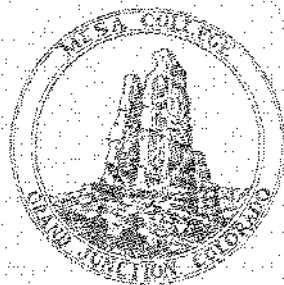


MESA COLLEGE

... *Catalog*



1947 - 1948

PLEASE BRING THIS CATALOG WITH
YOU WHEN YOU COME TO REGISTER

GRAND JUNCTION, COLORADO

foreword . . .

MESA COLLEGE LOOKS AHEAD

The first major improvement on the campus since the present building was erected is the occupation of the twenty-two dwelling units by married veterans and their families. To follow, a cafeteria and a classroom building will be built during the summer to care more adequately for the student body during the coming year. These two buildings will be completely equipped and ready for operation by the beginning of the Fall Quarter.

In addition, a shop building will be constructed which will serve the needs of veterans who desire such vocational courses as auto mechanics, electricity, radio, sheet metal, and similar work. These instructional facilities have been provided by the Federal Works Agency and are a part of the vast national program for the provision of facilities for veterans' education.

These material acquisitions have been accompanied by an enlargement of the faculty and the addition of courses which will make Mesa College, as never before, the intellectual, artistic, musical, and educational center for the entire western third of Colorado; it is the ambition of the college to participate in and to stimulate all types of advanced and continuation education for the youth of this area. The college hopes to assist in furthering cultural standards to a greater degree than ever before.

Grand Junction is geographically and industrially ideally located to fulfill these ambitions and hopes. Transcontinental airlines make daily stops and north and south airlines also serve the city. New schools, new business blocks, new theatres, new municipal projects, and a rapidly expanding population—all point in the direction of a vastly increased importance of Mesa College in the State's educational life.

More than all, however, is the past record of the college in providing a suitable junior college education to high school graduates. Approximately 5,000 students have entered the college since its inception in 1925. Hundreds have gone on successfully to complete their advanced degrees in colleges and universities of the United States. Hundreds more have been graduated and have taken their places in the commercial, industrial, family and community life—all much better equipped for having shared in college opportunities. Today, as in the past, Mesa College deems it a privilege to assist in the education "of all the children of all the people."

TABLE OF CONTENTS

CALENDAR	4
MESA COLLEGE: A Community Organization	5
MESA COLLEGE PERSONNEL	6-8
ADVANTAGES OF A JUNIOR COLLEGE	9
GENERAL INFORMATION	10
History, Location, Buildings	10
Housing	10-11
Student Activities	11-12
College-Community Relations	13
Expenses at Mesa College	13-14
Fees: Payment of, Refund of,	14
Scholarship, Loans, Employment	15
Organization for Instruction	15
School of Arts and Sciences	16
School of Commerce	16
Courses for Adults	17
ACADEMIC INFORMATION	17
Admission: Freshmen, Sophomores, Veterans	17-18
Special Students	18
Entrance Tests	18
Proficiency Examinations	18
Departments of Instruction	19
Courses of Study Requirements	19
Registration: Time of, Steps in,	19-20
Removal of High School Deficiencies	20
Graduation Requirements	20
Certificates, Diplomas, Degrees, Teaching Permit	21
Transfer of Credit	21
GENERAL REGULATIONS	22
Late Registration	22
Change of Program	22
Attendance	22
Student Load and Limitation; Course Continuation	23
Scholarship Standards	24
Examinations and Course Reports	24
Systems of Grades	24
Conditions and Incompletes	24
Withdrawal, Honorable Dismissal	24
COURSES OF INSTRUCTION	25
Agriculture	25-26
Art	26
Biology	27
Commerce	27-29
English Language, Literature, Speech	29-32
Foreign Language	32
Home Economics	33
Mathematics	33-35
Mechanical Drawing	35-36
Aeronautics	36
Music	36-37
Physical Education and Hygiene	38
Physical Science, Chemistry, Physics	38-39
Social Science	40
Social Science Survey	40
Economics	40
Education	40
Geography	41
History	41
Political Science	41
Psychology	42
Sociology	42
Trades and Industry	42-43
Related Training	43
SUMMER QUARTER	43

College Calendar . . .

SPRING QUARTER 1947.

March 18	Classes begin
May 28	Final examinations begin
May 30	Decoration Day holiday
June 6	Commencement

SUMMER QUARTER 1947.

June 16	Classes begin
July 4	Holiday
July 18	First term ends
July 21	Second term begins
August 22	Summer Quarter ends

FALL QUARTER 1947.

September 1	Credentials due
September 17-19	Pre-registration, former students
September 22	Registration begins
September 23-24	New student tests and counseling
September 25	Classes begin
October 6	Last day to change programs
October 23-24	C. E. A. meeting
November 27-28	Thanksgiving vacation
December 12	Pre-registration for Winter Quarter
December 15	Final examinations begin
December 19	Fall Quarter ends

WINTER QUARTER 1948.

January 3	Tests for new students
January 5	Registration
January 6	Classes begin
January 19	Last day to change programs
March 12-19	Pre-registration for Spring Quarter
March 22	Final examinations begin
March 25	Winter Quarter ends

SPRING QUARTER 1948.

March 29	Tests for new students
March 30	Registration
March 31	Classes begin
April 8	Last day to change programs
May 30	Decoration Day holiday
June 4	Final examinations begin
June 11	Commencement

SUMMER QUARTER 1948.

June 21	Registration
June 22	Classes begin
August 27	Summer Quarter ends

MESA COLLEGE

A COMMUNITY INSTITUTION

Mesa College is a democratic institution founded upon the principle that the community should provide education for all its members. It provides a cultural center for the community and recognizes its moral and social responsibility toward the students and adult population while it makes provisions for meeting educational and vocational demands made upon it.

PURPOSES

1. To provide a two-year course leading to entrance into the junior class for those who are to continue toward their specialization in a senior college or university; and in addition:
2. To furnish those for whom the junior college will complete their formal education, a degree of personal, social, civic, and vocational competence that will enable them to enter effectively into adult living.
3. To stimulate and lead the intellectual and cultural life of the community; to furnish programs for information and entertainment, and to provide a center for participation in recreational activities.
4. To foster activities leading to civic, social, moral and educational improvement of the community.

CURRICULUM

The curriculum of Mesa College is based upon the needs of the students and of the area which it serves, as determined by frequent surveys. It is flexible and meets the needs of both university-preparatory and terminal-vocational students. It contains courses which are equivalent to those offered during the first two years at the senior colleges and universities of the state. It also provides certain types of specialized training for specific occupations. For all students, it provides courses of a general nature which lead to a broad, well-rounded education that fits them for better living by developing within them a sound emotional and social balance and personal resources for continued intellectual growth.

TO WHOM IS MESA COLLEGE OPEN?

Mesa College is open to high school graduates and others of sufficient maturity, experience, and seriousness of purpose to enable them to benefit from its offerings.

PERSONNEL

MESA COLLEGE COMMITTEE

R. H. Penberthy, President	Grand Junction
J. A. Edling, Secretary	Appleton
M. L. Dilley, Treasurer	Clifton
Mrs. Clyde Biggs	Grand Junction
Garold McNew	Collbran

Florence Anderson English Language, Journalism
A. B., Colorado College.

Roberta R. Anderson Commerce
A. B., University of Colorado.
Graduate Study, University of Wyoming.

Norma Carr Home Economics
B. S., Colorado State College of Agriculture and Mechanic
Arts.

Victor F. Charles Social Science
B. A., University of Iowa.
M. A., Colorado State College of Education.
Adv. Grad. Study, University of Colorado.

Elizabeth H. Cramer Speech, Dramatics, English Language
A. B., University of Colorado.
M. A., University of Illinois.
Adv. Grad. Study, Moscow Art Theatre; Northwestern
University; University of Chicago.

Edward M. Day Commerce
A. B., Colorado State College of Education.
M. A., Colorado State College of Education.

Mattie F. Dorsey Registrar
A. B., Florida State College for Women.
M. A., University of Colorado.
Ph. D., University of Colorado.

Rupert M. Dorsey Mathematics, Engineering Drawing
B. S., Valparaiso University.
M. A., University of Colorado.
Adv. Grad. Study, University of Colorado.

May Belle Gordon Commerce
B. A., University of Colorado.
B. E., University of Colorado.
M. S., School of Commerce, University of Denver.

Harry Hammer Music
B. M., Syracuse University.
M. M., Syracuse University.

Lowell Heiny Chemistry, Physics
A. B., McPherson College.
M. A., Colorado State College of Education.
Adv. Grad. Study, Colorado University.

Esther Herr English Language, Literature
A. B., State University of Iowa.
A. M., Columbia University.

- Lois A. Johnson Physical Education
A. B., Colorado State College of Education.
- Marie Killheffer English Language, Literature
A. B., Cornell College, Iowa.
M. A., University of Chicago.
Adv. Grad. Study, University of Chicago.
- Melvin McNew Chemistry, Mathematics
A. B., Western State College.
M. A., Western State College.
- Harlan R. Morton Commerce
B. Ed., Western Illinois State Teachers College.
Graduate Study, University of Iowa; University of Colorado.
- Frances Gray Parks English Language, Speech
A. B., Hiram College, Ohio.
M. A., University of Michigan.
- Mary Rait History
B. A., University of Colorado.
M. A., University of Colorado.
Adv. Grad. Study, University of Washington;
Columbia University; University of Colorado.
- Lillian Sabin Librarian
Ph. B., University of Wisconsin.
B. L. S., Pratt Institute, Library School.
- Laura A. Smith Languages
A. B., University of Wichita.
A. M., University of Kansas.
Adv. Grad. Study, University of Colorado.
- Dallas Sulton Biological Sciences
A. B., University of Colorado.
M. S., Northwestern University.
Adv. Grad. Study, University of California.
- Jay Tolman Physical Education
B. S., Utah State Agriculture College.
- Marie Treece Voice, Choir
Pupil of Luisa Novelii and R. M. Montague.
- H. Herbert Weiden Mathematics, Physics
A. B., Western State College of Colorado.
M. A., Western State College of Colorado.
- Lester B. Whetten Agriculture
B. A., Brigham Young University.
M. S., Brigham Young University.
Adv. Grad. Study, University of Chicago;
University of Colorado.
- Ward Woodbury Music, Piano
A. B., Western State College of Colorado.
M. A., Eastman School of Music, University of Rochester.
- Horace J. Wubben Psychology
B. A., Colorado College.
M. A., University of Colorado.
Adv. Grad. Study, University of California; University of Colorado.

SPECIAL MUSIC INSTRUCTORS

Anna Ross Cheney	Voice
Elizabeth Fugate A. B., Colorado State College of Education,	Piano
Anna May Henry A. B., Colorado State College of Agriculture and Mechanic Arts.	Piano
Marion L. Jacobs M. A., Western State College of Colorado.	Brass Instruments
Charles Myers	Piano
Charles J. Steen A. B., Utah State College. Graduate Study, Northwestern University.	Woodwind Instruments

VOCATIONAL INSTRUCTORS

Benson, Herbert	Supervisor
Baldwin, Cecil	Electricity
Blankenbeker, J. E.	Carpentry
Bush, Warren	Plumbing
Constantine, Gus	Shop
Fender, Robert	Carpentry
Gallegos, Lyle	Radio
Hunt, R. A.	Handicraft
Lauck, W. H.	Farm Program
Platt, Don	Sheet Metal
Swisher, Charles E.	Farm Program
Truss, S. O.	Meat Cutting
Turner, Charles	Shop

ADMINISTRATIVE ASSISTANTS

Joyce Ross A. A., Mesa College.	Administrative Secretary
Rebecca Anderson B. S. E., University of Arkansas.	Assistant Secretary
Elmer G. Houston	Maintenance Superintendent

ADVANTAGES OF A JUNIOR COLLEGE

1. LOW EXPENSE.

Probably the most outstanding advantage of the junior college is the decreased cost of education for students in the first two years of advanced training.

2. SCHOLASTIC SAFETY.

The hazards involved in the transition from high school to college are so great that scarcely half of the college entrants survive the first two years. The junior college has the opportunity of trying out candidates for college under conditions more conducive to success than would be the case in a large university.

3. HIGH QUALITY OF PREPARATORY TRAINING.

It has been found from many studies that transfer students from junior colleges are able to do better work, in four-year schools, than those who enter the four-year institutions as freshmen.

4. HOME ENVIRONMENT.

The junior college makes it possible for students to remain at or near home two years longer—an advantage that can hardly be over-estimated by students and their parents.

5. CLOSER PERSONAL RELATIONS.

The limited size of the junior college contributes to close personal relationship among faculty members and students, which may constitute a genuine advantage to the student.

6. CURRICULUM ADVANTAGES.

Besides offering courses which are equivalent to those given during the first two years at a senior college or university, the junior college also provides finishing curriculums for those who wish to complete a course in general education or in vocational training in two years. The degree granted upon graduation marks the completion of a definite two-year program.

7. OPPORTUNITIES TO MAKE UP DEFICIENCIES IN COLLEGE ENTRANCE REQUIREMENTS.

Students who are deficient in subjects prescribed for entrance to any college may readily make up such deficiency by taking the necessary subjects as a part of their regular program.

8. OPPORTUNITY TO DISCOVER INTERESTS.

Many students complete the twelfth year without any very definite ideas as to the college or vocation they wish to enter. The junior college extends the opportunity for self-discovery. It gives two additional years during which time students may familiarize themselves with college curriculums, schools, vocational information, and in general, put themselves, at a relative small expense, into a better position to make intelligent choices.

9. BETTER GUIDANCE.

The junior college, articulating as it does with entrance either into a vocational or a more specialized advanced training, offers peculiar opportunities for educational and vocational guidance.

GENERAL INFORMATION

HISTORY.

Mesa College has been offering junior college work since 1925, until 1937 under the name of the Grand Junction Junior College. Since 1937, when the State Legislature made provision for public support, it has existed under the present name. It is fully accredited under the State Department of Public Instruction of Colorado, by the University of Colorado and all other institutions of higher learning in Colorado. Mesa College is a member of the American Association of Junior Colleges, an organization comprising some 460 junior colleges.

BUILDING AND EQUIPMENT.

The \$300,000 Mesa College building, completed in March 1940, covers nearly one-half city block in area. The two-story structure has been acclaimed by building authorities as one of the most modern and practical college plants in the West. Constructed in modern design, the building includes the administrative offices, class rooms, lecture rooms, laboratories, auditorium-gymnasium, library, special physical education rooms, and instructors' offices. First-floor halls are equipped with individual lockers for students' use.

Scientific lighting and ventilation are two features of the building. Glass brick is used throughout the building for light diffusion. Ornamental lighting fixtures afford ample direct, non-glare illumination.

The library, which now has more than 9,000 volumes and a wide selection of current magazines, is well lighted and air-conditioned. The various laboratories—chemical, physical, biological, home economics, and business—are fitted with modern equipment, permitting a high quality of laboratory work to be done.

An on-campus cafeteria, school operated, will serve 300 students at a seating. Meals at nominal cost.

LOCATION.

Mesa College is ideally located at North Avenue and Twelfth Street about one and one-quarter miles north and east of the main business district of Grand Junction. The College grounds include twenty acres on one of the highest levels in the city, commanding an unobstructed view of the Bookcliffs to the north, Grand Mesa to east, the Uncompahgre range to the south, and the Colorado National Monument to the west.

The residential section in the vicinity of Mesa College is rapidly becoming one of the most beautiful and modern districts in the city. Most of the residential sections in close proximity to the College have stringent building restrictions.

LINCOLN PARK.

Directly to the south and east of Mesa College across North Avenue is the beautifully landscaped Lincoln Park, the recreation center of Grand Junction. The park includes a green turfed football field, and a quarter-mile curbed cinder track. Other physical equipment includes a baseball diamond and stands, six concrete tennis courts, a nine-hole golf course with grass fairways and greens, and an outdoor swimming pool.

HOUSING.

Mesa College is building a women's dormitory to house out-of-

town women students. The hall will accommodate about seventy. Small individual rooms, communicating with a group living room and bath make attractive units for four or five young women. This dormitory will be completed during the year.

Until the completion of the dormitory, out-of-town women students will live in private homes. The college administration requires that students live in houses approved by the college. A list of these accommodations is available in the office of the Dean of Women. Out-of-town students who board and room in Grand Junction are expected to observe the college regulations concerning study, recreation, and entertaining.

A dormitory at the college farm with a capacity of forty-five men students is in use. The farm is a mile and a half from town and transportation as well as board and room is furnished the men living there. Men also live in private homes in Grand Junction.

STUDENT ACTIVITIES

STUDENT GOVERNMENT.

The associated students of Mesa college have charge of all student activities. Management of their affairs is vested in a council composed of elected student officers, class representatives, and faculty members. Part of the all-college fee, paid at registration, is administered by the council to further student projects.

Activities sponsored by the student association include Criterion, the college newspaper, social activities, and special interest clubs, such as the Mesa College Players, the Photography Club, Contact Troupe, and Yearbook.

ASSOCIATED MEN STUDENTS.

The men help to foster close relations among all students and endeavor to help new students become acquainted. The true-western spirit of Mesa College is in part due to the efforts of the Associated Men Students.

ASSOCIATED WOMEN STUDENTS.

The organization includes all women in the student body. One purpose of the group is to help new students become acquainted and feel at home in Mesa College. Teas, all-women parties, hikes, and athletic events are sponsored, and all college social functions.

ASSEMBLIES.

Programs for the assemblies are planned by a student and faculty committee. The programs are varied, utilizing student talent in dramatics, music, and other mediums of expression. Stimulating outside speakers appear on the programs, discussing timely, vocational, and cultural subjects.

CRITERION.

The official Mesa College newspaper is edited and managed by students. Staff members receive practical experience writing and editing news stories, interviewing campus visitors and assembly speakers, selling advertising and conducting the circulation. The Criterion attempts to present all the news of interest to the students.

DRAMATICS.

A major dramatic production is presented each quarter by the Mesa College Players. Try-outs are open to all students.

FUTURE TEACHERS OF AMERICA.

The local chapter of F.T.A. was organized in the spring of 1941 and affiliated with the national organization in the fall of that year. Its members have junior standing in the National Education Association. The organization is of prime interest to those majoring in education and is open to all students interested in the teaching field. F.T.A. has several business and professional meetings during the year and plans for at least one social meeting each quarter.

"M" CLUB.

Open to all letter men and sponsors good sportsmanship.

PHI THETA KAPPA.

Phi Theta Kappa, national honorary junior college fraternity, is represented in Mesa College by Beta Phi chapter. Membership in the fraternity is open to students of good moral character, who carry fifteen hours of college work a quarter, and who stand in the upper ten per cent of their class with a scholastic average of "B" or better. The objectives of the organization are to sponsor worthy projects and to promote school spirit and interest as well as scholarship. Freshmen may be pledged to this active organization during the second quarter of the school year.

SKI CLUB.

The Ski Club is open to all students interested in this favorite winter sport. Four ski runs, Leadville, Steamboat Springs, Aspen, and Grand Mesa, are accessible all winter.

SOCIAL LIFE.

Mesa College has a full calendar of social activities during the year through which the social needs of every student are satisfied. These activities are under the direction of the Dean of Women who aids students and organizations in planning a wholesome program. The College administration believes that an important phase of its instruction is the social training which the student receives in connection with the activities of the institution.

Among the traditional social affairs that become an important part of the year's calendar are a faculty reception which is held at the beginning of the fall quarter; the Sophomore party for the Freshmen in the fall; the Freshman picnic for the entire student body in the spring; the Soiree, the main formal function of the college, held during the winter quarter, and the social events of commencement week.

All-college picnics, parties, dances, teas, and hikes as well as small group and organization functions furnish variety and opportunity for students to engage in social activities.

SYMPHONY ORCHESTRA.

A community orchestra is composed of outstanding musicians in the area and in the college. Instrumental and vocal college ensembles assist on radio and community engagements.

VARSITY ATHLETICS.

Mesa College is a member of the Intermountain Collegiate Athletic Conference. Varsity sports include football, basketball, baseball, track, tennis, boxing and wrestling. Basketball trips are arranged to include games in California and each year the football team plays one game in that state. In addition to participating in regularly scheduled conference and invitational track meets, Mesa College sends outstanding trackmen to the national Junior College meet.

COLLEGE-COMMUNITY RELATIONS

Through mutual cooperation with the community, Mesa College has become a real cultural center, an integral factor in the educational and social development of western Colorado. Faculty members are available for lectures and discussions on a wide range of subjects related to education, agriculture, home-making and current social problems. Student groups appear often before public or private audiences for information on recreation. The public is invited to attend many types of programs at the college—musical, dramatic, forensic, religious, and those devoted to public affairs and international relations—presented by faculty, students, community members, and out-of-town speakers.

Weekly radio programs are broadcast over KFXJ in which students and faculty participate.

Book reviews, play readings, lectures, conferences, demonstrations and musical programs are presented at the college from time to time by members of the community, for the students and the public. The churches of Grand Junction all cooperate with the college in meeting the needs for religious education among the students. Opportunities include participation in student classes in Sunday schools, young people's organizations, and singing in choirs.

EXPENSES AT MESA COLLEGE

BOARD AND ROOM.

The cost of board and room is about forty-five dollars per month. Some students do light housekeeping and are able to reduce this cost, somewhat.

BOOKS AND SUPPLIES.

Text books, notebooks and school supplies are sold at cost at the College Bookstore. Cost for needed supplies will vary according to the courses taken by the student but ought not to exceed thirty dollars for the year and may be as low as fifteen, if used copies of text books are bought.

TUITION.

Because Mesa College is partially supported by taxes levied on Mesa County property, students whose parents are residents of Mesa County are not required to pay tuition.

Students who have reached their majority and who have been residents of Mesa County for six months next preceding the date of registration are not required to pay tuition.

A resident is one who can give evidence, beyond a reasonable doubt, that his permanent residence is in Mesa County. In determining residence, the place of voting, the previous home, the date of taking up present residence, age, vocation, citizenship and expectation of future residence will be taken into consideration.

Students who are residents of Colorado but who are not residents of Mesa County will be charged a tuition fee of \$25.00 per quarter, payable at the time of registration.

Out-of-state students will be charged a tuition fee of \$50.00 per quarter, payable at the time of registration.

GENERAL FEES.

Matriculation (paid once by each student)	\$ 5.00
Tuition (not charged Mesa County residents):	
Colorado students	25.00 per quarter
Out-of-state students	50.00 per quarter
All-College Fee	15.00 per quarter

LABORATORY FEES.

Applied Music	\$15.00-\$20.00 per quarter
Laboratory Science	5.00 per quarter
Commerce, any one course	5.00 per quarter
Education	1.00 per quarter
Home Economics (for each quarter hour taken)	1.00 per quarter
Art (for each quarter hour taken)	1.00 per quarter
Shop	15.00 per quarter
Related Training courses	15.00 per quarter
Ground School	.70 per hour
Flight training, dual	9.90 per hour
solo	7.75 per hour

MISCELLANEOUS FEES.

Late registration	\$ 2.00
Change in schedule	1.00
Late or special examination (including G E D tests)	each 1.00
Graduation (cap, gown, diploma)	3.00
Late petition for graduation	1.00
Late credential fee	3.00

PART-TIME STUDENT FEES.

Students taking a part-time course are charged the matriculation fee, a class fee of two dollars per quarter for each credit hour for which they register, plus the regular laboratory fee for any laboratory course they may take and the appropriate non-resident fee for students who are not residents of Mesa County. A part-time course consists of fewer than 10 quarter hours.

PAYMENT OF FEES.

All tuition and fees are due and payable at the time of registration—the first day of each quarter—and registration is not complete until the student's obligation is met in full. Any student who enrolls and attends classes is liable for payment of fees even though he may drop out of school. No student having unpaid financial obligations of any nature due the college shall be allowed to graduate or to receive any transcript of credits.

REFUND OF FEES.

No fees are returned after the first two weeks of the quarter except to students drafted for military service. Matriculation fees, late registration, late test, late credential fees are not refunded. During the first two weeks, if a student claims refund on withdrawing from college, two-thirds of tuition, all-college, and laboratory fees may be refunded upon the recommendation of the Registrar. All of these fees will be returned to a student who has completed registration but is unable to attend classes.

SCHOLARSHIPS.

Mesa College accepts Joint Honor scholarships awarded to high school graduates. These are valued at \$25.00 per quarter for non-residents of Mesa County and cover fees for residents of the county.

The Lions Clubs of several communities in cooperation with the Grand Junction Lions Club offer scholarships which pay freshman tuition.

Mr. Walter Walker and The Daily Sentinel provide two scholarships to be awarded to two freshmen, to be recommended by the college faculty, for use during their sophomore year at Mesa College.

Most of the major colleges and universities in the Rocky Mountain region, and several outside this region, offer scholarships to Mesa graduates who have made high scholastic records while in college.

LOAN FUNDS.

Several organizations in Grand Junction maintain loan funds from which needy students may obtain loans by presenting satisfactory credentials. Information concerning these funds is available in the office of the Dean of Women or the Dean of Men.

EMPLOYMENT OPPORTUNITIES.

Students who find it necessary to earn part or all of their expenses while attending Mesa College will be assisted in securing employment by the college. Grand Junction business men and residents are generous in offering employment to students and cooperate fully with the work-placement director of the college. It is important, however, that the student shall have enough money to enable him to stay in college for at least two months.

The college is interested in the placement of its graduates who desire to enter a permanent position and will assist them to obtain employment for which they are fitted.

ORGANIZATION FOR INSTRUCTION

The program for the two years at Mesa College will depend upon what the student plans to do at the end of two years. For those who plan to continue college work in a senior college or university the courses in liberal arts, which are equivalent to such first- and second-year courses at higher institutions of the state, are required. Certain definite lower-division requirements are met by the courses leading to the associate in arts or the associate in science. Other courses will depend upon the field in which the student's major interest lies, but will consist of such as fit into the student's planned program to be followed in the junior and senior years.

For those who do not plan to continue beyond the junior college several non-specialized courses are offered. These provide for a broad training and liberal choice of electives. For those who desire to prepare for a specific vocation, guidance is given in selecting the appropriate courses for such preparation.

SCHOOL OF ARTS AND SCIENCES.

The work of the School of Arts and Sciences is designed primarily for students who expect to transfer their junior college credits to a senior college or university where they will continue their formal education. The requirements for this school are those for the Associate in Arts and Associate in Science degrees, given on page 21. A secondary purpose of the School of Arts and Sciences is to provide for the completion of general education and to offer a well-rounded general cultural program for those who do not plan to continue for four years.

There are 51 hours required and 45 hours of electives which allow the student to follow his own interests, to prepare for entering education, home economics, business administration, or other senior college curriculums.

SCHOOL OF COMMERCE.

The basic purpose of the Mesa College School of Commerce is to provide young men and women with the necessary specialized training for a future of self-reliance and economic opportunity. Two-year terminal programs in business education and skills are offered to those who desire to prepare for clerical positions with business concerns, educational institutions, and governmental agencies. They provide the necessary preparation for beginning bookkeepers, assistant accountants, stenographers, typists, filing clerks, business machine operators, and other types of business and office workers.

A student is permitted to select, from a variety of courses, those which meet his own individual needs. Students may enroll for one or two years, depending on the amount of preparation needed or desired. Appropriate diplomas will be given those who complete the recommended curriculum and pass the proficiency examinations. The services of the placement bureau will also be at the disposal of students who complete the terminal courses.

ASSOCIATE IN COMMERCE.

The School of Commerce offers an excellent training for those terminal students who plan to enter a business career at the completion of their Junior College program. Students who meet the requirements of this two-year program will be granted the degree, Associate in Commerce, upon graduation.

PROGRAMS.

Two types of terminal programs are planned, one for the student who has not had previous training in commerce, and one for the student who has completed part of his business training in high school or elsewhere. Credit for typewriting 1, 2, shorthand 1, 2, and accounting 1, 2, will not be allowed those who have had a full unit of these respective courses in high school. Practice will be provided on a non-credit basis, however, in order to enable the students to maintain these skills. Advanced courses in which these skills are used will be provided on a credit basis.

Those students who look forward to promotion from routine stenography or bookkeeping to more responsible secretarial or junior executive positions will find the two year program a splendid preparation for such promotion.

College preparatory students who plan to transfer to schools of business administration or work toward a degree or specialization in some branch of commerce are advised to register in the School of Arts and Sciences.

COURSES FOR ADULTS

The regular college classes are open to adults of the community who may register as full- or part-time student. In addition, evening classes are organized during the winter quarter in courses for which there is sufficient demand, in the school of Arts and Science. Some of these which have been popular are: literature, public speaking, school law, current affairs, psychology and conversational Spanish. These courses are given on a non-credit basis.

Courses are offered regularly in the Evening School of Commerce for two to four evenings each week during fall, winter and spring quarters. These courses may be taken on a credit or a non-credit basis. A fee of \$10.00 per quarter is charged for each class meeting one hour twice a week.

The Mesa College farm is being used as a demonstration area where livestock and poultry are maintained for study and demonstration purposes. Individual farmers as well as groups who choose to study some phase of agriculture are able to draw freely on these resources.

Short information and refresher courses will be given on timely problems to groups who may desire them. These courses may be in the form of concentrated units meeting every day for a short period on such problems as feeding dairy cows, culling poultry or controlling disease of livestock, or more comprehensive courses such as Farm Machinery repair which might meet several nights per week and run for an indefinite period of time. Each program will vary with the interests and needs of the farmers or students who compose the classes.

ACADEMIC INFORMATION

ADMISSION TO MESA COLLEGE.

Admission to Mesa College may be had upon the filing of an application for admission and the presentation of satisfactory credentials. All applications must be filed upon the official forms available at the college, or, for Colorado residents, at the office of the high school principal.

ADMISSION TO THE FRESHMAN CLASS.

High School graduates, or those who have completed satisfactorily fifteen acceptable units of high school work, are eligible for admission. The application for admission, which includes a transcript of the high school record properly filled out and signed by the high school principal, must be submitted before the time of registration and should be on file in the Registrar's office not later than the first of September. (Blanks may be secured from high schools or from Mesa College).

An applicant for admission who has already attended another institution of college rank may not disregard his collegiate record and apply for admission as a freshman.

ADMISSION TO ADVANCE STANDING.

Honorably dismissed students from other colleges or institutions of similar rank may be admitted to advanced standing in Mesa College. Students applying for advanced standing will present to the Registrar's office a transcript of all college work sent from each institution attended.

ADMISSION OF VETERANS.

Mesa College is open to any veteran who qualifies for college education and its Veteran Service program has been organized to give the most efficient assistance possible in planning his education.

A veteran who does not meet the normal entrance requirements for admission, but who proves, through tests, that he is ready to do college work, will be admitted.

All educational work done by the veteran while in active service will be evaluated and credit given when possible. Academic credit, earned in a Navy or Army academic program or through correspondence courses taken from colleges and universities through the United States Armed Forces Institute, will be granted. Academic development through military experience or through non-academic courses will be measured by tests, and, if the veteran is found to have gained knowledge equivalent to a specified college course, credit will be granted.

A veteran may take regular courses leading to an associate degree granted by Mesa College and preparing for entrance to the higher division of four-year colleges and universities, or he may follow a terminal program designed to prepare for some specific occupation.

ADMISSION OF SPECIAL STUDENTS.

Mature individuals who lack some of the requirements for admission as regular students may be admitted as special students on a full or part-time basis. Special students may become regular students upon fulfilling the requirements for entrance. This may be done by passing proficiency tests in courses studied independently or by substituting certain college courses for high school units.

ENTRANCE TESTS.

Entrance tests are given new students during the registration period so that students and counselors may use the results in making out programs of study. These tests are required of all students but not in the sense certain records are necessary for entrance to college. Students do not "pass" or "fail" these tests. They are used to determine interests and abilities of new students in order to help them get the most out of college. The results are used for classification purposes and for planning a course of study to meet the particular needs of students. A fee of \$1.00 is charged for each late entrance test.

The tests include vocational interest, ability to do college work, English usage and reading tests, and a personality inventory. The results are available to the student and his adviser and form an excellent basis for counseling.

Those who make low scores in reading and English usage are given special help in overcoming their deficiencies. Two extra hours of classwork per week during the first quarter of Freshman English are provided for those whose reading test scores indicate weakness in this ability.

PROFICIENCY EXAMINATIONS.

Proficiency examinations are used to determine whether credit may be allowed for courses taken in an unapproved institution of higher learning; to determine amount of credit to be given for work done outside of class; and to provide a basis for exemptions from certain courses.

Students in Commerce who wish advanced standing take tests

in typewriting, shorthand and bookkeeping to determine their fitness for doing advanced work. Those who perform satisfactorily in English grammar and arithmetic tests will be excused from taking these courses in the School of Commerce.

DEPARTMENTS OF INSTRUCTION.

Mesa College offers courses in fourteen different departments. These are Agriculture, Art, Biological Science, Commerce, English, Foreign Language, Home Economics, Mathematics and Engineering, Music, Physical Science, Physical Education and Hygiene, Related Training, Social Science, and Trades and Industry.

COURSES OF STUDY REQUIREMENTS.

The course of study which an individual student pursues depends upon his present interests and his future plans. Freshmen requirements for the principal courses offered at Mesa College are similar to those at senior colleges. Students who plan to continue college work after leaving Mesa College should decide upon the college to which they will transfer and plan their course here so that freshman and sophomore requirements of the college of their choice will have been met. This is a student responsibility although counselors will be glad to help.

PREPARATORY COURSES FOR FRESHMEN.

All freshmen who register in the School of Arts and Science and plan to continue their work later in a senior college, university, or professional school, are required to register for English composition, 9 hours; and physical education, 3 hours.

Those whose major interest lies in the field of Education, English, Foreign Language, History, Law, Music, Social Science, or Speech, should register to meet the requirements of the Associate in Arts degree and, in addition, take the specific courses required in one of these fields, by the school to which they expect to transfer.

Those who are interested in Agriculture, Dentistry, Engineering, Home Economics, Mathematics, Medicine, Nursing, Pharmacy, or related fields, should register in courses leading to the Associate in Science degree, and take the particular courses required by these departments in universities and professional schools in the first two years.

REGISTRATION.

In order to become a student of Mesa College, whether regular or special, an applicant must register on official forms provided by the college and at the appointed time. Credit will be given only for courses in which the student is registered.

It is advisable for new students to read the college catalog carefully and to make tentative plans concerning the course they wish to take before coming to complete their registration. Counselors at the college will assist prospective students in making these plans during the summer and during registration.

N. C. D. COURSES.

A student who desires to attend certain classes regularly, but does not wish to take the final examinations or receive grades or credit, should register No Credit Desired in these courses. Record will be kept of classes attended. Credit for such courses cannot be established at a later date. A student may combine in his registration both credit and N. C. D. courses, but the total hours involved should not exceed a normal schedule.

TIME OF REGISTRATION.

Fall Quarter registration will begin at 9:00 a. m., September 22, 1947. All new students are required to be present at that time.

STEPS IN REGISTRATION.

A new student should file a complete high school record with the Registrar prior to the time of registration in order to have his record evaluated and to receive permission to register. This record should be presented by the first of September, or sooner if possible. In the case of students registering with advanced standing, a transcript of all college work completed should also be presented. Present "Permit to Register" to counselor to whom the student will be assigned. The order of registration is as follows:

1. Matriculate. The matriculation fee of five dollars is charged only once and is not refundable.
2. Present "Permit to Register" to counselor to whom the student has been assigned during matriculation, together with a tentative class schedule.
3. Get the approval of the counselor to register for the schedule tentatively planned. Copy the schedule in final form. Fill out class cards.
4. Have the schedule checked by the financial secretary who will make out a fee card. Take this fee card to the office and pay fees.

REMOVAL OF HIGH SCHOOL DEFICIENCIES.

Applicants with high school deficiencies should make arrangements to remove them during their first year at Mesa College. These arrangements should be made before registration is completed.

Deficiencies may be removed (1) by passing appropriate examinations or (2) by completing in the junior college with a grade of "C" or better college courses in the group or groups of subjects in which the deficiencies lie. No college credit will be given for such courses when they are used to remove high school deficiencies.

GRADUATION.

To graduate from Mesa College a student must:

1. Have been regularly enrolled at least three quarters including the one next preceding the time of his graduation.
2. Satisfy the general and specific requirements for the degree or diploma for which he is a candidate.
3. File with the Registrar a petition for graduation when registering for the last quarter. Penalty for late filing shall be \$1.00.
4. Satisfy all general and specific requirements of Mesa College which pertain to him, including the fulfillment of all financial obligations.
5. Have removed from his record all marks of deficiency in those subjects for which he expects to receive credit toward graduation.
6. Be in attendance upon the Commencement exercises of his class unless a petition of absence, properly made by him to the committee on graduation, is approved by that committee.

CERTIFICATES, DIPLOMAS, DEGREES.

Mesa College grants a certificate, diploma or degree, according to the type of curriculum selected by the student and upon completion of the specific requirements of each. These include an elementary certificate in business, a ground school certificate, a Mesa College diploma, and the degrees, Associate in Arts, Associate in Science and Associate in Commerce.

The Mesa College diploma is granted to those students who plan to complete their formal education at the end of two years, or who do not meet the requirements for admission to the upper division of a four-year institution. Those who matriculate as regular students, spend at least one year in residence, and complete 96 hours in college courses are entitled to the diploma.

The Associate in Arts degree is granted to students who meet the entrance requirements, matriculate as regular students, spend at least one year in residence and complete with an average of C, or better, 96 hours including English composition, 9 hours; physical science, 9 hours; history or other social science, 9 hours; literature, 9 hours; biology or psychology, 9 hours; physical education, 6 hours; approved electives, 18 to 24 hours; free electives, 27 to 21 hours. All electives must be transfer courses.

Freshmen should register for English composition, physical education and at least one other, preferably two, of the required courses. Approved electives include mathematics, foreign language, freshman literature, current history, public speaking, and social sciences. Free electives include any transfer courses offered by the college, such as education, home economics, etc.

The Associate in Science degree is granted to regular students who include the following courses in their program and who complete 96 hours with an average of C or better: Science and mathematics, 39 hours, of which at least 6 must be in mathematics; English composition, 9 hours; physical education, 6 hours; approved electives 18 to 24 hours; free electives, 24 to 18 hours.

The Associate in Commerce degree is granted to students who complete, with an average of C or better, 96 hours including the following courses: Freshman English, 9 hours; Mathematics or Physical Science, 3 hours; Principles of Economics, 9 hours; Social Science, 9 hours; Physical Education, 6 hours; Business Law, 3 hours; Business Mathematics, 5 hours; Business Machines, 2 hours; and Filing, 3 hours.

In addition, those who elect the Accounting Option must take Typewriting 3; Accounting 51, 52, 53; and necessary prerequisites. Those who elect the Secretarial Option must take Typewriting 3, 51; Shorthand 3, 51, 52; Secretarial Practice; Accounting 3; and necessary prerequisites.

TEACHING PERMIT.

Mesa College recognizes the need for teachers and encourages young people of ability to prepare for teaching, the most fundamental of the social services. Those students who complete satisfactorily two years in the School of Arts and Sciences and who include in the electives 9 hours of education, 6 hours of student teaching, 9 hours of psychology, and 6 hours of sociology or biology, are eligible to receive the pre-graduate permit, from the State Department of Public Instruction, to teach for one year.

TRANSFER OF CREDIT.

Credits earned at Mesa College are transferable to other institutions providing they meet the requirements of a specific field selected by the transferring student.

A student in good standing is entitled to a transcript of his record at any time. Such transcripts are accepted by other junior colleges. One transcript is furnished free of charge. A fee of \$1.00 is charged for each additional transcript.

Credits transferred from an accredited junior college are accepted in senior colleges and universities up to a maximum prescribed by the particular institution for the first two years of a course similar to the one from which the student transfers.

Junior colleges in Colorado are authorized by State law to provide only the first two years of college instruction. This is the equivalent of 90 academic hours, plus six hours of physical education, for most higher institutions.

Students who earn more than 90 academic hours do not receive credit for the excess hours on transfer to a four-year state college in Colorado that requires only 90. Colorado A. & M. College will accept 105 junior college credits since that institution requires this number during the first two years.

A student expecting to transfer to a senior college is advised to examine carefully the current catalog of the particular college he expects to enter and to follow as closely as possible its particular recommendations for programs of study.

GENERAL REGULATIONS

LATE REGISTRATION.

Students registering late will be required to make up the work they have missed. Students are not permitted to enroll after the third Monday in any quarter, for a full-time class schedule. A part-time program may be started at any time during the first six weeks of a quarter. The number of courses allowed will depend upon the time a student registers.

CHANGE OF PROGRAM.

No student may add a course for credit or transfer from one subject to another after the second week of the quarter. If a student desires to withdraw from a course he must make arrangements with the Registrar and his instructor. Failure to abide by this rule will result in the assignment of technical failure (TF) for the course or courses involved.

Transfer from one curriculum to another should not be made by a student without his counselor's approval.

ATTENDANCE.

A student at Mesa College is expected to attend all sessions of each class in which he is enrolled. Failure to do so may result in a lowered grade or exclusion from class. At any time during a quarter, a student who fails to attend regularly may be dropped from college rolls, at the discretion of the administration.

All instructors are required to make weekly reports of absence to the Registrar's office. In making these reports, whenever

the instructor thinks that absences are seriously affecting a particular student's work, it shall be his duty to report this fact to the office of the Dean of Men or the Dean of Women.

Absences will be excused when incurred by reason of a student's participation in required field trips, intercollegiate games and other trips arranged by the college only if previously approved by the President. The coach or instructor or other official whose work requires absences from classes shall file in the President's office a list of the names of the students involved at least 24 hours before the activity.

Absences because of neglect, work, calls home, etc., are alike counted as unexcused absences, since every absence may entail a loss to the student. Non-attendance at any regularly required class, laboratory exercise, rehearsal or field trip constitutes an absence.

Absences due to serious illness or strictly unavoidable circumstances may be excused if the instructor in charge of the course is completely satisfied as to the cause. Being excused for an absence in no way relieves the student of the responsibility of completing all the work of the course to the satisfaction of the instructor in charge.

STUDENT LOAD AND LIMITATIONS.

The normal student load is sixteen quarter hours and the minimum load is ten hours, except for a few special and part-time students. Seventeen hours is the maximum load until a student has shown his ability to take more, and then he may be permitted to carry more hours if his schedule is approved by the admissions committee. The programs of students who are gainfully employed are adjusted according to the number of hours they work a day, with due consideration given to the ability of the students.

COURSE CONTINUATION.

Courses which continue for three quarters should be taken throughout the year by students planning to transfer credits to senior colleges or universities, and in the sequence indicated by the course numbers. Example: French, 1, 2, 3, FWS. To receive transfer credit for this course it is necessary to take all three quarters.

SCHOLARSHIP STANDARDS.

Standards of scholarship at Mesa College depend upon the objectives, nature and content of the courses. While individual progress is a basic consideration, and the development of each student in the light of his needs and aptitudes is the major concern of the college, it cannot be too strongly emphasized that if minimum standards are not maintained failure will result. In no case is credit nor grades awarded merely on the basis of attendance.

In order that students and faculty may be aware of the quality of work being done and of progress being made, the evaluation of the student's work is based upon periodic examinations, class reports, term papers, and other evidences of scholarship. Each instructor is responsible for the evaluation methods employed in his courses.

A student's work is considered satisfactory when he maintains an average of "C" or higher. Any student whose record at the close of any quarter is unsatisfactory may be placed on probation.

may be transferred to another curriculum, or may be dismissed from college.

EXAMINATIONS.

Final examinations are held regularly at the end of each quarter. Students are required to take the final examinations at the appointed time and place in order to receive credit in a course. Mid-term examinations are held during the sixth week of each quarter and are required of all students. A fee of one dollar is charged for a late or special examination. Students who fail to appear for the final examination without notifying the instructor will receive an F in the course.

COURSE REPORTS.

Individual reports are sent to students, or parents if they request them, at the end of each quarter. Special reports may be obtained upon application to the Registrar at any time. An official report is withheld, however, until all fees are paid.

SYSTEM OF GRADES.

Grades in Mesa County are indicated as follows: A, for superior work; B, good; C, fair; D, minimum passing; F, not passing; Con., condition; Inc., incomplete; IP, in progress; S, satisfactory (given in physical education courses, for example); WP, withdrawn, passing; WF, withdrawn, failing; TE, unapproved withdrawal; X, for credit established by passing a proficiency examination; and M, for military credit.

CONDITIONS AND INCOMPLETES.

A grade of "Condition" is given to a student who is below passing a course, but in the opinion of the instructor may be expected to pass a condition examination, which must be given before the end of the third week of the following quarter at the discretion and convenience of the instructor. A fee of one dollar is charged for the privilege of taking a condition examination. For passing a condition examination only a grade of C, D, or F may be reported.

A grade of "incomplete" may be reported only on account of illness at the time of a final examination, or when the student for reasons beyond his control has been unable to finish all the work of the course. This grade may be given only upon agreement between the instructor and the Registrar of the college. To complete a course in which a grade of incomplete has been received, a student must register for the course during the next quarter he is in attendance.

WITHDRAWAL FROM COLLEGE.

A student who desires to withdraw from college should notify his instructor and make formal application to the Registrar for permission to withdraw. If permission is granted, the student will receive a grade of WP for each course in which he is passing at the time of withdrawal, and a grade of WF for each course in which he is not passing.

No permission to withdraw will be granted during the last two weeks of a quarter, except in emergencies.

HONORABLE DISMISSAL.

A statement of "honorable dismissal" will be given the student if at the time of withdrawal his standing as to conduct and character is such as to entitle him to continue in the college.

COURSES OF INSTRUCTION

The courses offered at Mesa College are grouped in twelve departments or fields of study. The descriptions which follow indicate the content of the courses and list the prerequisites for those which are not beginning courses. Courses are numbered and given titles. For example, Agriculture 51 is a course number and Dairy Fundamentals is the corresponding course title.

In general, the courses numbered from 1 to 50 are designed for freshman and those numbered above 50, for sophomores. Numbers end in 1, 2, 3, according to the quarter in which they are regularly offered. Many courses, however, are offered two or three quarters during the year so that students may enter at the beginning of any quarter and be able to take a full schedule of work.

Mesa College reserves the right to withdraw from its offerings any course for which the enrollment does not justify giving it, for any particular quarter. Additional courses will be added any quarter if the demand is sufficient.

AGRICULTURE

1. **ELEMENTARY LIVESTOCK PRODUCTION.** F. 3 hours.
Selection and evaluation of beef cattle, dairy cattle, sheep, swine, and horses on a purebred and market basis. Emphasis is placed on types, markets, and market classification.
2. **GENERAL POULTRY.** W. 3 hours.
A study of breeds, judging, incubation, brooding, feeding, culling, and marketing. Designed to meet the needs of students wishing a general knowledge of the poultry industry and the problems of production.
3. **FITTING AND SHOWING OF LIVESTOCK.** S. 3 hours.
Fitting, handling, and showing of beef cattle, dairy cattle, sheep, swine, and horses for show and sale.
11. **CROP PRODUCTION.** F. 3 hours.
A study of the principles of field crop production with special emphasis on cultural practices for crops grown in the intermountain area.
12. **FORAGE CROPS.** W. 3 hours.
A study of the production and preservation as hay or silage of the principal forage crops and cultivated grasses. Special attention is given to the production and maintenance of farm pastures.
13. **GENERAL HORTICULTURE.** S. 3 hours.
A general course covering the principles underlying the propagation, culture, improvement, and marketing of horticultural crops.
51. **SMALL FRUIT PRODUCTION.** F. 3 hours.
Commercial and home culture of different small fruits, including location; soil management; varieties classification; propagation, planting and culture; pruning and training; harvesting and marketing.

- 52. TREE-FRUIT PRODUCTION.** W. 3 hours.
Selection of locations and varieties, propagation of fruit plants, establishing orchards, pruning and training, soil management, irrigation, thinning, pollination, pest control, harvesting and marketing.
- 53. GENERAL SOILS.** S. 3 hours.
An introductory course in soils with incidental study of soil fertility and management problems. A beginning course for students in agriculture and forestry. Prerequisite: Inorganic Chemistry.
- 61. DAIRY FUNDAMENTALS.** F. 3 hours.
A general course in dairying. History and present status of the dairy industry; starting dairy herds; breeds of dairy cattle; cow testing; associations; club work; study of herd records; calf feeding; general principles of feeding management and housing of dairy cattle.
- 62. LIVESTOCK FEEDING.** W. 3 hours.
A study of the differences in digestive tracts of farm animals and the physiology of digestion and feed utilization, the composition of feeds, the balancing of rations, and discussions of feeding cattle, horses, sheep, and swine.
- 63. RANGE LIVESTOCK MANAGEMENT.** S. 3 hours.
The production of beef cattle and sheep under range conditions. Winter feeding, judging, breeds, breeding, and management of range livestock.
- 73. FARM MANAGEMENT.** S. 2 hours.
A study of the principles underlying the organizing, management, and financial success of farms and ranches. Consideration will be given to types of farming, size of business, combination of enterprises, rates of production, labor, and equipment efficiency.

ART

- 1, 2, 3. FREEHAND DRAWING.** FWS. 2 hours.
A basic course in drawing that should be taken by all art students, especially those who plan to do any advanced work in creative art. Emphasis is laid on drawing from casts to develop the power of accurate observation. The compositional aspect of drawing is taught simultaneously as the student learns the uses of line and tone in achieving rhythmic structure.
- 11, 12, 13. COLOR AND DESIGN.** FWS. 3 hours.
Color and design is a survey course in the field of two-dimensional and color composition, with abundant reference to the historical background of decorative arts. With freehand drawing, it is a basic course for art students and prospective teachers. Projects will consist mainly of individual work in creative design, some of which will be carried out in crafts of the student's choice.
- 33. INDIVIDUAL PROJECTS.** S. 3 hours.
This is a completion quarter in individual project work for students who have completed three quarters of design. Techniques of various crafts and fine arts will be taught, depending on the needs and interests of students enrolled. Special attention will be given to the problems of prospective teachers.

BIOLOGY

- 1, 2, 3. **FWS. 3 hours.**
 A study of the fundamental biological principles involving both plant and animal life; survey of all of the phyla of the animal kingdom and the divisions of the plant kingdom; the place of man in the world of living things; and the relationships of man to other organisms. Students who elect this course may not receive full credit for general college botany or zoology. Two lectures and one laboratory period each week.
- 22, 23. **GENERAL BOTANY. WS. 5 hours.**
 Study of the lower plant forms including the algae, fungi, mosses and ferns during the Winter Quarter. The structure and function of the higher plants, including a study of the roots, stems, leaves, flowers, and seeds are dealt with during Spring Quarter. Three lectures and two laboratory periods each week. A course for pre-medical, veterinary, forestry, pre-dental, and home economics and botany majors.
- 31, 32. **GENERAL ZOOLOGY. FW. 5 hours.**
 A detailed study of the fundamental principles of the science of animal biology, and a survey of all of the animal phyla with attention given to both structure and function. Three lectures and two laboratory periods each week. Full credit will not be given to those who have credit in general biology or zoology. A course for pre-medical, veterinary, pre-dental, and zoology majors.
51. **PRINCIPLES OF HEREDITY. F. 3 hours.**
 Facts and principles of heredity as developed from the study of plants and animals. Human inheritance; genius, mental defects, individual differences. Open to all Sophomores.
52. **MAMMALIAN ANATOMY AND PHYSIOLOGY. W. 5 hours.**
 Lectures on human and physiology. Laboratory work will consist of complete dissection of the rabbit. Three lectures and two laboratories each week. Prerequisite: 9 hrs. biology, botany, or zoology.
53. **GENERAL BACTERIOLOGY. S. 5 hours.**
 Lectures and laboratory work on bacteria, yeasts, molds, isolation, identification and cultivation. Preservation of foods, fermentation, food-borne diseases. Prerequisites: 9 hrs. biology, botany, or zoology.

COMMERCE**ACCOUNTING**

- 1, 2. **INTRODUCTORY ACCOUNTING. FW. 4 hours.**
 An introduction to the fundamentals of accounting. The complete bookkeeping cycle is studied. Students are taught to open and keep records on a double-entry basis for a sole proprietorship; to make entries for notes, drafts, interest, and discounted notes; to make adjusting and closing entries; to prepare statements. An introduction to records for a partnership and a corporation is given. One practice set, a single proprietorship grocery business, taking approximately ten days, is completed.

3. **APPLIED ACCOUNTING.** F or S. 4 hours.
 For those who plan to go into secretarial office work and may be required to keep the accounts of a dentist, lawyer, or other professional individual, or for those who will need to keep financial records for themselves or others. It is a terminal course and is not required for those who plan to take Principles of Accounting. Prerequisite: Accounting 2, or equivalent.

- 51, 52, 53. **PRINCIPLES OF ACCOUNTING.** FWS. 3 hours.
 Intended for those students who plan to major in business administration. Besides introduction to the fundamental principles of double-entry bookkeeping, the accounting principles are developed through the balance sheet, profit and loss statement, controlling accounts, partnership accounting, opening corporation books, surplus, bonds, and bond sinking funds, consignment and installment sales, interlocking ledgers, and managerial uses of financial statements.

GENERAL BUSINESS

41. **BUSINESS ARITHMETIC.** FWS. 5 hours.
 This course provides a review of the fundamentals of the various types of mathematical problems occurring in present day business. The course is required of those majoring in business.
42. **INTRODUCTION TO BUSINESS ORGANIZATION.** FWS. 3 hours.
 This course is a study of good business practices and methods involved in the organization and operation of a small business. Consideration is given to licenses, permits, bookkeeping and record keeping for small business, income tax, withholding tax, social security, etc. It is especially designed for those who will go into business alone or on a partnership basis.
42. **INTRODUCTION TO BUSINESS LAW.** FWS. 3 hours.
 A study of the usual contractual relationship in the business world. Numerous cases are employed to illustrate the rights and obligations of anyone in the pursuit of ordinary business transactions. This course should help the student to know when he needs the services of an attorney, and to discuss intelligently his legal problems with persons qualified to know what his rights are.
- 91, 92, 93. **BUSINESS MACHINES.** FWS. 1 hour.
 Fundamental skills are developed in such machines as the Sunstrand and Dalton Adding Listing Machines; the Monroe, Burroughs, Marchant, Calculating machines; Burroughs, Rand and Commercial Posting Machines; and Underwood-Elliott-Fisher Accounting and Writing Machine. A student earns one hour credit for each machine completed. Approximately 50 practice hours are required. Prerequisite: Permission of the instructor.

SECRETARIAL SCIENCE

51. **FILING.** FW. 3 hours.
 Alphabetic, numeric, geographic, subject, and soundex systems of filing are studied. Practice is given in the finding of correspondence as well as in the filing of material.

- 52. SECRETARIAL PRACTICE.** **S. 3 hours.**
Particular emphasis is given to such topics as general office knowledge, business ethics and dress, and the application of typing and shorthand to office problems. Prerequisite: Shorthand 51 or enrollment in Shorthand 51.
- 53. DICTAPHONE.** **FS. 1 hour.**
Instruction on the complete Dictaphone—transcriber, shaver, and dictation machine—is given. Office proficiency on the transcriber is developed. Prerequisite: Typewriting 3 or enrollment in Typewriting 3.

SHORTHAND

- 1, 2. SHORTHAND THEORY.** **FWS. 4 hours.**
The study of the principles of shorthand through reading and writing. Some practice dictation is given in the second quarter.
- 3. BEGINNING DICTATION.** **FWS. 4 hours.**
Review of the principles of shorthand. Dictation is given at the rate of 80 words. Machine transcription, with special attention to letter arrangement. Prerequisites: Shorthand 2 or equivalent. Typewriting 3 or enrollment in Typewriting 3.
- 51. INTERMEDIATE DICTATION AND TRANSCRIPTION.** **FWS. 4 hours.**
A dictation speed of 90-100 words a minute is attained, with a mailable transcript. Prerequisite: Shorthand 3 or equivalent.
- 53. ADVANCED DICTATION AND TRANSCRIPTION.** **FWS. 4 hours.**
The study of shorthand is applied to the terminology of various vocations. Dictation at the rate of 110-120 words. Prerequisite: Shorthand 51.

TYPEWRITING

- 1, 2. BEGINNING TYPEWRITING.** **FWS. 2 hours.**
A beginning course in which the keyboard and fundamentals of typewriting are taught.
- 3. INTERMEDIATE TYPEWRITING.** **FWS. 2 hours.**
Review of letter styles, forms of punctuation, and other fundamentals. Intensive drill on letter placement. Development of a speed required in the average office. Prerequisite: Typewriting 2 or equivalent.
- 51. ADVANCED TYPEWRITING.** **WS. 2 hours.**
Study of tabulations, telegrams, legal forms, and mimeograph work. Development of speed on varied material, rather than straight-copy work. Prerequisite: Typewriting 3.

ENGLISH

- 81. REVIEW ENGLISH.** **F, W, or S. 5 hours.**
A course designed for those students who need a review in the fundamentals of English before beginning college work in this field. It includes a review of high school grammar and punctuation, vocabulary building, composition, spelling, and reading. No transfer credit is allowed for this course.

- 01. REMEDIAL ENGLISH.** F or W. No credit.
A course required of freshmen who are deficient in reading and the fundamentals of English as evidenced by low scores on the entrance test. This course carries no credit but is taken along with English 1 so that together they carry three hours credit. English 01 meets twice a week for a quarter.
- 1, 2, 3. FRESHMAN ENGLISH.** FWS. 3 hours.
The ability to speak and write correctly and effectively is the result sought through this course. Instruction is given in the fundamentals of grammar, in the organization of themes, and in the use of the library. Attention is given to the development of vocabulary and to increasing speed and accuracy of comprehension through the study of essays on subjects of current interest. Required of all Freshmen.
- 4, 5, 6. FRESHMAN ENGLISH.** FWS. 3 hours.
The course is similar to English 1, 2, 3, but is designed to meet the special needs of Commerce students.
- 21. WORD STUDY.** F, W, or S. 2 hours.
The course is based primarily upon the practical, everyday words. The work is correlated so that spelling, usage, pronunciation, and syllabication give a more complete mastery of words and vocabulary.
- 31, 32, 33. SURVEY OF JOURNALISM.** FWS. 2 hours.
This course is a study of the various mediums of information—newspaper, magazine, and radio, with stress upon the newspaper. Getting and writing newspaper stories is emphasized. Stories are written, copy-read and proof-read for the Criterion, official college newspaper. Part of the credit received in this course is gained from active participation on the Criterion staff.
- 51, 52, 53. ADVANCED COMPOSITION.** FWS. 2 hours.
The student is directed in practice designed to develop correctness and ease in written expression. Expository writing in the Fall Quarter, with emphasis on the form and content of critical themes and research papers, is followed by practice in descriptive writing and the personal essay in the Winter Quarter and by a study of the technique of the short story and narrative composition in the Spring Quarter. Students are advised to plan for at least two of the three quarters, one of which should be the Fall Quarter. Prerequisite: English 1, 2, 3.

LITERATURE

- 41. FICTION.** F. 2 hours.
This study of short stories and novels by American, English, and European authors of the nineteenth and twentieth centuries aims to broaden the student's knowledge of the world's best fiction and to give him standards by which he can judge the values of a story. Open to Freshmen and Sophomores.
- 42. POETRY.** W. 2 hours.
This course is planned to develop the student's understanding and appreciation of English and American poetry. Open to Freshmen and Sophomores.

- 43. DRAMA.** S. 2 hours.
This course requires the reading of recent English, American, and European plays and the writing of critical papers on the drama. Open to Freshmen and Sophomores.
- 51, 52, 53. SURVEY OF ENGLISH LITERATURE.** FWS. 3 hours.
An appreciation course in the development of English poetry and prose from Beowulf to the present. The literature is presented against its political and social backgrounds. This course is designed to meet the requirements of those planning to major in English literature. Prerequisite: English 1, 2, 3.
- 61, 62, 63. SURVEY OF AMERICAN LITERATURE.** FWS. 3 hours.
This course consisting of three quarters presents the development of American prose and poetry from the seventeenth century to the present. It aims to develop appreciation of literature and to increase the student's understanding of America as it is today through knowledge of the thought and culture of the past. Credit will be given for any single quarter. Prerequisite: English 1, 2, 3.
- 71, 72, 73. SOPHOMORE LITERATURE.** FWS. 3 hours.
This is a course in literature on the sophomore level designed to give students an approach to literature and an appreciation of it. Although the works studied are predominantly from English literature, the course also includes representative work of Hawthorne, Chekhov, Maupassant, Whitman, Ibsen, Capck, and others. The works are classified as to Short Story, Poetry, Drama, Novel, Biography, and Autobiography. It is not open to students who have credit in Freshman literature.
- 1. PUBLIC SPEAKING.** F, W, or S. 3 hours.
This is a one-quarter course in the fundamentals of public speaking designed for students who are taking a general course or those taking pre-professional courses—agriculture, home economics, education, law, etc. It is designed to improve the student's conversational and platform speech in general. Emphasis is placed on the use of the speaking voice, diction, platform behavior, speech organization and delivery. Students are given numerous opportunities to speak and are led to develop standards of criticism.
- 11. VOICE IN SPEECH.** F. 2 hours.
This is the first part of a three-quarter course designed for students who plan to major in speech and others who desire to obtain a thorough grounding in good speech. It is devoted primarily to the improvement of the speaking voice with individual attention to the elimination of faulty habits of speech. Phonetics and the physical aspects of speech are emphasized.
- 12. SPEECHMAKING.** W. 2 hours.
This quarter is devoted to the development of the principles of effective speaking, practice in the preparation and delivery of short speeches, and work in analysis and sources. Prerequisite: Speech 11.
- 13. ORAL INTERPRETATION.** S. 2 hours.
This quarter is devoted to a study of the principles of expressive reading of prose and poetry with practice in class and platform reading, and in radio speech. Prerequisites: Speech 11, 12.

21, 22, 23. PLAY PRODUCTION.**FWS. 2 hours.**

The main purpose of this three-quarter course is to acquaint the student with the problems in the many phases of play production, and to provide opportunity to study the various means of solving them. The course will begin with History of the Theatre. Great plays will be studied with emphasis on what makes them good theatre. Accompanying the study of the theory of staging, lighting, costuming, make-up, directing and acting, will come actual experience along all those lines. Plays will be produced by the students throughout the year.

FOREIGN LANGUAGE**FRENCH****1, 2, 3. BEGINNING FRENCH.****FWS. 5 hours.**

An introduction to French through a conversational approach, developing an ability to read French in the short story, newspaper, and periodical. Careful attention is given to pronunciation and to the fundamentals needed for steady progress. Records are used for ear-training in French intonation of speech.

51, 52, 53. FRENCH READING.**FWS. 3 hours.**

A course to build up proficiency in reading French and by a study of some of the masterpieces of French literature to acquire knowledge and appreciation of such works and their place in the great literary movements. Prerequisite: two years high school French or one year college French.

GERMAN**1, 2, 2. BEGINNING GERMAN.****FWS. 5 hours.**

This course consists in speaking and writing simple German, and in reading German of medium difficulty. An introduction to German figures gives a foundation for further study of German literature. Intensive practice in reading German and in studying the make-up of the German sentence prepares one to take up the study of scientific German often required for a degree in science.

SPANISH**1, 2, 3. BEGINNING SPANISH.****FWS. 5 hours.**

Emphasis is given to the oral approach in learning to understand and speak Spanish of medium difficulty. The pronunciation and culture of Spanish America are used as the basis for this study. Intensive reading in text is supplemented by reading of short stories and newspapers. Records are used in developing ability to understand spoken Spanish.

51, 52, 53. SPANISH READING.**FWS. 3 hours.**

This course is designed to acquaint the student with representative literary works of Spain and South America. Considerable time is given to the reading of current Spanish periodicals and to the practice of spoken and written Spanish. Prerequisite: two years high school Spanish or one year college Spanish.

61, 62, 63. CONVERSATIONAL SPANISH.**FWS. 2 hours.**

Supplements Spanish 51, 52, 53, giving special emphasis to the oral use of idiomatic Spanish of everyday life. Prerequisite: Spanish 1, 2, 3, or permission of instructor.

HOME ECONOMICS

1. **COLOR AND DESIGN.** F. 3 hours.
Study of principles of color and design and their applications to personal and home living. Technique used in designing and making hand crafts.
2. **TEXTILES.** W. 3 hours.
Study of textile fabrics and fibers with emphasis on selection, care and wearing qualities of clothing. Tests for identification of textiles.
3. **SELECTION AND CONSTRUCTION OF CLOTHING.** S. 5 hours.
Fundamental experiences in selecting and purchasing materials and constructing clothing to meet individual needs. Remodeling and construction of clothing.
41. **INDIVIDUALIZED CLOTHING.** F. 3 hours.
Selection, care, and construction of clothing to meet the needs of young women.
42. **LIVING IN THE HOME.** W. 3 hours.
Study of family living problems including home decoration, first aid and home nursing, child care, and personal and family relationships.
43. **FEEDING THE FAMILY.** S. 3 hours.
Principles and practice of selection and preparation of foods with emphasis on nutrition and the planning and serving of family meals.
51. **CONSERVATION AND PRESERVATION.** F. 3 hours.
Actual preservation of foods by canning, drying, freezing, and home storage. Nutritive value of foods for feeding the family. Prerequisite: Chemistry 1, 2, 3.
52. **SELECTION AND PREPARATION.** W. 3 hours.
A study of food values and food costs. Principles and technique of preparing all types of foods with introduction to meal planning and serving.
53. **PREPARATION AND SERVING OF MEALS.** S. 3 hours.
Planning, preparing and serving family meals and special occasion menus.

MATHEMATICS AND ENGINEERING

GENERAL MATHEMATICS

These courses are planned to meet the needs of three groups: (1) those students who are deficient in university entrance requirements in mathematics; (2) those who have had high school mathematics but wish to review before beginning college mathematics; (3) students desiring to take one year or less of college mathematics to meet degree or curriculum requirements.

01. **ELEMENTARY ALGEBRA.** F. 3 hours terminal credit.
For students who do not have credit for one year of high school algebra. This course carries no transfer credit but meets college entrance requirements. It is a basic elementary course which will give the student a mastery of the elementary principles of algebra, and prepare him to continue with Math I.

02. PLANE GEOMETRY. W. 3 hours terminal credit.

For students who do not have credit for one year of high school geometry. This course carries no transfer credit but meets college entrance requirements. It includes plane geometry and the application of the geometric type of reasoning to problems of everyday life. Prerequisite: Elementary algebra.

01. ESSENTIALS OF MATHEMATICS.

F, W, or S. 3 hours terminal credit.

A review course in arithmetic; algebraic and geometric principles and processes; logarithms; introduction to trigonometry; tabular, graphical, and analytical representation of functions. This course does not carry transfer credit.

1. COLLEGE ALGEBRA. F, W, or S. 5 hours.

Fundamental concepts; laws, operations; review of factoring, fractions; linear equations, the graph; quadric equations and simultaneous quadric equations, binomial theorem, variation, progressions; determinants and systems of linear equations; exponents, radicals; logarithms; compound interest and annuities. Prerequisite: one year high school algebra, or Math 01, and one year of plane geometry, or Math 02.

1a. COLLEGE ALGEBRA. F. 3 hours.

A course similar to Math 1 but one in which less time is needed because of better preparation. Pre-requisite: a high score on the freshman entrance test in mathematics.

2. PLANE TRIGONOMETRY. W. 3 hours.

This course emphasizes the solution of right and oblique triangles, and meets the requirements of liberal arts majors or others who need only one year of college mathematics. Prerequisite: Math 1.

3. PLANE ANALYTIC GEOMETRY. S. 3 hours.

This course deals with the geometry of the straight line, circle, ellipse, parabola, hyperbola, and some of the higher plane curves. Prerequisites: Math 1 and 2.

ENGINEERING MATHEMATICS

These courses meet the requirements of students who wish to major in engineering or science, and those who plan to become teachers of mathematics.

03. SOLID GEOMETRY. F. 3 hours.

This course is offered so that students may make up deficiencies in prerequisites for engineering. It includes the topics usually covered in a high school course in solid geometry.

11. COLLEGE ALGEBRA. F, W, or S. 5 hours.

A course including a brief review of the most necessary topics from high-school algebra. In addition, systems involving quadratics; ratio, proportion, and variation; binomial theorem; progressions; function concept; mathematical induction; inequalities; complex numbers; theory of equations; computation and logarithms; mathematics of investment; permutations and combinations; probability; determinants; partial fractions; infinite series; method of least squares and related topics. Prerequisite: high school algebra through quadratics and plane geometry, and a satisfactory score on an entrance examination in mathematics.

12. PLANE AND SPHERICAL TRIGONOMETRY.

F, W, or S. 5 hours.

Angles and their measures; the trigonometric functions; significant figures and approximate computation; linear interpolations and use of tables; right triangles; identities; functions of multiple angles and addition formulas; inverse functions; trigonometric equations; oblique triangles; right and oblique triangles in spherical trigonometry. Prerequisite: Math 11.

13. PLANE AND SOLID ANALYTIC GEOMETRY.

F, W, or S. 5 hours.

Points in rectangular and polar coordinate systems; distance, slope, angle between lines; loci; straight line; circle, conic sections; polar and parametric equations; tangents and normals; curve tracing in various systems; translation and rotation; empirical determinations (curve fitting); direction cosines and numbers; the plane and line; quadric surfaces and sections; cylindrical and spherical coordinates. Prerequisite: Math 12.

21, 22, 23. ENGINEERING PROBLEMS.

FWS. 1 hour.

Supervised work emphasizing proper methods of work and correct form, and introducing some of the elements of various fields of engineering. Theory and use of the slide rule.

51, 52, 53. DIFFERENTIAL AND INTEGRAL CALCULUS.

EWS. 5 hours.

Functions; limits and limit theorems (without proof) the derivative and its interpretations; derivatives of algebraic functions; maxima and minima; rates; derivatives of transcendental functions; applications, including Newton's methods of approximation and tangents and normals; derivatives of higher order; the differential with applications; definite integral with applications such as length, area, surfaces and volume, moments, centroids, moments of inertia, improper integrals; applications of the definite integral such as work and attraction, curvature, curve tracing; indeterminate forms; series of constant terms; power series with Taylor's and Maclaurin's theorems with remainder term and applications in integration; partial differentiation with applications; multiple integrals with applications. Ordinary and partial differential equations with emphasis on engineering and physical applications. Prerequisites: Math 13 or consent of the instructor based upon evidence of ability to do the work as shown by a test in algebra and analytical geometry.

MECHANICAL DRAWING**1, 3. ENGINEERING DRAWING.**

FS. 3 hours.

Use of drawing instruments, lettering, principles of orthographic projections, dimensions, reading drawing, auxiliary and sectional views are stressed. Course 1 includes six hours of drafting, with quiz sections. Isometric, dimetric, oblique, cabinet drawing, linear perspective, working drawings, development of surfaces, tracing and blue printing are considered. This course includes six hours of drafting. Prerequisites for course 3: Engineering Drawing 1 and 2.

2. DESCRIPTIVE GEOMETRY.

W. 3 hours.

Orthographic projection of points, lines, planes, and curved surfaces mostly in the third quadrant of projection are studied. The change of position method is applied to a series of practice

problems and practical problems. Practical problems are presented as they would be encountered in engineering practice. The course includes six hours of drafting, with quiz sections. Prerequisite: Engineering Drawing 1.

AERONAUTICS

- I. PRIMARY GROUND SCHOOL.** F, W, or S. 3 hours.
Elementary knowledge of navigation, meteorology, and civil air regulations, considered necessary in the training of students desiring to become pilots for private flying.
- II. PRIMARY FLIGHT TRAINING.** F, W, or S. 2 hours.
Flight instruction necessary for the C. A. A. flight test for private pilot's license. Each student makes his own arrangement for flying time with approved flight operators.

MUSIC

THEORY AND HISTORY

- 1, 2, 3. ELEMENTARY THEORY.** FWS. 5 hours.
This course is designed to give a thorough ground work in the melodic, harmonic and rhythmic elements of music. Major, minor, diminished and augmented triads, keys and scales, intervals, and cadences are studied in singing, writing, playing and dictation. Rhythmic training includes the study of time durations, notation, time signatures, rhythmic reading and dictation. The fundamentals of the acoustics of music are also studied.
- II. FUNDAMENTALS OF MUSIC.** F. 3 hours.
This one-quarter course is designed primarily for non-music majors, and no previous knowledge of or experience in music is required. Among the topics studied are: Notation; Scales; Intervals and Triads; Keys; Signatures; and Elements of conducting. A survey is made of the various forms and styles of music in the instrumental and vocal fields. The instruments of the orchestra and the acoustical principles involved are discussed with demonstration by expert players.
- 51, 52, 53. ADVANCED THEORY.** FWS. 3 hours.
A study of harmonic resources, from primary seventh chords through enharmonic modulation and higher discords. Four-part harmony from melody and figured bass, and original composition in the simple forms are studied. Melodic, harmonic, and rhythmic dictation are continued. Prerequisite: Music 3.
- 61, 62, 63. HISTORY OF MUSIC.** FWS. 3 hours.
A survey of the history of musical development from the ancient Greeks through contemporary composers. Musical events are studied in their relation to world history. Lectures and readings are illustrated with recordings and motion picture films. Open to all students.

ENSEMBLE MUSIC

Besides regularly scheduled class meetings, members of ensembles are required to attend special rehearsals and to take part in programs.

- 21, 22, 23. COLLEGE CHOIR.** FWS. 1 hour per year.
A course for the purpose of study and presentation of standard choral compositions. The choir participates in college vesper services and radio broadcasts. Membership is open to all students. Students who have satisfactorily completed two quarters without credit enroll for credit in the third quarter.
- 31, 32, 33. COLLEGE BAND.** FWS. 1 hour per year.
Membership in the college band is open to all college students with previous band experience. (Credit will be given in College Band provided instrumentation is sufficient to warrant regular rehearsals).
- 41, 42, 43. SYMPHONY ORCHESTRA.** FWS. 1 hour per year.
The Mesa College Symphony Orchestra is made up of students, faculty, and professional musicians of Grand Junction. At least two concerts of symphonic works are presented during the school year. Open to all qualified college students. Students who have satisfactorily completed two quarters without credit enroll for credit in the third quarter.
- 71, 72, 73. INSTRUMENTAL ENSEMBLE.** FWS. 1 hour.
This course is open to advanced instrumental students, and gives opportunity for studying and playing standard works for small instrumental combinations. The course may be repeated for credit.
- 81, 82, 83. VOCAL ENSEMBLE.** FWS. 1 hour.
This course is open to advanced vocal students. Opportunities are given for singing in trios, quartets, etc. The course may be repeated for credit.
- 91, 92, 93. PIANO ACCOMPANYING.** FWS. 1 hour.
A course designed for giving piano majors actual experience in supervised accompanying.

APPLIED MUSIC

Individual music lessons are given in piano, voice, and the instruments of the band and orchestra. Two hours credit per quarter are given in the student's major instrument if he is a music major. One hour credit is given in the student's minor instrument or if private lessons are chosen as an elective. Music majors are required to study piano unless they can show ability to play second grade music.

Instruction by competent teachers is offered to beginners and advanced students. Materials are chosen according to the students needs and level of attainment.

To receive credit students must enroll for private instruction through the college with instructors approved by the college.

- 4, 5, 6; 54, 55, 56. VOICE.** FWS. 1 or 2 hours.
- 14, 15, 16; 64, 65, 66. PIANO.** FWS. 1 or 2 hours.
- 24, 25, 26; 74, 75, 76. VIOLIN.** FWS. 1 or 2 hours.
- 34, 35, 36; 84, 85, 86. BRASS INSTRUMENTS.** FWS. 1 or 2 hours.
- 44, 45, 46; 94, 95, 96. WOODWIND INSTRUMENTS.** FWS. 1 or 2 hours.

PHYSICAL EDUCATION AND HYGIENE

The Department of Physical Education aims to provide an instructional program in physical education activities and personal hygiene. It is designed to secure optimum health and physical fitness, based upon the needs and interests of the students. All regular or full-time students are required to take physical education each quarter they are registered in the college unless physically unable, as evidenced by a doctor's certificate, to participate in physical activities.

All entering students are given a comprehensive health examination by a staff of qualified physicians and dentists to determine their health status and to apply follow-up procedures.

Students who wish to major in physical education should take hygiene, biology, chemistry, public speaking, and psychology.

PEM 1, 2, 3, 51, 52, 53. PHYSICAL EDUCATION FOR MEN. FWS. 1 hour.

Courses offered for beginners and advanced students in tennis, basketball, touch-football, tumbling, gymnastics, archery, swimming, football and varsity sports. Participating students provide their own personal equipment.

PEW 1, 2, 3, 51, 52, 53. PHYSICAL EDUCATION FOR WOMEN. FWS. 1 hour.

Women students are required to take one team sport, one individual sport and one rhythmic course during the two years at Mesa. Courses offered in tennis, archery, speedball, volleyball, basketball, badminton, square dancing, tap dancing, swimming, gymnastics and postural work according to the preference of a particular group. Participating students provide their own personal equipment.

HYGIENE

1. PERSONAL HYGIENE. F, W, or S. 2 hours.

Emphasis is placed upon the functional rather than the anatomic phases of personal hygiene. The course is planned to give the student a general understanding of the body and to aid him in the fine art of living. The course is based upon the following units of work: personal hygiene; mental hygiene; and environmental hygiene. The study consists of lectures, collateral reading, and term themes.

PHYSICAL SCIENCE

1, 2, 3. SURVEY OF PHYSICAL SCIENCE. FWS. 3 hours.

A course designed to orient freshman in the fields of astronomy, chemistry, geology and physics. A logically developed course in physical science rather than a "cut-down" version of the elementary courses in the various departments represented. Its aim is to give a definite conception of the physical world, some appreciation of the scientific method and the part it has had in the intellectual life of the race, as well as the contributions of the physical sciences to the solution of some contemporary problems.

CHEMISTRY

1, 2, 3. GENERAL INORGANIC CHEMISTRY. FWS. 4 or 5 hours.

Lectures and laboratory. Fundamental principles of general inorganic chemistry, and applications in science and society; atomic structure; periodic table; gas laws; non-metallic elements and their principal compounds. Designed for students who are planning to take a major in chemistry, medicine, engineering, or other scientific work where an adequate foundation in chemistry is required.

11, 12, 13. SURVEY COURSE IN GENERAL CHEMISTRY. FWS. 3 hours.

Lectures and demonstrations, and recitations with the facts and philosophy of Chemistry in a broad way. Applications to the home, industry, and agriculture will be presented. Not accepted for the chemistry major or as a part of pre-medical or of engineering requirements.

51, 52, 53. ORGANIC CHEMISTRY. FWS. 5 hours.

Lectures, discussion, and laboratory exercises in the preparation and reactions of aliphatic and aromatic compounds of carbon. Syntheses of simple drugs and dyes are carried out in the laboratory and a discussion of foods and vitamins is included. Prerequisite: Chemistry 1, 2, 3.

61. QUALITATIVE ANALYSIS. F or S. 5 hours.

The separation and identification of the more common bases and acids. Prerequisite: Chemistry 2.

62. QUANTITATIVE ANALYSIS. W. 5 hours.

Elementary gravimetric and volumetric analysis. This course is designed for Pharmacy, pre-medical, medical, technology students, and chemistry majors. Prerequisites: Chemistry 61 and Trigonometry.

63. QUANTITATIVE ANALYSIS. S. 3 hours.

A continuation of Chemistry 62, with special attention to the methods of calculation and interpretation of analytical results. Required of Chemistry majors. Prerequisite: Chemistry 62.

PHYSICS

1. INTRODUCTION TO PHYSICS. S. 5 hours.

A course in physics consisting of lectures, demonstrations, discussions, and laboratory work designed for the non-science major with special emphasis on the understanding of underlying principles and methods of physics and their application to life in modern times. The human body and its physical environment constitute the central theme.

51, 52, 53. GENERAL PHYSICS. FWS. 5 hours.

Two of the six topics of a general physics course are considered each quarter. During the Fall Quarter mechanics and heat are studied. The fundamental facts and principles of these subjects are presented with practical applications. During the Winter Quarter the topics sound and light are presented. The Spring Quarter is used for the two remaining topics, electricity and magnetism. Many experiments are performed and several field trips are taken to make the student aware of practical applications. One three hour laboratory period per week is required of each student for each quarter.

SOCIAL SCIENCE

1, 2, 3. SOCIAL SCIENCE SURVEY. FWS. 3 hours.

This course introduces the student to the field of the social sciences and acquaints him with the common elements which bind them together. The fields of economics, political science, sociology and related sciences are presented with the material grouped around institutions, not traditional subject matter. The course is concerned with giving an understanding of the issues involved and of the common social problems thereby helping to solve them. It is particularly recommended to students who are not majoring in the field of social science.

ECONOMICS

51, 52, 53. PRINCIPLES OF ECONOMICS. FWS. 3 hours.

A course dealing with the structural organization of modern economic society, the ways in which it functions, the maladjustments in its operation resulting in problems calling for remedial action, and the policies pursued in attempts to make it function better. The study includes an analysis of rent, interest, profits, wages, prices, banking, foreign trade and the economic function of government.

EDUCATION

51. INTRODUCTION TO EDUCATION. F. 3 hours.

A short survey of the field of education. Important aspects considered are present philosophies of education, major problems of education, present practices, and the school as a social institution. Required of education majors.

52. ELEMENTARY INSTRUCTION METHODS. W. 3 hours.

Methods used in elementary instruction are examined in this course. Problems having to do with assignment, motivation, learning, appreciation, drill, and guidance in study are considered.

53. CLASSROOM MANAGEMENT. S. 3 hours.

Principal elements in successful classroom activities are presented. Included are such factors as the daily schedule, playground activities, health programs, records and reports, tests and measurements, and problems of discipline.

71. STUDENT TEACHING. FWS. 6 hours.

This course includes both theory and practice of instruction. Student teachers must teach five half-day periods a week in the public schools of Grand Junction. They must observe the work of a qualified teacher of a given grade or subject and then must teach independently. This laboratory work is supplemented by discussions, lectures, excursions, and visits. Student teachers are supervised by the regular instructors and principals as well as by a college representative. The course is required of all students expecting to teach.

GEOGRAPHY

1. **ECONOMIC GEOGRAPHY.** F. 3 hours.
An analysis of the world distribution of important occupations and commodities with emphasis upon outstanding producing and consuming areas.
2. **HUMAN GEOGRAPHY.** W. 3 hours.
A study of populations with regard to geographic factors. How human life is affected by differences in topographical and climatic surroundings and by the presence of natural resources.
3. **POLITICAL GEOGRAPHY.** S. 3 hours.
Political and historical significance of earth features; geographic aspects of the internal development and external relations of nations and regions.

HISTORY

- 1, 2, 3. **MODERN EUROPEAN HISTORY.** FWS. 3 hours.
This course seeks to give the student an understanding of peoples and events which helps to clarify the present world situation. It deals with great movements, political, social, and economic, from the beginning of modern times. The development of a spirit of nationalism, rise of the middle class, economic revolution, and changing political conceptions are studied. The Spring Quarter deals with the present time by use of contemporary materials. Class discussions, reports, lectures, text book and assigned readings are used to accomplish the purposes of the course.
- 41, 42, 43. **CURRENT AFFAIRS.** FWS. 1 hour.
The purpose of this course is to acquaint the student with the problems of the day. In addition to studying week-to-week happenings in the world, the course stresses reasons for, and backgrounds of these events. Economic and social movements, as well as political problems are discussed. Current periodicals are the chief source of materials. May be repeated for credit.
- 51, 42, 53. **UNITED STATES HISTORY.** FWS. 3 hours.
This is a general course in the history of the United States, primarily for Sophomores. It deals with developments from the opening of the American continent to the white man to the present time. The establishment and development of American institutions is stressed throughout. Economic trends, the development of democracy, the westward movement of people, the rise of interest and participation in world affairs are typical of movements studied. Present day political, economic and social problems and world issues are studied. Class discussion, reports, lectures, textbooks, a wide range of reading in books and periodicals are used.

POLITICAL SCIENCE

- 1, 2, 3. **AMERICAN GOVERNMENT.** FWS. 3 hours.
A course which treats of the framework and functions of local, state, and national government. An attempt is made to bring into relief the contemporary scene, economic and social, within which the government operates and within which the student will be called upon to perform the duties of citizenship.

PSYCHOLOGY

51, 52, 53. GENERAL PSYCHOLOGY. FWS. 3 hours.

This course is designed to give the student the fundamental understanding of the causes and methods of behavior, and to give him practical suggestions for the control and improvements of his own life. Factors in development, motivation, emotions, the special senses, attention and perception, learning, and thinking. The role of psychology in the solving of personal and social problems including a study of individual differences, intelligence, dynamic factors in personality, and social and vocational adjustment.

SOCIOLOGY

61, 62. GENERAL SOCIOLOGY. FWS. 2 hours.

A course designed to familiarize the student with basic group relationships. Various approaches are made to the study of social growth, social change, and social control.

63. AMERICAN SOCIAL PROBLEMS. S. 2 hours.

A study of specific social problems, including crime, poverty, housing, and those connected with the family and its place in society, with consideration given to causes, treatment and possible remedies for existing undesirable conditions.

73. MARRIAGE AND THE FAMILY. S. 3 hours.

The development of marriage and the family in various selected cultures from primitive times to date; an examination of the important aspects of courtship and marriage; contemporary marital and domestic problems; changing functions and the family, efforts at stabilization, and the problem of adjustment to a changing society. Prerequisite: Sophomore standing or permission of the instructor.

TRADES AND INDUSTRIES

Trades and Industry courses listed below are vocational training courses intended to meet the basic needs of individuals who wish to train or re-train for gainful employment in trades.

In no case are trade courses designed to give any transfer credit at higher institutions.

T & I 1, 2, 3. AUTO MECHANICS. FWS. 3-8 hours.

Automobile lubrication, chassis assembly and repair, tires, brakes, battery, engine, including carburetion and all electrical units, transmission and differential, steering mechanism, trouble shooting. Automotive machinist work to include complete engine overhaul and repair.

T & I 11, 12, 13. RADIO. FWS. 3-8 hours.

Shop laboratory practice leading toward employment as a technician in the radio and sound fields. Training in radio repair and maintenance. Tools, processes, and materials of the trade in the specialized fields of Radio Wireman, Mechanic, Serviceman, and Technician.

T & I 21, 22, 23. MACHINE SHOP. FWS. 3-8 hours.

General work carried on in machine shops and factories. Operations of the following machinery; engine lathes, shapers, planers, milling machines, grinders, drill presses, and other machines found in machine shops. Specialization will be permitted in a particular field where the student may be trained for a definite job in industry.

T & I 31, 32, 33. AIRPLANE MECHANICS. FWS. 3-8 hours.

Elementary instruction in basic elements of aircraft engine mechanics; bench work, hand and machine tools, engine teardown, inspection, assembly; some work on engine accessories such as magnetos, generators, carburetors, propellers, pumps, governors and superchargers.

RELATED TRAINING

Related training courses are given according to requirements of the Veterans Administration for those veterans who are taking on the job training. It is provided in such fields as carpentry, plumbing, electricity, sheet metal, auto mechanics, and other apprentice trades. A total of 144 attendance hours a year is required.

SUMMER QUARTER

1947

The summer quarter will begin June 16, and end August 22, 1947. The quarter will be divided into two terms of five weeks each and students may receive credit for work done in either term or for the entire quarter. Fifteen hours of credit may be earned during the quarter.

SCHOOL OF COMMERCE

Beginning and advanced courses in bookkeeping, shorthand, and typewriting will be offered. Other courses will be given according to demand from among the following: business English, business machines, business arithmetic, office practice, and business law.

SCHOOL OF ARTS AND SCIENCE

Instruction will be given in aeronautics, chemistry, college mathematics, history, mechanical drawing, political science, and in other courses according to demand.

FEES

Summer Quarter fees are the same as those of other quarters.

STAFF

Horace J. Wubben.....	President
Mattie F. Dorsey.....	Registrar
Roberta Anderson.....	Commerce
Edward M. Day.....	Commerce
R. M. Dorsey.....	Mathematics, Mechanical Drawing
May Belle Gordon.....	Commerce
Melvin McNew.....	Mathematics, Chemistry
Mary Rait.....	History, Political Science

