are necessary.

Additional Student Cost: Uniform, white shoes, wrist watch with sweep second hand.

Credits
NA 100 Nurse Aide 17

## ADVISORY COMMITTEE FOR NURSE ASSISTING AND HOME HEALTH AIDE AND WARD CLERK

Marianne Boettner, R.N. State Board Supervisor
Mrs. Lorraine D upper, L.P.N. Bonell Retirement Community
Richard Foster
Kenton Nursing Home
Mrs. Verna Jones, R.N. Fairacres Manor
Ms. Jean McEvoy, R.N. Eventide Nursing Home

Donald G. Miller Fairacres Manor
Mrs. Juanita Sanderson, R.N. Weld County General Hospital Mrs. Kathryn Smith, R.N. 2006 27th Street
Mrs. Louise Warner Birch Avenue Manor

## CRIMINAL JUSTICE

Course Length: Usually 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 College Counseling Center.
Science and Mathematics10
BIO 101 Biological Concepts ..... 5)
(Either of the following courses)
CHE 100 Fundamentals of Chemistry ..... (5)
PHY 100 Survey of Physics ..... (5) 5 )
Science and Mathematics Elective
(May be Mathematics, Biological or Physical Sciences) ..... 5
**Electives ..... 5
tOTAL General Courses ..... 44
TOTAL ..... 101*This requirement may also be met by certification indicatingcompletion of the Basic Recruit Seminar, Colorado Law En-forcement Training Academy (CLETA).
**Cadet Co-operative or other advisor-approved courses maybe used to meet this requirement.
***CRJ 215, CRJ 225, CRJ 231 are sequential courses.
ADVISORY COMMITTEE FOR CRIMINAL JUSTICE
Sheriff Ernest D. Bower Weld County Sheriff's Dept.
Judge Donald CarpenterDistrict Court

Captain Richard McNamara Greeley Police Department

Robert N. Miller<br>District Attorney

Chief John Parkinson Greeley Police Department
Chief Jack West
Evans Police Department

## WARD CLERK (WCL)

Course Length: One quarter for Certificate in Occupational Education. 14 credit hours, 170 clock hours. BUS 131, Medical Terminology is required; although this is suggested as a prerequisite, it may be taken concurrently. Formal classroom teaching is related to clinical experience at Weld County General Hospital.

Potential Opportunities: Entry level employment as Ward Clerk. This program is specifically directed toward hospital employment, but basic skills are also applicable in nursing homes and doctor's offices. High school diploma or GED is strongly recommended. Good verbal and written English skills are required. Minimum age of local employment is 18 . Good health and physical examination is required. Work requires mature, emotionally stable individuals able to work accurately under pressure.

Additional student costs: Blue smock to be worn over street clothes.

## TRADES AND INDUSTRY DIIISION

The Trades and Industry Division is committed to help the 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 <br> Auto Body Refinishing | (two-year AAS Degree) <br> (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 <br> Occupational Certificate) |
| (one-year Occupational Certificate) |  |
| Graphic Technology | (one-year Occupational Certificate) |
| Motorcycle and <br> $\quad$ Sportscraft Engines | (one-quarter Certificate) <br> Truck Driving <br> Welding |

## AUTO BODY REPAIR

Course Length: Usually 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 owning of the shop, shop foreman, shop estimator, and 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 for the repair of 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 applying of the modern automotive finishes. This course is designed to give the student skill and knowledge for job entry-level employment.

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 I12
VTR 101 Industrial Safety and First Aid ..... 2
TOTAL Fall Quarter ..... 14
Winter Quarter
ABR 142 Auto Body Repair II ..... 12
VTR 121 Shop Math ..... 3
TOTAL Winter Quarter ..... 15
Spring Quarter
ABR 143 Auto Body Repair III ..... 12
AMT 233 Air Cond./Comfort Control ..... 5
TOTAL Spring Quarter ..... 17
TOTAL FIRST YEAR ..... 46
SECOND YEAR:
Fall Quarter
ABR 241 Auto Body Repair IV ..... 12
VTR 105 Industrial Organizations \& Instiutions ..... 3
TOTAL Fall Quarter ..... 15
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 theequivalent 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 190 Introduction to Auto Body ..... 2
ADVISORY COMMITTEE FOR AUTO BODYMike Gundes
Auto Alignment \& Frame Ser. G
Art ButherasState Farm Insurance Co.
Duane Diesmag
Kennedy Chevrolet
Leonard Foster
Edwards Chevrolet
Carl Guilliams
Edwards Chevrolet
AUTO BODY REFINISHING

Course Length: Usually 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 bring the trainee to a job entry level.

Opportunities will be in the refinish 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.


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 ..... 12
VTR 101 Safety and First Aid ..... 2
VTR 122 Automotive Drawing ..... 3
TOTAL Fall Quarter ..... 17
Winter Quarter
AMT 133 Fuel Systems and Tune-up ..... 12
VTR 121 Shop Math ..... 3
VTR 103 Industrial Communications ..... 3
TOTAL Winter Quarter ..... 18
Spring Quarter
AMT 132 Steering and Suspension Systems ..... 12
VTR 123 Industrial Science ..... 5
TOTAL Spring Quarter ..... 17
TOTAL FIRST YEAR ..... 52
SECOND YEAR:
Fall Quarter
AMT 231 Automotive Engines ..... 12
VTR 125 Colorado State Safety Inspections ..... 2
TOTAL Fall Quarter
Winter Quarter
AMT 232 Advanced Electrical and Shop Practice 12
VTR 104 Oral Communications in Industry ..... 3
VTR 124 Service Management ..... 3
TOTAL Winter Quarter ..... 18
NOILVOnd
OCCUPATIONAL
Spring Quarter
AMT 234 Automatic Transmission and Advanced Service Practice ..... 12
AMT 233 Air Conditioning and Comfort Control ..... 5
TOTAL SECOND YEAR ..... 49
TOTAL ..... 101
SUPPORTING COURSES
AMT 190 Introduction to Automobile Mechanics ..... 2AMT 125 Auto Certification Refresher1
ADVISORY COMMITTEE FOR AUTOMOTIVE MECHANICS

John Bigelow<br>Co's European Auto

Howard Bohle
Howard's Tune Up G Electric
Claude Harvey
Erhlich Motors

Walt Loftus
Ted Nieters Motor Co.

## Bob Stover

McArthur Olds-Cadillac
Ron Walker
Garnsey $\mathcal{G}$ Wheeler Co.

## BUILDING CONSTRUCTION

Course Length: Usually 6 quarters for Associate in Applied Science Degree.
Potential Opportunities: "Variety" is the word that most nearly defines the work of the building construction craftsman. This program is geared to extensive training in all areas of carpentry pertaining to buildings. 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 appren-tice-type work in the general area of building construction.
Previous construction experience is not necessary, 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.
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
BCS 111 Building Construction I 9
BCT 115 Concrete 2
BCT 121 Framing I 3
BCT 160 Orientation to Building Construction 1
BCT 117 Basic Tools and Materials 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
VTR 101 Safety and First Aid 2
TOTAL Winter Quarter 17

## Spring Quarter:

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
$\begin{array}{lll}\text { BCT } & 141 & \begin{array}{l}\text { Basic Architectural Drafting and } \\ \text { Print Reading }\end{array} \\ & 2\end{array}$
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
VTR 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
$\begin{array}{lll}\text { VTR } 104 & \text { Oral Communications in Industry } & \frac{3}{16} \\ & \text { TOTAL Winter Quarter }\end{array}$

## Spring Quarter:

$$
\text { BCS } 233 \text { Building Construction VI } 7
$$

BCT 237 Legal Procedures and Practices 3
BCT 231 Construction Estimating 4
VTR 103 Industrial Communications 3
TOTAL Spring Quarter 17
TOTAL SECOND YEAR 50
SUPPORTING COURSE:
BCS 190 Introduction to Building Construction 2

## ADVISORY COMMITTEE FOR BUILDING CONSTRUCTION

Ernie Austin
Austin E Austin
Sam Fletcher
Fletcher Electric
Mel Geist
Geist Homes
Duane Glenn
City of Greeley
Darwin Guinn
Hensel Phelps

Ed Kaberlein
Private Contractor
D. H. Neece

Northern Colorado Savings and Loan
Bill Watkins
Everitt Lumber Co.
Glen White
Business Agent


## CHILD CARE TEACHER

## (Early Childhood)

Course Length: Usually three quarters for Certificate in Occupational Education. Usually six 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.

## VOCATIONAL CERTIFICATE - PRESCHOOL GROUP LEADER

Fall Quarter Credits

CCT 104 CCT 106 CCT 110 CCT 130 SOC 105Child Growth and Development I3
Programs in Early Childhood Education ..... 2
Activities for Young Children ..... 4
Practice Teaching I ..... 4
Marriage and the Family ..... 5
TOTAL Fall Quarter ..... 18
Winter Quarter
CCT 100 First Aid ..... 2
CCT 105 Child Growth and Development II ..... 3
CCT 141 Methods of Teaching the Young Child 4
CCT 220 Vocational Teaching Experience ..... 4
Skills in Classroom Equipment ..... 3
TOTAL Winter Quarter ..... 16
Spring Quarter
CCT 145 Nutrition for Young Children ..... 4
CCT 240
Children's Literature ..... 3
PSY 101
Practice Teaching II ..... 4
TOTAL Spring Quarter ..... 16
TOTAL ..... 50
Educational courses necessary for State Social Services Cer-tification for Director of a Child Care Center, Child Develop-ment and Nursery Education:
CCT 100 First Aid ..... 2
CCT 104 Child Growth and Development I ..... 3
CCT 10 05 Child Growth and Development II ..... 3
CCT 106 Programs in Early Childhood Education
CCT 110 Activities for Young Children ..... 4
CCT 14CCT 210
210 Children's Literature$\frac{3}{21}$
HEN 105 Personal Health ..... 3
CCT 230 Family and Community Relations ..... 5
CCT 250 Administration of Child Care Centers ..... $\checkmark 4$
Elective ..... 3
TOTAL Spring Quarter ..... 15
TOTAL Second Year ..... 46
TOTAL ..... 96
ADVISORY COMMITTEE FOR CHILD CARE/TEACHER AIDE

Mrs. John Althoff
First Congregational Church Cooperative Preschool
Ernest Andrade School District 6

Kenneth Eckhardt Maplewood School

Ann Heiman
Greeley Parent-Child Center

Mrs. Roger Wells


## GRAPHIC TECHNOLOGY

Course Length: Approximately 3 quarters for certificate in Occupational Education.

Potential Opportunities: This training program is designed to give the student a basic core of knowledge and machine skills related to office duplicators and the off-set printing process. Included in this core of training is the preparation and operation of the spirit and stencil duplicators, copy composition and pasteup, process camera production of line and halftone negatives, off-set plate making techniques, off-set press operation and bindery functions which will prepare the student for apprentice-type work in commercial print shops or in-house copy centers.

## MOTORCYLE AND SPORTSCRAFT ENGINES MECHANICS

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

Potential Opportunities: The growth of motorcycle and sportscraft engines has been most significant in recent years: Indications are that the boom is just getting started; that the sale of motorcycles and recreational vehicles, as well as mechanized lawn and garden equipment/ etc., will continue to increase rapidly. This development is associated with the energy shortage, the public and its leisure time, growth and consumption. Many opportunities in this field are motorcycle mechanic, boating and outboard engines service, snowmobile mechanic, miscellaneous recreational vehicle mechanic, shop owner and/or manager. Other related job areas are auto repair shops, service stations, farm equipment dealerships, construction companies, and various retail stores selling lawn and garden equipment.

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 |
| :---: | :---: |
| MSE 100 | Motorcycle and Sportscraft Engines 112 |
| VTR 101 | Safety and First Aid 2 |
| VTR 121 | Shop Math $\frac{3}{17}$ |
|  | TOTAL Fall Quarter 17 |
| Winter Quarter |  |
| MSE 101 | Motorcycle and Sportscraft Engines II 12 |
| VTR 104 | Oral Communications in Industry 3 |
| VTR 124 | Service Management |
|  | TOTAL Winter Quarter 18 |
| Spring Quarter |  |
| MSE 102 | Motorcycle and Sportscraft Engines III 12 |
| VTR 123 | Industrial Science $\quad 5$ |
|  | TOTAL Spring Quarter 17 |
|  | TOTAAL 52 |
| SUPPORTING COURSE |  |
| MSE 190 | Introduction to Motorcycle and Sportscraft Engines |
| ADVISORY COMMITTEE FOR |  |
| MOTORCYCLE | AND SPORTSCRAFT ENGINES |
| Lee Bogart | Ben Eckhardt George's Repair Shop |
| Carl Minnig Minnig Cycle Center |  |

## TRUCK DRIVING

Course Length: Usually ten weeks for Certificate in Occupational Education.

Potential Opportunities: Local and long distance truck driving. As prerequisites, students must qualify for chauffers license and must meet Department of Transportation qualifications.

# TDR 100 Truck Driving Practices TDR 101 Truck Driving <br> TOTAL <br> <br> ADVISORY COMMITTEE FOR <br> <br> ADVISORY COMMITTEE FOR TRUCK DRIVING 

 TRUCK DRIVING}

Ed Eisenman
Eisenman Chemical Co.
A. F. Groleau

L \& A Transport, Inc.

Toby A. Martinez Eisenman Chemical Co.

Floyd Midaugh
Saunders Petroleum

## WELDING

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

Potential Opportunities: The welding course is designed to develop the necessary skills so the participant can pass the welder qualification tests: Qualification tests may be given in one or more positions such as flat, horizontal, vertical, or overhead. After completion of this course, the student can find work on bridges, pipelines, power houses, refineries, railroads, automobiles, farm machinery, 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, the desire to work steadily and patiently with determination to achieve high skills in the art of welding, are prerequisites for this 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:

## Credits

12
VTR 101 Safety and First Aid 2
VTR 105 Industrial Ogranizations \& Institutions 3
Winter Quarter
WLT 132 Shielded, Metal, Arc I ..... 12
VTR 181 Basic Blueprint Reading ..... 3
TOTAL Winter Quarter ..... 15
Spring Quarter
WLT 133 Shielded, Metal, Arc II ..... 12
VTR 103 Industrial Communications ..... 3
VTR 182 Welding Layout ..... 3
TOTAL Spring Quarter ..... 18
TOTAL FIRST YEAR ..... 50
SECOND YEAR:
Fall Quarter
WLT 235 Shielded Metal Arc Pipe Welding ..... 12
VTR 183 Welding Industry ..... 3
TOTAL Fall Quarter ..... 15
Winter Quarter
WLT 234 Tig and Mig Welding ..... 12
VTR 104 Oral Communications in Industry ..... 3
WLT 135 Metallurgy ..... 5
TOTAL Winter Quarter ..... 20
Spring Quarter
WLT 236 Special Problems inWelding ..... 12
VTR 175 Welding Certification and Employment
TOTAL Spring Quarter ..... 17 TOTAL SECOND YEAR52
TOTAL ..... 102
EVENING CLASS OFFERINGS:
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 theequivalent of WLT 131.
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 132.

| WLT | 121 | Shielded Metal Arc II-A | 4 |
| :--- | :--- | :--- | :--- |
| WLT | 122 | Shielded Metal Arc II-B | 4 |

WLT 122 Shielded Metal Arc II-B 4
WLT 123 Shielded Metal Arc II-C
TOTAL 12
Note: WLT 121, WLT 122, and WLT 123 are the equivalent of WLT 133.

| 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 | $\mathbf{1 2}$ |

Note: WLT 201, WLT 202, and WLT 203 are the equivalent of WLT 235. TOTAL48

## SUPPORTING COURSE

WLT 190 Introduction to Welding
2

## ADVISORY COMMITTEE FOR WELDING

D. R. Joe Goddard Windin Higgs
Murray Hill
Lundvall Manufacturing Fred W. Hine Farmhand, Inc.

Dale Majors
Majors Welding Supply
John Peral
Eastman Kodak
Floyd Scofield
Hensel Phelps Construction Co.



## COMMUNICATION AND ARTS DIVISION

The Instructional Center, Communication and Arts vestibule, is available for the student desiring assistance with any difficulty or activity related to Communication and Arts. The center is supervised by members of the Communication and Arts staff. Students may avail themselves of this facility or may be referred by an instructor.

## ART

## ART (ART)

## ART 100 INTRODUCTION TO THE VISUAL ARTS AND DESIGN

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

## ART 205 ANCIENT ART HISTORY

A study of the various forms of art and crafts from pre-historic into the Middle Ages. Three credits.

## ART 206 RENAISSANCE ART HISTORY

A study of art from the Middle Ages through the Renaissance and to the Baroque and Rococo. Three credits.

## ART 207 CONTEMPORARY ART HISTORY

A study of art from Romanticism through the various major 20th Century movements. Three credits.

## ART 295 INDEPENDENT STUDY IN ART

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.

## CER 107 PRIMITIVE METHODS

Study of selected "primitive" methods of processing, shaping, coloring, and firing clay. Additional two studio hours arranged. Offered every other year. Three credits.

## CER 108 RAKU AND GLAZES

Study of glaze formation with emphasis on Raku glazes and firing methods. Additional two studio hours arranged. Offered every other year. Three credits.

## CER 205 POTTERY II

Study of the various techniques of throwing and introduction to glaze formulation. Additional two studio hours arranged. Three credits.

## CER 206 SPECIAL PROBLEMS IN CERAMICS

Individually oriented study stressing ceramic design in terms of shape, volume, and color. Additional two studio hours arranged. Three credits.

## DESIGN AND PHOTOGRAPHY (DEP) DEP 101 DESIGN I

Study of the several ways in which the fundamental visual elements are organized and perceived as expressions of thought and feeling. Visual presentation, discussion, and projects. Emphasis on application in two dimensional forms. Five credits.

## DEP 102 DESIGN II

Study of the several ways in which the fundamental visual elements are organized and perceived as expressions of thought and feeling. Visual presentations, discussion, and projects. Emphasis on three dimentional projects. Five credits.
DEP 106 BASIC PHOTOGRAPHY
A course dealing with black and white photography, cameras, lenses, films, and papers. Additional two studio hours arranged. Five credits.

## DEP 107 INTERIOR DESIGN

Introduction to principles of interior design with emphasis on students' exploration of individual design problems. Three credits.

## DRAWING AND PAINTING (DRP)

## DRP 101 DRAWING I

Study of the descriptive and expressive techniques of drawing. Emphasis on realistic composition. Additional two studio hours arranged. Three credits.

## DRP 102 FIGURE DRAWING

Using the figure as an object in space, emphasis will be on manipulation of line, values, shapes, and textures. Exercises will include both traditional and contemporary types of composition, working with pencil, charcoal, conte crayon, and ink. Additional two studio hours arranged. Three credits.

## DRP 105 WATER MEDIA I

Designed to introduce the student to the water color medium and its varied uses. Additional two studio hours arranged. Three credits.

## DRP 106 PAINTING I

Introduction of techniques of painting with oil and acrylic paints. Additional two studio hours arranged. Three credits.

## DRP 201 DRAWING II

Intermediate study of expressive media of drawing. Students further develop craft of drawing as well as ability to transform ideas and experiences into drawing statements. Additional two studio hours arranged. Three credits.

## DRP 205 WATER MEDIA II

Continuation of working with concepts and techniques of water color, water media paints, and related media. Additional two studio hours arranged. Three credits.

## DRP 206 PAINTING II

The course will emphasize painting elements as they relate to the human figure. Additional two studio hours arranged. Three credits.

## DRP 208 RELIEF PRINTMAKING

Study of the various relief methods of printing as an aesthetic form. Additional two studio hours arranged. Three credits.

## JEWELRY AND METALCRAFTS (JMC)

## JMC 105 JEWELRY I

Basic forming, forging, soldering, casting, and finishing techniques involved in creative jewelry. Additional two studio hours arranged. Three credits.

## JMC 106 METAL CRAFTS AND ENAMELING

An introduction to techniques with metals including reposse, forming, forging, casting and enameling. Course will emphasize functional objects. Additional two studio hours arranged. Three credits.

## JMC 107 GLASS CRAFTS

A course stressing personal awareness of physical and aesthetic properties of glass. Work in representative glass, crafts techniques, including design, layout, cutting and leading. Additional two studio hours arranged. Three credits.
JMC 205 JEWELRY II
Continued work in construction, casting and finishing techniques. Includes some stone cutting. Additional two studio hours arranged. Three credits.

## SCULPTURE AND WOOD CRAFTS (SWC)

## SWC 078 FURNITURE REFINISHING AND CONSTRUCTION

Use of hand tools and machines in learning fundamental skills and processes necessary to complete a well-designed project for individual students. Three credits.

## SWC 105 SCULPTURE: INTRODUCTION AND CLAY MODELING

Introduction to traditional and contemporary sculptural forms. Emphasis on modeling techniques and ceramic sculpture. Additional two studio hours arranged. Three credits.

## SWC 106 WELDED AND CONSTRUCTED SCULPTURE

Study of abstract sculptural forms, emphasizing welding and wood construction. Additional two studio hours arranged. Three credits.

## SWC 107 SCULPTURE: CARVING AND WOOD CRAFTS

An introduction to basic techniques involving carving and finishing wood and stone, stressing the design of sculpture and functional objects. Additional two studio hours arranged. Three credits.

## SWC 205 FIGURE SCULPTURE AND CASTING

Work with the head and the figure, and the techniques of metal casting. Additional two studio hours arranged. Three credits.

## TEXTILE CRAFTS (TEC)

TEC 011 DRESSMAKING I
This course acquaints the student with the machine, fabrics, and basic clothing construction. Two credits.

## TEC 012 DRESSMAKING II

The techniques of beginning clothing construction will be reviewed, and a garment of the student's choice will be made. Three credits.

## TEC 013 CROCHETING

Instructions in crocheting basic stitches, reading instructions and making fashions for the family and home. Two credits.

## TEC 014 KNITTING

Basic stitches of knitting, language of the art, and production of garments for family and home. Two credits.

## TEC 015 CURTAINS AND DRAPES

To develop awareness of creative window treatments, and skills in constructing drapes and curtains. Two credits.

## TEC 016 UPHOLSTERY

Course covers fundamentals of choosing fabrics, measuring, cutting, fitting and sewing. Students supply their own fabrics, tools and furniture. Three credits.

## TEC 017 SEWING WITH KNITS

This course will cover the step by step procedures for working with all types of knit fabrics. It will be possible to complete from one to three garments during the quarter. A basic knowledge of sewing will be helpful. Two credits.

## TEC 105 WEAVING AND TEXTILE CRAFTS I

Introduction to the basic techniques of weaving and selected textile crafts. Additional two studio hours arranged. Three credits.

## TEC 205 WEAVING AND TEXTILE CRAFTS II

Continued study of techniques of weaving and selected textile crafts. Additional two studio hours arranged. Three credits.

## TEC 207 TEXTILES - SPECIAL PROBLEMS

Work in selected textile crafts, including: macrame, hooking, batik, handweaving, stitchery, applique, silkscreen. Additional two studio hours arranged. Three credits.

## COMMUNICATIONS

## COMPOSITION (CON)

## CON 101 FUNDAMENTALS OF LANGUAGE

Designed to help the student to succeed in the college program. Emphasis is on communication skills, such as paragraph development, study skills, vocabulary, spelling, and other similar areas where the student needs individual attention. Three credits.

## CON 102 FUNDAMENTALS OF WRITING

Individualized course within the classroom for developing language skills and essay writing. Prerequisite: CON 101 or diagnostic test. Three credits.

## CON 103 COMMUNICATION AND RESEARCH

This course introduces students to the fundamentals of communication based on research, which will culminate in a series of short essays or a longer paper. Three credits.

## CON 107 INTRODUCTION TO LOGIC

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

## CON 295 INDEPENDENT STUDY IN COMPOSITION

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 especially treated. Three credits.

## JOURNALISM (JOU)

## JOU 101 COLLEGE NEWSPAPER

Gives each student on-the-job training, through staff work on the college newspaper. Laboratory, three hours per week. Two credits.

## JOU 102 COLLEGE NEWSPAPER <br> Continuation of JOU 101. Two Credits.

## JOU 103 COLLEGE NEWSPAPER

Continuation of JOU 102. Two credits.

## JOU 105 PHOTOJOURNALISM

A practical, non-technical study of photographing including the mechanics of cameras (both 35 mm and twin lens reflex), darkroom procedures, telling a picture story, composition, and use of the camera for school publications. Prerequisite: DEP 106, Basic Photography, or permission of instructor. Five credits.

## JOU 111 NEWSWRITING I

Introduction to fundamentals of news gathering, reportoriol skills, interviewing, and news story forms. Students must be enrolled in JOU 101 concurrently. Three credits.

## JOU 112 NEWSWRITING II

Principle and practices in writing news stories, features, and editorials. Students must be enrolled in JOU 102 concurrently. Three credits.

## JOU 113 NEWSWRITING III

Advanced news writing, editing, headline writing and page makeup. Students must be enrolled in JOU 103 concurrently. Three credits.

## JOU 114 INTRODUCTION TO MASS COMMUNICATION

Study of history, ethics, and current practices of mass communications media with emphasis on newspaper, radio, and television. Three credits.

JOU 115 INTRODUCTION TO RADIO BROADCASTING
An introduction to basic radio principles and production techniques with some practical laboratory experience in the studio. Three 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. Three credits.

## JOU 295 INDEPENDENT STUDY IN JOURNALISM

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.

## LITERATURE (LIT)

## LIT 105 INTRODUCTION TO LITERATURE

A beginner's exploratory study of poetry, drama, and the short story. Emphasis is on helping the student discover basic concepts of these genres and relevance of literature in any society. Three credits.

## LIT 106 INTRODUCTION TO FICTION <br> Practice in intensive analytical and interpretive reading to broaden and refine interests of students so that they may evaluate short stories and novels. Three credits.

## LIT 108 INTRODUCTION TO POETRY

Exploration of forms, types, language, and philosophies underlying the works of major American and British poets. Three credits.

## LIT 109 CREATIVE WRITING

Instruction and practice in creative writing of types best suited to individual interest and talent. Three 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 205 THE AMERICAN WEST

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

## LIT 206 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. This course fulfills a humanities requirement. Five credits.

## LIT 217 WOMEN IN LITERATURE

An exploration of varying images of women as found in various forms of literature, including poetry, drama, short story, and novels. Three credits.

## MAS 206 SURVEY OF CONTEMPORARY 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.

## READING (REA)

## REA 101 READING

An individualized laboratory course to aid average readers in learning and applying reading rate, vocabulary, and study skills to all content areas and study situations. Three credits.

## REA 106 SPEED READING

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

## 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.

## SPEECH (SPE)

## SPE 115 SPEECH ESSENTIALS

A performance course emphasizing oral communication skills and interpersonal communication. Three 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.

## FOREIGN LANGUAGES

## FRE 011 CONVERSATIONAL FRENCH I

Very 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. Three credits.

## FRE 012 CONVERSATIONAL FRENCH II

Continuation of FRE Oll emphasizing vocabulary expansion. Students also learn French cuisine and the history of major points of cultural interest. Three credits.

## FRE 013 CONVERSATIONAL FRENCH III

Advanced study of conversational French. Three credits.
GER 015 CONVERSATIONAL GERMAN
A beginning course in conversational German intended to help the person who may be traveling in Germany. Three credits.

## MAS OII CONVERSATIONAL SPANISH I

A beginning course in conversational Spanish concerned with developing the ability to understand and speak regional Spanish. Three credits.

## MAS 012 CONVERSATIONAL SPANISH II

A more adyanced treatment of MAS 011 . Three credits.
MAS 013 CONVERSATIONAL SPANISH III
Advanced study of conversational Spanish. Three credits.

## MAS 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. Emphasis is on language and culture of the Southwest. Five credits.

## MAS 102 ELEMENTARY SPANISH II

Continuation of MAS 101. Five credits.

## HUMANITIES

## HUMANITIES (HUM)

## HUM 101 INTRODUCTION TO THE GREEK AND ROMAN PERIOD

Exploration of the ideas of civilization through philosophy and the arts, including music, literature, sculpture, and architecture. Five credits.

## HUM 102 INTRODUCTION TO THE MIDDLE AGES AND RENAISSANCE

Continues the study of the development of the ideas of civilization. Five credits.

## HUM 103 INTRODUCTION FROM THE SEVENTEENTH TO THE TWENTIETH CENTURIES

Continues the study of ideas of civilization to the present. 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 107 MAN AS SELF, SOCIETY, SYMBOL

A study of the nature of man by a direct comparison of man's cultural contributions to his human values. Other related themes are the comic in man, the outsider or rebel in the arts, the relationship of utopian concepts to the human environment, and the heritage of humanism. 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.

## CULTURAL STUDIES (CUS)

## MAS 120 CULTURAL HERITAGE OF THE AMERICAN SOUTHWEST AND MEXICO

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

## CUS 106 CULTURAL HERITAGE OF AFRICA AND AMERICAN BLACKS

Students examine the art, music, and literature as expressions of the philosophy of Africa and the American Black. Influences of African culture from its existence in the tribal structure to its emergence in pre-Civil War and to contemporary culture are included. This course fulfills a humanities requirement. Five credits.

## PHILOSOPHY (PHI)

## 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, causation, mind, human knowledge and its validity, the possession of free choice, value and its determination, and related subjects. This course fulfills a humanities requirement. Five credits.

## PHI 121 INTRODUCTION TO WALDORF EDUCATION

How does a child encounter the world? What are the problems it is going to be confronted with? Child development and child psychology based on Rudolf Steiner's philosophy. Education at home, in preschool and kindergarten. Home and class environment; nutrition; books; toys ... Artistic and physical activities. Three credits.

## PHI 122 WALDORF EDUCATION I

Learning through living. Demonstration and discussion of the work in the elementary grades: Fairy tales; fables; mythology; history . . . The three R's; anatomy; zoology botany; mineralogy; geography; geometery; physics; chemistry; meteorology; artronomy . . . Arts and crafts. Second and third language. Three credits.

## PHI 123 WALDORF EDUCATION II

The adventure of adolescence. The physical, psychological and mental process of maturing. The liberating approach in high school. The social structure of a Waldorf school: The college of teachers - the students - the parents. The training of a Waldorf teacher. Three credits.

## PHI 207 CONTEMPORARY PHILOSOPHY

Examination of three philosophical movements: existentialism, logical positivism, and cosmic consciousness, which should be used as a basis for enriching discussions and creative presentations on such subjects and law and chaos, art and society, concept of mystery, and nature of human reality. Primary emphasis is given to creating a framework from which the student can develop his own personal philosophy. Three credits.

## MUSIC

## MUSIC APPRECIATION (MUA)

MUA 101 ORIGINS OF MUSIC
A non-technical introductory course of exploration of the beginnings and origins of music in the Eastern and the Western world. Three credits.

## MUA 102 CONFORMITY AND REVOLUTION IN MUSIC

A non-technical study of musical creation and its influence on man and his society. The course emphasizes a study of music from Baroque conformity through the Romantic revolution. This course fulfills a humanities requirement. Five credits.
MUA 103 NOW MUSIC
A non-technical course of listening and discussion of the music from the 1930's through and with special emphasis on music being written and performed TODAY by popular orchestras, groups, and soloists. Three credits.

## MAS 105 MUSIC OF MEXICO AND THE SOUTHWEST. <br> An examination of selected works in Mexican and MexicanAmerican music from 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.

## MUE 100 FUNDAMENTALS OF MUSIC <br> Introduction to basic terminology, scales, key signatures, intervals, and ear training. For students with little or no previous background in music theory. Five credits.

## MUE 101 MUSIC THEORY

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

## MUE 205 CHILDREN'S MUSIC

Workshop approach for prospective teachers of music on the preschool/elementary level and for parents who want to increase their ability to deal with children's music potential. Three credits.

## MUSIC PERFORMANCE-VOCAL (MPV)

## MPV 105 COMMUNITY SINGERS

Group singing and/or instrumental accompaniment; duets, quartets, madrigals, or mixed chorus. One credit.

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## MUSIC PERFORMANCEINSTRUMENTAL (MPI)

## MPI 101 GUITAR I

Students will foster an intelligent understanding of the guitar as a legitimate musical medium, creating a firm foundation for further study and appreciation. Daily practice required. Three credits.

## MPI 102 GUITAR II

The study of various basic "finger-style" picking methods. Emphasis is placed upon the development of chordal patterns with thought towards composition and practical music theory. Daily practice required. Three credits.

## MPI 103 GUITAR III

Students are introduced to some of the more complex and/or less well-known approaches to playing the instrument. Daily practice required. Three credits.

## MPI 105 EXPERIMENT IN MUSIC

Allows students with some degree of musical talent to share interests with others who are interested for the purpose of mutual enjoyment and development of musical expertise in impromptu group sessions. Two credits.

## MPI 106 BEGINNING PIANO

To provide a basic course in piano instruction for those who have not had a background in piano. This includes reading skills, style necessary to playing simple accompaniments, community songs and music appropriate to public schools. Daily practice required. Three credits.

## MUS 295 INDEPENDENT STUDY IN MUSIC

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.

## THEATRE

## THE 105 INTRODUCTION TO THEATRE

An introduction to the scientific and artistic practices of theatre. All phases of production and stagecraft in the legitimate theatre as well as alternate forms of drama performance including psychodrama, sociodrama, curative drama, TV and cinema. Involves lecture, field trips, discussion, playmaking activities and playwrighting. This course fulfills a humanities requirement. Five credits.

## THE 106 HISTORY OF THE THEATRE

Designed to explore theatre from its beginnings and evolution in social consciousness to the modern stage through performance from the chief periods of dramatic literature. Three credits.

## THE 107 BEGINNING ACTING

An introduction to the basics of dramatic art as an aid to inter-personal growth through exercises and group activities emphasizing relaxation and awareness of tools and environment of creating; specifically designed to awaken imagination and concentration. Three credits.

## THE 115, 116, 117 COMMUNITY THEATRE PRODUCTION

An opportunity for students and community members to gain credit for working on an Aims Community Theatre show. Auditions and crew positions are open to everyone in the Greeley area. Two credits per course.

## THE 205 STUDIO THEATRE

Performance opportunity through study of theatrical media from small audiences, tour productions, and video-tape productions. Includes all modern staging techniques and styles. Emphasis is placed on development of recorded performance for classroom use. Three credits.

## THE 206 CHILDREN'S THEATRE

An introduction to performance for children using techniques in creative dramatics and puppetry to develop a children's theatre performance. Improvisation and awareness activities are emphasized. Three credits.

## THE 295 INDEPENDENT STUDY IN THEATRE

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 members. Credit hours ( $1-3$ ) must be arranged with the Division Chairman and instructor.

## DEVELOPMENTAL STUDIES DIVISION

The Instructional Center, Developmental Studies vestibule, is available for the student desiring assistance with any difficulty or activity related to Developmental Studies. Mini-courses for college level credit are also offered through the Instructional Center. The center is supervised by members of the Developmental Studies staff. Students may avail themselves of this facility or may be referred by an instructor.

The Developmental Studies Division, including classes in English as a Second Language (ESL), Adult' Basic Education (ABE), and General Education Development (GED), operates on the assumption that all people can learn. 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 begin-
ning 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 specifi situation.

## FUNDAMENTAL EDUCATION - (ESL) ENGLISH AS A SECOND LANGUAGE

This class is for students who either wish to improve or gain English-speaking skills. English as a Second Language is taught in order to transfer students' communication skills in their native language to communication skills in English. Emphasis in teaching the class will be on verbal skills related to subject matter relevant to the adult learners in the class, such as consumer education, jobs, schools, and the community.

Although the emphasis in the class will be on the students ${ }^{\prime}$ acquiring verbal skills, beginning reading and writing will be taught relative to verbal instruction. Elementary computation skills will be taught in the class. As a part of the class, the student will be exposed to existing facilities in the community via field trips and outside speakers.

## EDUCACION FUNDAMENTARIA - (ESL) INGLES COMO EL LENGUAJE SECUNDARIO

Esta clase es para estudiantes que quieren aprender ingles, o mejorar su abilidad de habler ingles. Esta clase de ingles es para studiantes que quieren transferie la abilidad de conumicarse en su idioma natal, al ingles, y para orientar personas a oficios, educacion de agencias a las que pueden llamar en caso de apuros, y educacion de la comunidad.

Aunque el enfasis de la clase sera para que el estudiante pueda comunicarse verbalmente en ingles, tambien se ensenara lectura y escritura de acuerdo con lo que el estudiante haya aprendido verbalmente. Habran viajes en la comunidad y fuera de la comunidad para aprender de las facilidades que estan a nuestro servicio.

Completacion con exito de esta clase education hasta un cuarto grado) sera necesario para poder avanzar a la clase de educacion basica para adultos.

## ADULT BASIC EDUCATION (ABE)

This class is designed to give the adult student who previously dropped out of school a basic education in reading, communications, 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 either for a GED class or a vocational program. Curriculum is centered around individualized learning, allowing each student to work at his own rate.

## 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.

## INTERDISCIPLINARY ARTS AND SCIENCES (IAS)

## IAS 100 SURVIVAL SKILLS FOR COLLEGE STUDENTS

The course is designed to assist students in mastering the contemporary college environment. Instructors from each academic division will familiarize the student with academic skills necessary for success in college; including note-taking; test-taking, both objective and essay; effective use of the textbook; basic research techniques; familiarization with basic terms; and study skills. Three credits.

## IAS 105 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 otthe present. 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 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.

## CO-EDUCATIONAL ACTIVITIES (CAC)

## CAC 101 YOGAI

Designed to teach students an old, practical and wise system to obtain health, alertness and spiritual strength. Two clock hours per week. One credit.
CAC 102 YOGA II
Students further their health and knowledge of Yoga. Two clock hours per week. One credit.

## CAC 103 BEGINNING KARATE

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

## CAC 104 ADVANCED KARATE

Advanced form of kicking, punching, and blocking; self-defense and fighting techniques of Karate examined. Two clock hours per week. One credit.
CAC 105 FLAG FOOTBALL
Designed to teach various skills, techniques, rules, and regulations of flag football. Two clock hours per week. One credit.

## CAC 106 SOFTBALL

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

## CAC 107 SKIING

Designed to expose students to basic skills and techniques for aiding in the art of skiing. Two clock hours per week. One credit.

## CAC 111 BEGINNING VOLLEYBALL

Designed to teach basic skills of volleyball. Team play is stressed and some inter-squad competition is provided. Two clock hours per week. One credit.

## CAC 112 INTERMEDIATE VOLLEYBALL

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

## CAC 113 ADVANCED VOLLEYBALL

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

## CAC 121 BEGINNING SWIMMING

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.

## CAC 122 INTERMEDIATE SWIMMING

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

## CAC 131 PHYSICAL FITNESS

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.

## CAC 132 ADVANCED PHYSICAL FITNESS

A systematic conditioning program to provide strength, endurance, and coordination. Special emphasis is on more vigorous exercises and jogging for longer period of time. Two clock hours per week. One credit.

CAC 141 GOLF
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.

CAC 142 INTERMEDIATE GOLF
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.

CAC 143 ADVANCED GOLF
Students develop advanced techniques of golf. Two clock hours per week. One credit.

## CAC 161 BEGINNING BOWLING

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

## CAC 162 ADVANCED BOWLING

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

## CAC 165 BEGINNING HANDBALL

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

## CAC 166 INTERMEDIATE HANDBALL

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

## CAC 167 ADVANCED HANDBALL

Designed for students who want to further their skills and knowledge of handball. Two clock hours per week. One credit.

## CAC 171 FUNDAMENTALS OF DANCE

A variety of exercises and dances are taught. Students are allowed to express their own ideas through dancing. Two clock hours per week. One credit.

## CAC 172 ADVANCED FUNDAMENTALS OF DANCE

Further development of gracefulness and poise through exercise and dance. Two clock hours per week. One credit.

## CAC 175 SOCIAL DANCE I

Designed for those who want to learn a variety of social dances such as the Rumba, the Cha Cha and waltzes. Students will experience pleasure in dancing and will develop the ability to lead as well as to follow a partner. Two clock hours per week. One credit.

## CAC 176 SOCIAL DANCE II

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

## CAC 181 BEGINNING TENNIS

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

## CAC 182 INTERMEDIATE TENNIS

Designed to improve the player skills and strategies of Beginning Tennis. More individual play will be stressed. Two clock hours per week. One credit.

## CAC 183 ADVANCED TENNIS

Designed for improvement and advancement of skills of tennis. Two clock hours per week. One credit.

## CAC 185 BEGINNING RACKETBALL

An activity class designed to teach the basic movements, skills and rules of racketball. Two clock hours per week. One credit.

## CAC 186 INTERMEDIATE RACKETBALL

Designed to improve the player skills and strategies of Be ginning Racketball. More individual play will be stressed. Two clock hours per week. One credit.

## CAC 187 ADVANCED RACKETBALL

Designed for students who want to further their skills and knowledge of racketball. Two clock hours per week. One credit.

## MAS 155 MEXICAN DANCE

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

## MEN'S ACTIVITIES (MAC)

## MAC 101 WEIGHT TRAINING

Instruction and practice in fundamentals of physical training through use of various weight apparatus. Two clock hours per week. One credit.

## MAC 102 INTERMEDIATE WEIGHT TRAINING

Designed for those who want to continue their improvement in weight training skills and techniques and to rich a higher level of physical fitness. Two clock hours per week. One credit.

## MAC 103 ADVANCED WEIGHT TRAINING

Continuation of MAC 101, including advanced techniques demonstrated in class. Two clock hours per week. One credit.

## MAC 105 MEN'S PHYSICAL EDUCATION

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

## WOMEN'S ACTIVITIES (WAC)

## WAC 105 WOMEN'S PHYSICAL EDUCATION

Designed to teach basic skills of team and individual games to develop poise and attitudes toward physical activity, and improve physical fitness. Two clock hours per week. One credit.

## WAC 106 SLIMNASTICS

Women develop a better figure, firm up, increase circulation, and better coordination using modern equipment. Two clock hours per week. One credit.

## WAC 107 SELF DEFENSE FOR WOMEN

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

## SCIENCE AND MATHEMATICS DIVISION

The Instructional Center, Science and Mathematics vestibule, is available for the student desiring assistance with any difficulty or activity related to science and mathematics. Mini-courses for college level credit are also offered through the Instructional Center. The center is supervised by members of the Science and Mathematics staff. Students may avail themselves of this facility voluntarily or may be referred by an instructor.

## ASTRONOMY (AST)

## AST 100 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 N . lat. Also includes observing with the telescope. Three credits.

## AST 295 INDEPENDENT STUDY IN ASTRONOMY

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.

## BIOLOGICAL SCIENCES (BIO)

## BIO 101 BIOLOGICAL CONCEPTS

A general survey of major concepts related to living organisms. Three hours lecture, four hours lab. Five credits.

## BIO 102 ANIMAL BIOLOGY

Principles of animal biology are considered as they apply to animal phyla. Three hours lecture, four hours lab. Five credits.

## BIO 103 PLANT BIOLOGY

General physiology and anatomy of higher plants. Three hours lecture, four hours lab. Five credits.

## BIO 105 POLLUTION AND THE HUMAN ENVIRONMENT

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

## BIO 106 FIELD BIOLOGY

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 201 POPULATION AND COMMUNITY BIOLOGY

A study of interactions of various factors affecting composition of populations and communities or organisms. Included are principles of energy dynamics, population of dynamics, and community ecology. Three hours lecture, four hours lab. Field trips. 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, and code transcription. Three hours lecture, four hours lab. Five credits.

## BIO 203 DEVELOPMENTAL BIOLOGY

An introduction to changes occuring during organism development and differentiation; gene action, biochemical regulation, and environmental factors stressed. 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 206 ELEMENTARY CHROMATOGRAPHY

A study of uses of paper, thin layer and column chromatography in biological studies. Three hours lecture. Three credits...

## BIO 207 VERTEBRATE BIOLOGY

Biology of vertebrates with emphasis on adaptations of structure, function, and behavior for different habitats. Laboratory: Emphasis on major vertebrate systems. Three hours lecture, four hours lab. Five credits.

## BIO 208 INTRODUCTION TO ENTOMOLOGY

Classification and representative life cycles considered with economic importance of insects and types of control discussed. Three hours lecture, four hours lab. Five credits.

## BIO 209 ADVANCED PLANT BIOLOGY

Phylogenetic relationships, evolution, and genetics of plant kingdom. Three hours lecture, four hours lab. Five credits.

## BIO 295 INDEPENDENT STUDY IN BIOLOGY

This course provides the opportunity for the serious-minded students 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.

## CHEMISTRY (CHE)

## CHE 100 FUNDAMENTALS OF CHEMISTRY

General introduction to basic principles of chemistry and a survey of application of chemistry to various professions. Designed for non-science majors and students preparing for the general chemistry sequence. Three hours lecture, four hours lab. Five credits.

## CHE 101, 102, 103 GENERAL CHEMISTRY

A series of courses designed for students who have requirements in nursing, veterinary medicine, engineering, and related disciplines. A balanced introduction to inorganic, physical, analytical, and organic chemistry is presented, covering electronic structures, chemical bonding, thermodynamic equilibrium acid-base
theory, reactivity, stochiometry, and states of aggregation. Introduction to instrumental methods of analysis, nuclear chemistry, and polymer chemistry are included. The third quarter of lab is devoted to semi-micro qual itative analysis. Prerequisites: One year of high school algebra, one year high school chemistry or permission of instructor for starting CHE 101. Courses must be taken in sequence. Three hours lecture, four hours lab per course. Five credits per course.

## CHE 105 INTRODUCTORY NUTRITION

Basic principles adequate to 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 FUNDAMENTALS OF ORGANIC CHEMISTRY

Introductory basic principles of organic chemistry. Prerequisite: CHE 102 or permission of instructor. Three hours lecture, four hours lab. Five credits.

## CHE 202 FUNDAMENTALS OF ORGANIC CHEMISTRY

Continuation of CHE 201 with broader treatment including reaction mechanisms and techniques useful in organic analysis. Prerequisite: CHE 201. Three hours lecture, four hours lab. Five credits.

## CHE 205 GLASSBLOWING

Instruction and practice in methods of repair and construction of laboratory apparatus. Prerequisite: Permission of instructor. Four hours lab. Two credits.

## CHE 295 INDEPENDENT STUDY IN CHEMISTRY

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.

## 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 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 techniques which can be applied to their work in physical science, mathematics, business, biological science, social science, and engineering. Six 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, control cards, and other selected topics presented. Six 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 tand introductory features of physical geology are presented with reference to historical geology. Three hours lecture, three hours lab. Five credits.

## EAS 295 INDEPENDENT STUDY IN EARTH SCIENCE

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.

## GEOLOGY (GEY)

## GEY 101 PHYSICAL GEOLOGY

A study of rocks and minerals which make up the earth. Three hours lecture, four hours lab. Field trips. Five credits.

## GEY 102 HISTORICAL GEOLOGY

A study of fundamental history of the earth. Three hours lecture, four hours lab. Field trips. Five 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 016 BEGINNING ALGEBRA

Studies in addition, subtraction, multiplication, and division as applied to real numbers, literal numbers, and polynomials, with introduction to integral exponents, factoring linear equations, systems of linear equations, and quadratic equations. Five credits.

## MAT 100 SURVEY OF MATHEMATICS

Designed for students not majoring in science or mathematics. Emphasis is on manipulations of rational and irrational numbers, fractions, decimals, percentages, and proportions. An introduction without overemphasis on mechanical procedures, to the nature of algebra and basic concepts of plane geometry. Five credits.

## MAT 105 COLLEGE PLANE GEOMETRY

A study of plane geometry emphasizing definitions and properties of axioms, postulates, lines, angles, planes, and circles. An introduction to logic and polyhedrons, cylinders, cones, and spheres included. Prerequisite. MAT 016 or one year high school mathematics. Five credits.

## MAT 106 INTERMEDIATE ALGEBRA

Studies in development of real numbers using axioms and sets; equations (linear and quadratic); factoring; relations and functions; graphs and complex numbers. Prerequisite: MAT 016 or one year high school algebra. Five credits.

## MAT 109 METRIC SYSTEM

Provides a working knowledge of linear, liquid, and mass measures in the metric system. One credit.

## MAT 111 COLLEGE ALGEBRA

Emphasizes functions, graphs, quadratic equations, systems of equations, progressions, binomial theorem, and conic curves. Prerequisite: MAT 106 or one and a half years high school algebra. Five credits.

## MAT 112 COLLEGE TRIGONOMETRY

Presents trigonometric functions, logarithms applications of right triangles, trigonometric identities and equations, solution of oblique triangles, and complex numbers. Prerequisite: MAT 111. Five credits.

## MAT 113 CALCULUS WITH ANALYTIC GEOMETRY

Limits, continuity, definition of derivative, differentiation of algebraic functions, mean value theorem, and applications, applications of the derivative. Prerequisite: MAT 112. Five credits.

## MAT 115 SLIDE RULE AND CALCULATOR

A course designed to introduce students to the slide rule and to the calculator as instructional aids to Math and Science courses. One credit (Minicourse).

## MAT 201 CALCULUS WITH ANALYTIC GEOMETRY

Antiderivatives, definite integral, derivaotives and integrals of trancendental function, application of definite integral. Five credits.

## MAT 202 CALCULUS WITH ANALYTIC GEOMETRY

Techniques of integration, conics, polar coordinates, parametric equations, vectors in a plane, indeterminate forms, improper integrals. Five credits.

## MAT 203 MATHEMATICAL ANALYSIS

Vector functions in three-dimension space, partial differentiation, multiple integrals, and infinite series. Five credits.

## MAT 204 DIFFERENTIAL EQUATIONS

Studies solutions to ordinary differential equations by elementary methods. Five credits.

## MAT 205 LINEAR ALGEBRA

Vector spaces, linear transformations matrices, determinants, solutions of linear equations, and characteristics roots. Five credits.

## MAT 295 INDEPENDENT STUDY IN MATHEMATICS

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.

## PHYSICS (PHY)

## PHY 100 SURVEY OF PHYSICS

A comprehensive but not highly technical presentation of fundamental principles of physics with practical applications. Three hours lecture, three hours lab. Five credits.
PHY 101, 102, 103 INTRODUCTORY COLLEGE PHYSICS
An introductory sequence of courses for students not majoring in physics or engineering. Three hours lecture, four hours lab. Five credits per course.
PHY 201, 202, 203 GENERAL PHYSICS
Intended for students majoring in engineering, physics, or physical science. Elementary calculus is used in methods of analysis of practical and theoretical problems. Three hours lecture, four hours lab. Five credits per course.

## PHY 295 INDEPENDENT STUDY IN PHYSICS

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.

## 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 magniture and nature of problems, ascertaining why they arose and discover positive alternatives available to society and government. IBM 360 computer is used as an instructional aid. Five credits.

## SCI 101 AEROSPACE EDUCATION I

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

## SCI 102 AEROSPACE EDUCATION II

Continuation of SCI 101. Three credits.

## SCI 105 HISTORY OF SCIENCE

An introduction to history of science; role of science and its influence in civilization in past and present times. Will not apply toward the 15 -credit Science and Mathematics requirement. Three credits.

## SCI 106 HISTORY OF MATHEMATICS

Historical development of mathematics is presented from ancient to modern times, with heavy emphasis on development of arithmetic, geometry, algebra, and calculus. Will not apply toward the 15 -credit Science and Mathematics requirement. Three credits.

## STATISTICS (STA)

## STA 101 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 of descriptive measures, sampling, the normal, binomial and distributions, interval estimation, correlation, regression, and simple tests of statistical hypothesis. Calculators and IBM 360 computer are used as aids in computation and analysis. Five credits.

## STA 102 STATISTICS FOR BUSINESS, SCIENCE, AND SOCIAL SCIENCE II

Topics include probability, test of statistical hypothesis, T, CHI-SQUARE, F; practices in interpreting results and stating conclusions from sample study, selected topics involving curve fitting, correlation, regression, and analysis of varıance. Calculators and the IBM 360 computer will be used as aids in computation and analysis. Prerequisite: STA 101 or permission of instructor. Five credits.

## SOCIAL SCIEICE DIIISION

The Instructional Center, Social Science vestibule, is available for the student desiring assistance with any difficulty or activity related to Social Science. Mini-courses for college level credit are also offered through the center. The center is supervised by members of the Social Science staff. Students may avail themselves of this facility voluntarily or may be referred by an instructor.

## 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.

## ECONOMICS (ECO)

## ECO 100 INTRODUCTION TO ECONOMICS

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

## ECO 106 PRACTICAL ECONOMICS FOR WOMEN

A course dealing with many of the issues that women are required to face each day. Issues such as: real estate buying and selling, insurance, estate planning, taxes, employment, consumer credit, social security, car buying and car repair. Resource persons from the community will help in bringing realistic and relevant information that will meet the needs of the students. Three credits.

## ECO 201 PRINCIPLES OF ECONOMICS

An introduction to American capitalism, national policy, economic stability, and economic growth. Five credits.

## ECO 202 PRINCIPLES OF ECONOMICS

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

## FAMILY LIFE EDUCATION (FAL)

## FAL 115 CHILDBIRTH EDUCATION I

Designed for those having their first child; an opportunity for group discussion of the physical and emotional aspects of pregnancy, and post partum 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. Labor and delivery film is shown and tour of the hospital obstetrical facilities is included. Two credits.

## FAL 116 CHILDBIRTH EDUCATION 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); and sharing of ideas related to infant care. Promotes better preparation for labor and delivery processes by teaching and practicing related exercises and brothing techniques. Labor and delivery film is shown and tour of the hospital obstetrical facilities is included. Two credits.

## FAL 117 CHILDBIRTH EDUCATION III - LAMAZE

Relaxation, concentration, anod breathing techniques for use as active participants during labor and delivery are taught, using the Lamaze method. Also included are topics of discussion outlined in the basic Childbirth Education courses (see above descriptions). A Lamaze labor and delivery film is shown and a tour is taken of the hospital obstetrical facilities. Couples preferred. Two credits.

## FAL 125 YOUR INFANT

Acquaints mothers and fathers with normal characteristics of infancy, growth and development, nutrition and feeding, safety, anticipating and preventing accidents and practice of infant resuscitation. Explores and helps with understanding and coping with feelings regarding parenthood. One credit.

## FAL 126 EARLY INFANCY AND THE NEW MOTHER

Helps mothers develop their confidence in caring for their infant through group discussions about normal characteristics of infancy, growth and development, nutrition and feeding, safety, anticipating and preventing accidents. Practice infant resuscitation, learn to make baby foods, participate in mother-infant exercises. Develop ideas of how to identify and meet physical, social and emotional needs of infants. Explores and helps with understanding and coping of feelings regarding motherhood. Mothers will practice post portum exercises. Infants attend group with mothers. Two credits.

## FAL 129 CREATIVE PARENTING

Parents will become acquainted with normal characteristics of toddlers and preschoolers. Helps with understanding and coping of parent and child interaction as well as feelings concerning parenthood. Exploration of areas of physical, emotional, social and intellectual growth and development of children and ways of aiding their development through adequate nutrition, awareness of safety, anticipating and preventing accidents, physical activities, language development and toy stimulation. Practice mouth to mouth resuscitation on Resuscibaby. Bring your child and his favorite toy to the physical activity and toy session. Two credits.

## GEOGRAPHY (GEO)

## GEO 105 WORLD REGIONAL GEOGRAPHY

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

## GEO 207 URBAN GEOGRAPHY

Introductory study of geographical factors to 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. 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. Five credits.

## HIS 106 HISTORY OF THE UNITED STATES FROM 1865-1950

Continuation of HIS 105 with primary emphasis on political and economic developments after the Civil War. Also surveys international and cultural phases of post-Civil War America. Five credits.

## HIS 107 HISTORY OF THE UNITED STATES SINCE 1950

A survey of events in the United States since 1950 with emphasis on background to current social, cultural, and political changes. Five credits.

## HIS 205 HISTORY OF ENGLAND

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

## HIS 206 HISTORY OF CHINA - MODERN PERIOD

A survey of historical development of China in the modern period since 1800. Chinese culture, economy, government and society emphasized. Three credits.

## HIS 297 HISTORY OF JAPAN - MODERN PERIOD

A survey of historical development of Japan in the modern period since 1800. Japanese culture, economy, government and society emphasized. Three credits.

## HIS 208 TWENTIETH CENTURY EUROPE

An examination of major events and developments of 20th Century Europe; and 19th Century background; origins, course and results of World War I; the Russian Revolution and Soviet regime; Mussolini and Italian Facism; the Weimar Republic in Germany; Adolph Hitler and national socialism; European diplomacy; World War II and Europe in the post-yar world. Prerequisite: Sophomore standing or permission of instructor. Five 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. 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 100 INTRODUCTION TO MEXICAN-AMERICAN STUDIES

Designed to provide an understanding of background and philosophy of Mexican-American studies. Also analyzes relative position, difference, and commonalities of the Mexican-American community to the general American society. Three credits.

## MAS 161 MEXICAN HISTORY TO INDEPENDENCE

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 MEXICAN HISTORY SINCE INDEPENDENCE

A study of the historica! 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 OF THE SOUTHWWEST

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 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.

This course may be available in an individualized format during the 1975-76 academic year, allowing the student to enter the course at any time and complete the course requirements at his own pace. Check with the Political Science Instructor or the Office of Admissions and Records for further details. Five credits.

## POS 102 COMPARATIVE FOREIGN GOVERNMENT

Governmental systems and political heritage of Great Britain, France, Germany, and the Soviet Union are surveyed. Five credits.

## POS 105 CONTEMPORARY ISSUES IN STATE AND LOCAL POLITICS

Examination of a variety of political topics of current public interest in northeastern Colorado including tax reform, minority needs, campaign expenditures, county government structure, and others. Topics vary each quarter. Course will encourage contact with area leaders and groups familiar with problems being studied. Some familiarity with state, county, and city government is desirable. Five credits.

## POS 106 URBAN POLITICS

A study of origin, structure, and current trends in metropolitan government, with particular emphasis on the Denver-Metro area. Course may be offered in mini-course or contact-course format. In contact-course format, brief "internships" in various city government position will be available, and student will compare experiences in class discussions. Three-five credits.

## POS 107 STATE GOVERNMENT

A study of origin, structure, and current trends in state government in the U.S. Mini-course, contact-course or learning lab format, "internships" available as in POS 106. Two-five credits.

## POS 108 COUNTY GOVERNMENT

A study of the origin, structure, and current trends in county government in the U.S. Mini-course, contact-course or learning lab format, "internships" available as in POS 106. Two credits.

## POS 109 CITY GOVERNMENT

A study of origins, structure, and current trends in various forms of municipal government in the U.S. Mini-course or contactcourse format, "internships" available as in POS 106. Two credits.

## POS 115 EFFECTIVE CAMPAIGNING

Explores the most effective means of mobilizing support for a particular local candidate or issue. Designed to assist community leaders and students of political science interested in more practi-

## 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 117 CONTEMPORARY ISSUES IN AMERICAN POLITICS

Encourages students to examine a variety of controversial political topics of current public interest, including welfare and poverty, environment, minority politics, wealth, and political influence. Topics vary each quarter emphasizing reading and discussion. Some familiarity with American government structure desirable. 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 119 CONSUMER SURVIVAL

Community interest course reviewing the politics of the consumer movement coupled with activities designed to sharpen the consumer skills of the class member. Topics covered include a discussion of how the concerned consumer can use the political system to his own benefit, coping with inflation, tenant's rights, getting the most for the money on large-ticket purchases, the management of food, medical, legal, and automobile expenses, protection against unscrupulous business tactics, the handling of defective merchandise, useful consumer publications, and other topics. Three credits.

## POS 125 POLITICS OF WOMEN

. An examination of the political status of women in American society: what it now is, how it got that way, and how it is now changing. Three 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. Five credits.

## PSY 102 PSYCHOLOGY OF ADJUSTMENT

Application of psychological principles to problems of living. Personality integration is the primary goal. Three credits.

## PSY 103 CHILD DEVELOPMENT

A study of emotional and physical development of the normal child from infancy through childhood. 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 205 PSYCHOLOGY OF ADOLESCENCE

A comprehensive study of 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. Five 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 208 SOCIAL PSYCHOLOGY OF MINORITY GROUPS

An examination of social and psychological aspects of minor-ity-majority group relations in the U.S. Three credits.

## PHY 209 PSYCHOLOGY OF PREJUDICE

A course designed to assist students so they understand in depth the basic causes of prejudices and the etiology of predudicial behavior. Experiences are provided for greater understanding of people and processes for abating and ameliorating the degree of prejudice by the individual. Three credits.

## PSY 211 PARAPSYCHOLOGY I

A broad, experimental introductio to study of psychic phenomena, including ESP, psychokinesis, psychic healing and others. Three credits.

## PSY 212 PARAPSCHOLOGY II - SEMINAR IN PARAPSYCOLOGICAL ISSUES

${ }_{\alpha}$ A seminar in selected parapsychological issues including developing psychic awareness, paranormal healing, reincarnation. Students are required to do extensive outside reading and share their research with the class. Films and guest speakers will supplement the course. Prerequisite: Parapsychology I or approval of the instructor. Three credits.

## PSY 216 PSYCHOLOGICAL AND PRACTICAL ISSUES OF SEPARATION AND DIVORCE

This course is designed to assist people in sorting out and working through creatively the psychological and practical issues related to separation and divorce. Thre credits.

## PSY 295 INDEPENDENT STUDY IN PSYCHOLOGY

This course provides the oppotunity 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 major forms of group life, nature of culture, foundations of personality, and socialization of the individual member of society. Five credits.

## SOC 105 MARRIAGE AND THE FAMILY

Consideration of meaning of marriage as in inter-personal partnership, consideration of factors important in mate selection, marriage readiness, and adjustment of factors important in mate selection, marriage readiness, and adjustment within the family and society. Five credits.

## SOC 106 CONTEMPORARY SOCIAL PROBLEMS

Analysis of process of personal and social disorganization and reorganization in contemporary society. Three credits.

## SOC 115 SOCIOLOGY OF EDUCATION

Analysis and discussion of various learning situations; underlying values and norms; and organizational and 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 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 facunlty 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 MexicanAmerican community to the general American society. Emphasis given to the relationship of the Chicano education system. Three credits.

## MAS 125 THE CONTEMPORARY MEXICAN-AMERICAN

The course will concentrate on the position of the MexicanAmerican in the Anglo American economic, political, and social system from World War I to the present. Main emphasis will be on the Chicano movement from World War II to the new awareness of today. Three credits.


## BUSINESS DIVISION <br> 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 <br> 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 1005 PAYROLL ACCOUNTING
An in-depth study of various payroll systems using government requirements. Includes projects in actual payroll preparation. Twe credits. (THREE),

## ACC 121 INCOME TAX ACCOUNTING I

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. Five credits.

## ACC 122 INCOME TAX ACCOUNTING II <br> Continuation of ACC 121. Five 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 102 or permission of instructor. Five credits.

## ACC 202 INTERMEDIATE ACCOUNTING II

Continuation of ACC 201 with emphasis on long-term assets and liabilities. Five credits.

## ACC 203 INTERMEDIATE ACCOUNTING III <br> Continuation of ACC 201 and ACC 202 emphasizing accounts. 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 203 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 101 or permission of instructor. Five credits.

## ACC 212 COST ACCOUNTING II

Continuation of ACC 211. Three credits.

## BUSINESS (BUS)

## BUS 100 AMERICAN BUSINESS SYSTEMS

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, emphasizing learning the keyboard and parts of the typewriter; proper technique; beginning speed and control development; 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. Prerequisites: BUS 102 or two years high school typewriting or speed of at least 40 wpm . Three credits.

## BUS 105 MACHINE TRANSCRIPTION

Instruction in the use of transcribing machines in preparing business letters and correspondence. Students may elect specific professional correspondence such as medical or legal. Three credits.

## BUS 111 BEGINNNG GREGG SHORTHAND

A beginning course in theory of Gregg Shorthand, Diamond Jubilee Series. Five credits.

## BUS 112 SECOND QUARTER GREGG SHORTHAND

Review of theory to reinforce knowledge and skills; development of speed, vocabulary, and transcription skill. Prerequisite: BUS 111 or one year high school shorthand or permission of instructor. Five credits.

## BUS 113 THIRD QUARTER GREGG SHORTHAND

Further development of dictation speed with dictation and transcription on new material emphasized. Prerequisite: BUS 112 or two years high school shorthand. Five credits.

## BUS 114 ADVANCED GREGG SHORTHAND

Designed to build a shorthand speed to expert levels, plus rapid and accurate transcription, office style dictation, and mailable letter production. Prerequisite: BUS 113. Five credits.

## BUS 115 BUSINESS MATHEMATICS

A study of mathematical procedures in business and aspects of personal activities (per cent, check book records, pay roll, discounts, markup, interest, depreciation, overhead, taxes, insurance, etc.). Five credits.

## BUS 116 ADDING AND CALCULATING MACHINES

Instruction in operating procedure for full keyboard adding machine, ten key adding machine, printing calculator, rotary calculator, and electronic calculator. Emphasis is on machine application of mathematical problem solving in business. Lab hours may be required. Prerequisite: BUS 115. Three credits.

## BUS 121 ALPHABET SHORTHAND

A beginning course in theory of Forkner Alphabet Shorthand, a scientific combination of longhand letters and few symbols to form a system of rapid writing. Designed to develop rapid writing from dictation; transcription skills including spelling, English, and punctuation. Also designed for students interested in learning rapid writing for personal use (taking class notes, etc.) Five credits.

## BUS 122 ALPHABET SHORTHAND SPEED BUILDING

Designed to develop speed in taking business letter dictation at employable levels and continuing to develop transcription skill. Prerequisite: BUS 121 or permission of instructor. Five credits.

## BUS 123 ALPHABET SHORTHAND TRANSCRIPTION

Students develop shorthand dictation and reading speed to the highest individual level possible; transcribe rapidly and accurately; extend knowledge of English usage, punctuation, word division, spelling, typewriting, and business vocabulary; and prepare to enter an office position with adequate skill. Prerequisite: BUS 122. Five credits.

## BUS 125 CONSUMER ECONOMICS

A basic economics course covering personal finance, problems of consumer credit taxes, insurance, mortgage, 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 131 MEDICAL TERMINOLOGY

Supervised learning through which students develop insight, understanding and skill in practicing use of medical terminology through actual medical transcription. Assignment related so exprience is obtained in all types of medical terminology previously studied. Three credits.

## BUS 132 ADVANCED MEDICAL TERMINOLOGY

A study of language of medicine as it applies to each biological system of the body. Practical application includes chart review, oral reading practices, and listening to medical dictation. A student of clinical lab terms for each system, oral reading practices, and directed practice and systems analysis included. Some introduction to anatomy and physiology. Prerequisite: BUS 131 and good typing ability. Three 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 consignment and installment sales, 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 155 BUSINESS COMMUNICATIONS I

Students develop ability to communicate efficiently, spell, learn names of parts of speech, correct sentence structure, punctuation rules, and business rules for word division. Students develop more extensive vocabularies, and discuss ways these help achieve a successful career. Three 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 and ability to type. 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. Prerequisite: BUS 155. Three credits.

## BUS 165 FILING AND RECORDS MANAGEMENT

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 176 INSURANCE TERMINOLOGY AND PROCEDURES

Basic principles of insurance and risk. Various kinds of insurance are discussed; the primary objective of the course is an orientation of the many kinds of insurance and purposes. Three credits.

## BUS 215 LEGAL DICTATION AND TRANSCRIPTION

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. Five credits.

## BUS 245 BUSINESS STATISTICS

Designed to familiarize students with basic concepts of statistics as used in business. Emphasis is on using statistical technique for presentation and utilization of business data. Prerequisite: BUS 115 or permission of instructor. Four credits.

## BUS 246 FINANCIAL MANAGEMENT

Deals with conceptual alternatives of financial manaegement with emphasis on preparation and analysis of source and uses of short- and long-term capital. Prerequisite: ACC 101, 102 or permission of instructor. 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 255 BUSINESS LAW I

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

## BUS 275 REAL ESTATE OFFICE PROCEDURES

A fundamental real estate course covering the economic, legal, financial, marketing, managerial, and operational aspects of real estate. The analysis of real estate financing is emphasized. Five credits.

## BUS 276 MEDICAL OFFICE PROCEDURES

A study of medicl record department-receptionist techniques, medical records and files, and instruction in keeping financial records. Prerequisites: BUS 101 and BUS 131. Five Credits.

## BUS 277 LEGAL OFFICE PROCEDURES

Intensive practice in preparing many types of legal documents. Introduction of routine of a legal office. Designed for legal secretarial students, and attention is given to mastering meaning, spelling, and shorthand forms established for legal terms in preparation for legal dictating transcription. Lab hours may be required: Prerequisite: BUS 175. 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 a minimum of 15 hours per week during the two quarters of enrollment. 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.

## 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. 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 system design process, and introduction to computer programming. Three credits.

## EDP 102 COMPUTER CONCEPTS

A study of computer hardware and software with emphasis on how components relate to an integrated processing system, and introduction to basic programming concepts. Intended to provide necessary background to effectively pursue programming language courses. Prerequisite: EDP 101 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. Threecredits.

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## EDP 121 COBOL

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

## EDP 122 ADVANCED COBOL

Continuation of EDP 121. Topics parallel EDP 102 with addition of efficient COBOL programming techniques. Prerequisites: EDP 121, EDP 202. Five credits.

## EDP 126 REPORT PROGRAM GENERATOR (RPG)

An elective course in RPG programming language. Topics include printed report generation, file matching, control breaks and table search. Prior knowledge of fundamental programming logic required. Prerequisite: EDP 102 or equivalent experience. 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, EDP 121, or equivalent experience. Five credits.

## EDP 201 ASSEMBLER LANGUAGE

Programming concepts learned in EDP 102 are implemented using IBM 360 Assembler Language. Documentation techniques and programming standards stressed. College computer will be used to test programs written by students. Prerequisite: EDP 102. Five credits.

## EDP 202 ADVANCED ASSEMBLER LANGUAGE

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

## EDP 281, 282 COOPERATIVE WORK EXPERIENCE

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. Prerequisite: Students 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 their advisor and the supervising instructor. Five credits per course.

## MID-MANAGEMENT (MGT)

## MGT 105 SALESMANSHIP

An interpretation of psychological development of persons. Emphasis is on arts of making friends and development of successful relationships between customer and salesman. Five credits.

## MGT 106 PRINCIPLES OF MERCHANDISING

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 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 225 PRINCIPLES OF MARKETING

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

## MGT 235 PRINCIPLES OF MANAGEMENT

A study of essentials of management of merchandising concerns in industry; organization sturctures, control of physical facilities, financing, production, planning and scheduling, purchasing, sales, office services, budgeting and decision-making. Five credits.

## MGT 181, 182, 183, 281, 282, 283, PERSONAL ADJUSTMENT TO BUSINESS

Supervised employment in positions related to field of merchandising. Intended to provide practical experience in operations and methods for students preparing for a career in business. A minimum of 15 hours of qualified employment plus one hour each week in a seminar in human relations. Five credits per course.

## TECHIICAL DIVISION <br> AGRICULTURE CO-OP PRE-MANAGEMENT (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. Feed and feed processing; petroleum; chemicals; and agriculture credit will be covered. 50 clock hours. Field trips included. Five credits.

## AGR 112 AGRICULTURE CO-OP CAREERS II

Continuation of AGR 111 . Fertilizers, tires, batteries, and accessories; office management; and grain handling will be covered. 50 clock hours. Field trips included. 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; big business; 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 on 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 CHEMICALS AND FERTILIZERS

Overview of more common chemicals used in agriculture, their makeup and úses, including soils, fertilizers, spray compounds, and medications. 50 clock hours. Five 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. 2 or 3 credits. 20 or 30 clock hours.

## 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, casset, and student manual. 3 credits. 30 clock hours.

## AGR 145 BULK BLENDING

This course covers the blending of fertilizer to use on a per acre basis, blending 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 is Agriculture 139. 2 or 3 credits. 20 or 30 clock hours.

Students completing this course for Lab Testing Technician (chemistry) must sign up for 3 credit hours. The student will contract with the instructor for one additional hour of credit.

## AGR 146 ANHYDROUS AMMONIA

This course begins with the history of ammonia and progresses through the chemistry, production and application of the most wisely 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. Prerequisites are Understanding of Soils or Agriculture 139. 2 or 3 credits. 20 or 30 clock hours.

Students completing this course for Lab Testing Technician (chemistry) must sign up for 3 credit hours. The student will contract with the instructor for one additional hour of credit.

## 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 or 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. 3 credits. 30 clock hours.

## 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 traiffic 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 G 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 meterology, 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 and 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 study 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 meteorology, 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 <br> 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 sucessful completion of the course. Five credits.

## AVT 219 INSTRUMENT FLIGHT INSTRUCTOR

Theory and practice of teaching basic attitude instrument flying. Inlstrument flight planning and instructional techniqus. The student will be able to pass the FAA IFI check ride, 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, 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.

## DRAFTING (DRA)

## DRA 121 DRAFTING I

Designed to develop basic drafting skills. Drawing fundamentals (linework, lettering), geometric construction, dimensioning, orthographic projection, sketching, working drawings, and ablique pictorials studied and rendered. 100 clock hours. Seven credits.

## DRA 122 DRAFTING II

Continuation of development of basic skills with emphasis on pictorial drafting, auxiliary views, shadow and shading, sectioning, mechanical fasteners, and production drawings. 100 clock hours. Seven credits.

## DRA 123 DRAFTING III

Applied vocational drafting in areas of architectural drafting, structural drafting, mapping and topography, electrical and electronics drafting, piping and vessel construction, intersection and development, charts and graphs. 100 clock hours. Seven credits.

## ELECTRONICS (ELT)

ELT 100 INTRODUCTION TO ELECTRONICS
For students who have no previous courses in electricity. Includes electricity; Ohm's law, series, parallel and series-parallel circuits; network theorems; direct-current meters, conductors and insulators, resistors, batteries; magnetism, electromagnetics induction. Lab experiments performed. Obtains partial credit toward ELT 131. 60 clock hours. Four credits.

## ELT 101 INTRODUCTION TO ELECTRONICS

Second quarter of an introductory series investigating basic principles. Includes alternating voltage and current; inductance; inductive reactance; inductive circuits, capacitance; capacitive reactance cacapitive circuits; alternating current circuits; complex numbers, resonance; filters, electron tubes; transistors. Lab experiments performed. Obtains partial credit toward ELT 132. 60 clock hours. Four credits.

## ELT 103 FCC COMMERCIAL LICENSE REQUIREMENTS

Designed to prepare students for FCC exams for Second Class and Third Class radiotelephone licenses. Also beneficial for students interested in First Class and Amateur ratings. Communications normally covered in FCC licensing exams are studied. Obtains partial credit toward ELT 262. 30 clock hours. Two credits.

## ELT 105 ELECTRONIC DEVICES

Operating characteristics of active electronic devices and some circuit applications. Emphasizes solid-state including JFET, IGFET, UJT, SCR, DIAC, TRIAC, integrated circuits, LED's, etc., and some coverage of electron tbues. Obtains partial credit toward ELT 132. 60 clock hours. Four credits.

## ELT 106 ELECTRONICS MATH I

Designed to build proficiency in solving basic math problems associated with electronics. Obtains partial credit toward ELT 131. 40 clock hours. Three credits.

## ELT 107 ELECTRONICS MATH II

Continuation of ELT 106. Reviews basic algebraic operations, equations, applications, determinants, quadratic equations, graphic relationships, j-operator, exponentials, logarithms, sets, logic, trigonometry, vectors, and phasors. Obtains partial credit toward ELT 132. 40 clock hours. Three credits.

## ELT 109 INTRODUCTION TO TRANSISTORS

First course in transistor characteristics, bias and circuit considerations. Common-emitter and common-collector modes stressed. Some discussion of related solid-state devices provided. Obtains partial credit toward ELT 133. 20 clock hours. One credit.

## ELT 110 SOLID-STATE CIRCUITS I

Introduction of solid-state circuit concepts. Development of analytical and graphic tools for practical application to commonly encountered transistorized circuits. Obtains partial credit toward ELT 133. 60 clock hours. Four credits.

## ELT 111 SOLID-STATE CIRCUITS II

Continuation of ELT 110. A simplified approach to analyzing solid-state circuits. When preceded by ELT 110, meets requirements for ELT 133. 60 clock hours. Five credits.

## ELT 112 SOLID-STATE PULSE AND LOGIC CIRCUITS

Treatment of pulse and logic fundamentals; passive logic circuitry; switching circuitry; and matrix, counting, and registry circuitry. Designed for electronics technicians who may encounter circuits in television, radar, test equipment, computers and instrumentation. Obtains partial credit toward ELT 263, ELT 265. 60 clock hours. Five credits.

## ELT 113 TRANSISTOR CIRCUIT APPROXIMATIONS II

Deals with semi-conductor circuits using diodes under varying conditions, transistor operations, bias, common-emitter, common base, conmmon collector circuit approximations, graphic analysis, low and high frequency effects, feedbacks, and multi-stage amplifiers. Obtains partial credit tward ELT 133. 50 clock hours. Four credits.

## ELT 114 TRANSISTOR CIRCUIT APPROXIMATIONS II

Continuation of ELT 113. Obtains partial credit toward ELT 133. 50 clock hours. Four credits.

## ELT 131 AC AND DC FUNDAMENTALS

Physics of electricity, current flow, and direct current circuits. Magnetic and time varying currents introduced. Strongly mathematics oriented and technical math is integrated with study of fundamental principles of basic circuits. Electron devices introduced and lab experiments progress to study of moderately complex circuits. NOTE: ELT 100, ELT 101, ELT 105, ELT 106, AND ELT 107 are an internative way to meet requirements for ELT 131, ELT 132. 120 clock hours. Nine credits.

## ELT 132 AC AND DC CIRCUIT ANALYSIS

Continuation of AC and DC circuit study. Transient waveform analysis and application of network theorms to complex AC and DC circuits practiced. Circuit simplification through employment of equivalent circuits covered. Technical mathematics is provided as an integral part. Additional electron devices introduced and a number of special circuits are studied to illustrate principles of circuits. Lab experiments provided. Prerequisites: ELT 131 or permission of instructor. NOTE: ELT 100, ELT 101, ELT 105, ELT 106, AND ELT 107 are an alternative way of meeting requirements for ELT 131, ELT 132. 120 clock hours. Nine credits.

## ELT 133 ELECTRONIC CIRCUITS AND APPLICATIONS

Analytical and experimental application of active electron devices to various circuits. Solid-state applications emphasized; equivalent circuits, bias, and applications to amplifiers, oscillators, etc. covered. Technical mathematics continues. Lab experiments performed utilizing solid-state devices in both single and cascaded circuits. Prerequisite: ELT 132 or permission of instructor. NOTE: Alternate methods of meeting degree requirements for ELT 133 are either ELT 110 and ELT 111, or ELT 109, ELT 113, and ELT 114. 120 clock hours. Nine credits.

## ELT 134 INSTRUMENTS AND MEASUREMENTS

Electrical measurements and instrumentation devices studied. Measurement accuracies, techniques, equipments, and principles of design use and relationship are covered. 50 clock hours. Five credits.

## ELT 162 DIGITAL PRINCIPLES

Includes number system, Boolean algebra, and logic circuits incluing integrated circuits. Obtains partial credit toward ELT 263, ELT 265. 60 clock hours. Five credits.

## ELT 163 DIGITAL COMPUTER PRINCIPLES

An overview of characteristics and uses of digital computers, and development of understanding of internal works. Includes computer history, uses of computers, types of digital computers, programs, number systems, basic logical circuits, and logical design. Obtains partial credit toward ELT 263, ELT 265. 60 clock hours. Five credits.

## ELT 165 LOGIC DESIGN OF DIGITAL EQUIPMENT

Oriented for use of digital integrated circuits; reviews basic tools of logic designer and builds high proficiency in their use. A reviewer of number systems and Boolean albebra; minimization aids, digital integrated circuits, combinational logic, sequential networks; pulsed sequential networks; flip-flop programming, flipflop counters, special purpose functions. Obtains partial credit toward ELT 263, ELT 265. 60 clock hours. Five credits.

## ELT 261 INDUSTRIAL ELECTRONICS I

A study of circuits and systems commonly employed in industry. Mathematical orientation continues. Transfer functions of circuits and systems developed. 100 clock hours. Eight credits.

## ELT 262 COMMUNICATION CIRCUITS

Continuation of ELT 133, covering receiver and transmitter circuits. Transistor use in communication circuits and principles of operation of various classes of circuits emphasized. Prerequisite: ELT 133 or permission of instructor. Partial credit may be obtained by ELT 103. 80 clock hours. Six credits.

## ELT 263 INTRODUCTION TO DIGITAL COMPUTERS

Emphasis on principles of operation and circuitry in digital computers, binary number system, and Boolean algebra. Computer circuit and sub-system stressed. Prerequisite: ELT 133 or permission of instructor. NOTE: Degree requirements for ELT 263, ELT 265 may be alternately met by ELT 112, ELT 162, and ELT 165; or ELT 112, ELT 163, AND ELT 165. 100 clock hours. Eight credits.

## ELT 264 COMMUNICATION SYSTEMS

Continuation of ELT 262 covering transmission methods, transmission lines, antennas, and introducing microwave systems. Systems used to transmit information from one point to another and using radio frequency techniques emphasized. Prerequisites: ELT 262 or permission of instructor. 40 clock hours. Three credits.

## ELT 265 DIGITAL COMPUTERS II

Review of binary arithmetic; study of Boolean algebra, and digital logic; mechanizing logical functions in terms of computer hardware. Experiments conducted where gating, counting, serial and parallel operations, encoding, decoding, and software are studied and practiced. Prerequisite: ELT 263 or permission of instructor. NOTE: Degree requirements for ELT 263, ELT 265 may be alternately met by ELT 112, ELT 162 and ELT 165; or ELT 112, ELT 163 and ELT 165. 80 clock hours. Six credits.

## ELT 266 ELECTRONIC DESIGN AND FABRICATION

Proper chassis layout and equipment arrangements (packaging) ; building a functional electronic unit of an approved type is undertaken. 40 clock hours. Three credits.

## ELT 267 INTRODUCTION TO NEW ELECTRONIC INDUSTRY DEVELOPMENTS

New devices, including development in general. Students are encouraged to assist in literature searches for information on new developments and devices, and make class presentations. Current hiring practices and conditions, desirable employee attitudes, propper conduct during an interview, typical entrance exam questions, etc. 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. 30 clock hours. Three credits.

## ELT 269 INDUSTRIAL ELECTRONICS II

Industrial electronics application continued; additional considerations of motor controllers, process control, closed-loop systems, and analytical methods presented. 40 clock hours. Three credits.

## FIRE SCIENCE (FS) <br> FS 100 INTRODUCTION TO COMPANY DISCIPLINE AND ADMINISTRATION

Instruction, methods and procedures for department discipline, company administration and details to public assembly. 20 clock hours. Two credits.

## FS 105 ROPES AND KNOTS

Detailed study of ropes and knots used in fire department operations such as raising and lowering equipment and rescue procedures. 20 clock hours. Two credits.

## FS 110 FORCIBLE ENTRY

Methods used in forcible entry in all types of building construction. 20 clock hours. Two credits.

## FS 115 LADDER INSTRUCTION

Instruction, practice and study of types of ladders; construction of ladders and methods of use. 20 clock hours. Two credits.

## FS 120 BASIC OPERATIONS

Basic operations for beginning firemen. 20 clock hours. Two credits.

## FS 125 HOSE LAYOUTS

Elementary and advanced hose evolutions from hydrants, standpipes, fire department connnections, and master streams on equipment. 20 clock hours. Two credits.

## FS 130 WATER HYDRAULICS

A detailed study of water hydraulics in connection with pressure, friction, loss, range and reach, head or elevation, reaction and discharge, and volume. 50 clock hours. Five credits.

## FS 135 VENTILATION

Proper methods of ventilating smoke and toxic gases from all types of buildings. 20 clock hours. Two credits.

FS 140 CHEMISTRY OF FIRE
Basic characteristics for makeup of fire with instruction on terms including explosive range, incipient fire, ignition temperature, thermodynamics, flash point, and spontaineous ignition. Instruction also given on hazardous chemicals in connection with department activities. 50 clock hours. Five credits.

## FS 145 GAS AND SMOKE MASKS

Gas and smoke masks, methods of use, safety features and types of manufacturers. 20 clock hours. Two credits.

## FS 150 BUILDING CONSTRUCTION

Instruction in all types of buildings as connected with fire prevention, inspection, and fire fighting. 20 clock hours. Two credits.

## FS 155 MOTOR VEHICLES

A study of all types of department vehicles including manufacturers, maintenance, proper operating procedures, and driver training. 20 clock hours. Two credits.

## FS 160 ELECTRICITY AND THE FIREMAN

A basic knowledge of electricity as used in conjunction with fire fighting and conformity of codes during fire inspection. 20 clock hours. Two credits.

## FS 165 SALVAGE AND OVERHAUL

Complete instruction and study of use of salvage covers and methods of overhaul at fire scenes. 20 clock hours. Two credits.

## FS 170 ARSON OR INCENDIARY FIRES

A detailed study of degrees of arson, methods of detection, surveillance, and collection of evidence. 20 clock hours. Two credits.

## FS 175 PORTABLE FIRE EXTINGUISHERS

Instruction in all types of fire extinguishers, methods of use, and chemical makeup of each type as used in various fires. 20 Clock hours. Two credits.

## FS 180 RESCUE AND FIRST AID

Methods of rescue and study of use of equipment including resuscitators, cardiac, compressors, inhalators, and first aid procedures used in emergencies. 50 clock hours. Five credits.

## FS 185 CITY CODES AND ORDINANCES

A study of ordinances and codes used in conjunction with department activities. Instruction for understanding of city government nicluded. 20 clock hours. Two 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. 50 clock hours. Five credits.

## LABORATORY TESTING TECHNOLOGY (CHEMICAL) (CHT)

## CHT 101 CHEMICAL TESTING TECHNOLOGY I

Review of basic safety precautions, laboraotory hazards and first aid, proper record keeping, how to use analytical balances, burners, other equipment and laboratory glassware. Some standard ASTM techniques and methods will also be used. Lecture: 30 hrs . Lab: 40 hrs. Five credits.

## CHT 102 CHEMICAL TESTING TECHNOLOGY II

Designed to develop basic laboratory skills in drying operations, physical property determination, colorimetric and radiological instrumentation, and to develop skills with chemical calculations, slide rule and electronic calculators. Lecture: 30 hrs . Lab: 40 hrs. Five credits.

## CHT 103 CHEMICAL TESTING TECHNOLOGY III

Oriented toward separations and naming of chemical compounds, detection of compounds by spot plate, spectrophotometer, polarimeter and gas chromatograph. Lecture: 30 hrs . Lab: 40 hrs . Five credits.

## CHT 201 CHEMICAL TESTING TECHNOLOGY IV

Designed to teach use of technical libraries, repair of simple glassware, perform analytical titrations, volumetric and electrometric. Water analysis procedures will also be performed. Lecture: 30 hrs. Lab: 40 hrs. Five credits.

## CHT 202 CHEMICAL TESTING TECHNOLOGY V

Intensive training in use of gas chromatograph - UV-Vis and AA spectrophotometer. Electrophoresis methods. Natural organic products and synthetic polymers will be analyzed. Lecture: 30 hrs. Lab: 40 hrs. Five credits.

## CHT 203 CHEMICAL TESTING TECHNOLOGY VI

Deals with electrochemistry, electrometers, NMR spectrophotometer and mass spectrophotometer and analytical methods associated with these instruments. Lecture: 30 hrs. Lab: 40 hrs . Five credits.

## 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 131, 132 and 133 (15 credits.)

## MCE 101 DRAFTING I

Initial development of basic drafting skills, i.e. 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 II

Continuation of basic skill development, i.e., line symbols, lettering, etc. Primary purpose is 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 III

Continuation of basic skill development within the following areas of concentration, sectioning, auxiliary views, revolution and rotation and working drawings. 60 clock hours. Four credits.

## MCE 104 DRAFTING IV

Continuation of basic skill development within the following areas of concentration, mechanical posture, intersection and development and charts and graphs. 60 clock hours. Four credits.

## MCE 131 INTRODUCTORY DRAFTING

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 132 INTERMEDIATE DRAFTING

Continuation of MCE 131, emphasizing pictorial and multiview drawing. Technical sketching, auxiliary views, shadow and shading, revolution and detail working drawings studied. 80 clock hours. Five credits.

## MCE 133 MECHANICAL DRAFTING I

Continuation of MCE 132 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 261 MECHANICAL DRAFTING II

Continuation of MCE 133 emphasizing working drawings in architecture, structural, electronic and electrical, welding and topographic areas. 80 clock hours. Five credits.

## MCE 262 STATICS AND MECHANICS

Basic principles of analytic mechanics. Simple stresses analyzed with reference to design criteria. Structures and joining members studied relative to available strength. 60 clock hours. Five credits.

## MCE 263 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 264 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 265 APPLIED DESIGN AND DRAFTING

Basic engineering design problems primarily of a civil and mechanical nature developed and solved. Emphasis is on design and procudres and graphic solutions to production drawing. 80 clock hours. Five credits.

## MCE 266 MACHINE DESIGN

Application of knowledge of mathematics, sciences and drafting to 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 271 BASIC SURVEYING

Basic Surveying equipment and its uses presented. Compatible data gathering and presentation skills developed. Computations relative to surveying studied and practiced. 60 clock hours. Three credits.

## MCE 272 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 273 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.

## NURSE ASSISTING AND HOME HEALTH AIDE (NA)

## 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. 210 clock hours, theory and clinical application. Seventeen 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. 75 clock hours. Seven credits.

## HLH 215 ANATOMY AND PHYSIOLOGY

A study of the body, (cells, tissues, organs, cavaties and planes) plus systems of the body on a medical concept. Prerequisite: BIO 107. Five credits.

## CRIMINAL JUSTICE (CRJ)

## CRJ 105 POLICE PROCEDURES

Study of report forms, department records, use of teletype, crime lab, and orientation to city ordinances. 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. 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; uses 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, detension court procedure and case dispostions and Colorado Children's Code; methods of combat juvenile crime. 30 clock hours. Three credits.

## *CRJ 150 LAW ENFORCEMENT BASIC TRAINING

An intensive introduction to law enforcement: criminal law, evidence, administration of justice, criminal investigation, community relations, patrol procedures, traffic control, juvenile procedures, defensive tactics, firearms, Spanish for officers, and first aid. A certificate of completion is awarded to successful candidates requesting one. 230 clock hours. Twenty 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, prepartion of reports, and case follow-up. Includes surveillance, sources of information, methods of tracing and locating alleged fugitives, and case investigations. 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; exception of recognition; collection, identification, and pre-
servation of evidence; and submissions of evidence for lab examination and presentation in court. Prerequisite: CRJ 210 or permission of instructor. 40 clock hours. Three credits.

## CRJ 225 EVIDENCE II

Continuation of PS 215. 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, crossexamination by defense attorneys, court rulings on admissions of evidence, testimony; execution of search warrants; affidavits, etc. Prerequisite: CRJ 215, 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.
*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).

## WARD CLERK (WCL)

## WCL 106 WARD CLERK

The successful student will be able to function effectively as a unit receptionist, assist in maintaining patient's records, accurately transcribe physician's orders, maintain supplies, and coordinate services to the patient and communicate effective with patients, visitors and staff. 170 clock hours, theory and clinical application. Fourteen credits.

## TRADES AND INDUSTRY DIVISION AUTO BODY REPAIR (ABR) AND AUTO BODY REFINISHING (ABR)

## ABR 190 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 the student will have a basic Auto Body Skill. 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, T joints, flat, and lap, butt vertically. 60 clock hours. Four credits. Prerequisites: None.

## 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. 60 clock hours. Four credits. Prerequisites: ABR 101 or instructor approval.

## ABR 103 BASIC REFINISHING

The student 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. Prerequisites: None.

## 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. 60 clock hours. Four credits. Prerequisites: ABR 102, ABR 141, or instructor approval.

## ABR 112 PANEL REPLACEMENT

The students wil remove, replace and align damaged panels using proper tools and equipment. 60 clock hours. Four credits. Prerequisites: ABR 111 or instructor approval.

## ABR 121 ELECTRICAL AND ALIGNMENT

The student 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 and methods of aligning a front end. 60 clock hours. Four credits. Prerequisites: None.

## ABR 122 ADVANCED REFINISHING

The students will properly sand and prime, mask and seal and refinish a car using any of the finishes used today. 60 clock hours. Four Credits. Prerequisites: ABR 103 or instructor approval.

## ABR 123 DAMAGE APPRAISAL (ESTIMATING)

The students will become familiar with the manuals, forms and procedures of writing estimates. 40 clock hours. Four credits. Prerequisites: ABR 121.

## ABR 141 AUTO BODY REPAIR I

The student will be able to weld lap, butt, and tee joints, flat and vertically. He will be able to remove small dents with pick and file method without the use of fillers, progressing to a severe or


#### Abstract

ABR 142 AUTO BODY REPAIR II The students will be able to identify the panels on an auto and to use power tools in the repair, replacement, and alignment of damaged panels. He will remove and replace interior and exterior trim as necessary for completion of the repair. The student will also refinish partial and complete panels. 150 clock hours. Twelve credits.


## ABR 143 AUTO BODY III

The student will be able to diagnose minor electrical malfunctions in circu,its using continuity lites. The student will also properly sand, prime, mask, and seal and refinish a car using any of the types of finishes used today. He will become familiar with the use of the front end alignment equipment and methods used in aligning the front end while becoming familiar with the manuals and procedures of writing estimates. 150 clock hours. Twelve credits.


#### Abstract

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 student 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 student will do prep and application of top coats on complete autos in both lacquers and enamals. 150 clock hours. Twelve credits.

## ABR 201 QUARTER PANEL REPLACEMENT

The students will be able to remove and replace a quarter panel, repair inner panels and reinforcements. They will align the sheet metal and complete the job including refinishing. 60 clock hours. Four credits. Prerequisites: ABR 123, ABR 143, or instructor approval.

## ABR 202 BASIC SHEET METAL REPLACEMENT

The students will be able to remove and replace a door skin, and front sheet metal including alignment and refinishing. 60 clock hours. Four credits. Prerequisites: ABR 201 or instructor approval.

## ABR 203 ADVANCED SHEET METAL REPLACEMENT (continuation of ABR 202 and ABR 201)

The students will be able to remove and replace door skin, and front sheet metal including alignment and refinishing. They will also be able to remove and replace a quarter panel, repair inner panels and reinforcements. They will align the sheet metal and complete the job including refinishing. 60 clock hours. Four credits.

Prerequisites: ABR 202, or ABR 201 or instructor approval.

## ABR 211 BASIC FRAME REPAIR

The student will be able to identify and diagnose types of frames and damage. They will be familiar with reinforcement and replacement methods. 60 clock hours. Four credits. Prerequisites: ABR 203, ABR 241 or instructor approval.

## ABR 212 CONVENTIONAL FRAME REPAIR

The students will be familiar with the equipment and methods used to repair and align conventional frames. 60 clock hours. Four credits. Prerequisites: ABR 211 or instructor approval.

## ABR 213 UNITIZED FRAME REPAIR

The students will be familiar with the equipment and repair methods used in the alignment of the unitized body. 60 clock hours. Four credits. Prerequisites: ABR 212 or instructor approval.

## ABR 221 AUTO BODY REBUILDING I

The students will be able to repair an auto with severe damage "total" and do all required operations to completely finish the auto making it road worthy. 60 clock hours. Four credits. Prerequisites: ABR 213, ABR 242, or instructor approval.

## ABR 222 AUTO BODY REBUILDING II

The students will be able to repair an auto with severe damage "total" and do all required operations to completely finish the auto making it road worthy. 60 clock hours. Four credits. Prerequisites: ABR 221.

## ABR 223 AUTO BODY REBUILDING III ( continuation of ABR 222)

The students will be able to repair an auto with severe damage "total" and do all required operations to completely finish the auto making it road worthy. 60 clock hours. Four credits.

## ABR 241 AUTO BODY REPAIR IV

The student will be able to remove, replace, and align weld on body panels such as quarter panels, door skins, rear body panels and the complete replacement of front sheet metal and its alignment. They will be able to straighten or repair damaged inner structures using power equipment and tools. The job will be completed including refinish work, by the student. 150 clock hours. Twelve credits.

## ABR 242 AUTO BODY REPAIR $V$

The student will be able 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. 150 clock hours. Twelve credits.

## ABR 243 AUTO BODY REPAIR VI

The student will be able to repair an auto with severe damage "total" and do all required operations to completely finish the auto having it road worthy. 150 clock hours. Twelve credits.

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## AUTOMOTIVE MECHANICS TECHNOLOGY (AMT)

## AMT 190 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 125 AUTO CERTIFICATION REFRESHER

To prepare professional auto mechanics for certification tests given by National Institute for Automobile Service Excellence. 16 clock hours. One credit.

## AMT 131 BRAKES, TRANSMISSIONS AND FINAL DRIVES

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

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. I'50 clock hours. Twelve credit́s.

## AMT 133 FUEL SYSTEMS AND TUNE-UP

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. 150 clock hours. Twelve credits.

## AMT 231 AUTOMOTIVE ENGINES

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 AND SHOP PRACTICE

Students learn theory, diagnosis, and repair of all automotive electrical units including batteries, starters, generators, alternators, regulators, electrical accessories, wriging, and instruments.

Students learn how to use latest 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 ADVANCED SERVICE PRACTICE

Students learn principles of hydraulics, planetary gear sets, and power flow through modern automatic transmissions. Students gain experience in disassambly, 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.

## BUILDING CONSTRUCTION (BCS)

## BCS 190 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 and equipment, methods and procedures. Upon completion the student will have a basic knowledge of Building Construction. 30 clock hours. Two 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 121 FRAMING 1

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, measure, 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 list the material 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 number, 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 hte procedure which his training will follow. The student in this course will be required to score at least $85 \%$ 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 CONTRUCTION IV

Upon completion of this course the student will be proficient in laying out a building site, locating foundations and set-
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, an 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 231 CONTRUCTION ESTIMATING

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 studnt will know how to use the Uniform Building Code as a refrernce 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 responsibilities, employment practices, vocabularly, 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 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 104 CHILD GROWTH AND DEVELOPMENT I

A study of human growth patterns from prenatal influences and conception to five years of age. The emphasis is on physical, social, emotional, and psychological growth. 30 clock hours. Three credits.

## CCT 105 CHILD GROWTH AND DEVELOPMENT II

Continuation of Child Development I. Study of human growth patterns from kindergarten to pre-adolescence with an emphasis on the child's learning environment. Prerequisite: CCT 104 or permission of instructor. 30 clock hours. Three credits.

## CCT 106 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 relation to his own career goals. 20 clock hours. Two credits.

## CCT 110 ACTIVITIES FOR YOUNG CHILDREN

Practical 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 130 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 141 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 110 or permission of the instructor. 40 clock hours. Four credits.

## CCT 145 NUTRITION FOR YOUNG CHILDREN

The study of the essential nutrients and their function for a growing child. Learning to evaluate menus and snacks in home and institutional food services. Applications of nutrition education in the classroom. 40 clock hours. Four credits.

## CCT 150 SKILLS IN CLASSROOM EQUIPMENT

A laboratory experience designed to acquaint the student with the most commonly used types of duplicating, mimeograph and audiovisual equipment used in most school settings. 30 clock hours. Three credits.

## CCT 200 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 positiv and constructive attitude towards self appraisal and the appraisals of others. 100 clock hours. Five credits.

## CCT 205 BUSINESS MANAGEMENT AND CHILD CARE

 CENTERSA study of federal, state and local regulations, record keeping, funding, legislation and other factors related to the business operation of a child care center. 30 clock hours. Three credits.

## CCT 210 CHILDREN'S LITERATURE

A study of the various forms of literature vailable for young children, with an emphasis on skills in presenting stories to children. 30 clock hours. Three credits.

## CCT 220 VOCATIONAL TEACHING EXPERIENCE

Course designed for the student to work as a teacher aide under the direction of a qualified teacher in a setting for young children, closely supervised by an instructor. Prerequisite: CCT 130. 80 clock hours. Four credits.

## CCT 230 FAMILY AND COMMUNITY RELATIONS

A team teaching experience with an emphasis on the effects of family, class and ethnic value systems $n$ the young child's personality. 100 clock hours. Five credits.

## CCT 240 PRACTICE TEACHING II

Continuation of Practice Teaching I. Student will be responᄂsible for making plans and working with small groups of children. Prerequisite: CCT 130. 80 clock hours. Four credits.

## CCT 245 PRACTICE TEACHING III

Continuation of Practice Teaching II. Students will develop skills in a guided classroom teaching experience in a setting for young children. Prerequisite: CCT 240. 80 clock hours. Four credits.

## CCT 250 ADMINISTRATION OF CHILD CARE CENTERS

A study of the organization and management of the various child care programs; goals, staffing, planning, equipment, parent participation, community resources and administrative procedures. 40 clock hours. Four credits.

## CCT 255 SCIENCE FOR PRESCHOOL TEACHERS

A practical course designed to assist teachers in extending children's understanding in both natural and applied science. 50 clock hours. Five credits.

## GRAPHIC TECHNOLOGY (GRT)

## GRT 101 INTRODUCTION TO DUPLICATING MACHINES I

Upon completion of this course the student will be able to demonstrate a general knowledge of the kinds of office duplicating methods in use and will be able to produce materials with employable skill by the copier, spirit duplicator and stencil duplicator methods. 50 clock hours. Four credits.

## GRT 102 DUPLICATING MACHINES II

Upon completion of this course the student will be able to demonstrate a knowledge and employable skills in the production of paste-ups, electronic stencil imaging techniques and basic office bindery operations such as folding, collating, stitching and drilling. 50 clock hours. Four credits.

## GRT 103 DUPLICATING MACHINES III

Upon completion of this course the student will be able to demonstrate a knowledge of basic off-set printing and employable skills in the preparation of paste-ups for reproduction by off-set, electrostatice plate making and press operation. 50 clock hours. Four credits.

## GRT 121 INTRODUCTION TO GRAPHIC TECHNOLOGY I

Upon completion of this course the student will be able to demonstrate a knowledge of basic off-set printing and skills as an employable duplicator operator by being able to produce from a rough draft, a layout, compostion, paste-up, line negative, flat, plate and press production in one color to the users specification and satisfaction. 100 clock hours. Eight credits.

## GRT 122 GRAPHIC TECHNOLOGY II

Upon completion of this course the student will be able to demonstrate knowledge and employable skills in copy mark-up for photo compostion; paste-up, camera, plate making and press work of multiple layouts and in multiple color, to the users specifications and satisfaction. 100 clock hours. Eight credits.
GRT 123 GRAPHIC TECHNOLOGY III
Upon completion of this course the student will be able to demonstrate knowledge and employable skills in copy mark-up for programmed photo composition as well as pre-press, press and finishing techniques used in the production of multiple page books. 100 clock hours. Eight credits.

## MOTORCYCLE AND SPORTSCRAFT ENGINES (MSE)

## MSE 190 INTRODUCTION TO MOTORCYCLE AND SPORTSCRAFT ENGINES

The course will introduce the student to motorcycle and sportscraft engines. Emphasis will be on safety and a knowledge of the motorcycle and sportscraft mechanics. Upon completion the student will have a basic understanding of power mechanics and other mechanical and electrical systems as applied to modern motorcycles and sportscraft. 30 clock hours. Two credits.

## MSE 100 MOTORCYCLE AND SPORTSCRAFT ENGINES I

Students will learn and understand how to use general hand tools and specialized shop equipment used in repair of motorcycle and sportscraft engines. They will understand power mechanics as it applies to both four-stroke cycle and two-stroke cycle engines. They will perform various services and repairs, including complete engine overhaul on all types of four-and two-stroke motorcycle and sportscraft engines. 150 clock hours. Twelve credits.

## MSE 101 MOTORCYCLE AND SPORTSCRAFT ENGINES II

Students obtain an understanding and working knowledge of basic electricity (DC) in areas of electron theory, magnetism, magnetic induction, electrical terms and properties, conductors, insulators, and bateries. They will understand principles of operation and service all types of ignition system used on motorcycles and sportscraft engines, including conventional battery-contact point system flywheel and unit type magnetos, energy transfer system, and capacitor discharge ignition (CD) systems. They will be able to service all types of motorcycle and sportscraft engine fuel systems including float and diaphram carburetors, vacuum type fuel pumps, and/or different types of fuel tanks and line. 150 clock hours. Twelve credits.

## MSE 102 MOTORCYCLE AND SPORTSCRAFT ENGINES IIII

Students service both AC and DC charging systems and electrical starting system as used on motorcycles, outboards, snowmobiles, and other units. They develop skill necessary to service outboard power head (special features) and lower units, diagnose boat performance problems, and tank test outboard engines. Other skills developed include servicing motorcycle wheels and brakes, clutches, and transmissions. They will also understand basic design and operation of rotary engines. 150 clock hours. 12 credits.

## TRUCK DRIVING (TDR)

## TDR 100 TRUCK DRIVING PRACTICES

Students acquire skill and knowledge to prepare for actual driving training, observing other drivers, and drive under close supervision. Prerequisites: Must qualify for chauffers' license and meet Department of Transportation qualification. 110 clock hours. Ten credits.

## TDR 101 TRUCK DRIVING

Students observe an experienced truck driver at work, and obtain driving skills under "on-the-road" conditions. This is a cooperative class. Prerequisite: TDR 100. 60 clock hours. Two credits.

## WELDING (WLT)

## WLT 190 INTRODUCTION TO WELDING

The course will introduce the student to oxy-acetylene and 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 overhead 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 $3 / 16^{\prime \prime}$ 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 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 112 SHIELDED METAL ARC I-B

Upon successful completion of the course the participant will be able to make multple pass fillet welds in the vertical position using E-6010 and E-7018 electrodes to meet American Welding Society specifications. 60 clock hours. Four credits.

## WLT 113 SHIELDED METAL ARC I-C

Upon successful completion of the course the participant will be able to make multiple pass fillet welds in the overhead postion using various electrodes and meeting American Welding Society specifications. 60 clock hours. Four credits.

## WLT 121 SHIELDED METAL ARC II-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 122 SHIELDED METAL ARC II-B

Upon successful completion of the course the participant 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 123 SHIELDED METAL ARC II-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 Weld Society specifications. 60 clock hours. Four credits.

## WLT 131 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 criteria used to judge objectives. 150 clock hours. Twelve credits.

## WLT 132 SHIELDED, METAL ARC I

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 sate work habits in cutting and preparing metal. American Welding Sociohn standards will be criteria used to determine objective completion. and cutting practice. 150 clock hours. Twelve credits.

## WLT 133 SHIELDED, METAL, ARC II

Students weld butt joints on plate $1 / 4^{\prime \prime}$ to $1 / 2^{\prime \prime}$ in thickness. Prerequisite: WLT 131 or ten hours of exygen/acetylene safety Joints are of common use in industry, and with various electrodes used in industry. American Welding Society standards will be criteria used to determine objective completion. Prerequisite: WLT 131, WLT 132, or ten hours of oxygen/acetylene safety and cutting practice. 150 clock hours. Twelve 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 201 SHIELDED METAL ARC PIPE-A

Upon successfud 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 $\mathrm{E}-6010$ and $\mathrm{E}-7018$ electrodes in $2 \mathrm{G}, 5 \mathrm{G}$ and 6 G 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 $\mathrm{E}-6010$ and $\mathrm{E}-7018$ electrodes in $2 \mathrm{G}, 5 \mathrm{G}$ and 6 G positions in accordance with American Welding Society specifications. 60 clock hours. Four credits.

## WLT 234 TIG AND MIG WELDING

Students will weld all common beads and joints with MIG and TIG processes in all position. They learn proper procedures in care and safe operation of equipment used. 150 clock hours. Twelve credits.

## WLT 235 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 $2 \mathrm{G}, 5 \mathrm{G}$ and 6 G positions in accordance with American Welding Society specifications. 150 clock hours. Twelve 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.

## VOCATIONAL TECHNICAL RELATED (VTR)

## VTR 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.

## VTR 102 ELEMENTS OF TECHNICAL WRITING

Effective technical communication is stressed in proper maintenance of engineering notebooks, trip reports, experimental findings, technical procedures, specifications, resumes, and applications. 30 clock hours. Three credits.

## VTR 103 INDUSTRIAL COMMUNICATIONS

Students recognize importance of communication in industry, good and poor practices, and improvement of communications abilities. 30 clock hours. Three credits.

## VTR 104 ORAL COMMUNICATIONS IN INDUSTRY

Students recognize importance of oral communications, good and poor practices, and improvement of individual abilities. 30 clock hours. Three credits.

## VTR 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.

## VTR 111 TECHNICAL MATHEMATICS I

A basic arithmetic review with introduction to applied algebra, slide rule, and formula application. 50 clock hours. Five credits.

## VTR 112 TECHNICAL MATHEMATICS II

Continuation of VTR III with treatment of applied algebra, geometry, and introducing applied trigonometry. 50 clock hours. Five credits.

## VTR 113 TECHNICAL MATHEMATICS III

Continuation of VTR 112, applying trigonometic formulas and equations including vectors and graphing technical solutions. 50 clock hours. Five credits.

## VTR 121 SHOP MATH

Students will recall concepts and solve problems relating to his vocational area of study. 30 clock hours. Three credits.

## VTR 122 AUTOMOTIVE DRAWING

Students read drawings involving different types of projection, sections and views to understand trade manuals. 30 clock hours. Three credits.

## VTR 123 INDUSTRIAL SCIENCE

Students recall concepts and solve problems in science relating to his vocational area of study. 50 clock hours. Five credits.

## VTR 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.

## VTR 125 COLORADO STATE SAFETY INSPECTION

Students develop understanding, ability, and skills to perform state motor vehicle inspection properly. 20 clock hours. Two credits.

## VTR 151 MATERIALS OF INDUSTRY

Study of modern materials of industry including ferrous- and non-ferrous metals, wood, plastic, and ceramic materials. 40 clock hours. Three credits.

## VTR 152 INTRODUCTION TO INDUSTRY

Brief study of basic industrial and business practices relative to draftsmen and technicians. 30 clock hours. Three credits.

## VTR 153 ENGINEERING PROBLEMS ANALYSIS

Investigation of engineering approach to problem solutions. Manufacturing and construction problems are analyzed and solutions developed. 30 clock hours. Three credits.

## VTR 175 WELDING CERTIFICATION AND EMPLOYMENT

Students are acquainted with certification requirement for different industries and possibilities in professions. Prerequisites: WLT 131, WLT 132, WLT 133, WLT 234, WLT 235. 50 clock hours . Five credits.

## VTR 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.

## VTR 182 WELDING LAYOUT

Students learn layout for sheet metal, heavy plate, and pipe joints, using cardboard and plywood for simulation. Prerequisite: VTR 181. 30 clock hours. Three credits.

## VTR 183 WELDING INDUSTRY

Students acquire understanding of importance of welding industry and its effect on everyday life. 30 clock hours. Three credits.

## VTR 184 INDUSTRIAL PHYSICS I

Principles of precision measurement and applied mechanics are studied. Properties of materials (solids, liquids,gases), forces and 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 185 INDUSTRIAL PHYSICS II

Fundamental of heat, light, and sound are studie emphasizing understanding principles involved and mathematical proficiency in industrial applications. 70 clock hours. Five credits.

## VTR 186 INDUSTRIAL PHYSICS III

Applied physics concerning electricity, electronic and magnetism are studied,/ emphasizing industrial practices and applications. 70 clock hours. Five credits.

## VTR 195 TRADE MATH CARPENTRY

Students solve problems relating to carpentry involving whole numbers, factions, decimals, percentages, measurements, ratioproportion, power and root, and formulas. 30 clock hours. Three credits.

## VTR 202 COST AND MATERIAL ESTIMATING

Techniques and procedures are studied and applied relative to technical projects for construction and manufacturing. 30 clock hours. Three credits.

## VTR 203 INDUSTRIAL PSYCHOLOGY

Students evaluate industrial environments, problems and develop guidelines for working effectively with associates. 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 ECONOMICS

A study of basic practices of industrial management relating to economics, including relationship of economic factors in labormanagement associations. 30 clock hours. Three credits.

## VTR 206 INDUSTRIAL MANAGEMENT

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 PRINCIPLES OF PUBLICATION PROCEDURES

Students gain understanding of standards, procedures, and practices of technical and non-technical publications industry. 30 clock hours. Three credits.

# AIMS JUNIOR COLLEGE DISTRICT COMMITTEE 

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Member

## AIMS COMMUNITY COLLEGE FACULTY

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B.A., University of Northern Colorado; Graduate Study, Uni-
versity of Northern Colorado; Eighteen years business ex-
perience.
B.A., University of Northern Colorado; Graduate Study, University of Northern Colorado; Eighteen years business experience.

> CHARLOTTE ANDRADE (Counselor)
> Undergraduate and Graduate Study, University of Northern Colorado; Two years social work.
LARRY G. BATMAN (Mathematics)
B.A., University of Northern Colorado; M.A., University of Northern Colorado; Advanced Graduate Study, Colorado State University.
MARVIN L. BAY (Division Chairperson, Technical)B.S., Colorado State University; M.A.', University of NorthernColorado; Advanced Graduate Study, University of North-ern Colorado; Eight years experience in aviation industry.
EDWARD R. BEATY (President)

> WILLIAM H. ADAMSON (Electronics)
> B.S.E.E. University of Southern California; Graduate Study, University of California-Los Angeles, Colorado State University; Eighteen years industrial and military experience.

B.S., University of Denver; M.Ed., Adams State College; Ed.D., University of Northern Colorado.
WILLIAM R. BINGER (Building Trades)
Twenty years industrial experience.
GILBERT D. BORTHICK (Engineering Technology)
P.R.E., Colorado School of Mines; M.S., Colorado School of Mines; Nineteen years industrial experience.
W. ARLIN BROWN (Communication/Arts)
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ROY E. CAMERON (Mathematics/Science)
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BOBBY G. CLOYD (Building Trades)
B.S.,Trades and Industrial Education, Oklahoma State University; Graduate Study, Oklahoma State University, University of Alaska, Colorado State University; Fifteen years industrial experence.

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SUSAN CRIBELLI (Developmental Studies)
B.A., University of Northern Colorado; Graduate Study, University of Northern Colorado.

ARLINE M. CROSS (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.

## DONALD DABERKOW (Graphic Arts)

B.A., University of Northern Colorado; Graduate Study, University of Northern Colorado; Six years experience in office production work.

## CHARLES G. DALPRA (Skill Center) <br> B.A., University of Northern Colorado; M.A., University of Northern Colorado; Eight years industrial experience.

JAMES CARROLL DUNCAN (Agriculture)
B.S., Abilene Christian College; M.Ed., Sam Houston State University; Seven years industrial experience.

GEORGE D. EDEL (Auto Mechanics)
B.E., Colorado State University; Graduate Study, Colorado State University; Eight years automotive trade experience.
J. PHILLIP EDWARDS (Electronic Technology)
B.A., University of Northern Colorado; Graduate Study, University of Northern Colorado, Colorado State University; Nine years military and industrial experience.

JOSEPH S. FAJARDO (Coordinator of Mexican-American Studies) B.A., University of Denver; M.A., University of Colorado.

GENE R. FREDERICK (Social Science)
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LESLIE L. FRENCH (Director of Plant and Services)
A.S., Barnes School of Commerce; Graduate Study, Denver University, Punjab University (Lahore, Pakistan), American Institute of Foreign Trade (Phoenix).
R. ARTHUR GIESICK (Engineering Technology)
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Undergraduate and Graduate Study, University of Northern Colorado.

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JAMES H. HALLOCK (Director of Computer Center)
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