



Community College
of Denver

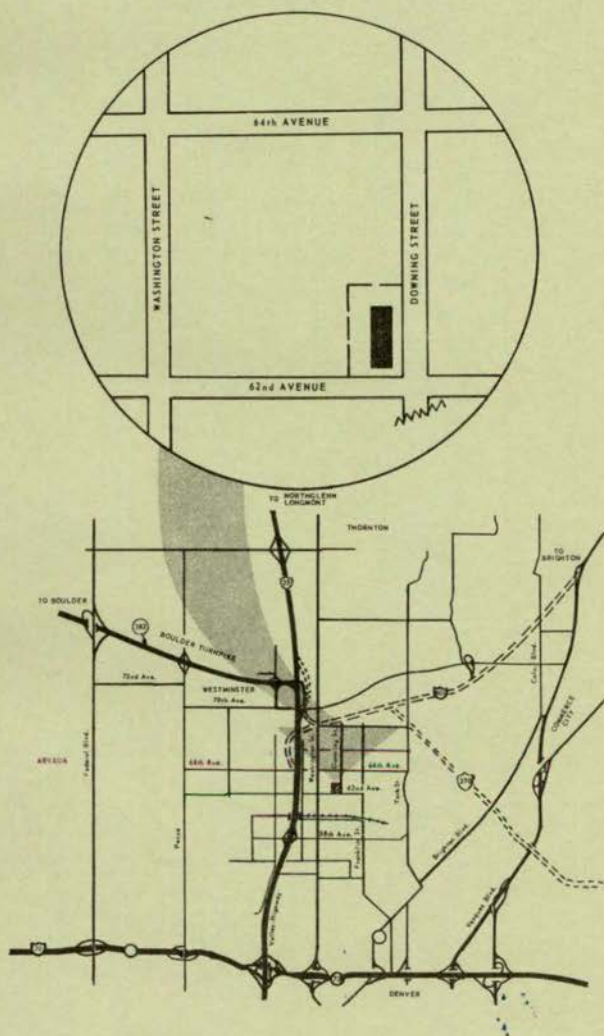


1968 - 69

CATALOG

COMMUNITY COLLEGE OF DENVER

Location of First Campus



1968 - 69

CATALOG

COMMUNITY COLLEGE OF DENVER
1001 East 62nd Avenue
Denver, Colorado 80216

CATALOG NUMBER ONE

MAY, 1968

182

1001 East 62nd Avenue
Denver, Colorado 80216

Telephones:

Prior to June 15, 1968

892-3151

After June 15, 1968

Admissions: 287-0197

Administrative: 288-2551

Established by the
1967 General Assembly of the State of Colorado

Under the Jurisdiction of the
Colorado State Board for Community Colleges and Occupational
Education

Representation in the
Colorado Association of Junior College Presidents

An Institutional Member of the
American Association of Junior Colleges

A Member of the
Council of North Central Junior Colleges

Applicant for Correspondent Membership in the
North Central Association of Colleges and Secondary Schools

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THE DENVER AREA COUNCIL

FOR

COMMUNITY COLLEGES

Mr. Robert P. Davison Chairman
(Boulder County)

Mr. H. C. Engdahl Vice-Chairman
(Jefferson County)

Mr. Harold V. Anderson Secretary
(Boulder County)

Mr. Harry Bath Member
(Boulder County)

Mr. Richard W. Wright Member
(Denver County)

Fall Quarter

August 19
September 11,12,13 & 16
September 17
September 18 & 19
September 20
September 23
November 1
November 28 & 29
December 12
December 13 & 14

Applications for Fall Quarter Due
Faculty Meetings
Orientation for New Students
Registration *
Instructors-Administrators Meetings
Classes Begin
Mid-Term
Thanksgiving Intermission
Quarter Ends
Evaluation

Winter Quarter

December 16
January 2 & 3
January 6
February 10
March 14
March 15

New Student Applications Due
Registration *
Classes Begin
Mid-Term
Quarter Ends
Evaluation

Spring Quarter

March 17
March 24 & 25
March 26
May 1
May 30
June 5
June 6

New Student Applications Due
Registration *
Classes Begin
Mid-Term
Memorial Day Holiday
Quarter Ends
Evaluation

Summer Quarter

June 9
June 16
June 17
June 18
July 4
July 24
August 27
August 28

New Student Applications Due
Orientation for New Students
Registration *
Classes Begin
Holiday
Mid-Term
Quarter Ends
Evaluation

* Registration for Day Classes
Registration for Evening Classes

8:00 a.m. to 5:00 p.m.
6:00 p.m. to 9:30 p.m.

1968-69 CALENDAR

1968

SEPTEMBER							OCTOBER							NOVEMBER							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	
1	2	3	4	5	6	7			1	2	3	4	5							1	2
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9	
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16	
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23	
29	30						27	28	29	30	31			24	25	26	27	28	29	30	
DECEMBER							(Shaded areas indicate classes not in session)														
S	M	T	W	T	F	S															
1	2	3	4	5	6	7															
8	9	10	11	12	13	14															
15	16	17	18	19	20	21															
22	23	24	25	26	27	28															
29	30	31																			

1969

JANUARY							FEBRUARY							MARCH										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
			1	2	3	4						1							1					
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8				
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15				
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22				
26	27	28	29	30	31		23	24	25	26	27	28		23	24	25	26	27	28	29				
														30	31									
APRIL							MAY							JUNE										
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S				
			1	2	3	4	5					1	2	3				1	2	3	4	5	6	7
6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14				
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21				
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28				
27	28	29	30				25	26	27	28	29	30	31	29	30									
JULY							AUGUST																	
S	M	T	W	T	F	S	S	M	T	W	T	F	S											
			1	2	3	4	5						1	2										
6	7	8	9	10	11	12	3	4	5	6	7	8	9											
13	14	15	16	17	18	19	10	11	12	13	14	15	16											
20	21	22	23	24	25	26	17	18	19	20	21	22	23											
27	28	29	30	31			24	25	26	27	28	29	30											
							31																	

GENERAL INFORMATION

History of the College

The 1967 Colorado General Assembly, in the enactment of House Bill 1448, established a state system of community colleges under a State Board for Community Colleges and Occupational Education. The first college to be created under the State Board, by the passage of House Bill 1449, was the **Community College of Denver**.

The five-member governing council of the Community College of Denver, officially named the Denver Area Council for Community Colleges, was appointed by the Governor and held its organization meeting on September 27, 1967.

The initial task of the Council was to engage the services of a president. Candidates were interviewed in October, and Dr. Leland B. Luchsinger was named as the first president of the Community College of Denver on November 1, 1967, Dr. Luchsinger reported for full-time service late in December.

Deans were appointed in the following order: Dr. Theodore E. Albers, Dean, Student Personnel Services, appointed January 19, 1968; Dr. Joseph K. Bailey, Dean, Occupational Studies, appointed March 8, 1968; Mr. E. Theodore Archuleta, Dean, Business Services; and Dr. John H. Swenson, Dean, General Studies, appointed April 5, 1968. Division directors and instructors are being employed as this first catalog goes to press.

Proposals for a temporary site and facilities for the initial campus, calling for a lease-purchase arrangement, were solicited in April, 1968. The proposal accepted provided for two relocatable prefabricated steel buildings to be erected on a six and one-fourth acre site at the intersection of East 62nd Avenue and Downing Street.

The Community College of Denver, will initially enroll students in September, 1968. The institution will offer 45 occupational programs ranging in length from three months to twenty-one months duration. Programs which require various periods of time for completion and which impart differentiating skills and knowledges are offered in fulfillment of the commitment of the College to give appropriate emphasis to the various facets of occupational education.

A five-year master plan is being developed, thereby assuring orderly growth and integration of course offerings and the proper location and facilities for each of the permanent campuses.

Objectives of the College

The Community College of Denver is a comprehensive state community college established within a five-county area of Adams, Arapahoe, Boulder, Denver and Jefferson Counties to help meet the educational needs of youth and adults. More interested in what the student is ready to do than in what he has done, the College is open to all who can profit from the instruction for which they enroll and will offer:

1. Occupational courses and programs of several weeks to two years duration the satisfactory completion of which may lead to job entry in an occupation of the student's choice or advancement in a current job.

2. Pre-professional and liberal arts courses which, upon completion of the first and second years, will enable a student to transfer to a four-year college or university and earn a baccalaureate degree.
3. Other education opportunities for youth and adults, both credit and non-credit, including developmental programs, cultural opportunities and community services.
4. An emphasis on meeting the individual needs of the learners including the provision of specialized learning laboratories and a student-oriented learning materials center.
5. A comprehensive guidance program staffed by counselors who are genuinely concerned with the educational, vocational, and personal welfare of students.

Degrees Offered

The Associate Degree will be given to students successfully completing two-year programs. For shorter programs, Certificates of Achievement and Certificates of Completion will be awarded.

Limitations on Programs and Course Offerings

The availability of the offerings described in the Catalog is subject to sufficient enrollments. The College must retain the customary right to cancel programs or course offerings where enrollments are insufficient to permit the offerings on an educationally sound and economically efficient basis.

During the first year of its operation, 1968-69, the College will limit its offerings to the first year of the various programs and courses. Information given in the GENERAL STUDIES PROGRAMS, OCCUPATIONAL STUDIES PROGRAMS and COURSE DESCRIPTIONS sections of this Catalog concerning second-year offerings is included to facilitate the program planning of students.

Accreditation

The Community College of Denver is under the jurisdiction of the Colorado State Board for Community Colleges and Occupational Education. The Community Colleges Division of the State Board is presently requesting letters from officials of four-year colleges and universities in Colorado stating that transfer credit will be granted to students who have successfully completed appropriate courses at the several colleges operating under the State Board. Students who plan to transfer to baccalaureate programs at four-year institutions can be confident that college-parallel credits earned at the Community College of Denver will transfer without difficulty.

Application has been made for Correspondent Membership in the North Central Association of Colleges and Secondary Schools, an association which accredits all institutions of higher education in this area. This procedure will facilitate full accreditation by the North Central Association in the shortest possible time.

Location and Facilities of Initial Campus

The first campus of the Community College of Denver is located at 1001 East 62nd Avenue just outside the north central boundary of the City of Denver, approximately five miles from the state capitol in the downtown Denver area. The site is ideally situated with respect to various population concentrations, existing public school facilities and programs and highway and street networks. The map inside the back cover gives additional details about the location of the College.

Prior to the completion of permanent campus facilities, the College will be housed principally in two new fabricated steel buildings especially designed for the beginning student body. An office of the College will also be opened in the city of Denver to facilitate the provision of appropriate College services to the inner-city area.

STUDENT SERVICES

The Student Services staff assists with admissions, records and registration, counseling services, financial aid, job placement, health services, student activities, and veterans' eligibility.

Admissions, Records and Registration

Detailed information on admissions requirements and procedures is given in the next section of the catalog. Prior to the beginning of each quarter, each student whose application for admission has been accepted will receive registration information and a scheduled period for registration. In so far as possible, pre-registration procedures will be directed toward minimizing the complexities and time involved in the formal registration process.

A system of record keeping assures the student of a complete and confidential file of information on previous educational experience, credits earned at the Community College of Denver, test data and other information. Transcripts of appropriate records are available to the student without charge.

As a part of the admission process, new full-time students are asked to participate in a one-day orientation program which will deal with registration procedures, student services, programs of study, and College policies and regulations.

Counseling Services

The College is committed to the provision of a comprehensive guidance program staffed by specially selected counselors who are genuinely concerned with the interests, achievements, aspirations and goals of students. After the student application is received, students are assisted in the selection of a program by a counselor. Counseling services will continue to be available thereafter to assist students with educational, vocational, and personal matters.

Counselors aid students in clarifying their occupational objectives. Interest inventories can be administered and reference made to the extensive occupational information which is available to students. In order to aid the student in planning for his future education, an extensive collection of college catalogs is maintained in the Counseling Office. The professionally trained counseling staff will work with students experiencing personal or emotional problems or may refer them to the appropriate agency or service for specialized assistance. All students are encouraged to utilize the services provided by their counselors. Counselors are available for all part-time, full-time day, and extended-day students at the College.

Entrance examinations and test scores are not required for admission to the College. However, testing services are available and test results are interpreted to students and used appropriately by counselors in assisting students.

The entire faculty of the College is guidance oriented and has a major commitment to help each individual student pursue a course of study planned to fulfill his goals. In order to accomplish this, instructors are committed to assisting students on an individual basis. Students are encouraged to confer with their instructors when problems or questions arise.

Financial Aid and Placement

The Office of Student Services will endeavor to help deserving students obtain financial assistance in meeting their college expenses and assist students in finding full-time employment in occupations for which they have been prepared at the Community College of Denver.

Possibilities for financial assistance include loans, scholarships, tuition waivers, and part-time employment including work-study programs. The awarding of financial aid is based primarily on need and interested students should apply to the Dean of Student Services prior to registration.

The staff of the Office of Student Services and instructors in the area of Occupational Studies maintain close contact with business and industry concerning job opportunities and a record of available positions, both full- and part-time, is kept in the Office of Student Services.

Health Services

College officials recognize the basic importance of good health to happy and productive citizenship and wish to encourage students in the development and maintenance of good health practices. Although initially the College will not provide an infirmary, a registered nurse will be available part-time to assist students with health problems and college authorities will retain the general consulting services of a physician. A student accident and sickness insurance program is available to students at low cost.

Student Activities

The College will cooperate in the development of those student-initiated activities which supplement the more formal instructional program by providing constructive experiences which will stimulate personal growth and social development and add to the student's enjoyment of life. Opportunities for the development of leadership, cooperative planning, and special interests must be fostered through participation in these activities. All student activities will be coordinated through the Office of Student Services.

Veterans' Eligibility

Prospective students who are eligible for veterans' benefits should make application for benefits at the Veterans Administration Regional Office. Immediately upon receipt of an application, the Veterans Administration will mail the veteran information acknowledging the claim and providing a claim number. After processing the application the V. A. will issue eligible veterans a Certificate of Eligibility valid only at the institution named and only for the objective indicated. The prospective student should bring the Certificated of Eligibility to the Office of Admissions and Records at the time of initial registration.

ADMISSIONS INFORMATION

Admissions Policy

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

Applications for Admission

Persons planning to enroll within one year following their graduation from high school are requested to submit the Standard Colorado Application for Admission Form, Parts I and II, which are available from high school counselors or the College. Part II is to be sent by the high school at the request of the applicant.

Other persons should submit Application for Admission Form SS-1, which is available from the College.

All persons seeking the Associate Degree, who have had previous college attendance, must arrange for a current official transcript of their college credits to be sent to the Community College of Denver.

The College does not require a physical examination as a general condition of admission but reserves the right to require evidence of good health in individual instances when such seems appropriate.

Entrance examinations are not required as a condition for admission to the College.

A \$10 pre-payment of tuition must accompany each application for admission to the College unless enrollment for fewer than four quarter hours credit or its equivalent is planned. No portion of this pre-payment is refundable if the student does not matriculate.

Applications should be submitted as soon as possible prior to the due date for each quarter shown in the College calendar. When the necessary materials and payment have been received the applicant will be notified of his admission status.

Tuition

	<u>Colorado Residents</u>	<u>Out-of-State Residents</u>
Ten or more quarter hours of credit	\$30 per quarter	\$250 per quarter
Nine or fewer quarter hours of credit	\$ 3 per Qtr. hour	\$ 25 per Qtr. hour

Fees

Fees will not be charged for the College's initial quarter of operation, but a fee structure may be developed for subsequent quarters. However, in some cases students will be required to purchase certain individual supplies and materials and rent uniforms.

Residency Policy

At the time of application for admission, students are classified for tuition purposes as Colorado residents or Out-of-State residents according to the provisions of Colorado law and policies of the College. The classification remains unchanged in the absence of satisfactory evidence to the contrary, and students are held responsible for reporting changes in residency status to the Office of Admissions and Records.

Refunds

A refund of 75 per cent of the tuition charge is made to either full-time or part-time students who withdraw from College during the first ten days of classes. No refunds are made after that time, nor are refunds made if students drop a partial course load at any time.

Programs and Course Offerings May Be Withdrawn

The College retains the right to cancel programs or course offerings where enrollments are insufficient.

GENERAL REGULATIONS

Students entering college for the first time might need to be reminded of the added responsibilities of attending college. They should recognize that the College must have a minimum number of rules if its objectives are to be accomplished. Regulations are based upon respect for the rights of others and observance of civil and moral laws. All who enroll in the Community College of Denver must realize that success rests upon personal efforts, attitudes, honor, integrity, and common sense and that attendance at this institution is a privilege.

Credit Hours

Generally, one credit hour is earned by attending a non-laboratory class for a fifty-minute period, once a week, for a full quarter. In a laboratory course, one credit hour is granted for, from two to four, fifty-minute periods per week in a laboratory.

Course Load

The normal course load for a full-time student is fifteen credit hours. Special permission must be obtained from the faculty advisors and the Dean of Student Services to register for more than eighteen credit hours.

It is recommended that employed students consult with a counselor about their course load.

Classification of Students

Full-time – a student who carries twelve or more credit hours.

Part-time – a student who carries less than twelve credit hours.

First year (Freshman) – a student who has completed fewer than forty-five credit hours.

Second year (Sophomore) – a student who has completed forty-five or more credit hours, but has not received an associate degree or has not qualified for upper division classification in a four-year college or university.

Special – a student who is enrolled for courses but is not pursuing a degree or certificate of achievement.

Attendance

College officials believe that 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 a 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.

Adds and Drops or Withdrawals

Adds and drops are to be held to a minimum. Forms for adding and dropping can be secured from the Admissions and Records Office or the Counseling Office. Adds and drops are approved by the instructor and counselor, and are to be used only to improve the student's instructional program.

If a student is withdrawing from college, he must complete Drop forms for all classes on his program. Failure to complete the Drop forms will interfere with receiving any refunds that may be due, and may result in a failing grade for the course.

Adding Courses

Students are expected to complete their registration during the registration period, if not before. However, a student may add a course during the first two weeks of the course. An Add form must be completed and turned in to the Admissions and Records Office by the student. Students may not add a course after this two week period.

Dropping Courses

A student is expected to complete the courses for which he is registered. He may formally drop a course up to and including the week following midterm. The letters WP(Withdrawal Passing) will appear on his record. Drop forms must be completed and turned in to the Admission and Records Office by the student.

If a student withdraws from a course after the week following midterm, either the letters WP or WF (Withdrawal Failing) depending upon the instructor's evaluation of the student's status at the time, will appear on the student's record. A Drop form must be completed any time a student withdraws from a class.

Withdrawal from College

If for some reason a student must withdraw from college (withdrawal meaning dropping all classes), the student may claim a seventy-five percent refund of tuition paid if the withdrawal is made during the first ten days classes meet. Application for refund must be made through the Office of Admissions and Records.

Dismissal

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

Evaluation and Grading

The Community College of Denver is philosophically committed to a program that focuses on the student and activities that foster his learning. Student evaluation, when properly conducted, is seen as one of these activities. Proper evaluation is considered to be a continuous process involving a variety of evaluative methods and techniques which assure a reasonably fair appraisal of student accomplishments.

A system of evaluation and a means of letting the student know the degree of progress he is making can be achieved in numerous ways. One means is by proper evaluation and by assignment of grades, completion of credit hours, and accumulation of grade points. The grade symbols listed below have the meanings indicated.

Grades	Grade points per credit hour
A – superior	4
B – excellent	3
C – averagé	2
D – inferior	1
F – failure	0
I – incomplete – credit withheld	
IF – incomplete – failing	
IP – incomplete – passing	
WF – withdrawal – failing	
WP – withdrawal – passing	

Grade-Point Average

Honor points or grade points measure the achievement of the student for the number of credit hours he has attempted.

A student who enrolls in college for the first time usually is not familiar with the terms grade points and grade-point average. Grade points are determined by multiplying the grade points per credit hour by the credit hour value of the course attempted. The following example will enable the student to compute his grade-point average.

Course	Credit Hours Attempted	Final Grade	Grade Points
English	3	B	3 grade points (3 x 3) equals 9
History	3	F	0 grade points (0 x 3) equals 0
Mathematics	3	C	2 grade points (2 x 3) equals 6
Electronics	2	A	4 grade points (4 x 2) equals 8
Physics	5	C	2 grade points (2 x 5) equals 10
Physical Education	1	D	1 grade point (1 x 1) equals 1
	17		34

Divide the total grade points by the total credit hours attempted, for example – 34 divided by 17 equals 2.00 grade-point average.

The cumulative grade-point average is the total number of grade points earned divided by the number of credit hours attempted. It includes the number of credit hours of 'F', even though no grade points are allowed for this grade. When a course is repeated, the original grade and the number of credit hours attempted are not removed from the student's permanent record. The repeated course and the second grade received in the course are entered on the student's permanent academic record, but in the case of a course that was failed initially, the credit hours attempted are only entered on the permanent record for the initial enrollment.

Grades are issued at mid-term for new students and, at the end of each quarter for all students. The mid-term grade is an indication of student progress and does not become a part of his permanent record. Both mid-term and final grades are mailed to the home address of the student.

Incomplete Grade 'I' Credit Withheld

If for some reason a student has not completed all the requirements of a course as determined by the instructor, the instructor may issue an incomplete grade 'I'. The student has until the end of the next quarter to complete the requirements of the course. If the requirements are not met during the quarter following the term the incomplete was given, the grade automatically becomes an IP, (Incomplete-Passing), or IF, (Incomplete-Failing), depending upon the instructor's evaluation of the student's status at the time.

Graduation Requirements

Commencement ceremonies for all Community College of Denver graduates are held in the month of June. The conferring of associate degrees, the granting of certificates of achievement and the giving of honors highlight the graduation exercises.

To receive the ASSOCIATE DEGREE a student must:

1. Complete a minimum of ninety credit hours (the last fifteen must be earned at the Community College of Denver), including the specific subject or course requirements in the selected program. Certain programs may require more than the minimum of ninety credit hours and these must also be completed.
2. Earn a minimum cumulative grade-point average at the Community College of Denver of 2.0.
3. Complete three credit hours of English.
4. File the Application for Graduation form at the time of registering for the final quarter. This form is available from the Office of Admissions and Records.

To receive the CERTIFICATE OF ACHIEVEMENT a student must:

1. Complete a minimum of forty-five credit hours (the last fifteen must be earned at the Community College of Denver), including the specific subject matter or course requirements of the selected program. Certain programs may require more than the minimum of forty-five credit hours and these must also be completed.
2. Earn a minimum cumulative grade-point average at the Community College of Denver of 2.0.
3. Complete three credit hours in speech or English.
4. File the Application for Graduation form at the time of registering for the final quarter. This form is available from the Office of Admissions and Records.

Certificate of Completion

The College offers many short courses, conferences, work shops, and seminars. These will vary in length from one to two meetings of short duration to units necessitating many clock hours accumulated over a period of several weeks. Successful completion of short courses of this type will result in the granting of a Certificate of Completion.

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 Admissions and Records Office. There is no charge for this service, provided the student has fulfilled all financial obligations to the Community College of Denver.

Course Numbers

Course numbers consist of prefix letters, which constitute an abbreviation of the subject area or program, and a series of three digits, the first of which has the following meaning:

The digit of a course number indicates its classification according to the year it should be taken.

(a) Courses numbered 100 to 199 are usually taken during the first year of college; in most cases they are pre-requisite courses.

(b) Courses numbered 200 to 299 are usually taken during the second year of college.

GENERAL STUDIES PROGRAMS

GENERAL STUDIES PROGRAMS

The General Studies Programs are intended to provide educational opportunities in support of the student's selected career emphasis in Occupational Studies, in preparation for transfer to a four-year college or university and in general and developmental education interests.

Students enrolled in Occupational Studies Programs may enroll in General Studies courses to meet the specific requirements of particular occupational curricula and to select desired elective courses.

Students who intend to transfer to a four-year college or university should review the general requirements presented in the following Arts and Science programs. These programs as outlined are to serve as guidelines only. Students are advised to review the catalog of the particular college to which they plan to transfer in order to determine specific course requirements. Copies of catalogs for other Colorado colleges, universities, and out-of-state schools are available in the Office of Student Services. The associate degree is awarded by the Community College of Denver upon successful completion of the requirements in Arts and Science.

Arts

The following pattern of courses for students concentrating in Liberal Arts, Education, Literature or Business Administration is one which meets the requirements of the first two years of work in most four-year colleges and universities.

First Year	Credit hours	Second Year	Credit hours
English Language	9	Literature	9
Social Science	9	Social Science	9
Foreign Language	15	Foreign Language	9
Mathematics	9	Science	15
Art or Music	3	Electives	3-6
Electives	3		
	<hr style="width: 50%; margin: 0 auto;"/> 48		<hr style="width: 50%; margin: 0 auto;"/> 45-48

Science

The following pattern of courses for students concentrating in the Sciences, Mathematics, Forestry and Conservation, Education, Engineering or the several medical fields is one which meets the requirements of the first two years of work in most four-year colleges and universities.

First Year	Credit hours	Second Year	Credit hours
English Language	9	Foreign Language or Literature	9-15
Social Science	9	Social Science	6
Mathematics	9	Mathematics	9
Science	15	Science	15
Electives	6	Electives	3-6
	<hr style="width: 50%; margin: 0 auto;"/> 48		<hr style="width: 50%; margin: 0 auto;"/> 42-51

General Education

The General Education program is especially suitable for those students who wish to gain broad understandings in various content fields and are not concerned specifically with acquiring job-entry skills or securing college-parallel credit. The associate degree is awarded upon successful completion of the requirements in General Education. The following broad guidelines are intended to provide opportunity for students to advance their own intellectual, cultural and personal development according to their needs and interests.

First Year	Credit hours	Second Year	Credit hours
English Language	9	Literature	9-12
Social Science	9	Social Science	15-18
Mathematics or Science	9-15	Foreign Language or Elective	9-15
Foreign Language or Elective	9-15	Art or Music	3-6
Art or Music	3-6		
Minimum	45	Minimum	45

Developmental Education

The program of studies in Developmental Education is intended to be highly individualized in order to provide opportunity for students to strengthen and develop their learning skills, to complete high school diploma equivalency requirements or to prepare for entry into Occupational or General Studies programs. Student needs are diagnosed and individual programs are planned, including study in learning laboratories and participation in fundamental and preparatory classes. The following program opportunities will be available according to individual needs.

Learning Laboratories:

- Mathematics
- Reading
- Speech-Listening
- Writing

Fundamental and Preparatory Courses:

- English Language (basic written communication)
- Mathematics (fundamentals of arithmetic, algebra, and geometry)
- Science (basic life sciences and physical science)
- Social Science (fundamentals of world and U.S. history, U.S. government, and consumer economics)
- Electives (selected courses from Occupational and General Studies programs)

LEARNING MATERIALS CENTER

The Learning Materials Center (LMC) includes the College's library and audiovisual facilities. The LMC provides faculty and students with educational material in many media: books, periodicals, films, filmstrips, microfilm, slides, tapes, records and transparencies.

The library is arranged to provide a pleasant relaxed atmosphere for students to study, browse and carry our research assignments. Students may study in individual carrels or work together in small groups. Members of the LMC staff are always available to assist students in obtaining needed learning materials. Interlibrary loan agreements supplement the LMC's collection with materials from the Colorado State Library and other public, college and university libraries.

The audiovisual department handles all faculty requests for educational media and materials. A preview room is available for viewing films and filmstrips that are used in classes and assigned by instructors. Tape recorders also are available for preparing taped presentations or for listening to selected recordings.

OCCUPATIONAL STUDIES PROGRAMS

**DIVISION
OF
BUSINESS AND MANAGEMENT
OCCUPATIONS**

ACCOUNTING

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Composition 111	3	English Composition 112	3	English Composition 113	3
Introduction to Business 104	3	Principles of Marketing 213	3	Business Machines 103	3
Mathematics for Business and Industry 110	3	Accounting 111	3	Accounting 112	3
Typing 102	3	Introduction to Data Processing 101	3	Unit Record Equipment 113	3
Elective	<u>3</u>	College Algebra 111	<u>3</u>	Social Science Elective	<u>3</u>
	15		15		15

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Office Procedures and Administration 204	3	Business Organization and Management 209	3	Fundamentals of Economics 109	3
Accounting 113	3	Principles of Governmental Accounting and Budgeting 220	3	Statistics for Business and Industry 120	3
Unit Record Equipment 114	3	Computer Programming 115	3	Introduction to Accounting Systems 215	3
Business Law 207	3	Elective	3	Income Tax Accounting 211	3
Psychology of Personal Development 107	<u>3</u>	Work Experience	<u>3</u>	Elective or Work Experience	<u>3</u>
	15		15		15

Employment Opportunities: Completion of this program leads to employment opportunities as an accountant in business and industrial concerns or at various levels in governmental agencies.

Total Credit Hours: 90

BUSINESS MANAGEMENT

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Introduction to Business 104	3	Principles of Marketing 213	3	Fundamentals of Economics 109	3
English Composition 111	3	English Composition 112	3	English Composition 113	3
Mathematics for Business and Industry 110	3	Accounting 112	3	Accounting 113	3
Accounting 111	3	Psychology of Personal Development 107	3	Introduction to Data Processing 101	3
Elective	<u>3</u> 15	College Algebra 111	<u>3</u> 15	Elective	<u>3</u> 15

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Business Organization and Management 209	3	Personnel Administration 216	3	Human Relations in Business and Industry 100	3
Statistics for Business and Industry 120	3	Business Finance 205	3	Office Management 201	3
Office Procedures and Administration 204	3	Computer Programming 115	3	Business Policies 210	3
Technical Writing 110	3	Business Law 207	3	Elective or Work Experience	<u>6</u> 15
Elective	<u>3</u> 15	Elective or Work Experience	<u>3</u> 15		

Employment Opportunities: Supervisory and administrative or managerial trainee opportunities in a variety of businesses or industries.

Total Credit Hours: 90

DATA PROCESSING

Six-Month Program

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.
Introduction to Data Processing 101	3	Unit Record Equipment 114	3
Introductory Algebra 105	3	Accounting 112	3
Typing 102 or Key Punch Laboratory 102	3	Computer Programming 115	3
Unit Record Equipment 113	3	Key Punch Laboratory 102 or Work Experience	3
Accounting 111	<u>3</u>	Elective	<u>3</u>
	15		15

Employment Opportunities: Employment by firms handling a large volume of data, reporting, record keeping, and other paperwork. Employment by manufacturing, wholesale and retail, and utility firms as Key Punch, Sorting Machine or Tabulating Machine Operator.

Total Credit Hours: 30

DATA PROCESSING

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	Introduction to Business 104	3	Technical Writing 110	3
Mathematics Elective	3	English Elective	3	Accounting 112	3
Accounting 111	3	Mathematics Elective	3	Unit Record Equipment 114	3
Introduction to Data Processing 101	3	Unit Record Equipment 113	3	Computer Programming 115	3
Elective	<u>3</u>	Elective	<u>3</u>	Mathematics Elective	<u>3</u>
	15		15		15

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Statistics for Business and Industry 120	3	Business Organization and Management 209	3	Office Procedures and Administration 204	3
Sociology Elective	3	Fundamentals of Economics 109	3	Psychology of Personal Development 107 or Human Relations in Business and Industry 100	3
Data Processing Applications 220	3	Data Processing Systems 223	3	Programming Systems 222	3
Computer Programming 116	3	Computer Programming 117	3	Elective	3
Elective	<u>3</u>	Social Science Elective or Work Experience	<u>3</u>	Work Experience	<u>3</u>
	15		15		15

Employment Opportunities: Entry occupations include data processing applications, data systems and procedures analyses, and computer programming in private businesses, industrial firms, governmental agencies and educational institutions.

Total Credit Hours: 90

GENERAL CLERICAL

Nine Months Program

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Introduction to Business 104	3	Clerical Recordkeeping and Accounting 100	3	Introduction to Data Processing 101	3
English Fundamentals 106	3	English Fundamentals 107	3	Business Machines 103	3
Alphabetic Shorthand 101	3	Alphabetic Shorthand Speed Building 103	3	Human Relations in Business and Industry 100	3
Typing 102	3	Typing 104 or Office Practice 202	3	English Fundamentals 108	3
Elective	<u>3</u> 15	Elective	<u>3</u> 15	Elective	<u>3</u> 15

Employment Opportunities: Various businesses, industries, governmental agencies, banks, institutions and private offices which employ general clerical personnel to carry on many office functions.

Total Credit Hours: 45

KEY PUNCH

Three Months Program

<u>First Quarter</u>	<u>Cr. Hrs.</u>
Typing 102	3
Key Punch Laboratory 102	3
Introduction to Data Processing 101	3
Human Relations in Business and Industry 100	3
Unit Record Equipment 113 or Elective	<u>3</u>
	15

Employment Opportunities: Employment as key punch operator for business, industrial or governmental agencies.

Total Credit Hours: 15

MERCHANDISING
(DISTRIBUTIVE EDUCATION)

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Introduction to Business 104	3	Salesmanship 225	3	Salesmanship 226	3
English Composition 111	3	English Composition 112	3	English Composition 113	3
Principles of Marketing 213	3	Principles of Advertising 200	3	Lettering and Layout 100	3
Accounting 111	3	Typing 102 or Introduction to Data Processing 101	3	Mathematics Elective	3
Elective	$\frac{3}{15}$	Accounting 112	$\frac{3}{15}$	Elective	$\frac{3}{15}$

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Business Organization and Management 209	3	Sales Management 227	3	Human Relations in Business and Industry 100	3
Principles of Merchandising 215	3	Psychology of Personal Development 107	3	Techniques of Fashion Merchandising 230 or Principles of Buying 211	3
Advertising Design 203	3	Principles of Retailing 217	3	Personal Short-hand 111	3
Business Law 207	3	Elective	3	Elective	3
Elective or Work Experience	$\frac{3}{15}$	Work Experience	3	Work Experience	3
			$\frac{15}{15}$		$\frac{15}{15}$

Employment Opportunities: Sales, supervision and managerial trainee opportunities in a variety of retail, wholesale and marketing businesses.

Total Credit Hours: 90

MERCHANDISING
(DISTRIBUTIVE EDUCATION)

Nine Month Program

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Introduction to Business 104	3	Accounting 112	3	Principles of Merchandising 215	3
Salesmanship 225	3	Salesmanship 226	3	Clerical Record-keeping and Accounting 100	3
Accounting 111	3	Principles of Advertising 200	3	Business Communications 133	3
Business Communications 131	3	Business Communications 132	3	Mathematics Elective	3
Psychology of Personal Development 107	3	Work Experience	3	Work Experience	3
	<u>3</u> 15		<u>3</u> 15		<u>3</u> 15

Employment Opportunities: Entry level employment in a sales position in retail, wholesale and marketing businesses.

Total Credit Hours: 45

OFFICE ADMINISTRATION

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Introduction to Business 104	3	Accounting 111	3	Accounting 112	3
English Composition 111	3	English Composition 112	3	English Composition 113	3
Mathematics Elective	3	Office Practice 202 or Typing 102	3	Introduction to Data Processing 101	3
Typing 102	3	Filing and Records Control 105	3	Psychology of Personal Development 107	3
Elective	$\frac{3}{15}$	Mathematics Elective	$\frac{3}{15}$	Elective	$\frac{3}{15}$

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Business Organization and Management 209 or Personnel Administration 216	3	Office Procedures and Administration 204	3	Human Relations in Business and Industry 100	3
Statistics for Business and Industry 120	3	Fundamentals of Economics 109	3	Principles of Marketing 213	3
Accounting 113	3	Business Machines 103	3	Case Studies in Administrative Assistance 212	3
Unit Record Equipment 113 or Computer Programming 115	3	Personal Shorthand 111	3	Business Law 207	3
Elective	$\frac{3}{15}$	Elective or Work Experience	$\frac{3}{15}$	Elective or Work Experience	$\frac{3}{15}$

Employment Opportunities: Supervisory and administrative or managerial trainee opportunities in a variety of businesses and industries.

Total Credit Hours: 90

SECRETARIAL-MEDICAL

First Year

<u>First Quarter</u>	<u>Cr. Hrs.</u>	<u>Second Quarter</u>	<u>Cr. Hrs.</u>	<u>Third Quarter</u>	<u>Cr. Hrs.</u>
Introduction to Business 104	3	Mathematics	3	Secretarial Accounting 110	3
Business Communication 131	3	Business Communication 132	3	Business Communication 133	3
Gregg Shorthand Principles 106	3	Gregg Shorthand Principles 107	3	Gregg Shorthand Speed Development 108	3
Typing 100	3	Typing 102	3	Typing 104	3
Anatomy and Physiology 123	4	Anatomy and Physiology 124	4	Human Relations in Business and Industry 100	3
	<u>16</u>		<u>16</u>		<u>15</u>

Second Year

<u>Fourth Quarter</u>	<u>Cr. Hrs.</u>	<u>Fifth Quarter</u>	<u>Cr. Hrs.</u>	<u>Sixth Quarter</u>	<u>Cr. Hrs.</u>
Introduction to Data Processing 101	3	Health Science Terminology 100	3	First Aid 101	2
Shorthand Transcription 109	3	Office Procedures and Administration 204	3	Medical Secretarial Procedures and Records 114	3
Nursing Procedures and Professional Ethics 105	3	Business Machines 103	3	Medical Dictation and Transcription 112	3
Office Management 201	3	Elective	3	Case Studies in Administrative Assistance 212	3
Social Science Elective	<u>3</u>	Work Experience	3	Elective	3
	<u>15</u>		<u>15</u>		<u>14</u>

Employment Opportunities: Prepares for secretarial positions assisting professionals in the medical field. Employment in hospitals, clinics, and physicians' offices.

Total Credit Hours: 91

SECRETARIAL SCIENCE

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Introduction to Business 104	3	Mathematics Elective	3	Secretarial Accounting 110 or Accounting 111	3
Gregg Shorthand Principles 106	3	English Elective	3	English Elective	3
Typing 100	3	Gregg Shorthand Principles 107	3	Gregg Shorthand Speed Development 108	3
English Elective	3	Typing 102	3	Typing 104	3
Elective	3	Social Science Elective	3	Psychology of Personal Development 107	3
	<u>15</u>		<u>15</u>		<u>15</u>

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Business Organization and Management 209 or Accounting 112	3	Fundamentals of Economics 109	3	Human Relations in Business and Industry 100	3
Introduction to Data Processing 101	3	Office Procedures and Administration 204	3	Machine Transcription 110	3
Shorthand Transcription 109	3	Secretarial Procedures 200	3	Specialized Professional Dictation 205	3
Business Law 207	3	Business Machines 103	3	Case Studies in Administrative Assistance 212	3
Elective	3	Elective or Work Experience	3	Elective or Work Experience	3
	<u>15</u>		<u>15</u>		<u>15</u>

Employment Opportunities: Business, industry, banks, institutions, private offices and governmental agencies seeking highly trained secretarial personnel to perform the more responsible functions in operating an office.

Total Credit Hours: 90

STENOGRAPHIC

Nine Month Program

Students who have studied Gregg Shorthand and can pass a proficiency test at 60 words per minute may elect to continue the Gregg program indicated below. All students who have had no previous shorthand training, or those not electing the above option, will be assigned to Stenoscript Shorthand.

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Introduction to Business 104	3	Mathematics for Business and Industry 110	3	Secretarial Accounting 110	3
English Elective	3	English Elective	3	Machine Transcription 110	3
Gregg Shorthand Principles 107 or Alphabetic Shorthand 101	3	Gregg Shorthand Speed Development 108 or Alphabetic Shorthand Speed Building 103	3	Shorthand Transcription 109	3
Typing 102	3	Typing 104 or Office Practice 202	3	Secretarial Procedures 200	3
Business Machines 103	3	Introduction to Data Processing 101	3	Psychology of Personal Development 107	3
	<u>15</u>		<u>15</u>		<u>15</u>

Employment Opportunities: Various businesses, industries, governmental agencies, banks, institutions, and private offices employing clerk-typists to carry on many office functions.

Total Credit Hours: 45

STENOGRAPHIC

One Year Program

Students who have studied Gregg Shorthand and can pass a proficiency test at 60 words per minute may elect to continue the Gregg program indicated below. All students who have had no previous shorthand training, or those not electing the above option, will be assigned to Stenoscript Shorthand.

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Introduction to Business 104	3	Mathematics for Business and Industry 110	3	Secretarial Accounting 110	3
English Elective	3	English Elective	3	English Elective	3
Gregg Shorthand Principles 107 or Alphabetic Shorthand 101	3	Gregg Shorthand Speed Development 108 or Alphabetic Shorthand Speed Building 103	3	Shorthand Transcription 109	3
Typing 102	3	Typing 104	3	Secretarial Procedures 200	3
Elective	3	Elective	3	Elective or Work Experience	<u>3</u>
	<u>15</u>		<u>15</u>		<u>15</u>

Fourth Quarter	Cr. Hrs.
Introduction to Data Processing 101	3
Business Machines 103	3
Machine Transcription 110	3
Psychology of Personal Development 107	3
Work Experience	<u>3</u>
	<u>15</u>

Employment Opportunities: Various businesses, industries, governmental agencies, banks, institutions, and private offices employing clerk-typists to carry on many office functions.

Total Credit Hours: 60

TRANSPORTATION AND TRAFFIC MANAGEMENT

Eighteen-Month Program

The program provides a good foundation in traffic principles, develops technical proficiency in the use of tariffs and rates, and provides an understanding of rules and laws pertaining to shipment of freight by the various transportation media.

The curriculum provides a combination of courses in the field of transportation, courses directly applicable to transportation, and general studies courses required for an Associate Degree. The program consists of 90 credit hours in the following broad categories:

The Field of Transportation	9 credit hours
Transportation Economics and Management	9 credit hours
Transportation Regulations	9 credit hours
General Business in Transportation	9 credit hours
International Trade	9 credit hours
Related Studies	20 credit hours
Applicable General Studies	<u>25</u> credit hours
Total Credit Hours	90

Employment Opportunities: Those who complete the curriculum are prepared for positions in traffic, claims, shipping, receiving, and as freight-rate specialists as well as many other transportation positions such as agents, sales representatives, and consultants.

**DIVISION
OF
COMMUNITY AND PERSONAL
SERVICE OCCUPATIONS**

BUILDING MAINTENANCE

Three Month Program

<u>First Quarter</u>	<u>Cr. Hrs.</u>
First Aid 101	2
Safety and Orientation 100	1
Operational Tasks 102	5
Floor Maintenance 104	2
Equipment and Materials 106	2
Heating and Ventilation 108	2
Maintenance of Grounds 110	1
Security and Protective Measures 112	$\frac{1}{16}$

Employment Opportunities: This program has been designed to prepare for employment in building maintenance. Those who complete the curriculum are prepared for positions in schools, offices, public institutions, and all types of businesses or industries demanding custodial work.

Total Credit Hours: 16

CHILD CARE

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	Fundamentals of Speaking 102	3	Methods of Teaching the Young Child 106	4
Child Growth and Development 101	3	Child Growth and Development 102	3	Nutrition 108	2
First Aid 101	2	General Psychology 111	3	Supervised Student Participation 105	5
Creative Activities 102	3	Supervised Student Participation 103	5	General Psychology 112	3
Literature for Children 145	$\frac{3}{14}$	Elective	$\frac{3}{17}$		$\frac{14}{14}$

Fourth Quarter

* Internship 5

Second Year

Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.	Seventh Quarter	Cr. Hrs.
General Psychology 113	3	Family and Community Relations 110	4	Family and Community Relations 112	4
Methods of Teaching the Young Child 108	4	Business Organization and Management 209	3	Child Guidance Techniques 105	3
Music for Children 145	3	Social Science Elective	3	Supervised Student Participation 111	5
Supervised Student Participation 107	$\frac{5}{15}$	Supervised Student Participation 109	$\frac{5}{15}$	Elective	$\frac{3}{15}$

Employment Opportunities: The nationwide trend is for mothers with small children to join the nation's work force. The pre-school children of these mothers will be taken care of in some type of childrens' center. Graduates of this program will be ready to work in day care centers, nursery schools, kindergartens and child development centers.

Total Credit Hours: 95

* Not required for students who have had adequate applicable work experience.

CULINARY ARTS
(Food Services)
Twenty-One Month Program

		<u>First Year</u>			
First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Developmental English 102	3	Developmental Mathematics 100	3	Clerical Recordkeeping and Accounting 100	3
Sanitation and Safety 100	3	Meal Planning and Service 106	4	Principals of Merchandising 215	3
Basic Food Science 104	3	Nutrition 108	2	Food Production 202	5
Basic Food Preparation 101	$\frac{5}{14}$	Basic Food Preparation 103	$\frac{5}{14}$	Basic Baking 110	$\frac{2}{13}$
<u>Second Year</u>					
			Cr. Hrs.		
			<u>Fourth Quarter</u>		
			5		
			$\frac{2}{7}$		
Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.	Seventh Quarter	Cr. Hrs.
Business Organization and Management 209	3	Personnel Administration 216	3	Food and Beverage Management 206	3
Food Production 204	5	Food and Beverage Control 205	4	Human Relations in Business Industry 100	3
Food and Beverage Purchasing 201	4	Advanced Food Production 208	5	Advanced Food Production 209	5
Psychology of Personal Development 107	3	Elective	3	Case Studies in Administration Assistance 212	3
	<u>15</u>		<u>15</u>	Elective	$\frac{3}{17}$

Employment Opportunities: The demand for trained people in the culinary arts field is becoming critical. The first-year program provides the individual with a salable skill qualifying him for employment as a cook or other related position in the field. Provision for experience in chef training and management careers are employment objectives of the second-year program. Graduates will find unlimited opportunities in hotels, motels, restaurants, institutions and other organizations where food service is offered.

Total Credit Hours: 95

FIRE SCIENCE TECHNOLOGY

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Introduction to Fire Science 100	3	Fire Company Organization and Procedure 104	3	Fire Hydraulics 108	3
Introduction to Fire Supression 102	3	Fire Fighting Tactics and Strategy 106	3	Fire Apparatus and Equipment 110	3
Mathematics Elective	3	Technical Writing 110	3	Blueprint Reading 115	3
English Fundamentals 106	3	English Fundamentals 107	3	Fundamentals of Speaking 102	3
Fundamental Chemistry 101	3	Introductory Algebra 105 or College Algebra 111	3 5	Fundamental Physics 101	3
	<u>3</u> 15		15 or <u>17</u>		<u>3</u> 15

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Fundamentals of Fire Prevention 202	3	Property and Casualty Insurance 220	3	Fire Protection Equipment and Systems 212	3
Related Codes and Ordinances 204	3	Rescue Practices 206	3	Fire Department Administration 214	3
Hazardous Materials 208	3	Hazardous Materials 209	3	Fire Investigation 218	3
Introduction to Chemistry 111	5	Social Science Elective	3	Building Construction for Fire Protection 216	3
Human Relations in Business and Industry 100	3	Psychology of Personal Development 107	3	Elective	3
	<u>3</u> 17		<u>3</u> 15		<u>3</u> 15

Employment Opportunities: Program is designed to prepare for initial entrance into employment or advancement with municipalities, industrial firms, or other employers requiring fire protection personnel. May be employed by insurance companies as salesmen, fire insurance adjusters, or bureau raters.

Total Credit Hours: 92 or 94

LIBRARY TECHNOLOGY

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Library Usage 102	3	Library Practice 104	4	Library Practice 106	4
Fundamentals of Speaking 102	3	Introduction to Literature 141	3	World Literature 147	3
Typewriting 102	3	Typewriting 104	3	Business Machines 103	3
English Fundamentals 106	3	English Fundamentals 107	3	Psychology of Personal Development 107	3
Mathematics Elective	$\frac{3}{15}$	Elective	$\frac{3}{16}$	Introduction to Literature 143	$\frac{3}{16}$

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Library Practice 200	4	Fundamentals of Economics 109	3	Music Appreciation 100	3
World Literature 148	3	Literature for Children 145	3	Human Relations in Business and Industry 100	3
Introduction to Political Science 100	3	World Literature 149	3	Juvenile Delinquency 123	3
Office Procedures and Administration 204	3	Art Appreciation 100	3	Introduction to Data Processing 101	4
Work Experience	$\frac{3}{16}$	Work Experience	$\frac{3}{15}$	Work Experience	$\frac{3}{16}$

Employment Opportunities: Will include assisting librarians with the classifying and cataloging of books and serving clientele in public libraries, particularly in libraries maintained by public and private schools, colleges, and universities; governmental agencies, educational and research associations, and business and industrial firms.

Total Credit Hours: 94

TEACHER ASSISTING

Nine-Month Program

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Teacher Aide Techniques 100	3	Teacher Aide Techniques 102	3	Teacher Aide Techniques 104	3
General Psychology 111	3	General Psychology 112	3	Arts and Crafts 106	3
Basic Health Science 130	4	Typewriting 102	3	General Psychology 113	3
English Fundamentals 106	3	First Aid 101	2	Fundamentals of Speaking 102	3
Instructional Media and Materials 108	$\frac{3}{16}$	English Fundamentals 107	$\frac{3}{14}$	Work Experience	$\frac{4}{16}$

Employment Opportunities: The demand for trained assistants or aides in the teaching field is steadily increasing. Jobs are available in nursery schools, day-care centers, after-school enrichment programs, hospital nurseries, children's psychiatric clinics and baby clinics in hospitals.

Total Credit Hours: 46

URBAN HORTICULTURE

Twenty-One Month Program

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hr
Introduction to Urban Horticulture 100	2	Ornamental Horticulture Science 106	4	Ornamental Horticulture Operations 110	3
Ornamental Plant Materials 102	4	Urban Horticulture Mechanics 108	4	Soils and Fertilizers 112	4
Mathematics Elective	3	English Fundamentals 107	3	Landscape Planning 114	3
English Fundamentals 106	3	Fundamentals of Speaking 102	<u>3</u>	Fundamentals of Economics 109	3
Basic Plant Science 104	<u>4</u>		14	Salesmanship 225	<u>3</u>
	16				16

Second Year

Fourth Quarter

Internship (8 hours credit)

Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.	Seventh Quarter	Cr. Hr
Disease and Pests - Identification and Control 201	4	Nursery Production and Management 207	4	Special Problems 215	3
Landscape Maintenance 203	3	Horticulture Equipment and Facilities 209	3	Turf Production and Maintenance 213	4
Merchandising Horticulture Products 205	3	Greenhouse Management 211	4	Psychology of Personal Development 107	3
Clerical Recordkeeping and Accounting 100	3	Business Organization and Management 209	<u>3</u>	Work Experience	<u>4</u>
			14		14
Human Relations in Business and Industry 100	<u>3</u>				
	16				

Employment Opportunities: The urban horticulture industry provides many career opportunities for well-trained and ambitious young people. This program provides training in basic urban horticulture the first year with a provision for specializing in the nursery, landscape, and turf industries the second year.

Total Credit Hours: 98

**DIVISION
OF
HEALTH OCCUPATIONS**

DENTAL ASSISTING

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Basic Health Science 130	4	Advanced Dental Science 140	4	Principles of Operatory Procedures 130	4
Orientation to Dental Assisting 110	1	Developmental Mathematics 100	3	Physical Science 103	3
English Composition 111	3	English Composition 112	3	Fundamentals of Speaking 102	3
Dental Science 120	4	Office Procedures and Administration 204	3	Clinical Practice and Work Experience	4
Elective	<u>3</u>	Elective	<u>3</u>		<u>14</u>
	16		16		

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Dental Office Procedures 210	4	Dental Materials 200	3	Human Relations in Business and Industry 100	3
Principles of Dental Laboratory Procedures 215	3	Advanced Dental Laboratory Procedures 220	4	First Aid 101	2
Dental Roentgenology 205	3	Psychology of Personal Development 107	3	Social Science-Elective	3
Clinical Practice and Work Experience	4	Clinical Practice and Work Experience	<u>6</u>	Clinical Practice and Work Experience	6
	<u>14</u>		16		<u>14</u>

Employment Opportunities: The program is designed to prepare students to become direct assistants to dentists in general and specialized practice. In addition to the responsibilities of chairside assisting, the dental assistant will have office responsibilities and laboratory duties.

Total Credit Hours: 90

INHALATION THERAPY

Twenty-one month program

An Associate Degree Program in Inhalation Therapy will be offered beginning the Fall Quarter, 1968, concluding with the Spring Quarter, 1970. Included in the program will be the Summer Quarter, 1969, which will be entirely devoted to clinical practice and work experience. The program will be implemented jointly by the Community College of Denver and the General Rose Memorial Hospital School of Inhalation Therapy.

The program is structured to meet the recommendations of the American Registry for Inhalation Therapists upon completion of the two-year program. The program will consist of 105 credit hours in the following broad categories:

Health Science	33 credit hours
Inhalation Therapy Theory and Application	48 credit hours
Science, mathematics and other applicable general studies	24 credit hours

The program is also structured so as to prepare for employment upon completion of specific phases of the curriculum.

<u>Curriculum Completed</u>	<u>Employment Potential</u>
First two quarters	Assistant Respiratory Therapy Technician
First year (including summer sessions)	Respiratory Therapy Technician
Full seven quarters	Inhalation Therapist and Associate Degree

Employment Opportunities: The program in Inhalation Therapy Technology is designed to prepare therapists to work under the supervision of a physician responsible for inhalation therapy departments in health service agencies. The therapist operates, maintains, and administers the equipment used in patient care and is employed in hospitals, medical and research laboratories.

NURSE ASSISTING

Three-Month Program

This program is designed for those individuals who are able to perform nurse's assistant activities safely, appropriately and comfortably. The nurse's assistant assists with patient care under the direction and supervision of a registered professional nurse. The Nurse Assistant Program is one quarter in length and consists of the following broad areas of curriculum:

<u>First Quarter</u>	<u>Cr. Hrs.</u>
The Nurse's Assistant and her job 130	1
Basic Personal Care 110	5
Patients Requiring Special Types of Care 140	3
Home Health Care 120	6

Employment Opportunities: Graduates will qualify for service in hospitals, extended care facilities, nursing homes, and home-care agencies. Persons who qualify for a more advanced program, will be counseled to enter practical, technical or professional nursing programs.

Total Credit Hours: 15

RADIOLOGIC TECHNOLOGY (X-RAY)
Thirty-Three Month Program

		<u>First Year</u>			
First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	English Elective	3	Introductory Algebra 105	3
Basic Health Science 130	4	Anatomy and Physiology 123	4	Anatomy and Physiology 124	4
Health Science Terminology 100	3	Mathematics Elective	3	Nursing Procedures and Professional Ethics 105	3
Principles of X-Ray Techniques 100	3	Principles of X-Ray Techniques 105	3	Principles of X-Ray Techniques 106	5
Elective	$\frac{3}{16}$	First Aid 101	$\frac{2}{15}$		$\frac{5}{15}$

Fourth Quarter
10 weeks

Clinical X-Ray Experience 220 (in hospital)

Cr.
Hrs.

7

Second Year

Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.	Seventh Quarter	Cr. Hrs.
Fundamentals of Speaking 102	3	Principles of X-Ray Techniques 200	3	Principles of X-Ray Techniques 205	3
Principles of X-Ray Techniques 107	5	Applied X-Ray Techniques 210	4	Applied X-Ray Techniques 215	6
Radiation Physics 105	4	Chemistry 111	5	Elective	3
Psychology of Personal Development 107	$\frac{3}{15}$	Elective	$\frac{3}{15}$		$\frac{12}{15}$

Third Year

Internship: 12 months
(full time in hospital)

Spring Quarter

Review for Registry 225 - 3 hours credit Total Credit Hours: 98

Employment Opportunities: The program is designed to prepare persons for employment opportunities in clinics, physicians' offices, government health facilities and research laboratories. The program is being conducted in cooperation with Denver hospitals.

**DIVISION
OF
INDUSTRIAL OCCUPATIONS**

APPLIANCE REPAIR

Nine-Month Program

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Basic Electricity 100	4	Small Appliance Ser- vice and Repair 110	4	Large Appliance Service and Repair 105	4
Blueprint Reading 115	3	Psychology of Personal Development 107	3	Basic Mechanisms 210	3
Fundamentals of Welding 100	3	Electives	6	Elective	3
Mathematics Elective	3			Work Experience	6
English Elective	<u>3</u> 16		<u>13</u>		<u>16</u>

Employment Opportunities: Servicing household and industrial appliances.

Students are qualified to enter service departments of appliance sales firms or to be self employed.

Total Credit Hours: 45

AUTO BODY SERVICE

Nine-Month Program

<u>First Quarter</u>	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Auto Body Repair 100	4	Welding and Fabrication 105	6	Automobile Re-finishing 115	4
Automobile Re-finishing 105	4	Auto Body Repair 110	4	Wheel Balancing and Alignment 120	4
Fundamentals of Welding 100	3	Human Relations in Business and Industry 100	3	Psychology of Personal Development 107	3
English Elective	3	Mathematics Elective	3	Fundamentals of Speaking 102	3
	<u>14</u>		<u>16</u>	Elective	<u>3</u>
					<u>17</u>

Employment Opportunities: Body repairman or helper, painter or painter's helper in automobile dealership, independent body shop, or automotive maintenance department of business or industry.

Total Credit Hours: 47

AUTO BODY SERVICE

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
Auto Body Repair 100	4	Welding and Fabrication 105	6	Automobile Re-finishing 115	4
Automobile Re-finishing 105	4	Auto Body Repair 110	4	Wheel Balancing and Alignment 120	4
Fundamentals of Welding 100	3	Mathematics Elective	3	Psychology of Personal Development 107	3
English Elective	3	Human Relations in Business and Industry 100	3	Fundamentals of Speaking 102	3
	<u>14</u>	Elective	<u>3</u>	Elective	<u>3</u>
			19		17

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Frame and Unit Body Straightening 205	4	Major Body Repair 210	4	Frame and Unit Body Sectioning Methods 215	4
Sociology Elective	3	Collision Estimating 200	4	Body Rebuilding Methods 220	4
Automotive Air Conditioning 220	3	Typewriting 100	3	Labor Relations 108	3
Technical Writing 110	3	Elective	3	Work Experience	4
Elective	<u>3</u>	Work Experience	3		
	16		<u>17</u>		<u>15</u>

Employment Opportunities: Automobile body repairman and/or painter in an automobile dealership, independent body shop or maintenance department of business and industry; or may be employed as insurance adjuster trainee, manager trainee, order writer in dealership, salesman in automotive supply house.

Total Credit Hours: 98

AUTOMOTIVE MECHANICS

Nine-Month Program

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	Mathematics Elective	3	Psychology of Personal Development 107	3
Basic Ignition 100	3	Power Plants 160	4	Charging Systems 125	3
Fundamentals of Welding 100	3	Wheel Balancing and Alignment 120	4	Transmission and Power Trains 140	3
Engines and Carburetion 105	3	Carburetion and Tune-up 150	3	Basic Service Repair 210	3
Brake Systems 10	3	Elective	3	Elective	3
	<u>15</u>		<u>17</u>		<u>15</u>

Employment Opportunities: Entry mechanic in a service station or dealership. May specialize by applying six hours of electives on electrical systems, engine and carburetion or alignment and brakes.

Total Credit Hours: 47

AUTOMOTIVE MECHANICS

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	Mathematics Elective	3	Psychology of Personal Development 107	3
Basic Ignition 100	3	Power Plants 160	4	Charging Systems 125	3
Fundamentals of Welding 100	3	Wheel Balancing and Alignment 120	4	Transmission and Power Trains 140	3
Engines and Carburetion 105	3	Carburetion and Tune-up 150	3	Engine Rebuilding 130	3
Brake Systems 110	3	Elective	3	Elective	3
	15		17		15

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Dynamometer Operation 205	4	Engine Diagnosis 215	4	Diagnosis and Repair 200	4
Suspension Systems 230	3	Automotive Air Conditioning 220	3	Labor Relations 108	3
Technical Writing 110	3	Basic Service Repair 210	3	Automatic Transmissions 225	3
Introductory Algebra 105	3	Social Science Elective	3	Work Experience	3
Elective	3	Work Experience	3		
	16		16		13

Employment Opportunities: Entry into automotive service field as a line mechanic in a dealership or service station. Often find employment in specialty shops rebuilding engines, transmissions, or charging systems. Many opportunities also in automotive parts, sales or as a manufacturer's service representative. This program is a good foundation for the potential service manager or garage foreman.

Total Credit Hours: 92

CIVIL TECHNOLOGY - DRAFTING - MECHANICAL TECHNOLOGY

A CORE PROGRAM

for

Building Construction Technology, Civil Technology, Drafting and Design Technology, Highway Technology, Mechanical Design Technology, Mechanical Production Technology

Course descriptions for the six technological programs listed above are described under Civil Technology, Drafting, Mechanical Technology

First Year

The first year is devoted to a core curriculum which is prerequisite to options in Drafting and Design Technology, Civil Technology, Building Construction Technology, Highway Technology, Mechanical Design Technology, and Mechanical Production Technology.

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	Mathematics Elective	3	Technical Writing 110	3
Mathematics Elective	3	Technical Drawing 105	3	Mathematics Elective	3
Technical Drawing 100	3	Basic Electricity 100	4	Technical Drawing 110	3
Elementary Surveying 100	3	Manufacturing Processes 105	4	Fundamental Physics 101	5
Measurements 100	3	Psychology of Personal Development 107	3	Electronics Devices 115	4
	<u>15</u>		<u>17</u>		<u>18</u>

Employment Opportunities: If employment is desired at the end of the core curriculum, the student is prepared for many jobs in manufacturing and construction industries.

Total Credit Hours: 50

BUILDING CONSTRUCTION (option)

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Introduction to Data Processing 101	3	Labor Relations 108	3	Human Relations in Business and Industry 100	3
Estimating Construction Costs 209	3	Soils and Foundations 225	3	Building Service Systems 201	5
Architectural Drafting and Design 200	3	Contracts and Specifications 205	3	Architectural Drafting and Design 203	3
Structural Drafting and Design 225	3	Architectural Drafting and Design 201	3	Technical Project 240	5
Construction Methods and Equipment 203	<u>3</u>	Structural Drafting and Design 226	3		
	<u>15</u>		<u>15</u>		<u>16</u>

Employment Opportunities: Job opportunities for building construction technicians are found in many areas of the construction field. These may be described as: maintenance foreman, construction assistant, building supply salesman, assistant to plant engineers, architectural draftsman and structural draftsman.

Credit Hours Core Program: 50
 Credit Hours Second Year: 46
 Total Credit Hours 96

CIVIL TECHNOLOGY (option)

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Introduction to Data Processing 101	3	Structural Drafting and Design 226	3	Human Relations in Business and Industry 100	3
Drainage and Geology 207	3	Route Surveys and Design 220	4	Structural Drafting and Design 230	4
Estimating Construction Costs 209	3	Labor Relations 108	3	Photogrammetry 215	4
Structural Drafting and Design 225	3	Fundamentals of Hydraulics and Pneumatics 205	3	Technical Project 240	5
Advanced Surveying 200	4	Construction Methods and Equipment 203	3		
	<u>16</u>		<u>16</u>		<u>16</u>

Employment Opportunities: The Civil Technician is prepared with a broad background in civil engineering principles, related technical training, mathematics, science and communications. The graduate is qualified to fill positions as civil draftsmen, assistants to engineers, estimators, purchasing agents, building material salesmen, and laboratory technicians.

Credit hours Core Program: 50
 Credit Hours second year: 48
 Total Credit Hours 98

DRAFTING AND DESIGN (option)

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Introduction to Data Processing 101	3	Fundamentals of Hydraulics and Pneumatics 205	3	Human Relations in Business and Industry 100	3
Structural Drafting and Design 225	3	Labor Relations 108	3	Topographic Drawing 230	5
Machine Drafting and Design 220	4	Structural Drafting and Design 226	3	Electro-Mechanical Drafting 216	3
Architectural Drafting and Design 200	3	Architectural Drafting and Design 201	3	Technical Project 240	4
Elective	3	Electro-Mech Drafting 215	3		
	<u>16</u>		<u>15</u>		<u>15</u>

Employment Opportunities: Drafting and Design technicians are concerned with preparation of drawings for design proposals, for experimental models and items for production use. These technicians perform many aspects of design in a specialized field, such as the developing of the design of a section, sub-assembly or major component. Investigating design factors and availability of materials and equipment, production methods and facilities are frequent assignments. Technicians in this classification will often supervise the preparation of working drawings and design based upon engineers original design concepts or specific ideas.

Credit hours Core program: 50
 Credit hours second year: 46
 96

HIGHWAY (option)

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Introduction to Data Processing 101	3	Route Surveys and Design 219	3	Human Relations in Business and In- dustry 100	3
Drainage and Hydrology 207	3	Construction Methods and Equipment 203	3	Route Surveys and Design 220	4
Advanced Survey- ing 200	4	Highway Materials 213	3	Reinforced Concrete Construction 217	4
Highway Materials 211	3	Labor Relations 108	3	Technical Project 240	5
Estimating Con- struction Costs 209	3	Soils and Foundations 225	3		
	<u>16</u>		<u>15</u>		<u>16</u>

Employment Opportunities: The Highway Technology Program provides the graduate with a broad background in civil engineering principles, related technical training, mathematics, science, and communications. The graduate is qualified to fill positions as highway surveyors, highway engineering aides, estimators, purchasers of rights of way, sales of building materials, laboratory technicians, construction equipment salesmen, and photogrammetrists.

Credit hours Core Program: 50
 Credit hours second year: 47
 97

MECHANICAL DESIGN (option)

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Introduction to Data Processing 101	3	Fundamentals of Hydraulics and Pneumatics 205	3	Human Relations in Business and Industry 100	3
Properties of Materials 230	4	Electro-Mechanical Drafting 215	3	Tool Design 251	4
Machine Drafting and Design 220	4	Labor Relations 108	3	Basic Mechanisms 210	4
Industrial Specifications 210	4	Estimating Manufacturing Costs 200	3	Technical Project 240	5
	<u>15</u>	Tool Design 250	<u>4</u>		<u>16</u>

Employment Opportunities: The graduate of this course is prepared to enter employment either as design and detail draftsmen or as an assistant to an industrial engineer in the various phases of factory planning and operation. Job opportunities include such functions as production planning, methods, standards, quality control, plant safety and cost analysis.

Credit hours Core Program: 50
 Credit hours second year: 47
 97

MECHANICAL PRODUCTION (option)

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Introduction to Data Processing 101	3	Fundamentals of Hydraulics and Pneumatics 205	3	Human Relations in Business and Industry 100	3
Properties of Materials 230	4	Labor Relations 108	3	Basic Mechanisms 210	4
Quality Control 235	3	Estimating Manufacturing Costs 200	3	Production Planning and Control 225	4
Methods and Operation Analysis 215	4	Plant Layout and Material Handling 220	3	Technical Project 240	5
Lective	2	Methods and Operation Analysis 216	$\frac{3}{15}$		$\frac{16}{16}$
	$\frac{16}{16}$				

Employment Opportunities: Graduates of this program are prepared to enter employment as assistants to industrial engineers in the various phases of factory planning and operation. Such functions as production planning, methods, standards, quality control, cost analysis and plant safety may be included.

Credit hours Core Program: 50

Credit hours second year: 97

COMMERCIAL ART

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	Basic Design 106	3	Fundamentals of Speaking 102	3
Technical Drawing 100	3	English Elective	3	Rendering 105	3
Basic Design 105	3	Lettering 103	3	Principles of Advertising 200	3
Mathematics Elective	3	Basic Drawing 101	3	Basic Drawing 102	3
Lettering and Layout 100	3	Human Relations in Business and Industry 100	3	Elective	3
	<u>15</u>		<u>15</u>		<u>15</u>

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Basic Photography 211	3	Advertising Design 201	3	Advertising Photography 213	3
Advertising Design 101	3	Graphics (Print-making) 200	3	Rendering 205	3
Psychology of Personal Development 107	3	Visual Merchandising 203	3	Spot Illustration 209	3
Electives	6	Elective	3	Advertising Theory and Production 207	3
	<u>15</u>	Work Experience	<u>3</u>	Work Experience	<u>4</u>
			<u>15</u>		<u>16</u>

Employment Opportunities: The program is organized to develop skills in design, layout, lettering, typography, spot illustration, production, art service and studio procedures. Graduates are qualified to accept positions as designers, layout men, letterers, paste-up and mechanical men in advertising agencies, art studios, art services, department stores, publishing houses, packaging services and product manufacturers. Graduates of this curriculum have advanced to the position of art director, assistant art director, layout specialist and consultant, package designer and studio supervisor.

Total Credit Hours: 95

ELECTRONICS TECHNOLOGY

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	English Elective	3	Fundamentals of Speaking 102	3
Basic Electricity 100	4	Circuit Analysis, A C and D C 101	4	Electronic Amplifiers 110	4
Mathematics Elective	3	Mathematics Elective	3	Mathematics Elective	3
Electronic Devices 115	4	Labor Relations 108	3	Technical Drawing 110	3
		Elective	3	Human Relations in Business and Industry 100	3
	<u>14</u>		<u>16</u>		<u>16</u>

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Fundamental Physics 101	3	Introduction to Computers 220	4	Control Circuits and Systems 205	4
Instruments and Measurements 215	4	Technical Writing 110	3	Electronic Design and Fabrication 210	3
Communication Circuits 103	4	Psychology of Personal Development 107	3	Fundamentals of Economics 109	3
Blueprint Reading 115	3	Communication Systems 200	4	Introduction to New Electronic Devices 225	2
Elective	<u>3</u>	Elective	<u>3</u>	Work Experience	<u>3</u>
	<u>17</u>		<u>17</u>		<u>15</u>

Employment Opportunities: The objective of the total curriculum in Electronic Technology is to produce a competent electronics technician. The electronics technician must be capable of working and communicating with engineers, scientists, and production personnel in his specialized work. Job opportunities are as research and development technicians, sales and service technicians, operations technicians, assembly technicians and communications technicians. The program will provide the knowledge for the technician to advance into positions of increasing responsibility.

Total Credit Hours: 95

MACHINE SHOP

Nine Month Program

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	Basic Applied Mathematics 103	3	Manufacturing Processes 110	4
Basic Applied Mathematics 102	3	Blueprint Reading 120	3	Machine Maintenance 115	4
Measurements 100	3	Layout and Bench Assembly 101	4	Inspection of Shop Products 120	3
Layout and Bench Assembly 100	4	Manufacturing Processes 105	4	Heat Treatment and Testing 125	3
Blueprint Reading 115	3	Structure of Metals 107	3	Psychology of Personal Development 107	3
	<u>16</u>		<u>17</u>		<u>17</u>

Employment Opportunities: The first year is designed to give learners the opportunity to acquire basic skills and the related information necessary to gain employment and build a profitable career in the machine shop industry. Trainee is qualified to enter an occupation as a machinist helper, tool room attendant, machine tool inspector, as well as other areas including apprenticeable occupations.

Total Credit Hours: 50

MACHINE SHOP

First Year

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	Basic Applied Mathematics 103	3	Manufacturing Processes 110	4
Basic Applied Mathematics 102	3	Blueprint Reading 120	3	Machine Maintenance 115	4
Measurements 100	3	Layout and Bench Assembly 101	4	Inspection of Shop Products 120	3
Layout and Bench Assembly 100	4	Manufacturing Processes 105	4	Heat Treatment and Testing 125	3
Blueprint Reading 115	3	Structure of Metals 107	3	Psychology of Personal Development 107	3
	<u>16</u>		<u>17</u>		<u>17</u>

Second Year

Fourth Quarter	Cr. Hrs.	Fifth Quarter	Cr. Hrs.	Sixth Quarter	Cr. Hrs.
Manufacturing Processes 205	4	Quality Control 235	3	Pattern Making 235	3
Practical Automation 210	3	Estimating Manufacturing Costs 200	3	Toolmaking 240	4
Industrial Specifications 210	4	Pattern Making 220	3	Human Relations in Business and Industry 100	3
Inspection of Shop Products 215	3	Manufacturing Processes 225	4	Work Experience	6
Labor Relations 108	<u>3</u>	Toolmaking 230	<u>4</u>		<u>16</u>
	<u>17</u>		<u>17</u>		

Employment Opportunities: The graduate will have the necessary skills to work directly with machine shop equipment. He will be capable of working from blueprints or written specifications, applying the knowledge of mechanics, shop mathematics, metal properties, and layout machining procedures.

Total Credit Hours: 100

RADIO AND TELEVISION REPAIR

Nine Month Program

First Quarter	Cr. Hrs.	Second Quarter	Cr. Hrs.	Third Quarter	Cr. Hrs.
English Elective	3	Receiving Circuits and Vacuum Tubes 105	5	Fundamentals of Speaking 102	3
Mathematics Elective	3	Mathematics Elective	3	Human Relations in Business and Industry 100	3
Fundamentals of Radio and Electrical Theory 100	5	Power Supplies, Tuning and Loudspeakers 110	4	Television Theory, Servicing and Repair 130	6
Technical Drawing 100	3	Radio-Telegraph, Tele- phone Transmitters 120	3	Technical Project 240	3
	<u>14</u>	Elective	<u>3</u>		<u>15</u>

Employment Opportunities: The Radio and Television Repair Program is designed so the student will be able to enter employment after completing the prescribed program. Employment areas are associated with FM radio, AM radio, television servicing, and electronic equipment and repair. The third class FCC license may be acquired after completing this program.

Total Credit Hours: 47

COURSE DESCRIPTIONS

**DIVISION
OF
BUSINESS AND MANAGEMENT
OCCUPATIONS**

ACCOUNTING

acct. 111 Accounting 3 credit hours

Prerequisite or co-requisite: Introduction to Business 104

An introductory study of accounting principles to acquaint the student with the theory and logic that underlie accounting procedures. Course coverage includes the accounting cycle, financial statements, controlling account, special columnar journals, and fundamental data processing applications. (3 hours per week, plus lab as needed)

acct. 112 Accounting 3 credit hours

Prerequisite: Accounting 111

A continuation of accounting principles as they pertain to ownership, income and expense, and cost aspects of business enterprise. Special emphasis is placed on the interpretation of accounting data. Course content is related to the partnership and corporate forms of business organization. (3 hours per week, plus lab as needed)

acct. 113 Accounting 3 credit hours

Prerequisite: Accounting 112

This intermediate accounting course treats the specialized phases of accounting such as the processing of cash and temporary investments, receivables, inventories, long-term investments, plant and equipment, intangible deferred charges, liabilities, capital stock and surplus, and complex financial statements. (3 hours per week, plus lab as needed)

acct. 114 Accounting (Cost Accounting) 3 credit hours

Prerequisite: Accounting 112

A study of the fundamental elements of production costs and their distribution. Concepts and procedures applicable to job order, process, and standard cost systems are covered. Emphasis is placed on the use and interpretation of cost data for managerial decision-making. (3 hours per week)

acct. 100 Clerical Recordkeeping and Accounting 3 credit hours

The purpose of this course is to equip students with basic vocational skills that are common to clerical office jobs in which record keeping is involved. Instruction covers cashier's records, checks and bank statements, petty cash, retail sales clerk records, payroll records, recording receipts and disbursements for a small business, etc. The course concludes with a simple overview of the bookkeeping cycle and the format for common financial statements. (3 hours per week, plus lab as needed)

Acct. 211 Income Tax Accounting 3 credit hours

Prerequisite: Accounting 113 or equivalent

Practice in the application of the Internal Revenue Code to the determination of income taxes for individuals. Familiarization with the Code provisions for businesses, with Colorado income tax laws and with resources available for use in preparation of returns. (3 hours per week)

Acct. 215 Introduction to Accounting Systems 3 credit hours

Prerequisite: Accounting 113 and Introduction to Data Processing

Installation and control of systems of accounting in various organizations and situations. Analysis of cases and research in types of tools available for implementation of an accounting system or procedure. (3 hours per week)

Acct. 220 Principles of Governmental Accounting
and Budgeting 3 credit hours

Prerequisite: Accounting 113

Orientation in the concepts of budgetary control as a matter of law and public administration theory. Accounting principles and procedures necessary to implement budgetary controls. (3 hours per week)

Acct. 110 Secretarial Accounting 3 credit hours

This study of the basic elements of accounting for the secretarial student includes the handling of cash receipts and disbursements, and payroll records for various small business enterprises. A summary treatment of the accounting cycle and the preparation of financial statements is provided. (3 hours per week, plus lab as needed)

MANAGEMENT

Mgt. 203 Advertising Design 3 credit hours

Prerequisite: Principles of Advertising 200

A combination of classroom instruction and laboratory practice in layout, copy writing, program planning, and project work adapted to several graphic media. Opportunities for individual creative advertising are afforded. (3 hours per week)

Mgt. 205 Business Finance 3 credit hours

Examines the sources of short-term, intermediate-term, and long-term funds for a business. Principles and motives of financial management are stressed. Designed primarily for second-year students and community businessmen. (3 hour per week)

Mgt. 207 Business Law 3 credit hours

Introduction to ordinary legal aspects of business transactions including such topics as contracts, agency, and negotiable instruments. Designed to give a general understanding of the understanding of the subject and to provide information useful in determining the need for professional counsel. (3 hours per week)

Mgt. 103 Business Machines 3 credit hours

Instruction in the basic mathematical processes -- addition, subtraction, multiplication, division -- on modern calculating machines of both listing and non-listing types. Instruction in operation and use of duplicating and transcribing machinery and equipment. Emphasis throughout the course is on machine applications to mathematical problem-solving in business and industry. (5 hours per week)

Mgt. 209 Business Organization and Management 3 credit hours

Reviews the primary purposes and responsibilities of business, legal forms of ownership, types of organizational structure, and the promotion and operation of business. This is followed by an application of these principles to the areas of personnel, production, plant and equipment, working conditions, and the relations between the business, the community, and society. (3 hours per week)

Mgt. 210 Business Policies 3 credit hours

A study of policy construction and its relationship to effective management, sound personnel administration, and financial stability. Various areas previously studied are related to policy decision-making through the use of case studies. (3 hours per week)

Mgt. 212 Case Studies in Administrative Assistance 3 credit hours

This is an upper level course for secretarial science and office administration students, though it has value implications for all business majors. Using the case study-seminar approach, it encourages critical thinking and decision-making in those office situations where a person must project himself into the capacity of his own supervisor, associate, or staff employee in determining a course of action or an appropriate response. (3 hours per week)

Mgt. 115 Computer Programming 3 credit hours

Prerequisite: Introduction to Data Processing 101 and
Introductory Algebra 105 or Statistics
For Business and Industry 120

A basic course in programming of electronic computers for those who plan to be programmers or those whose work may be closely related to computer applications in business and industry. Covers problems of data processing, characteristics of computers, and computer programming and coding. (3 hours per week, plus lab practice)

Mgt. 116 Computer Programming 3 credit hours

Prerequisite: Computer Programming 115

Continuation of Computer Programming. Aims at achievement of proficiency with programming input and output devices; machine-aided coding; program optimizing; file maintenance; computer problem planning and report writing. (3 hours per week)

Mgt. 117 Computer Programming 3 credit hours

Study of a pertinent programming language and further study of the disk system and its applications. Monitor concepts are introduced. (3 hours per week, plus lab practice.)

Mgt. 220 Data Processing Applications 3 credit hours

Prerequisite: Unit Record Equipment 114

Illustrates the use of data processing equipment in various types and sizes of business operations. Form design, card design, and flowcharting skills are developed. Unit record equipment utilization for accounts receivable, accounts payable, payroll, and inventory control will be studied with case problems in each area. Each student is assigned a laboratory problem necessitating flowcharting, card and form design, and control panel wiring to produce the required reports. (3 hours per week plus practice)

Mgt. 221 Data Processing Field Project (Credit to be determined)
(by the instructor)

Prerequisite: Data Processing Applications 220

An independent studies course in which students develop a project of their own conception (approved by the instructor.) The project undertaken must result in a finished, usable product. The design of the system will include data collection, processing, and implementation. (3 hours per week)

Mgt. 223 Data Processing Systems 3 credit hours

Prerequisite: Computer Programming 115

A study of data processing systems and procedures, including analysis of various existing data processing applications in business and industry. Examines decision systems as communications networks and evaluates information from cost-value standpoint. Considers design of systems according to logic of feasible equipment. (3 hours per week)

Mgt. 104 Introduction to Business 3 credit hours

A survey of the structure and functions of the American business system. Provides an overview of business organization, finance, managerial control, production, distribution, personnel, and the interdependence of business and government. (3 hours per week)

Mgt. 101 Introduction to Data Processing 3 credit hours

An introduction to basic methods, techniques, and systems of manual, mechanical, and electronic data processing. Covers manual and machine accounting equipment and systems, punched tape or integrated data processing, and electronic or automatic data processing. (3 hours per week)

Mgt. 102 Key Punch Laboratory 3 credit hours

Prerequisite: Typing 100 and 102 or proficiency test

A practice course in the operation of the card punch machine and verifier. If the student reaches employable levels prior to the completion of the quarter, he may be given other tape equipment instruction as conditions warrant. (3 hours per week plus practice as needed)

Mgt. 201 Office Management 3 credit hours

The emphasis in this course is on the functions of the office and office organization; work in the office, office layout, equipment, supplies, and forms; personnel problems in the office; and costs and control of office work. (3 hours per week)

Mgt. 202 Office Practice 3 credit hours

Prerequisite: Typing 102

Training is given in efficient office methods, business routines, extensive typing of diverse business forms and correspondence, plus short units on indexing and filing, transcribing machines, liquid and stencil duplicating, etc. Electric typewriters are used in this course. (3 hours per week)

Mgt. 204 Office Procedures and Administration 3 credit hours

Develops a knowledge of office services and procedures in order to foster an understanding of the interrelationship of office functions, office services, and office facilities. Presents methods of recognizing and solving office communication problems, and an awareness of successful human relations, changing technologies and philosophies of business, and the technical terminology used in business. (3 hours per week)

Mgt. 216 Personnel Administration 3 credit hours

A study of the principles and techniques of personnel management, including an examination of managerial practices in the selection, development, and motivation of employees. Considers factors underlying employee participation in policy formation; the effect of the work environment; administration of wages, salaries, and benefits; and the evaluation of personnel programs. (3 hours per week)

Mgt. 200 Principles of Advertising 3 credit hours

An introductory course handling the theory, practice, and techniques in advertising. Considers the role of advertising and sales promotion in our economy, and includes a general survey of the kinds and purposes of different media, the psychological implications of typical appeals, and limited student practice in promotional programming. (3 hours per week)

Mgt. 211 Principles of Buying 3 credit hours

Designed for the student who wishes to specialize in this area, the course covers both principles and practices in the buying field. Professional buyers from the Metropolitan area will be invited to teach various units and lead discussions of typical buying problems. (3 hours per week)

Mgt. 213 Principles of Marketing 3 credit hours

Marketing as an institution and as a managerial variable is studied in this course. Covers a survey of the distributive fields, their function, and interrelationship. (3 hours per week)

Mgt. 215 Principles of Merchandising 3 credit hours

A practical examination of the total process of merchandising, including the selection, buying, pricing, advertising, display, and analysis associated with the handling of merchandise. (3 hours per week)

Mgt. 217 Principles of Retailing 3 credit hours

Designed to acquaint the student with the fundamentals of retail store organization and management, including store location, layout, buying, pricing, and operation. (3 hours per week)

Mgt. 222 Programming Systems 3 credit hours

Prerequisite: Computer Programming 117

A study of software development beginning with the organization of assembly languages, then learning to use such systems as COBOL, report generators, and monitors. (3 hours per week)

Mgt. 227 Sales Management 3 credit hours

Prerequisite: Salesmanship 225 and Salesmanship 226

A study of sales management, the methods, techniques, and problems involved, and the relationship of sales management to the total business operation. (3 hours per week)

Mgt. 225 Salesmanship 3 credit hours

Covers the fundamentals of selling from the determination of customer needs to the close of the sale. Treats such factors as customer problems, merchandising knowledge, and personality traits of successful salesmen. (3 hours per week)

Mgt. 226 Salesmanship 3 credit hours

Prerequisite: Salesmanship 225

A continuation of the introductory course; this phase of the sequence studies techniques and psychological factors involved in business transactions with emphasis on sales demonstrations and classroom practice. (3 hours per week)

Mgt. 230 Techniques of Fashion Merchandising 3 credit hours

Prerequisite: Principles of Merchandising 215

A specialized course concentrating on the dynamic field of fashion. It examines the factors to be weighed in selecting fashion goods, considering all the sub-markets, the short - and long-term trends, creative techniques of promotion, and cost factors. (5 hours per week)

Mgt. 113 Unit Record Equipment 3 credit hours

Instruction, demonstration, and machine practice on the card punch, sorter, interpreter, reproducer, collator, and tabulator. Lecture and wiring practice covering reading brushes, reproducing brushes, punch magnets and brushes, counters, selectors, typebars, and comparing brushes. (3 hours per week plus lab practice)

Mgt. 114 Unit Record Equipment 3 credit hours

Prerequisite: Unit Record Equipment 113

Lecture and control panel wiring of selected accounting machines, covering detail printing, group printing, counter operation, summary punching, X and digit selection, field selection, total transfer, cross-footing, and carriage control. (3 hours per week plus lab practice)

SECRETARIAL

Sec. 101 Alphabetical Shorthand 3 credit hours

An accelerated introductory course for those not electing Gregg Shorthand Principles. Covers the theory of ABC Stenographic Shorthand, a totally alphabetical system. Provides both reading and writing techniques and introduces short dictation exercises at minimum speeds. (3 hours per week plus practice hours as directed)

Sec. 103 Alphabetical Shorthand Speed Building 3 credit hours

Prerequisite: Alphabetical Shorthand 101

Develops speed in taking business letter dictation at employable levels and introduces typed transcription. Basic rules of sentence structure, punctuation, capitalization, etc., are reviewed in preparation for job-entrance tests and Civil Service Examinations. Spelling improvement is integrated with the course content. (3 hours per week plus practice hours as directed)

Sec. 105 Filing and Records Control 3 credit hours

The primary aim of this course is to acquaint the student with the rules, procedures, and techniques of filing that are so important to every business worker. It includes a knowledge of the principles of records management. (3 hours per week)

Sec. 106 Gregg Shorthand Principles 3 credit hours

Introduces the theory of Gregg Shorthand, Diamond Jubilee Series, and develops reading speeds from book plates and handwritten notes. Shorthand writing of familiar matter demonstrating all Gregg principles is developed to average speeds of 60 to 80 words per minute. Unfamiliar material of short duration is introduced. This course is intended for students who have had no previous Gregg Shorthand instruction, or for those whose proficiency examinations indicate a need for basic retrieval. (3 hours per week plus practice as directed)

Sec. 107 Gregg Shorthand Principles 3 credit hours

Prerequisite: Gregg Shorthand 106 or proficiency examination

Reinforces basic theory principles and develops the ability to take dictation of both familiar and unfamiliar matter. Transcription at the typewriter is introduced and special attention is placed on building shorthand vocabulary. (3 hours per week plus lab)

Sec. 108 Gregg Shorthand Speed Development 3 credit hours

Prerequisite: Shorthand 107 or proficiency examination

Intensive dictation practice from programmed multi-channel laboratory equipment permits the student to reach optimum speeds in shorthand skill. A comprehensive review is provided in punctuation, spelling, letter style, and vocabulary improvement. (3 hours per week plus 6 to 8 hours of lab practice)

Sec. 110 Machine Transcription 3 credit hours

Intensive practice in the use of magnetic tape and belt transcribing machines in the preparation of business correspondence. Includes a review of letter styles, rules of transcription and punctuation, and the mechanics of producing legible letters at high production rates. Experience on several models of electric typewriters will be provided. (3 hours per week)

Sec. 112 Medical Dictation and Transcription 3 credit hours

Prerequisite: Shorthand Transcription 109 and Typing 102
(Latter course may be taken concurrently.)

A specialized course for medical reporting and transcription in the offices of physicians and hospitals. Trainee will acquire familiarity with the terminology necessary for medical correspondence, case history records, autopsy protocols, etc. Stress is placed on mastering meanings, spelling, and shorthand forms established for medical terms. Dictation content is related to body systems and the effects of disease, injury, or abnormal functioning of the body system. Individual taped, programmed dictation is used extensively in this course. (3 hours per week plus lab as needed)

Sec. 114 Medical Secretarial Procedures and Records 3 credit hours

Prerequisite: Typing 102

Centers on the functional and environmental aspects of medical secretarial work in a general practitioner's or specialist's office. Medical reporting, correspondence, record keeping and retrieval, appointment scheduling, bookkeeping, insurance reporting, processing patients, etc., are covered in this course. (3 hours per week plus lab as needed)

Sec. 111 Personal Shorthand 3 credit hours

Designed primarily for managerial, professional, and baccalaureate candidates, this course will provide an accelerated method of taking notes, using a total alphabetical shorthand system. Techniques in listening, organizing, outlining, conducting research, and reporting will be integrated with the basic objective of learning to record lectures and data rapidly. (3 hours per week plus practice as needed)

Sec. 200 Secretarial Procedures 3 credit hours

Prerequisite: Typing 104

Designed to introduce the student to the secretarial field and to acquaint the student with the duties of a secretary. Units are covered on organization of secretarial work, incoming and outgoing mail, dictating processes, postal and shipping services, telegrams, indexing and filing, etc. (3 hours per week)

Sec. 109 Shorthand Transcription 3 credit hours

Prerequisite: Gregg Shorthand Speed Development 108

Optimum speed and accuracy in dictation and transcription are fully realized in this course, with emphasis on the production of mailable letters. Total business proficiency is expected, and attention is directed to the ability to take dictation for longer periods and to transcribe job assignments at employable production rates. (3 hours per week plus lab as needed)

Sec. 205 Specialized Professional Dictation 3 credit hours

Prerequisite: Gregg Shorthand Speed Development 108 and
Shorthand Transcription 109

This program familiarizes the student with the specific vocabulary related to a field of special secretarial interest: Law, medicine, education, etc. Programmed tapes selected and transmitted through personal listening stations provide highly individualized instruction for this course. (3 hours per week)

Sec. 100 Typing 3 credit hours

A beginning course for those who have had no previous instruction in typing. Introduces the keyboard and machine parts, and develops correct techniques for attaining acceptable levels of speed and accuracy. While primary emphasis is placed on straight-copy skills, the course covers a range of basic typing applications: reports, manuscripts, business communications, tabulation problems, and common business forms. Designed to meet the needs of students with vocational as well as non-business objectives. (3 hours per week plus lab as needed)

Sec. 102 Typing 3 credit hours

Prerequisite: Typing 100 or proficiency

Reinforces skills acquired in Typing, identifies and handles individual typing deficiencies, and covers a comprehensive program of vocational typing applications. Serves as a refresher course for those who have not used their typing skills for an extended period of time and strengthens their speed and accuracy. (3 hours per week plus practice as needed)

Sec. 104 Typing 3 credit hours

Prerequisite: Typing 102 or proficiency

Emphasizes the attainment of high professional levels in speed and accuracy, especially in the rate of production output in those activities frequently performed by a secretary or full-time typist. Typing projects will be selected to meet the individual objectives and needs of students enrolled in this class. (3 hours per week plus practice as needed)

**DIVISION
OF
COMMUNICATIONS AND ARTS**

ART

Art 100 Art Appreciation 3 credit hou

A study of the world's art masterpieces for the purpose of developing the student's own criteria for the evaluation and greater appreciation of art works and their meaning in men's lives. (3 hours per week)

Art 101 Basic Drawing 3 credit hou

An introductory course in drawing utilizing a variety of media and techniques. Essentials of visual form, analysis of structure and texture are studied with reference to pictorial presentation of still life, the human figure, landscape and contemporary life scenes. (6 hours per week)

Art 102 Basic Drawing 3 credit hou

Continuation of Art 101 with intensified practice and skill development in additional media. (6 hours per week)

Art 105 Basic Design 3 credit hou

Introduction to basic elements of design such as line, form, texture and color. Experimentation with two-dimensional problems in design. (6 hours per week)

Art 106 Basic Design 3 credit hou

Continuation of Art 105. Experimentation with three-dimensional design. Structural composition. Use of materials and tools of sculpture and ceramics (6 hours per week)

NOTE: Courses in history of art, watercolor and oil painting may be offered during the 1968-69 academic year if there is sufficient student demand. These courses will be offered during 1969-70.

ENGLISH

ading Laboratory Non-Credit

the laboratory is intended to provide opportunity for students to improve their basic reading skills. Reading problems and deficiencies will be diagnosed and individual and group programs will be developed to allow students to progress at their own rate of development.

iting Laboratory Non-Credit

diagnostic and development experiences in basic writing skills. Emphasizes the practical use of fundamental grammatical structure, punctuation, and correct spelling in common written communications through individual and group instruction and writing exercises.

g. 100 Developmental Reading 3 credit hours

emphasis on improving reading speed and comprehension and vocabulary development. Reading techniques and study skills appropriate to academic materials are developed. Course work may be supplemented with reading laboratory experiences according to individual needs. (3 hours per week)

g. 102 Developmental English 3 credit hours

provides instruction and practice intended to improve the student's writing skills. Emphasis on writing correct and intelligible expository paragraphs and brief reports. Preparatory for minimal job-entry requirements or further study of English fundamentals appropriate to the student's career emphasis. (3 hours per week)

g. 106 English Fundamentals 3 credit hours

English Fundamentals 106, 107 and 108 constitute a three-quarter sequence which emphasizes the practical application of the English language for those students enrolled in non-transfer programs. The first quarter will stress preparation and presentation of both oral and written compositions. (3 hours per week)

g. 107 English Fundamentals 3 credit hours

continuation of Eng. 106 with emphasis on the preparation of short essays, documented reports and letters of application. (3 hours per week)

g. 108 English Fundamentals 3 credit hours

continuation of Eng. 107. Written and oral application of English fundamentals with particular reference to the student's probable future needs. (3 hours per week)

Eng. 110 Technical Writing 3 credit hours

Treats specifically the writing problems of those engaged in or preparing for managerial or business fields that require specific vocabulary, format style, statistical support or other prescribed requirements. Practice and evaluation, using established criteria, will be provided. (3 hours per week)

Eng. 111 English Composition 3 credit hours

English Composition 111, 112 and 113 constitute a three-quarter sequence designed for students intending to transfer to a four-year degree granting institution. The student will prepare themes frequently to develop skill in expository writing. (3 hours per week)

Eng. 112 English Composition 3 credit hours

Continuation of Eng. 111 with further study and practice in written composition emphasizing logical organization and clarity of expression. (3 hours per week)

Eng. 113 English Composition 3 credit hours

Continuation of Eng. 112 with emphasis on the use of library materials and research writing. (3 hours per week)

Eng. 131 Business Communications 3 credit hours

Prerequisite: Eng. 108 or equivalent.

Presents a comprehensive coverage of English fundamentals, especially those needed in written communications directly pertinent to daily business activities. Intensive practice in the mechanics of language used by management and office personnel is provided. The aspects of business writing most often included in job-entrance and government tests, as well as the errors most commonly made by office workers, are treated in detail. Instruction in correct transcription and typing style is correlated with this curriculum. (3 hours per week)

Eng. 132 Business Communications 3 credit hours

Prerequisite: Eng. 131 or equivalent.

Applies the techniques of written communication to situations that require problem solving and an understanding of human relations. Students will compose and evaluate the various kinds of business letters that commonly pass between a businessman and his customers, dealers, and associates. Business reports, inter-office bulletins, news releases, and other forms of business composition will receive attention. The legal and ethical responsibilities involved in written communications will be considered. (3 hours per week)

g. 133 Business Communications 3 credit hours

Prerequisite: Eng. 131 or equivalent.

rious applications of the writing, speaking and listening skills in business communications are covered in this course. Oral business reporting for staff meetings, public speaking, correct telephone usage, techniques in business negotiation, listening for notetaking, and other commercial facets of written and oral communications are practiced. (3 hours per week)

g. 141 Introduction to Literature - Poetry and Drama3 credit hours

introduction to the study of poetic and dramatic literature. Designed to give an understanding of literature through reading and discussion of selected works. (3 hours per week)

g. 143 Introduction to Literature - Short Story and Novel3 credit hours

introductory study of selected short stories and novels as forms of literature. (3 hours per week)

g. 145 Literature for Children 3 credit hours

general survey of the illustrated books, prose and poetry suitable for the young child. Emphasis on the evaluation and selection of quality literature for different age groups. Intended for library and elementary education career emphasis and for interested parents. (3 hours per week)

g. 147 World Literature 3 credit hours

introductory study of masterpieces of world literature from the time of ancient Greece through the Renaissance period. (3 hours per week)

g. 148 World Literature 3 credit hours

significant literary works from the Renaissance through the 19th century. (3 hours per week)

g. 149 World Literature3 credit hours

study of contemporary world literature in the 20th century. (3 hours per week)

FOREIGN LANGUAGE

NOTE: Students who plan to take a second year of a foreign language, either at the Community College of Denver or at some other institution of higher learning, must successfully complete the entire first year three-quarter sequence of that particular language.

FRENCH

French 111 First-Year French 5 credit hours

A beginning course in the French language with emphasis on pronunciation, speaking and understanding, supplemented by grammar, reading and writing. (5 hours per week)

French 112 First-Year French 5 credit hours

Continuation of French 111. (5 hours per week)

French 113 First-Year French 5 credit hours

Continuation of French 112. (5 hours per week)

SPANISH

Spanish 111 First-Year Spanish 5 credit hours

The beginning course in Spanish emphasizing pronunciation, speaking, and understanding the spoken language and developing basic skill in reading and written communication. (5 hours per week)

Spanish 112 First-Year Spanish 5 credit hours

Continuation of Spanish 111. (5 hours per week)

Spanish 113 First-Year Spanish 5 credit hours

Continuation of Spanish 112 (5 hours per week)

MUSIC

Music 100 Music Appreciation 3 credit hours

An introduction to music and appreciation of its value in men's lives. Investigation of the basic elements of music, their functions, and the varying styles of music. Instruction will emphasize major works of music through the use of recordings. (3 hours per week)

Music 130 Band 1 credit hour

Performance of standard band literature. The course is open to regular student and to the public upon permission of the instructor. May be repeated for credit up to a maximum of three quarter hours. (2 hours per week)

Music 140 Chorus 1 credit hour

Performance of choral literature ranging from the classics to modern composition. Open to regular students and to the public upon permission of the instructor. May be repeated for credit up to a maximum of three quarter hours. (2 hours per week)

SPEECH

Speech-Listening Laboratory Non-Credit

Provides opportunity for students to develop and improve their basic skills in speaking and listening. Practical exercises in correct pronunciation, accepted oral expression and the perception and interpretation of meaning in speech. Individual problems and deficiencies in speaking are identified and corrective programs developed. Recording and playback equipment is utilized.

Speech 100 Developmental Speech 3 credit hours

Improvement of vocabulary, spoken grammar, pronunciation and articulation. May be combined with speech-listening laboratory experiences as needed. Preparatory for minimal job-entry requirements or further study of fundamentals of speaking appropriate to the student's career emphasis. (3 hours per week)

Speech 102 Fundamentals of Speaking 3 credit hours

Instruction and intensive practice in essential speech processes and skills. Organization and effective oral presentation of reports and speeches related to the student's career interests. (3 hours per week)

Speech 110 Public Speaking and Debate 3 credit hours

Prerequisite: Speech 102 or equivalent.

Introduction to basic theory of public speaking, logical analyses, persuasion and refutation. Experience in the preparation and delivery of speeches, argumentative discourse and formal debate.

PHYSICAL EDUCATION

Phys. Ed. 101 First Aid 2 credit hours

Outlined by the American Red Cross, this course consists of lectures, assigned readings and practice work in First Aid. A certificate is awarded to each student completing the course. (2 hours per week)

PHYSICAL EDUCATION ACTIVITY COURSES

Note: Due to limited facilities and equipment during the 1968-69 school year, it may not be possible for the College to offer all of the Physical Education activity courses listed here.

Phys. Ed. 110 Group Activities (Men) 1 credit hour

Participation and instruction in such activities as basketball, soccer and touch football. (2 hours per week)

Phys. Ed. 112 Group Activities (Women) 1 credit hour

Participation in activities designed to develop poise, improve physical fitness and teach some of the skills of various team sports. (2 hours per week)

Phys. Ed. 120 Conditioning Activities 1 credit hour
(2 hours per week)

Phys. Ed. 121 Archery 1 credit hour
(2 hours per week)

Phys. Ed. 122 Bowling 1 credit hour
(2 hours per week)

Phys. Ed. 123 Golf 1 credit hour
(2 hours per week)

Phys. Ed. 124 Swimming 1 credit hour
(2 hours per week)

Phys. Ed. 125 Tennis 1 credit hour
(2 hours per week)

**DIVISION
OF
COMMUNITY AND PERSONAL
SERVICE OCCUPATIONS**

BUILDING MAINTENANCE

B. Maint. 100 Safety and Orientation 1 credit hour

Safety procedures as applied to building maintenance. Orientation to the occupation including basic human relations. (2 hours per week)

B. Maint. 102 Operational Tasks 5 credit hours

Involves a study of making work schedules such as grouping, routine jobs and frequency, job-time requirements and scheduling. Emphasis on dusting, mopping stairway cleaning, lavatory cleaning, furniture cleaning, glass cleaning, acoustical tile cleaning, chalkboard care and cleaning, light fixture cleaning and insect and rodent control. (15 hours per week)

B. Maint. 104 Floor Maintenance 2 credit hours

Considers types of floors and their proper care. Studies the various types of cleaners and use of equipment. (3 hours per week)

B. Maint. 106 Equipment and Materials 2 credit hours

A study of all types of equipment and materials used by custodians. Also involves the purchasing of equipment and supplies. (3 hours per week)

B. Maint. 108 Heating and Ventilation 2 credit hours

A study of the various types of heating and ventilation equipment and necessary preventive maintenance. (3 hours per week)

B. Maint. 110 Maintenance of Grounds 1 credit hour

Equipment, methods, and use of various chemicals in the proper care of outside grounds. (3 hours per week)

B. Maint. 112 Security and Protective Measures 1 credit hour

A study of various devices, methods and measures used in the security and protection of buildings and facilities. (1 hour per week)

CHILD CARE

- Child C. 102 Creative Activities 3 credit hours
Basic instruction in the use of tools for creating and maintaining play equipment and for work with young children. Emphasis is placed on ways to use creative activities to stimulate learning experiences for children. (3 hours per week)
- Child C. 103, 105, 107, 109, and 111
Supervised Student Participation 5 credit hours
This course is required for five quarters during which student will acquire 100 clock hours of participation. Students will receive experience in day care centers, kindergartens, Head Start Programs, and other types of pre-school programs. They will work in both the large and small centers. (10 hours per week)
- Child C. 106 Methods of Teaching The Young Child 4 credit hours
Theory and method of teaching the young child in relation to his development and behavior patterns. (9 hours per week)
- Child C. 108 Methods of Teaching The Young Child 4 credit hours
Basic philosophy and methods in teaching the child two to six years of age. Emphasis on the use of various materials and aids in teaching. (9 hours per week)
- Child C. 110 Family and Community Relations 4 credit hours
This course is designed to help the student understand the importance of good working relationships with adults, community leaders, employers. Also ways to establish connections for effective use of community resources. The course gives a basic understanding of the dynamics of family interaction and their effects upon the child. (9 hours per week)
- Child C. 112 Family and Community Relations 4 credit hours
Continuation of Family and Community Relations. Emphasis is placed on the problems of population, international relations, automation, the urban community, longevity, and leisure. (9 hours per week)

CULINARY ARTS

C. Arts 100 Sanitation and Safety 3 credit hours

Sanitation in the industry. Bacteriology, housekeeping, pest control. Safety procedures and programs. (3 hours per week)

C. Arts 208 Advanced Food Production 5 credit hours

Perfecting the techniques of food preparation in a complete meal including: appetizer, soups, salads, entrees, vegetables, sauces, and garnishes. Art of cold buffet. A la carte service and detailed use of French menu terminology. (15 hours per week)

C. Arts 209 Advanced Food Production 5 credit hours

A continuation of Advanced Food Production. (15 hours per week)

C. Arts 110 Basic Baking 2 credit hours

Equipment and composition of ingredients used in a hotel, restaurant, or modern pastry shop. Arrangement and display, storing, selling, freezing of baked goods. Production procedures, service, weights, and measures. Basic recipes for bread, rolls, and cakes. (3 hours per week)

C. Arts 101 Basic Food Preparation 5 credit hours

Lecture, demonstration and participation in basic quantity food preparation. Theory of grilling, frying, broiling, and sauteeing with a thorough understanding of use and maintenance of equipment and the duties performed at each station. Lecture and demonstration on meat cuts, basic salad dressings and sauces. (15 hours per week)

C. Arts 103 Basic Food Preparation 5 credit hours

Organization of food preparation and station assignments. Preparation of stocks, broths, consommés, and various finished soups. Preparation of various sauces, and finished meat dishes, seafood, hors d'oeuvres and canapés. Continuation of meat cuts and purchases with demonstration on hotel cuts. (15 hours per week)

C. Arts 104 Basic Food Science 3 credit hours

A study of the composition of food groups, their content of basic substances. Study of the effects and action of chemicals used as catalysts, flavoring, and preservatives. The effects of cooking and refrigeration. Cause and prevention of food spoilage and food-borne disease. (3 hours per week)

- . Arts 205 Food and Beverage Control 4 credit hours
 application of food control systems for various types of feeding arrangements and operations. Preparation of butcher tests. Pre-cost, pre-control, and techniques. Inventory turnover controls. Monthly reports and adjustments. Use of forecasting and sales histories. Beverage cost controls used in hotels, motels, restaurants and clubs. Wine cellar operations, perpetual inventories, and bar control. Sales and cost distributions. (6 hours per week)
- . Arts 206 Food and Beverage Management 3 credit hours
 course designed for those who have a desire to prepare themselves for advancement in the field. A blending of the knowledges and skills in food, its preparation, its merchandising, and service, plus additional knowledges of financial and business practices. (3 hours per week)
- . Arts 201 Food and Beverage Purchasing 4 credit hours
 study of the marketing world and how it operates. Language of buying and how to use it in carefully written, precise specifications and in verbal dealings with market agents. Buying of fresh fruits and vegetables, processed fruits and vegetables, dairy products, cereal products, beverages, poultry and eggs, fish and shellfish, meats, and alcoholic beverages. (6 hours per week)
- . Arts 202 Food Production 5 credit hours
 preparation and service of complete menus. Menu planning, plate composition and related to haute cuisine in hotels and restaurants. French menu terminology. (15 hours per week)
- . Arts 204 Food Production 5 credit hours
 continuation of Food Production. (15 hours per week)
- . Arts 106 Meal Planning and Service 4 credit hours
 meal and service planning for all phases of food service; snack bar, cafeteria, coffee shop, restaurant, and banquet. Making production schedules and order lists. Use of personnel, operating reports, and portion control. (5 hours per week)
- . Arts 108 Nutrition 2 credit hours
 orientation in nutritional values, their effect on the human body, how they apply to commercial food service, and procedures necessary in assuring these values are preserved through food preparation and service. (2 hours per week)

FIRE SCIENCE TECHNOLOGY

F.S.T. 100 Introduction to Fire Science 3 credit hours

Philosophy and history of fire protection; history of loss of life and property by fire; review of municipal fire defenses; study of the organization and function of Federal, State, County, and private fire protection agencies; survey of professional fire protection career opportunities. (3 hours per week)

F.S.T. 102 Introduction to Fire Suppression 3 credit hours

Fire suppression organization; fire suppression equipment; characteristics and behavior of fire; fire hazard properties of ordinary materials; building design and construction; extinguishing agents; basic fire fighting tactics; public relations. (3 hours per week)

F.S.T. 202 Fundamentals of Fire Prevention 3 credit hours

Organization and function of the fire prevention organization; inspections; surveying and mapping procedures; recognition of fire hazards; engineering a solution of the hazard; enforcement of the solution; public relations as affected by fire prevention. (3 hours per week)

F.S.T. 106 Fire Fighting Tactics and Strategy 3 credit hours

Review of fire chemistry, equipment, and manpower; basic fire fighting tactic and strategy; methods of attack; pre-planning fire problems. (3 hours per week)

F.S.T. 212 Fire Protection Equipment and Systems 3 credit hours

Portable fire extinguishing equipment; sprinkler systems; protection systems for special hazards; fire alarm and detection systems. (3 hours per week)

F.S.T. 204 Related Codes and Ordinances 3 credit hours

Familiarization with national, state, and local laws and ordinances which influence the field of fire prevention. (3 hours per week)

F.S.T. 108 Fire Hydraulics 3 credit hours

Review of basic mathematics; hydraulic laws and formulas as applied to the fire service; application of formulas and mental calculation to hydraulic problems; water supply problem; underwriters' requirements for pumps. (3 hours per week)

F.S.T. 110 Fire Apparatus and Equipment 3 credit hours

Driving laws, driving technique, construction and operation of pumping engines, ladder trucks, aerial platforms, specialized equipment, apparatus maintenance. (3 hours per week)

- .S.T. 104 Fire Company Organization and Procedure 3 credit hours
 review of fire department organization; fire company organization; the company officer; personnel administration; communications; fire equipment; maintenance; training; fire prevention; fire fighting; company fire fighting capability; records and reports. (3 hours per week)
- .S.T. 206 Rescue Practices 3 credit hours
 rescue practices, the human body, emergency care of victims, childbirth, artificial respiration, toxic gases, chemicals and diseases, radioactive hazards, rescue problems, and techniques. (3 hours per week)
- .S.T. 208 Hazardous Materials 3 credit hours
 review of basic chemistry; storage, handling, laws, standards, and fire fighting practices pertaining to hazardous materials. (3 hours per week)
- .S.T. 209 Hazardous Materials 3 credit hours
 second semester course in hazardous materials covering storage, handling, laws, standards, and fire fighting practices with emphasis on fire fighting and control at the company officer level. (3 hours per week)
- .S.T. 214 Fire Department Administration 3 credit hours
 consideration of basic concepts and principles of administration applicable to the organization and administration of an efficient fire department. (3 hours per week)
- .S.T. 216 Building Construction for Fire Protection 3 credit hours
 fundamental building construction and design; fire protection features; special considerations. (3 hours per week)
- .S.T. 218 Fire Investigation 3 credit hours
 introduction to arson and incendiarism, arson laws, and types of incendiary fires. Methods of determining fire cause, recognizing and preserving evidence, interviewing and detaining witnesses. Procedures in handling juveniles, court procedure and giving court testimony. (3 hours per week)
- .S.T. 220 Property and Casualty Insurance 3 credit hours
 analysis of the fire insurance rating structure. Elements involved in establishing insurance rates. The grading system for cities and towns, the classification of cities and towns, and hazard factors in occupancy, construction and exposures. (3 hours per week)

LIBRARY TECHNOLOGY

- Lib. Tech. 102 Library Usage 3 credit hours
A general course in the use of books and libraries. Students receive instruction and practice in the arrangement of books, use of card catalog, Readers Guide, the most commonly used reference sources, and the study of the various types of reference tools. (3 hours per week)
- Lib. Tech. 104 Library Practice 4 credit hours
An introduction to techniques and information needed by supportive staff in libraries; widely used circulation schemes, quick reference tools, and major bibliographies; use of card catalog and preparing catalogue cards. (6 hours per week)
- Lib. Tech. 106 Library Practice 4 credit hours
Emphasis on circulation preparation and maintenance of library materials. (6 hours per week)
- Lib. Tech. 200 Library Practice 4 credit hours
Order of books, binding preparation, financial records and library administration. (6 hours per week)

TEACHER ASSISTING

- T. Aide 100 Teacher Aide Techniques 3 credit hours
Techniques of showing and explaining interesting and constructive art work, songs, games, music, dances, sand and water play for nursery and elementary school children. (3 hours per week)
- T. Aide 102 Teacher Aide Techniques 3 credit hours
Relationship of the teacher aide to the professional teacher and administrator. Limitations of the teacher aide; further development of the teacher aide techniques. (3 hours per week)
- T. Aide 104 Teacher Aide Techniques 3 credit hours
Problems concerning the student. More specific treatment of methods for assisting the teacher, such as, grading papers, bulletin boards, observation of student behavior patterns, and classroom supervision. (3 hours per week)
- T. Aide 106 Arts and Crafts 3 credit hours
An elementary approach to drawing, cutting, pasting, painting, making play dough, papier-mache, potatoe printing, paper construction and art work with non-ferrous metals. (3 hours per week)
- T. Aide 108 Instructional Media and Materials 3 credit hours
A practical and comprehensive approach to the applications of visual materials and auditory aids. (3 hours per week)

URBAN HORTICULTURE

- U. Hort. 100 Introduction to Urban Horticulture 2 credit hours
 A study of the urban horticulture industry with an overview of job opportunities and business operations. (2 hours per week)
- U. Hort. 102 Ornamental Plant Materials 4 credit hours
 The basic production and management of ornamental plants, shrubs, and trees. (3 hours per week plus laboratory)
- U. Hort. 104 Basic Plant Science 4 credit hours
 A study of the fundamental principles of plant growth. (3 hours per week plus laboratory)
- U. Hort. 106 Ornamental Horticulture Science 4 credit hours
 A study of the growth and development of ornamental plants. (3 hours per week plus laboratory)
- U. Hort. 108 Urban horticulture Mechanics 4 credit hours
 Selection, adjustment, and repair of engines, mowers, and other specialized equipment used in production nurseries, landscape construction, and maintenance operations. (3 hours per week plus laboratory)
- U. Hort. 110 Ornamental Horticulture Operations 3 credit hours
 A study of the elements of business management as applied to horticulture operations. (3 hours per week)
- U. Hort. 112 Soils and Fertilizers 4 credit hours
 The properties and management of soils in relation to plant growth with emphasis on the principles of soil fertility, and practices of fertilizer use. (3 hours per week plus laboratory)
- U. Hort. 114 Landscape Planning 3 credit hours
 Practical experience in drafting, basic principles of landscape design and computation. (3 hours per week)
- U. Hort. 201 Disease and Pest Identification and Control ... 4 credit hours
 The identification of disease, insects, and their prevention and control. Special consideration will be given to the use of insecticides and other chemicals. (3 hours per week plus laboratory)

- U. Hort. 203 Landscape Maintenance 3 credit hours
 The principles and cultural practices used for caring for annuals, biennials, and perennials, shrubs, and trees. (3 hours per week)
- U. Hort. 205 Merchandising Horticulture Products 3 credit hours
 The principles and practices of retailing as related to the horticulture industry. (3 hours per week)
- U. Hort. 207 Nursery Production and Management 4 credit hours
 The principles and practices of germination, seeding, planting, transplanting and culture of nursery materials. The course also includes the management of men, materials, and money that apply to the industry. (3 hours per week plus laboratory)
- U. Hort. 209 Horticulture Equipment and Facilities 3 credit hours
 An in-depth study of production and merchandising equipment and facilities. (3 hours per week)
- U. Hort. 211 Greenhouse Management 4 credit hours
 The management of enclosed structures for regulating plant growth. (3 hours per week)
- U. Hort. 213 Turf Production and Maintenance 4 credit hours
 The principles and practices involved in the establishment and maintenance of lawns and turf for parks, playgrounds, golf courses, and home grounds. (3 hours per week plus laboratory)

**DIVISION
OF
HEALTH OCCUPATIONS**

DENTAL ASSISTING

Dent. A. 110 Orientation to Dental Assisting.....1 credit hour

Prerequisite: Admission to dental assisting curriculum.

General orientation to college and the history of dentistry. The role of the Dental Assistant Association, code of ethics, certification of dental assistants, and observation in dental offices. Dental jurisprudence and malpractice prevention are included in this course. (1 hour per week)

Dent. A. 120 Dental Science.....4 credit hour

Prerequisite: Orientation to Dental Assisting 110
(may be taken concurrently).

This course deals with dental terminology, histology; tooth growth, eruption and anatomy; physiology and anatomy of the head. (4 hours per week)

Dent. A. 130 Principles of Operatory Procedures.....4 credit hour

This is a study of the names and uses of dental instruments, preparation and care of patients, proper chairside assistance and operation of equipment, bacteriology and sterilization. (4 hours per week)

Dent. A. 140 Advanced Dental Science.....4 credit hour

Prerequisite: Dental Science 120

Continuation of Dental Science. This is a study of the relation of oral health to general health, oral pathology, diet and nutrition, occlusions, drawing and wax carving of selected teeth to millimeter measurements. (4 hours per week)

Dent. A. 200 Dental Materials.....3 credit hour

Prerequisite: Advanced Dental Science 140

Chemical properties and uses of dental materials and solutions; manipulative techniques, dental pharmacology and anesthesia are included in this course. (4 hours per week)

Dent. A. 205 Dental Roentgenology.....3 credit hour

Prerequisite: Dental Science 120 and Advanced Dental Science 140

Principles, practices, and precautions in the operation of dental X-Ray units are studied. This course also involves instruction and practice in making intra-oral and extra-oral X-Ray exposures; processing and mounting X-Ray films are included. (4 hours per week)

Dent. A. 210 Dental Office Procedures.....4 credit hours

Prerequisite: Principles of Operatory Procedures 130

Office practices as related to operating procedures, case history records, treatment planning, and estimates are involved in this course. (4 hours per week)

Dent. A. 215 Principles of Dental Laboratory Procedures.....3 credit hours

This is a study of the practice of manipulation of cold cure acrylic material in making custom impression trays, retainers, and minor denture repairs; preparation of impression materials, use of dental laboratory equipment and storage of laboratory supplies. (4 hours per week)

Dent. A. 220 Advanced Dental Laboratory Procedures.....3 credit hours

Prerequisite: Principles of Dental Laboratory Procedures 215

This course involves carving inlay patterns, investing and casting inlay restorations; pouring of plaster and stone cases; making stone, amalgam, and copper electroplated dies. (4 hours per week)

HEALTH EDUCATION (BASIC)

Health Ed. 100 Health Science Terminology.....3 credit hours

A study designed to acquaint the student with the origin and structure of medical terms. The intent of this course is to help the student interpret and understand medical terms, medical reports and medical requests applicable to his field (3 hours per week)

Health Ed. 105 Nursing Procedures and Professional Ethics.....3 credit hours

The nursing procedures relative to patient and services to be offered. The organization of hospitals and public health nursing services. Practical demonstrations in nursing and professional obligations to the patient. (3 hours per week)

NURSES ASSISTING

Nurse A. 110 Basic Personal Care.....5 credit hours

An understanding of basic human needs (physical, emotional, social and spiritual) through the ability to identify these needs from the way the patient behaves, is developed within the student. Patient behavior, nursing care procedures, observation and reporting (oral and written), basic methods of control of disease and infection, safety hazards, body mechanics as a means of preserving health, energy and efficiency, communication skills and the development of the awareness of the patient's nutritional and elimination needs and means of meeting these needs which will promote maximum health is taught. (9 hours per week)

nurse A. 120 Home Health Care.....6 credit hours

The home health assistant is given a deeper awareness of social and psychological factors involved in being the helping person. The ability of the home health assistant to adapt patient care to the facilities available in the home as well as to manage housekeeping tasks, and to work with nutrition and food services is given to develop a deeper understanding of the functions of the home health assistant. (12 hours per week)

nurse A. 130 Nurse's Assistant and Her Job.....1 credit hour

The training program, its objectives and functions, is discussed. The basic purposes of the hospital, nursing home and home health assistant and what each unit expects of the nurse's assistant is given each student as well as the legal limitations, standards of appearance and general behavior. The ethics involved in the position and the responsibilities of the nurse's assistant as a member of the nursing and health teams are also discussed. (1 hour per week)

nurse A. 140 Patients Requiring Certain Types of Care.....3 credit hours

This course develops in the student a beginning understanding and appreciation of special means of patient care as well as the development of the ability to adapt to the specific patient. An awareness of the need for team nursing and the part it plays in patient care is stressed. (6 hours per week)

RADIOLOGIC TECHNOLOGY (X-RAY)

Rad. Tech. 100 Principles of X-Ray Techniques.....3 credit hours

A basic course that includes orientation and radiation protection, elementary darkroom and radiographic techniques. (3 hours per week)

Rad. Tech. 105 Principles of X-Ray Techniques.....3 credit hours

A study of darkroom chemistry and techniques. Principles of radiographic exposure, radiographic positioning, and film critique will be included. (3 hours per week)

Rad. Tech. 106 Principles of X-Ray Techniques.....5 credit hours

A continuation of X-Ray Techniques; includes positioning of the patient, radiographic exposure, procedures using contrast media, and film critique. (5 hours per week)

Rad. Tech. 107 Principles of X-Ray Techniques.....5 credit hours

A continuation of X-Ray Techniques with greater emphasis on special positioning, radiographic exposure, protection, special radiographic procedures and film critique. (5 hours per week)

- ad. Tech. 200 Principles of X-Ray Techniques.....3 credit hours
 continuation of X-Ray Techniques with emphasis on pediatric and intraoral radio-
 graphy, equipment maintenance, departmental administration, and film critique.
 3 hours per week)
- ad. Tech. 205 Principles of X-Ray Techniques.....3 credit hours
 instruction in radiation therapy and nuclear medicine, and continuation of
 specialized positioning and film critique. (3 hours per week)
- ad. Tech. 210 Applied X-Ray Technology.....4 credit hours
 practical application of the skills and knowledge acquired in Principles of
 X-Ray Techniques. (12 hours laboratory per week)
- ad. Tech. 215 Applied X-Ray Technology.....6 credit hours
 continuation of Applied X-Ray Technology (16 hours laboratory per week)
- ad. Tech. 225 Review for Registry.....3 credit hours
 total review of all courses and clinical work in X-Ray Technology. (Taken
 during Spring Quarter of Internship)
- ad. Tech. 220 Clinical X-Ray Experience.....7 credit hours
 a summer course to be taken between the first and second year. All instruction
 and laboratory experiences are given in the hospital.

INTERNSHIP

Upon completion of the two years, the College will award the Associate Degree.
 The student will be required to complete an additional twelve months of full-
 time internship. During the final twelve months of training, he will receive
 a student stipend to be paid by the hospital. The internship shall be for
 twelve months, a minimum of 40 hours per week will be spent interning.

**DIVISION
OF
INDUSTRIAL OCCUPATIONS**

APPLIANCE REPAIR

Ap. Rep. 105 Large Appliance Service and Repair 4 credit hours

Basic experiences in studying the components of large appliances, including diagnostic experiences and repair. (9 hours per week)

Ap. Rep. 110 Small Appliance Service and Repair 4 credit hours

Basic experiences in studying the components of small appliances, including diagnostic experiences and repair. (9 hours per week)

AUTO BODY SERVICE

Auto. Body 100 Auto Body Repair..... 4 credit hours

Co-requisite: Fundamentals of Welding 100

An introductory course in auto body repair fundamentals. Repairs are made on damaged body panels while studying the working properties of automobile sheet metal and basic damage conditions. Analyzing typical damage conditions and establishing accepted repair procedures are an important part of this course. (9 hours per week)

Auto. Body 105 Automobile Refinishing 4 credit hours

An introductory course in the methods and procedures used with automobile refinishing materials. Acrylic lacquers and enamels are used to spray paint automobile body panels and complete automobiles. Proper use of refinishing materials and the development of basic skills and knowledge of the trade are stressed. Reconditioning of used cars is included. (9 hours per week)

Auto. Body 110 Auto Body Repair 4 credit hours

Prerequisite: Auto Body Repair 100 and Welding and Fabrication 105

A detailed study of the automobile body that includes the use of hydraulic jacks and accessories to make typical repairs to the front, side, and rear sections of automobiles damaged by collision. Typical repair jobs are selected to provide the student diversified experience on body trim and hardware, panel replacement, and aligning various body components. (9 hours per week)

Auto. Body 115 Automobile Refinishing 4 credit hours

Prerequisite: Automobile Refinishing 105

A continuation of the units begun in the first course including the improvement of skills, mixing and matching of high metallic colors, spot repair and complete refinishing of acrylic lacquers and enamels. Special color effects including the use of "candy" and metal flake are studied. Proper use of materials and quality workmanship are stressed. (9 hours per week)

Auto. Body 200 Collision Estimation 4 credit hours

An introductory course designed to expose the student to the use of flat rate manuals to establish parts and labor prices in estimating damaged automobiles. Modern methods of repair are demonstrated and emphasis is placed on the economics of repairing as opposed to replacing damaged body sections. Procedures used to obtain complete estimates are included. (9 hours per week)

Auto. Body 205 Frame and Unit Body Straightening 4 credit hours

The problems involved in repairing various frame design. The laboratory work includes advanced instruction in using portable frame straightening equipment to diagnose and straighten common damage conditions. (9 hours per week)

Auto. Body 210 Major Body Repair 4 credit hours

Prerequisite: Auto Body Repair 110

Co-requisite: Frame and Unit Body Straightening 205

Advanced instruction in the use of portable frame and body straighteners to repair major body damage. Three common types of damage are selected for study as being representative of front end, rear end, and side collision damage. (9 hours per week)

Auto. Body 215 Frame and Unit Body Sectioning Methods 4 credit hours

Prerequisite: Frame and Unit Body Straightening 205

Advanced instruction in reinforcing methods and sectioning of the unitized body. The problems involved in sectioning and replacing structural members of conventional type frames are also covered. (9 hours per week)

Auto. Body 220 Body Rebuilding Methods 4 credit hours

Prerequisite: Major Body Repair 210

The procedures and problems involved in sectioning automobile bodies. Repair jobs will be selected as being representative of front end, unit body and rear-end collisions. (9 hours per week)

AUTOMOTIVE MECHANICS

Auto. Mech. 100 Basic Ignition 3 credit hours

An introduction to fundamentals of electricity, storage batteries and battery ignition. The operation of the storage battery and battery ignition systems is covered both in theory and practical application on live cars. (6 hours per week)

Auto. Mech. 105 Engines and Carburetion 3 credit hours

The principles, design, construction, and operation of modern automotive engines and carburetors are studied both in theory and practical application on live cars. (6 hours per week)

Auto. Mech. 110 Brake System 3 credit hours

Specialized instruction in hydraulic principles as applied to automotive hydraulic brake systems, including the operation and service of these systems on live vehicles. (6 hours per week)

Auto. Mech. 120 Wheel Balancing and Alignment 4 credit hours

A detailed study of wheel alignment and balancing. Students perform wheel and steering diagnosis and repairs on live units. (9 hours per week)

Auto. Mech. 125 Charging Systems 3 credit hours

Prerequisite: Basic Ignition 100

A continuation of Basic Ignition including the operation and service of the charging systems both A.C. and O.C. operation and service of current starting systems. Tests and adjustments are made on live vehicles whenever possible. (6 hours per week)

Auto. Mech. 130 Engine Rebuilding 3 credit hours

Prerequisite: Engines and Carburetion 105

Specialized instruction in procedures to completely rebuild an engine. Mechanical operations such as cylinder boring, piston service, rod and cap reconditioning are stressed. Completed engine is tested for performance on dynamometer. (6 hours per week)

Auto. Mech. 200 Diagnosis and Repair 4 credit hours

A detailed study in diagnosis procedures that are used in dealerships and garages. Shop work will be based upon diagnosis and will follow the pattern of most commercial garages. (9 hours per week)

Auto. Mech. 205 Dynamometer Operation 4 credit hours

Specialized instruction in chassis and engine dynamometer operation. Basic methods of testing horsepower and torque capacities at engine and rear wheels will be studied. (9 hours per week)

Auto. Mech. 140 Transmission and Power Trains 3 credit hours

A detailed study of construction, operation, and service techniques for conventional driveline units. Students will receive practical experience on passenger cars and light trucks. (6 hours per week)

Auto. Mech. 150 Carburetion and Tune-up 3 credit hours

Prerequisite: Basic Ignition 100 and Engines
and Carburetion 105

Theory of operation and the diagnosis and service of one, two, and four barrel carburetors are covered, as well as service procedures for complete tune-ups. Modern test equipment and procedures are stressed. (6 hours per week)

Auto. Mech. 210 Basic Service Repair 3 credit hours

A detailed study of service procedures used on new car inspection and adjustment. Students will also repair, replace, and adjust door latches, locks, windows, and window regulators. (6 hours per week)

Auto. Mech. 215 Engine Diagnosis 4 credit hours

Prerequisite: Carburetion and Tune-Up 150

Diagnosis of engines and components with the latest test equipment and procedures. The engine, cranking systems, fuel system, ignition system, and charging systems are covered, as well as the equipment needed to make the correct diagnosis. (9 hours per week)

Auto. Mech. 220 Automotive Air Conditioning 3 credit hours

Specialized instruction in the operation and service of automotive air conditioning, including diagnosing and charging of units on live vehicles. (6 hours per week)

Auto. Mech. 225 Automatic Transmissions 3 credit hours

A detailed study of automatic transmissions including principles of operation and repair procedures. Classroom instruction is coordinated with experience in servicing live units. (6 hours per week)

Auto. Mech. 230 Suspension Systems 3 credit hours

Prerequisite: Wheel Balancing and Alignment 120

Nomenclature, theory, and service of the suspension systems on modern passenger cars and light trucks is covered in classroom with service performed on live vehicles. (6 hours per week)

Auto. Mech. 160 Power Plants 4 credit hours

Study of construction, operation, parts and service procedure for two and four-cycle engines, cooling systems, lubrication systems and clutches. Instruction will be given on the use of special equipment and power plant hand tools. (9 hours per week)

CIVIL TECHNOLOGY

Civ. Tech. 100 Elementary Surveying 3 credit hours

An introductory course designed to cover surveying methods of measuring distance, angles, and elevations. Practical problems in the use of surveying equipment are given. Care of surveying equipment is a part of this course. The importance of note taking is stressed. (6 hours per week)

Civ. Tech. 200 Advanced Surveying 4 credit hours

Applied engineering surveys, stadia measurement of topographic details, construction surveys, and more advanced land survey problems are given by actual field problems. (8 hours per week)

Civ. Tech. 201 Building Service Systems 5 credit hours

A basic study of mechanical and electrical systems used in buildings to provide comfort and utility within the structure. (9 hours per week)

Civ. Tech. 203 Construction Methods and Equipment 3 credit hours

An introductory study of methods to determine quantities of materials, equipment, labor, and money required for construction projects. It includes characteristics and capabilities of work equipment, methods of obtaining unit costs of in-place construction, and field reporting practices and responsibilities of field inspection. (6 hours per week)

Civ. Tech. 205 Contracts and Specifications 3 credit hours

Instruction is given in the accepted forms of contracts and in the methods of writing specifications. A number of previously drawn contracts and specifications are discussed. Specifications for such construction materials as lumber, steel, brick and others are discussed. Office procedures are a part of this course. (3 hours per week)

Civ. Tech. 207 Drainage and Geology 3 credit hours

A study of the basic theory of the hydraulics of flow in pipes and in open channels including also the hydrology of drainage areas, storm water runoff and stream-flow analysis. Design concepts and techniques cover sub-surface drainage and storm drainage structures, such as ditch checks, conduit systems, bridges and culverts. (6 hours per week)

Civ. Tech. 209 Estimating Construction Costs 3 credit hours

Introduction to the functions and operations of a construction office, including planning, scheduling, estimating, purchasing, cost accounting, and control. (6 hours per week)

Civ. Tech. 211 Highway Materials 3 credit hours

Initial concepts of soil characteristics and origin are contrasted with rock and its characteristics, both as a source of aggregates and of concrete. Emphasis, especially in the laboratory, is given to applications involving soil classifications and testing procedures and practices. (6 hours per week)

Civ. Tech. 213 Highway Materials 3 credit hours

Portland cement, its properties and use in concrete, is considered in this course. The student is given applications in the field of materials, quality control, and adherence to specifications; laboratory and field procedures for concrete testing according to standard specifications are studied. (6 hours per week)

Civ. Tech. 215 Photogrammetry 4 credit hours

Study and application of aerial photographs in the preparation of topographic maps. The student studies the development of instruments and methods of utilizing the data in the photographs for surveying and mapping purposes. (8 hours per week)

Civ. Tech. 217 Reinforced Concrete Construction 4 credit hours

Studies of the properties of reinforced concrete and its capability to carry stress in designs involving columns, beams, and slabs. (6 hours per week)

Civ. Tech. 219 Route Surveys and Design 3 credit hours

The basic elements needed in the design of transportation systems of all kinds. Reconnaissance, preliminary and construction surveys for routes of all kinds, is included. Circular curves, compound and reverse curves, parabolic curves, transition spirals and spiraled compound curves are studied. (6 hours per week)

Civ. Tech. 220 Route Surveys and Design 4 credit hours

The skills acquired in Route Surveys and Design 220 are used to develop plans which cover the design of routes of all kinds: railroads, highways, pipelines, air transport, and waterways. This course acquaints the student with sound engineering principles used in route location and design. (8 hours per week)

Civ. Tech. 225 Soils and Foundations 3 credit hours

Construction practices of soil, foundation, and earth structures. Investigation of physical characteristics of Portland cement and concrete, design of concrete mixes, soils testing and analysis, standard tests and specifications. (6 hours per week)

Civ. Tech. 230 Topographic Drawing 5 credit hours

A course designed to give the student the elements of topographic drawing. The preparation of topographic maps, drawings of real estate sub-divisions and plotting traverses and contours is given in practical problems. Symbols are studied. (9 hours per week)

COMMERCIAL ART

Com. Art 100 Lettering and Layout 3 credit hours

Appreciation of relationship of lettering and typography to layout design. Skills and techniques of drawing letter forms and letter spacing. (6 hours per week)

Com. Art 101 Advertising Design 3 credit hours

Analysis and application of fundamentals of design to layout and advertising art problems. Experimentation in expressive graphic visualization of ideas and symbols. Exploration through use of various media and techniques. (6 hours per week)

Com. Art 103 Lettering 3 credit hours

Comprehensive and finished lettering techniques, mechanical and freehand. Methods of indication of typography in layout, formal and informal scripts. (6 hours per week)

Com. Art 105 Rendering 3 credit hours

Elements in perspective, contour drawing, light and shade and composition. Develops the skills necessary to the rendering of merchandise. (6 hours per week)

Com. Art 200 Graphics (Printmaking) 3 credit hours

The study of basic hand printing techniques in the fine arts area. Lithography, etching, wood engraving, wood block, and silk screen printing is studied. The student is made aware of the qualities and the relationship of the printed matter to commercial printing used in advertising. (6 hours per week)

Com. Art 201 Advertising Design 3 credit hours

Advertising layout as applied to practical problems in designing for newspapers, national and trade magazines. Emphasis on professional presentation of roughs, visuals and comprehensives. Preparation of finished art for engraving and printing. (6 hours per week)

Com. Art 203 Visual Merchandising 3 credit hours

Application of the principles of three-dimensional design and construction as they apply to all phases of merchandising display and packaging. Aspects of consumer appeal are taught. (6 hours per week)

Com. Art 205 Rendering 3 credit hours

Advanced study of merchandise renderings for commercial advertising application and reproduction. Emphasis is placed on developing skills in the use of dry and wet media, in black and white and color. (6 hours per week)

Com. Art 207 Advertising Theory and Production 3 credit hours

Study of the advertising field, business procedures, methods of reproduction, quantity and quality control in the graphic arts. Further study of typography, type-setting, estimating and various copy fitting techniques. (6 hours per week)

Com. Art 209 Spot Illustration 3 credit hours

Spot drawing for magazines, newspapers and direct mailing advertising. Pen and ink, black and white, wash and color. (6 hours per week)

Com. Art 211 Basic Photography 3 credit hours

Theory and Practice of Photography. Basic knowledge and skill in use of photographic equipment and materials while photographing a variety of technical and artistic subjects. (6 hours per week)

Com. Art 213 Advertising Photography 3 credit hours

Study and exploration of photography as a means of expressive communications. Creative manipulation of light, cameras, paper, films, developing, printing, enlarging, copying, and retouching techniques as related to advertising art. (6 hours per week)

DRAFTING

Draft. 200 Architectural Drafting and Design 3 credit hours

A beginning course combining architectural graphics and small home design. Preparation of drawings for a small house to include the plot, floor plans, elevations, sections, foundation plan, and roof plan. (6 hours per week)

Draft. 201 Architectural Drafting and Design 3 credit hours

The working and detail drawings, isometric, perspective, and framing drawings will be prepared for the house designed in Architectural Drafting and Design 200. (6 hours per week)

Draft. 203 Architectural Drafting and Design 3 credit hours

Working drawings of structural systems, mechanical equipment, plumbing, heating, and electrical systems. Drawings for a small commercial building will be developed. (6 hours per week)

Draft. 210 Basic Mechanisms 4 credit hours

A course dealing with the analysis of the motion characteristics of a mechanism of existing design and the application of the study in the design of a mechanism to provide desired motion characteristics. (8 hours per week)

Draft. 115 Blueprint Reading 3 credit hours

Interpretation and reading of blueprints. Development of the ability to read and interpret various industrial drawings. Information on the basic principles of lines, views, dimensioning procedures, and notes. (3 hours per week)

Draft. 120 Blueprint Reading 3 credit hours

Further practice in interpretation of blueprints as they are used in industry. Study of prints supplied by industry. Making plans of operations. Introduction to drafting room procedures; sketching as means of passing on ideas, information and processes. (3 hours per week)

Draft. 215 Electro-Mechanical Drafting 3 credit hours

A combination of electronic, electrical and mechanical drafting is taught in the course. Industrial machine tools using electro-mechanical methods are studied. Field trips are taken to industry using machines employing electro-mechanical methods. (5 hours per week)

Draft. 216 Electro-Mechanical Drafting 3 credit hours

A continuation of Electro-Mechanical Drafting 215 with more practical problems worked with a minimum of supervision. (5 hours per week)

Draft. 220 Machine Drafting and Design 4 credit hours

A course in which the student will receive instruction in designing such machine elements as bearings, clutches, shafts, screws, rivets, bushings, fly-wheels, belts, gears, cams and springs. Selection of materials to be used is discussed. Attention is given to loads of various types, shrink fits, stresses and other factors influencing the design of machines. A machine design problem is given incorporating design and drafting procedures. (8 hours per week)

Draft. 225 Structural Drafting and Design 3 credit hours

This course is an introduction to elementary structural analysis, detailing and design. The student will become familiar with basic analysis, detailing and design procedures, specifications and building codes, and proper use of handbooks where applicable. Work with timber design will be stressed as well as the economic aspects of structural applications. (8 hours per week)

Draft. 226 Structural Drafting and Design 3 credit hours

A natural extension of Structural Drafting and Design 225, intended to help the student achieve greater facilities in his basic skills previously acquired. The student is given selected problems applicable to modern structural practices. A minimum amount of supervision is given the student as solution of problems are reached. (6 hours per week)

Draft. 230 Structural Drafting and Design 4 credit hours

A continuation of Structural Drafting and Design 226. More advanced problems are studied. Emphasis is placed on designs and drafting procedures currently being used. Visits to steel companies, consulting firms and on-the-job situations enhance the students' knowledge. (8 hours per week)

Draft. 100 Technical Drawing 3 credit hours

Basic drafting techniques. Lettering, line work, use of drafting instruments and orthographic projection principles. Visualization is stressed. Practical problems are given. (6 hours per week)

Draft. 105 Technical Drawing 3 credit hours

The application of orthographic projection principles to the more complex drafting problem. Both detail and assembly drawings are made involving the basic machine elements such as screws, keys, pins, rivets, and springs. Tool design is introduced. Working drawings of gears and cams are made. The student learns to make details from designer's layouts. The use of the A.S.A. standard welding symbols and various charts and graphs is made by the student. (6 hours per week)

Draft. 110 Technical Drawing 3 credit hours

Graphical analysis of space problems involving points, lines, planes and a combination of these. Practical design problems will be stressed with analytical verification where applicable. Visualization will be stressed on every problem. (6 hours per week)

Draft. 240 Technical Project 1 to 5 credit hours

Individual assignments in a carefully selected project will be made for each student during this quarter of work. This project provides an opportunity to initiate a project and complete the project during the quarter. This course places the responsibility upon the student to solve a significant problem with minimum of teacher assistance. To determine how the material covered in the various courses in technology is interrelated, the student is required to integrate the knowledge obtained throughout the program. (hours arranged)

Draft. 250 Tool Design 4 credit hours

This course consists of designing and laying out cutting tools, gauges, simple jigs, fixtures, and dies. Mass production methods are discussed to help the student gain knowledge and experience necessary to design tools commonly used in modern manufacturing. (8 hours per week)

Draft. 251 Tool Design 4 credit hours

A design problem is given the student. Through what has been learned in Tool Design 250, the student completes all drawings required for final production. (8 hours per week)

ELECTRONIC TECHNOLOGY

El. Tech. 100 Basic Electricity 4 credit hours

A study of current flow and direct current circuits. The course presents work with magnetic circuits and introduces time varying currents. This course utilizes mathematics tools as they are developed in the mathematics course. It is strongly laboratory-oriented to develop knowledge and skills. (9 hours per week)

El. Tech. 101 Circuit Analysis, AC and DC 4 credit hours

A continuation of Basic Electricity emphasizing AC circuit theory and both AC and DC network theorems. This course provides the background needed to analyze complex networks with both active and passive elements present. (9 hours per week)

El. Tech. 103 Communication Circuits 4 credit hours

A continuation of the Electronic Amplifiers course covering class C power amplifiers, oscillators modulation, small signal tuned amplifiers, and detector circuits. Emphasis is on using transistors in communication circuits and the underlying principles of operation of the various classes of circuits studies. (9 hours per week)

El. Tech. 200 Communication Systems 4 credit hours

A continuation of the Communication Circuits course covering transmitters, receivers, transmission lines, antennas, and introducing microwave systems. This course emphasizes systems used to transmit information from one point to another using radio frequency techniques. (6 hours per week)

El. Tech. 205 Control Circuits and Systems 4 credit hours

An investigation of various control circuits, commonly employed in industry. These circuits are then used in systems, and various methods of systems analysis are used to predict the performance of a complete system. (6 hours per week)

El. Tech. 110 Electronic Amplifiers 4 credit hours

A continuation of Electronic Devices. Many of the devices studied in the first semester are used in forming amplifier circuits. Amplifiers, both transistor and tube types, are covered with emphasis on methods of analysis and design procedures. A student should be capable of limited design of amplifiers to specifications using either tubes or transistors upon completion of this course. (9 hours per week)

El. Tech. 210 Electronic Design and Fabrication 3 credit hours

A course directed toward teaching proper chassis layout and equipment arrangement (packaging) and toward building a functional electronic unit of some kind. Modern printed circuit layout and fabrication are covered. Throughout the curriculum little emphasis has been placed on construction details -- thus bread-board techniques often have been used to save valuable laboratory time throughout the curriculum. The student at this point has a firm foundation in electronics and can undertake the problems of proper design and fabrication of electronic equipment. (6 hours per week)

El. Tech. 115 Electronic Devices 4 credit hours

A study of electronic devices; how they work, nomenclature, materials, apparatus, and characteristics. Both tube characteristics and solid state device characteristics are covered. This course utilizes the mathematical tools as they become available and the ideas of electron flow and circuit analysis as they are developed in the Basic Electricity course. Laboratory techniques and skills are taught by extensive use of a variety of devices and equipment. (9 hours per week)

El. Tech. 215 Instruments and Measurements 4 credit hours

A course concerned with the accuracy of measurements, how instruments work, proper use of instrument, and calibration techniques. Emphasis is placed on how to use and calibrate general laboratory equipment. Measuring methods and techniques for various frequency ranges are studied. (9 hours per week)

El. Tech. 220 Introduction to Computers 4 credit hours

A course that employs principles from almost all previous technical courses as it familiarizes the student with both analog and digital computers. Emphasis is placed on principles of operation and on circuitry used in these computers. The binary number system and Boolean algebra are covered. Computer use for measurement, comparison logging, data storage and retrieval, and system control is studied. (9 hours per week)

El. Tech. 225 Introduction to New Electronic Devices 2 credit hours

A study of new electronic devices, materials, techniques, and applications. This is a unique course, since it depends heavily on the judgment of the teaching staff. The subject matter coverage will change rapidly as new developments in industry are announced. It may be noted that a few of the topics appearing in the list for this course are contained elsewhere in the curriculum (such as tunnel diodes and field effect transistors). It is expected that new information will be developed through this course and will find a permanent, appropriate position in the curriculum. (3 hours per week)

MACHINE SHOP

Mach. Shop 100 Layout and Bench Assembly 4 credit hours

Deals primarily with layout procedures used in the machine shop. Use of scribe, steel rule, bevel protractor, vernier scale and punches. The identification, care and use of basic hand tools used in bench work is stressed. (9 hours per week)

Mach. Shop 101 Layout and Bench Assembly 4 credit hours

A continuation of Layout and Bench Assembly 100. (9 hours per week)

Mach. Shop 105 Manufacturing Processes 4 credit hours

Modern machine tools of industry. Thorough study is made of industrial situations. Field trips will be a part of this course as well as practical work on machine tools. Basic parts of machines are made on the lathe, shaper, milling machine and drill press. (9 hours per week)

Mach. Shop 107 Structure of Metals 3 credit hours

Elementary and practical approach to metals, their structure, markings, classifications and uses. Interpretation of properties and specifications of steels by use of manuals, catalogs, and charts. (3 hours per week)

Mach. Shop 110 Manufacturing Processes 4 credit hours

Advanced work on the engine lathe, turning, boring and threading operations. Grinding operations and set-ups, milling machine operations and set-ups, and shaper operations and set-ups are given. Introduction to indexing terminology with additional processes on calculations stressing the cutting and measuring of spur, helical, and worm gears and wheels. (9 hours per week)

Mach. Shop 115 Machine Maintenance 4 credit hours

Maintaining equipment and tools including servicing and repair of lathes, milling machines, shapers, grinders and benchworking tools. (9 hours per week)

Mach. Shop 120 Inspection of Shop Products 3 credit hours

Inspection procedures are studied. Principles, methods, techniques and skills essential for inspection room practice and on-the-job situations. The student is introduced to the various precision instruments used in inspection situations. (6 hours per week)

Mach. Shop 125 Heat Treatment and Testing 3 credit hours

Working knowledge of the methods of treating ferrous and nonferrous metals. The effects of hardening, tempering, and annealing upon the structure and physical properties of metals. Students will be given the opportunity to acquaint themselves with the equipment and processes of heat treating and testing procedures. (6 hours per week)

Mach. Shop 205 Manufacturing Processes 4 credit hours

Development of class projects using previously learned procedures in planning, blueprint reading, and machine operations. Students will work together on these projects. (9 hours per week)

Mach. Shop 210 Practical Automation 3 credit hours

A combination lecture-laboratory course designed to acquaint the student with automated machines used in the metal working field. Guest lecturers, films, and field trips will be a part of this course. (6 hours per week)

Mach. Shop 215 Inspection of Shop Products 3 credit hours

A continuation of Inspection of Shop Products 120. The use of inspection drawings specifically designed to use tolerances when inspecting final machined tools. Assembly-line procedures are taught. (6 hours per week)

Mach. Shop 220 Pattern Making 3 credit hours

Fits, assembles and hand finishes castings and parts in making metal foundry patterns, using handtools and analyzing specifications according to knowledge of pattern making methods. Studies blueprint of part to be cast, computes dimensions, and plans sequence of operations. (6 hours per week)

Mach. Shop 225 Manufacturing Processes 4 credit hours

The student learns and studies mass production methods, interchangeability of machined parts, machine tool standards and foundry practice. (9 hours per week)

Mach. Shop 230 Toolmaking 4 credit hours

The student is introduced to machine shop toolmaking. Specifications are analyzed according to knowledge of tool designs, shop mathematics, machining, and layout and assembly procedures. Drill press and hand tools are used as well as grinders, lathes, milling machine and shaper. (9 hours per week)

Mach. Shop 235 Pattern Making 3 credit hours

A continuation of Pattern Making 220. Blueprints are studied of parts to be cast, dimensions are computed, and sequence of operations are planned. Templates for layout and inspection are made to specifications. (6 hours per week)

Mach. Shop 240 Toolmaking 4 credit hours

A more detailed study is made of tool and die-making practices. Makes set-ups and operates machine tools to assure assembly into assemblies or mechanisms. (9 hours per week)

MECHANICAL TECHNOLOGY

Mech. Tech. 200 Estimating Manufacturing Costs 3 credit hours

This is a basic course which presents information concerning the various phases of a production cost estimating program. Instruction covers development and promotion costs, construction and depreciation costs, estimating first costs, estimating operation costs, financial return and yield and instruction in the problems of replacement. (6 hours per week)

Mech. Tech. 205 Fundamentals of Hydraulics and Pneumatics 3 credit hours

The basic theories of hydraulics and pneumatic systems. Combinations of systems in various circuits. Basic designs and functions of circuits and motors, controls, electrohydraulic servo-mechanisms, plumbing, filtration, accumulators, and reservoirs. (6 hours per week)

Mech. Tech. 210 Industrial Specifications 4 credit hours

The student is given the opportunity to study industrial standards and specifications through analyzing parts, catalogs, industrial detail drawings and designs, engineering standards, tool standards and the machinery handbook; problems will be solved using these media. (6 hours per week)

Mech. Tech. 100 Measurements 3 credit hours

A study of measuring instruments commonly encountered by the technician. Included are scales, rules, tapes, micrometers, gauges, meters, and other measuring instruments. Practical job situations will be studied. (3 hours per week)

Mech. Tech. 215 Methods and Operations Analysis 4 credit hours

A course covering the accepted and proven techniques of work measurement and outlines numerous helpful controls in establishing fair motion standards. A greater insight into the techniques used by industry is taught by actual motion studies on some of the more common machine tools. Discussion topics are: wage incentive systems, motion study, and other functions of manufacturing. (6 hours per week)

Mech. Tech. 216 Methods and Operation Analysis 3 credit hours

A continuation of Methods and Operation Analysis 215. Production forecasting, product development, control of materials, routing, scheduling, dispatching, and follow-up are studied. (6 hours per week)

Mech. Tech. 220 Plant Layout and Material Handling 3 credit hours

The course centers upon the fundamental principles of material handling and the factors affecting plant layout. Building planning and arrangement of machinery, process layout schemes, and flow diagrams are studied. (6 hours per week)

Mech. Tech. 225 Production Planning and Control 4 credit hours

A study of various production problems and activities associated with them. Available texts and engineering handbooks are used for reference. Visits to manufacturing industries are made. (6 hours per week)

Mech. Tech. 230 Properties of Materials 4 credit hours

Instruction is given in the physical, electrical and magnetic, thermal, and chemical properties of selected metallic and non-metallic materials and their use in industry. (6 hours per week)

Mech. Tech. 235 Quality Control 3 credit hours

The course covers statistical techniques as applied to industrial situations to reduce costs and improve quality. The use of measuring gauges and other precision instruments for determining quality is included. Frequency distributions, measures of dispersion, and control charts are studied. (6 hours per week)

RADIO AND TELEVISION REPAIR

Rad. & TV 100 Fundamentals of Radio & Electrical Theory .. 5 credit hours

A study of electronic devices; how they work, nomenclature, materials, apparatus, and characteristics. The course utilizes extensive laboratory procedures. Electron flow and circuit analysis are provided through construction of typical circuit boards. Soldering techniques and schematic diagrams are studied. (9 hours per week)

Rad. & TV 105 Receiving Circuits and Vacuum Tubes 5 credit hours

The vacuum tube, reading wave form pictures on an oscilloscope, detector circuits, amplifiers, the transformer, rectification and control of I.F. output are studied. Servicing and repair principles are applied to radio and television. Students conduct experiments applying radio and television fundamentals. (9 hours per week)

Rad. & TV 110 Power Supplies, Tuning and Loudspeakers 4 credit hours

AC - DC power supplies, converting electrical energy up to sound, the microphone, electrical circuits of a public-address system, and multi-loudspeaker installations. Servicing and repair techniques. (8 hours per week)

Rad. & TV 120 Radio-Telegraph, Telephone Transmitters 3 credit hours

The oscillator-amplifier transmitter, voice modulation of radio frequency waves, the low-power radio-telephone transmitter and methods of analysis and design procedures are taught. (6 hours per week)

Rad. & TV 130 Television Theory, Servicing and Repair 6 credit hours

The television system, sound system, deflection circuits, video amplifiers, RF and IF amplifiers are studied through theory and applied laboratory procedures. Troubleshooting techniques. (18 hours per week)

SMALL ENGINE MECHANICS

S.E. Mech. 100 Introduction to Small Engines 3 credit hours

Rules and regulations governing safety and housekeeping are taught. Students develop basic understanding and skills of small engine maintenance and repair. (6 hours per week)

S.E. Mech. 105 Four Cycle Engines 4 credit hours

Proper procedure for servicing and repair of four-stroke cycle engines, including major engine overhaul. (9 hours per week)

S.E. Mech. 110 Two Cycle Engines 4 credit hours

Proper procedure for servicing and repair of two-stroke cycle engines, including major engine overhaul. (9 hours per week)

WELDING AND FABRICATION

Weld. 100 Fundamentals of Welding 3 credit hours

A basic combination welding course dealing with oxy-acetylene and arc welding. Designed to meet the needs of students enrolled in Auto Body Repair, Auto Mechanics, Detailer and Draftsman. Typical applications are made in a laboratory setting. (6 hours per week)

Weld. 105 Welding and Fabrication 6 credit hours

The use of oxy-acetylene and arc welding equipment to perform such operations as butt, lap, and fillet welds using bare and shielded, straight polarity and reverse polarity electrodes on mild steel plate are taught the use of filler rods for oxy-acetylene operations and Cast iron welding and brazing and silver soldering are included. (15 hours per week)

Weld. 110 Welding and Fabrication 6 credit hours

Prerequisite: Welding and Fabrication 105

Advanced instruction in oxy-acetylene and arc welding with emphasis on "out of position" welded joints in both mild steel plate and pipe. Procedures are covered for cutting, beveling, fabricating and welding various joints on steel plate and pipe. Related theory, codes, and standards are included. (15 hours per week)

Weld. 115 Welding and Fabrication 6 credit hours

Prerequisite: Welding and Fabrication 110

Tungsten-inert-gas shield arc welding with manually operated torch on such metals as aluminum, mild steel, and stainless steel. Technical theory directly related to tig welding including the composition and properties of metals. (15 hours per week)

Weld. 200 Welding and Fabrication 6 credit hours

Prerequisite: Welding and Fabrication 115

Specialized oxy-acetylene welding, inert-gas-shielded arc, and consumable carbon dioxide welding. Emphasis is given the welding of various metals such as aluminum, stainless steel, high alloy steels, and cast iron. Procedures for welding of the exotic metals such as titanium, tantalum, columbium, zirconium, and molybdenum are included. (15 hours per week)

**DIVISION
OF
SCIENCE AND MATHEMATICS**

BIOLOGY

Biol. 111 Introduction to Biology.....5 credit hour

Introductory course dealing with the fundamental properties of living things. A basic biological survey course designed to help the student understand man as he is related to his changing environment. May be taken by non-science majors but required for biology majors. (7 hours per week)

Biol. 112 General Biology.....5 credit hour

Prerequisite: Biol. 111

Fundamental principles of animal life; survey of all the phyla of the animal kingdom; the place of man in the world of living things; and the relationships of man to other organisms. (7 hours per week)

Biol. 113 General Biology.....5 credit hour

Prerequisite: Biol. 112

Fundamental principles of plant life; and a survey of the divisions of the plant kingdom. (7 hours per week)

Biol. 123 Anatomy and Physiology.....4 credit hour

Detailed study of gross and microscopic anatomical structure of the human body and the function to structure relationships. (5 hours per week)

Biol. 124 Anatomy and Physiology.....4 credit hour

Prerequisite: Biol. 123

A continuation of Anatomy and Physiology. (5 hours per week)

Biol. 130 Basic Health Science.....4 credit hour

A core biological science course for health science students. Subject matter from anatomy, physiology, bacteriology, microbiology, and pathology are studied with reference to the appropriate health science program. (5 hours per week)

CHEMISTRY

Chem. 101 Fundamental Chemistry.....3 credit hour

A basic applied course in the fundamentals of chemistry dealing with the states of matter, laws of chemical combination, chemistry of metals and non-metals and their compounds and other basic principles. Laboratory experiences will be related to the student's particular occupational interest. (5 hours per week)

Chem. 111 Introduction to Chemistry.....5 credit hours
Introductory study of principles of inorganic and organic chemistry; properties of matter, nature and chemical changes. This course may be taken by the student wishing to improve his background before taking General Chemistry but is required for chemistry majors. (7 hours per week)

Chem. 112 General Chemistry.....5 credit hours
Prerequisite: Chem. 111

Beginning general college chemistry course which includes the laws of chemical combination, states of matter, atomic and molecular structure, bonding and other basic principles. (7 hours per week)

Chem. 113 General Chemistry.....5 credit hours
Prerequisite: Chem. 112

Continuation of General Chemistry 112, including ionic equilibria and qualitative analysis. The accompanying laboratory will include the qualitative identification of unknown substances, and the quantitative determination of known substances using elementary instrumental techniques. (7 hours per week)

EARTH SCIENCE

Geol. 111 Introduction to Geology.....4 credit hours
An introductory study of geology which provides a broad perspective of the science. Practical training in earth science, including work with minerals, rocks, fossils, maps, meteorology, astronomy and oceanography. (5 hours per week)

Geol. 112 Physical Geology.....4 credit hours
Prerequisite: Introduction to Geology 111

Physical features of the earth, materials, structure and the geographic processes involved in their development along with an interpretation of topographic maps and the study of common rocks and minerals. (5 hours per week)

Geol. 113 Historical Geology.....4 credit hours
Prerequisite: Physical Geology 112

History of the earth from its origin to the present dealing with North America as a typical continent. Covers the formation of mountains, plains and evolution of life on land and water. Includes the identification of fossils and interpretation of geologic maps. (5 hours per week)

MATHEMATICS

Mathematics Laboratory.....Non-credit

An opportunity for students to work on any mathematical difficulty or project under the direction and supervision of the mathematics staff. Students may avail themselves of this opportunity voluntarily or may be referred to the laboratory by an instructor.

Math. 100 Developmental Mathematics.....3 credit hours

A review of mathematics involving whole numbers, fractions, decimals and percentages. This course is intended to develop background for students who have had little or no previous training in mathematics. (3 hours per week)

Math. 101 Notational Systems.....1 credit hour

An independent study program designed for all science students, covering the metric system, units and dimensions, exponential numbers, the slide rule, graphic display and temperature. (1 hour per week)

Math. 102 Basic Applied Mathematics.....3 credit hours

Practical number theory. Analysis and application of arithmetic processes, fractions, decimals, powers and roots, percentages ratio and proportion. Plane and solid geometric figures used in industry; measurement of surfaces and volumes. Introduction to algebra used in trades. (3 hours per week)

Math. 103 Basic Applied Mathematics.....3 credit hours

Continuation of Math. 102. Application to problems in trigonometry. Study of logarithms, functions of an angle, and solution of practical problems involving the right triangle and oblique triangles. (3 hours per week)

Math. 105 Introductory Algebra.....3 credit hours

Prerequisite: Developmental Mathematics 100 or equivalent mathematics background.

Intended for the student who has not had high school algebra or who needs review. An introduction to the basic concepts of algebra sets, properties of the real number system, operations on algebraic expressions, linear equations and systems of quadratic equations. (3 hours per week)

Math. 106 Introductory Geometry.....3 credit hours

Prerequisite: Introductory Algebra 105

Review of simple geometric configurations, basic definitions and axioms for a logical system, nature of deductive reasoning, rectangular coordinates, directed line segments, loci, equation of the line and circle, three-dimensional figures, planes, and geometry of the sphere. (3 hours per week)

ch. 107 Introductory Trigonometry.....3 credit hours

Prerequisite: Introductory Algebra 105

Review of basic functions of angles, logarithms, and solutions of triangles. Exercises are applicable to occupational interests and preparatory to higher level trigonometry courses. (3 hours per week)

ch. 110 Mathematics for Business and Industry.....3 credit hours

Consists of an integrated development of the structural concepts and practical computational skills in numbers and arithmetic that are commonly encountered in business and industrial usage. The discussions are supplemented with typical problems concerning percentages, fractions, ratios and proportions, graphs, interest, banking, insurance, taxes and investments. (3 hours per week)

ch. 111 College Algebra.....5 credit hours

Prerequisite: Introductory Algebra 105 or High School Algebra

Fundamentals of algebra, linear functions, exponents and radicals, quadratic equations, ratio and proportion, probability, theory of equations and determinants. (5 hours per week)

ch. 112 College Trigonometry.....5 credit hours

Prerequisite: College Algebra 111 or two years of high school algebra

Emphasizes trigonometric functions of angles; logarithms; graphs of circular functions; solutions of triangles; trigonometry identities and equations. (3 hours per week)

ch. 113 Analytic Geometry and Calculus.....5 credit hours

Prerequisite: College Algebra 111 and College Trigonometry 112

Differentiation and integration of elementary algebraic functions, the plotting of curves, conic sections, plane analytic geometry using Cartesian coordinates, areas and improper integrals. (5 hours per week)

ch. 120 Statistics for Business and Industry.....3 credit hours

Prerequisite: Introductory Algebra 105

Designed to provide an opportunity for the business student to develop critical and functional understandings of statistical data. Attention is given to the basic concepts of statistical methodology and procedures which are used as a basis in the business world. The principles of statistical investigation, unique in data presentation, measures of central tendency, etc., are applied in their practical business application. (3 hours per week)

PHYSICS

Phys. 101 Fundamental Physics.....3 credit hours

A basic applied course in the fundamentals of physics with laboratory experience related to the student's occupational interests. (5 hours per week)

Phys. 103 Physical Science.....3 credit hours

A core science course for health science students and others, which includes basic understanding of the science method. Subject matter will be drawn from physics, chemistry and pharmacology. The emphasis is on science skills such as: observation, evaluation, experimentation, comparison and reporting. (5 hours per week)

Phys. 105 Radiation Physics.....4 credit hours

Provides the student with both specialized information on X-Ray equipment and the theoretical background to make it meaningful. Covered are: fundamentals of electrical and radiation physics and the basic principles underlying the operation of X-Ray equipment and auxiliary devices. (6 hours per week)

Phys. 111 Introductory Physics.....5 credit hours

Prerequisite: College Algebra 111 and College Trigonometry 112
or two years of high school algebra

A study of length, mass and time concentrates measurements; mechanics, work and power, motion, acceleration, and kinematics; properties of matter and heat are included. Designed for science majors and appropriate occupational studies programs. (7 hours per week)

Phys. 112 General Physics.....5 credit hours

Prerequisite: Introductory Physics 111 and College Trigonometry 112

A continuation of Introductory Physics 111, Mechanics, heat, electricity and magnetism, sound, light, and polarization are covered. Primarily for students in science or engineering. (7 hours per week)

Phys. 113 General Physics.....5 credit hours

Prerequisite: General Physics 112

A continuation of General Physics 112. The course includes the first and second laws of thermodynamics, sound waves, reflection, refraction, interference and atomic physics. (7 hours per week)

**DIVISION
OF
SOCIAL SCIENCES**

ANTHROPOLOGY

Anthro. 107 Religions of the World.....3 credit hour

A study of the religions of nonliterate peoples and of the great religions of the world from an anthropological perspective. Emphasis on the role of religion in the development of culture. (3 hours per week)

Anthro. 108 Human Evolution.....3 credit hour

An introductory study of the fossil evidence related to the evolution of man. Special emphasis is given to the evolutionary mechanics of race formation and the utility of anthropological factors in improving our understanding of the social problems of race. (3 hours per week)

NOTE: A three-quarter sequence in physical and cultural anthropology may be offered for interested college-transfer students during the 1969-70 academic year.

ECONOMICS

Econ. 107 Consumer Economics.....3 credit hour

A basic economics course covering personal and household finance; problems of consumer credit; taxes; insurance; mortgages; social security; Medicare; and other related topics. (3 hours per week)

Econ. 108 Labor Relations.....3 credit hour

Development, structure and philosophy of U. S. trade unionism; comparison with labor movements in other nations. Includes study of collective bargaining, public labor policies, union-management issues, productivity and wages, operation of the labor market and the role of organized labor in economic development. (3 hours per week)

Econ. 109 Fundamentals of Economics3 credit hour

An introductory survey and analysis of the American economic system as it affects the average citizen's function as an employee or a decision-making member of a business. Includes such factors as resources, business structure, markets, labor and finance. (3 hours per week)

Econ. 111 Principles of Economics.....3 credit hour

Study of the principles and theory of economics, including the American economic system, international economics and economic growth. Includes principles of money, banking, public finance, distribution of income, pricing and allocation of resources, volume of economic activity and other topics related to the nature and scope of economics. A three quarter sequence intended for students planning to specialize in business administration and for college transfer students. (3 hours per week)

- n. 112 Principles of Economics.....3 credit hours
 (continuation of Econ. 111 (3 hours per week))
- n. 113 Principles of Economics.....3 credit hours
 (continuation of Econ. 112 (3 hours per week))

GEOGRAPHY

- g. 107 Economic Geography.....3 credit hours
 Distribution, production and trade of the world's major mineral resources,
 manufacturing products and causes for the location of manufacturing. (3 hours
 per week)
- g. 108 Conservation.....3 credit hours
 Analysis of the problems facing man in the conservation of natural resources and
 implications for the future. (3 hours per week)
- g. 109 Urban Geography.....3 credit hours
 Introductory study of geographic factors related to the development of modern
 urban areas; population growth, land use and future planning. (3 hours per week)

NOTE: A three-quarter sequence in the fundamentals
 of physical and cultural geography may be
 offered for interested college transfer students
 during the 1969-70 academic year.

HISTORY

- st. 111 History of World Civilization.....3 credit hours
 Three quarter sequence covering the historical development of world civiliza-
 tion from ancient times to the present. (3 hours per week)
- st. 112 History of World Civilization.....3 credit hours
 (continuation of Hist. 111 (3 hours per week))
- st. 113 History of World Civilization.....3 credit hours
 (continuation of Hist. 112 (3 hours per week))

Hist. 150 Contemporary World History.....3 credit hours

Major historical developments in world history during the 20th Century, with particular emphasis on international problems of war, world government, conflicting economic and political ideologies and the emergence of nationalism in Latin America, the Middle East, Asia and Africa. (3 hours per week)

PHILOSOPHY

Phil. 107 Introduction to Philosophy.....3 credit hours

Basic philosophical principles, methods and theories as exemplified in the work of representative philosophers. Emphasizes analytical and speculative function to aid in understanding the world in which man lives and works. (3 hours per week)

Phil. 108 Logic.....3 credit hours

Introduction to the nature and techniques of deductive reasoning. Emphasis on modern methods of analysis, proof and presentation as applied in industry, business and government. (3 hours per week)

POLITICAL SCIENCE

Pol. Sci. 100 Introduction of Political Science.....3 credit hours

Basic principles of political science and government, including the general nature and purposes of governmental structure, the political process, types of political institutions and political behavior. (3 hours per week)

Pol. Sci. 111 American National Government.....3 credit hours

Study of the origins and nature of the United States constitution and the structure, powers, and functions of our modern national government. (3 hours per week)

Pol. Sci. 112 American State and Local Government.....3 credit hours

Forms and functions of state and local governments in the United States. Special attention is given to local-state-federal relationships, Colorado state government and the metropolitan Denver complex of municipal governments. (3 hours per week)

Pol. Sci. 150 Comparative Government.....3 credit hours

Prerequisite: Pol. Sci. 100

Introductory survey and analysis of 20th Century governmental structures, institutions, and political theories of major authoritarian and democratic states in Europe and Asia. (3 hours per week)

PSYCHOLOGY

- Psych. 100 Human Relations in Business and Industry.....3 credit hours
 evaluates the environment, the problems, and proposed guidelines in working
 effectively with associates and employees. It deals with intergroup relations,
 collective behavior, one-to-one association, and the relationship of these
 interactions to the operation and administration of a business or industrial
 enterprise. (3 hours per week)
- Psych. 101 Child Growth and Development.....3 credit hours
 introductory study of the first five years of a child's life. Emphasizes
 parental attitudes, home influences, play activities and other factors which
 aid in understanding individual development during early childhood. (3 hours
 per week)
- Psych. 102 Child Growth and Development.....3 credit hours
 continuation of Psych. 101, Child Growth and Development, with more intensive
 study of child psychology and development. (3 hours per week)
- Psych. 105 Child Guidance Techniques.....3 credit hours
 relates to speech and action on the part of adults responsible for children.
 considers voice, comparisons and competition, independence, reinforcement and
 suggestions, limits and the prevention of difficulties. (3 hours per week)
- Psych. 107 Psychology of Personal Development.....3 credit hours
 study of the processes involved in the adjustment of the individual to the
 problems of everyday living. Emphasis given to the study of the development of
 techniques of adjustment to meet conflict situations in the social environment.
 (3 hours per week)
- Psych. 111 General Psychology.....3 credit hours
 introduction to basic principles and methods in the scientific study of human
 behavior, including perception, motivation, learning, emotions, maturation and
 psychological development. Intended to meet occupational studies and college
 transfer requirements. (3 hours per week)
- Psych. 112 General Psychology.....3 credit hours
 continuation of Psych. 111 (3 hours per week)
- Psych. 113 General Psychology.....3 credit hours
 continuation of Psych. 112 (3 hours per week)

SOCIOLOGY

Soc. 111 Introduction to Sociology.....3 credit hours

Basic principles of sociology and analysis of social behavior, including man and culture, social institutions, social interaction and social change. Theoretical principles are related to contemporary social problems and societal change. (3 hours per week)

Soc. 112 Introduction to Sociology.....3 credit hours

Continuation of Soc. 111 (3 hours per week)

Soc. 113 Introduction to Sociology.....3 credit hours

Continuation of Soc. 112 (3 hours per week)

Soc. 120 Marriage and the Family.....3 credit hours

Designed for all students, the purpose of the course is to develop an understanding of the social role of marriage and family living and to promote stable marital relations. Special emphasis on courtship and preparation for marriage, conflict situations and adjustments between husband and wife, parent-child relationships, the family in the community and other factors related to successful family life. (3 hours per week)

Soc. 121 Minority Groups in American Society.....3 credit hours

Basic principles of group structure and behavior, historical development of race and ethnic groups and related social, economic and psychological factors which influence social stratification and its contemporary effect on minority groups. (3 hours per week)

Soc. 123 Juvenile Delinquency.....3 credit hours

Sociological and cultural aspects of late childhood and adolescence. Problems of the individual in his social environment and group forces which lead to maladjustment. Sociological principles for working with youth from the viewpoint of parent, teacher, police, social worker and youth organization leader. (3 hours per week)

FACULTY

Leland B. Luchsinger President
B.S., Texas Agricultural and Mechanical University
M.S., Texas Agricultural and Mechanical University
Ed.D., The University of Texas

DEANS

Theodore E. Albers Dean, Student Services
B.A., University of Denver
M.A., University of Denver
Ed.D., University of Colorado

E. Theodore Archuleta Dean, Business Services
B.A., University of Denver
M.A., Colorado State College

Joseph K. Bailey Dean, Occupational Studies
B.S., West Virginia University
M.S., West Virginia University
Ph.D., Ohio State University

John H. Swenson Dean, General Studies
B.A., Augustana College, Illinois
M.Ed., University of Colorado
Ed.D., University of Colorado

DIVISION DIRECTORS

Vivian Brockman (Mrs.) Director, Learning Materials Center
B.A., Claflin College, South Carolina
B.L.S., University of Wisconsin

S. Theodore Guttadore Director, Division of Business
and Management Occupations
B.S., Miami University, Ohio
M.B.A., University of Denver

Audrey A. Jones (Miss) Director, Division of Health Occupations
B.S., University of Utah
M.S., University of Washington

George T. Lyon Director, Division of Community
and Personal Service Occupations
B.S., Kansas State University
M.S., Kansas State Teachers College

Donald R. Mankenberg Director, Division of Industrial Occupations
B.A., Westmar College, Iowa
M.A., Colorado State University

Martin Van Dyke Director, Division of Science and Mathematics
B.A., Calvin College, Michigan
M.S., University of Denver
Ph.D., Colorado State University

COUNSELORS

Donald F. Carson Counselor, Student Services
A.A., Ventura Junior College, California
B.A., Colorado State College
M.A., Colorado State College

The selection of staff members was still in progress at the time of the printing of the 1968-69 catalog. A complete listing of the faculty will be prepared as a supplement to the catalog at a later date.

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