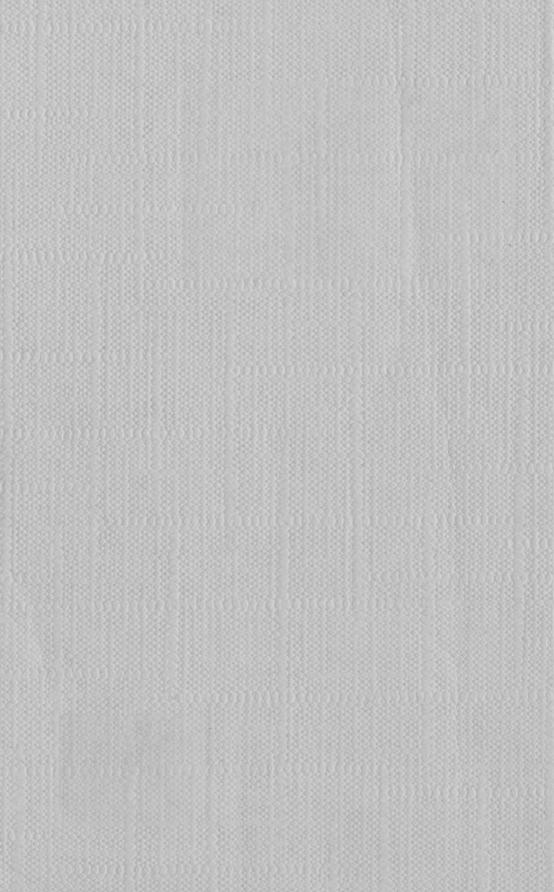
BULLETIN

COLORADO STATE
COLLEGE OF EDUCATION

GREELEY

YEARBOOK NUMBER 1942-1943



# BULLETIN

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# CALENDAR FOR THE COLLEGE YEAR

## 1943-1944

### SUMMER QUARTER

SUMMER QUARTER					
1943					
JUNE	19	Saturday. Registration, 7:00 a.m12:00 m.			
JUNE	21	Monday. Classes begin.			
JULY	3	Saturday. Registration, short session.			
JULY	5	Monday. Short session classes begin.			
August	13	Friday. Summer sessions end.			
		FALL QUARTER			
SEPTEMBER	26	Sunday. Approved houses open for occupancy. Welcoming party for all new students, 7:00 p.m. Student Union Ballroom.			
SEPTEMBER	27-28	Monday-Tuesday. Matriculation tests and interviews with advisers.			
SEPTEMBER	29	Wednesday. Registration for all students. All-College Assembly, Little Theatre, 7:30 p.m.			
SEPTEMBER	30	Thursday. Classes begin.			
November	25-26	Thursday-Friday (Thanksgiving). Holiday.			
DECEMBER	16-17	Thursday-Friday. Final examinations.			
DECEMBER	18	Saturday. Christmas vacation begins.			
		WINTER QUARTER			
1944					
January	3	Monday. Registration.			
JANUARY	4	Tuesday. Classes begin.			
March	16-17	Thursday-Friday. Final examinations.			
MARCH	18	Saturday. Spring vacation begins.			
		SPRING QUARTER			
MARCH	27	Monday. Registration.			
MARCH	28	Tuesday. Classes begin.			
May	3	Wednesday. Insignia Day.			
JUNE	4	Sunday. Baccalaureate.			
JUNE	6	Tuesday. Senior Ceremonial.			
JUNE	7	Wednesday. Commencement.			
JUNE	8-9	Thursday-Friday. Final examinations.			

## CALENDAR FOR THE COLLEGE YEAR

### 1942-1943

1942		SUMMER QUARTER
JUNE	12	Friday. Registration, graduate students, 7:00 a.m
JUNE	12	12:00 m.
June	13	Saturday. Registration, undergraduate students, 7:00 a.m12:00 m.
JUNE	15	Monday. Classes begin.
JULY	3	Friday. Registration, short session.
JULY	6	Monday. Short session classes begin.
August	/	Friday. Summer sessions end.
		FALL QUARTER
		A detailed program of Orientation Week activities, beginning Sunday, September 27, 1942, will be sent on request.
SEPTEMBER	27	Sunday. Residence Halls and approved houses open for occupancy. New students guests at an informal
SEPTEMBER	28-29	welcoming supper.  Monday-Tuesday. Matriculation tests and interviews with advisers.
SEPTEMBER	30	Wednesday. Registration for all students. All-College Assembly, Gunter Hall, 7:30 p.m.
OCTOBER	1	Thursday. Classes begin.
November		Thursday-Friday (Thanksgiving). Holiday.
DECEMBER		Thursday-Friday. Final examinations.
DECEMBER	19	Saturday. Christmas vacation begins.
1943		WINTER QUARTER
JANUARY	4	Monday. Registration.
JANUARY	5	Tuesday. Classes begin.
MARCH	18-19	Thursday-Friday. Final examinations.
MARCH	20	Saturday. Spring vacation begins.
		SPRING QUARTER
MARCH	29	Monday. Registration.
MARCH	30	Tuesday. Classes begin.
TUNE	2	Wednesday. Insignia Day.
JUNE	6	Sunday. Baccalaureate.
June	8	Tuesday. Senior Ceremonial.
JUNE	9	Wednesday. Commencement.
June	10-11	Thursday-Friday. Final examinations.

### **COLLEGE EXPENSES**

# TUITION AND FEES BY QUARTER FALL, WINTER, AND SPRING QUARTERS\*

Required of All Students:	
Tuition, Resident of Colorado (out-of-state students pay an additional \$5.00)	\$22.50
Registration	2.50
College Service	5.00
Associated Students (includes health fee of \$2.50)	3.00
Fall Quarter, \$9.00; Winter Quarter, \$9.00; Spring Quarter, \$6.00 (Average)	8.00
REQUIRED IN ACCORDANCE WITH TERMS OF EACH STUDENT'S REGISTRATION**	
Matriculation (paid only once by all new students)	2.50
Late Registration (assessed for each separate failure to com-	
ply with regulations)	\$ 1.00
Special Examination (required of each student given permission to take an examination at a time other than	
that scheduled)	2.00
Late Application for Degree	2.00
Extension of Credit, Tuition and Incidental Fees***  (applied for deferments granted for more than one	
week after registration	1.00
Credit by Examination	
Test	2.00
Credit, per quarter hour	2.50
Special Fees:	
See the Graduate School, pages 29, 33, 35; the Division of page 95.	of Music,
LIVING COSTS:	
The rates for room and board and other living costs will be pages 134, 135.	found on

<sup>\*</sup>For Summer School Fees, refer to the Summer School Bulletin.

<sup>\*\*</sup>A fee substituted for special course and laboratory fees, the former Student Union and Book Fees, and required physical education service fees.

<sup>\*\*\*</sup>Tuition and fees are due and payable in full at registration. Privileges for an extension of credit are granted in exceptional circumstances upon application.

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<sup>†</sup>Deceased, December 10, 1941. \*On leave Fall, Winter and Spring quarters.

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\*On leave Summer and Fall quarters, 1942; Winter and Spring quarters, 1943.

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<sup>†</sup>Serving in the armed forces.

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<sup>†</sup>Serving in the armed forces.

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#### Interns

HELEN BRADBURY, A.B.

A.B., Colorado State College of Education.

Elementary Education

EUGENE SHAW CARTER, A.B.

A.B., Colorado State College of Education; Graduate Student, Chicago Musical College, New Mexico Military Academy.

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### Colorado State College of Education

COLORADO State College of Education is primarily a professional teacher-preparation institution offering undergraduate work leading to the Bachelor of Arts degree with a teaching certificate, and graduate work leading to the Master of Arts and Doctor of Education. Its main objective is the preparation of capable teachers, supervisors, and administrators for public schools and colleges. However, those desirous of following other vocations will find ample opportunity for preparation, in clerical work, pre-professional, or a four-year program leading to the Bachelor of Arts degree without the teaching certificate.

The program for the first two years of college work is organized to satisfy a demand for general cultural college work. It has a three-fold purpose: (1) Provide the best possible preparation in general education for advanced study, (2) provide a terminal education for those who for various reasons will not attend college longer than two years, and (3) provide a general education for those who will transfer at the end of two years to other colleges, or continue a program of studies in Colorado State College of Education leading to the Bachelor of Arts degree with a teaching certificate.

Those who do not wish to prepare for the profession of teaching may continue a program of studies leading to the Bachelor of Arts degree without the teaching certificate. A liberal cultural program is offered and the student is permitted wide latitude in making his own program, with the advice of the chairman of the division in which he chooses to major. Students following this program will be obliged to take the prescribed general education courses as listed on page 21.

Two year terminal programs in business education and skills are provided for 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, retail salespeople, and other types of business and office workers. The courses included in these curricula are practical, intensive, and free from professional requirements for teachers. They provide excellent preparation and review for state and federal civil service examinations in the clerical field. A variety of courses is offered and the student is permitted to select those that 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 to those who complete the recommended curricula and pass the proficiency examinations. The services of the placement bureau of the college will also be at the disposal of students who complete the terminal courses.

Students desirous of following professions outside the field of teaching will find ample opportunity to pursue their preparatory studies under the two-year pre-professional curriculum. Most of the fundamental preparatory courses required in the other professional colleges and universities will be found in this curriculum.

Each student will be assigned an adviser in the division in which he expects to major. The amount and character of course work in the major is indicated in the requirements for each division.

At least one minor shall be outside the major division. A minor shall include a minimum of twenty-four quarter hours. The minimum requirements for teaching in secondary schools accredited by the North Central Association of Colleges and Secondary Schools are as follows:

- I. For prospective teachers of English, mathematics, foreign languages, science, and social studies:
  - 1. At least twenty-four quarter hours must be completed in a subject chosen for teaching.
  - 2. In Science and Social Studies, eight quarter hours must be earned in the specific subject to be taught in high school.
  - 3. In foreign languages, twenty-four quarter hours must be earned in a single language.
  - 4. The amount of credit to be earned in mathematics and foreign languages (twenty-four quarter hours each) may be reduced by three quarter hours for each high school unit accepted for entrance to the college, but not to exceed a total reduction of nine quarter hours in either of the two fields.
  - 5. Professional preparation requiring twenty-four hours in education.
- II. For prospective teachers of other subjects such as art, music, industrial arts, physical education, and business education: The same general preparation as given in I, above, is required. Students who select a major or minor in these fields will be given complete information by the registrar's office when they enroll.

#### Admission

Admission is open to all those who can do college work. Applications will be received from graduates of high schools and from students desiring to transfer from other colleges. Men and women who have not graduated from high school may be admitted under certain conditions.

High school graduates will be admitted on recommendation of the principal, who will base his recommendation on health, good character, and ability to do college work. High school graduates whose scholastic rating places them in the lower twenty-five per cent of the class seldom do acceptable college work and therefore are not encouraged to apply for admission.

Graduates of non-accredited high schools will be admitted conditionally on recommendation of the high school principal. On completion of successful college work for one year all conditions will be removed.

Each entering student must show a satisfactory health status by a physical examination conducted by the staff physicians cooperating with the college health program. This examination is scheduled by appointment during the first week of registration.

Blank forms for use in making application for admission are in the hands of the high school principals, from whom they may be obtained by prospective students. They may also be obtained by mail from the registrar's office. All applications for admission should be sent to the registrar at the earliest possible date so that full evaluation may be accorded each student's record.

Students who have had work in other colleges are required to submit official transcripts together with evidence of good moral character and that honorable dismissal has been granted by the last college attended. It is required, also, that the student shall be eligible to continue in the last school attended, or at least be recommended for acceptance on probation.

### Guidance Examinations

The college offers a testing program for each student in order that full recognition may be given to one's general capacity, level of attained achievement in a particular subject matter field, and stage of maturity along intellectual and emotional lines. Tests offered upon admission to college must be completed before full matriculation status is

granted. Results of proficiency examinations are used in determining the question of exemption of students from certain courses; to determine whether credit may be received for courses taken in an unapproved institution of higher learning; and to determine credit for work done outside of class. Students will not receive credit for more than twelve quarter hours in any one division or more than a total of eighteen hours toward graduation.

Results from standardized tests given to each student early in his college career will also be used to determine his admission to preparatory professional status in the field of education. All of these examinations except the proficiency examinations shall be taken by all undergraduate students.

### Quarterly Program

All credit toward graduation is computed in "quarter-hours." The term "quarter-hour" means a subject given one day a week through a quarter of a year, approximately twelve weeks. Most of the college courses call for four recitations a week, representing four quarter-hours credit.

The normal course load carried by students during any quarter in college usually totals sixteen quarter-hours exclusive of physical activity courses. If no increase or reduction has been made in the student's quarterly program he will have accumulated forty-eight quarter-hours at the conclusion of each school year of three quarters.

Students who are found to be deficient in such elementary skills as those involved in composition, computation, library usage, reading, and speech shall be required to make up such deficiencies during the freshman year. For these students the load of credit hours will also be adjusted by the Department of Student Personnel.

Students whose high school record shows a below-average achievement, whose matriculation tests show a below-average ranking, or who because of financial difficulties may be compelled to put in several hours each day in employment, are advised not to carry a full course load until evidence of ability to do satisfactory college work is established. A student whose health record indicates the inadvisability of carrying a full schedule should adjust his program accordingly.

If a student has demonstrated ability to achieve an academic standing of approximately 4.0 (B) average he may be permitted to apply through his adviser for extra hours to be carried beyond the normal course load.

### The Marking System

A indicates superior work

B indicates work above average

C indicates average work

D indicates work below average, but passing

F indicates failure

"Inc." incomplete

"W" approved withdrawal

"TF" unapproved withdrawal

"WF" failing at time of withdrawal

"IF" condition not removed within time limit

"S" satisfactory, and "U" unsatisfactory may be used in certain designated college courses.

A course marked "Inc." shall be made up in the next quarter in residence, to receive degree credit. If not made up in this quarter the work becomes IF.

If a student withdraws from a class or from college without making formal arrangements with the registrar, he or she will receive a TF in all subjects. Should the student be obliged to leave because of an emergency, a letter giving all facts shall be filed with the registrar.

The marks "W," "S," and "Inc." (within time limits described above) are not considered in computing the grade average. "WF" has the same value as "F."

#### Mark Evaluation

Each of the letters of the marking system has a numerical value. The letter A has a value of 5 points; B a value of 4; C of 3; D of 2; and F of 1. If all of a student's marks were C's they would have a numerical value of 3. If one-half of his marks were C's and the other half D's, the numerical value of all his marks would be 2.5. The general average numerical value of a student's marks shall be no less than 2.5 to permit him to apply for preparatory professional status. Application for a degree or a certificate will not be approved if the student's general average is below 2.5.

### Requirements

Matriculated students will be expected to maintain a general scholastic average above the current minimum rating of 2.3 for the freshman and sophomore years, and shall attain a general scholastic average above the current minimum rating of 2.5 before preparatory professional status is considered. A general grade average of 3.0 assures recommendation for graduation.

Ability to keep the general scholastic average above the minimum ratings as stated is acknowledged as capacity to continue college work. Scholastic average below the minimum for two successive quarters will be sufficient for recommending withdrawal from the college.

Students who have obtained college employment or appointment to N. Y. A. projects shall maintain a general scholarship average of 3.0 (C average) in order to maintain such employment throughout any succeeding school quarter.

Students who fail to maintain acceptable grade averages will not be permitted to participate in varsity athletics, dramatics, and debate.

Absences without excuse are not regarded as legitimate. Both tardiness and absences are dealt with by the individual instructors on the assumption that each student is expected to do the full work of the class

Students will not be permitted to take final examinations unless all fees for the quarter have been paid.

All undergraduate men are required to take one active physical exercise each quarter.

### Graduation Requirements

If a student has not been handicapped by various subject matter inadequacies, and if it has not been necessary for him to reduce his normal course load because of the demands of outside employment, four school years of three quarters each is usually sufficient for him to acquire the 192 quarter-hours (exclusive of physical exercise requirements) required for the Bachelor of Arts degree.

One whose scholastic average is less than 2.5 at the time he applies for graduation will not be graduated or granted a teaching certificate until he has by further residence study raised his total average to or above that mark.

Application for any degree must be made to the registrar at the beginning of the senior year.

Candidates for the Bachelor of Arts degree will be allowed six years to complete requirements effective at the time of their matriculation.

### Core Requirements

All students are required to have a background of general education. Definite requirements are listed below. However, students who demonstrate suitable proficiency in any field will not be required to take courses in that field in college. Past records or scores on placement examinations will be used as a basis for evaluating proficiency. All students taking courses leading to the Bachelor of Arts degree without the teaching certificate shall include twenty-four hours of a foreign language in addition to the required general education courses.

#### General Education

THE ARTS-four hours credit

Usually Art 20a, b, c (6 hours credit) will be advised. However, any two of these courses or other courses may be taken with the approval of the Division of the Arts.

HEALTH AND PHYSICAL EDUCATION—four hours credit

Personal Hygiene will be taken by all those students who do not demonstrate a sufficient knowledge of the subject. All students take an active physical exercise each quarter as Freshmen and Sophomores. Required of men students each quarter in college.

LITERATURE AND LANGUAGES—eight hours plus an additional twentyfour hours in Foreign Languages for a non-teaching degree.

Courses selected shall have the approval of the Division of Literature and Languages.

Music—four hours credit, unless the student has had satisfactory contact with music

Usually Music 1a, b, c (six hours credit) is advised. However, any two of these courses or other courses may be taken with the approval of the Division of Music.

Science—eight to twelve hours credit

A familiarity with both physical and biological sciences is necessary. This can be obtained by taking Science 3a and b (eight hours credit). However, non-teaching students will take twelve hours of a laboratory science. Other students may do this also with the permission of the Science Division.

Social Studies—twelve hours credit

Courses selected with the advice of the Division of Social Studies. World Geography shall be included as a part of the twelve hours credit by students seeking the teaching certificate.

#### THE GRADUATE SCHOOL

Each division has its own graduate committee. This committee is Council. This council, under the chairmanship of the director of the charged with studying graduate problems in a restricted field. The chairmen of these seven graduate committees make up the Graduate Graduate School, is the legislative body of the Graduate School. All correspondence concerning graduate work should be addressed to the director of the Graduate School.

The degree of Master of Arts is offered in all seven divisions of the college:

THE ARTS—(Fine Arts, Home Arts, Industrial Arts)

EDUCATION—(Elementary Education, Secondary Education, Educational Administration, Educational Psychology, Business Education)

HEALTH AND PHYSICAL EDUCATION

LITERATURE AND LANGUAGES—(English and Literature, Speech, Foreign Languages)

Music

THE SCIENCES—(Biological Science, Physical Science, Mathematics)

THE SOCIAL STUDIES—(Economics, Geography, History, Social Studies)

Students working toward the master's degree are offered a choice of two plans.

Plan A requires thirty-six quarter hours of graduate course work earned in three quarters in residence and twelve quarter hours of thesis credit. Under Plan B the student presents forty-eight quarter hours of graduate course credit earned in four quarters of residence and a final written examination.

#### Admission and Candidacy

Application for admission should be made to the director of the Graduate School. The student should fill out an application for admission at least thirty days before registration. A certified transcript of all academic credits shall accompany the application for admission. This is necessary if the student desires to avoid delays at the time of registration. Blanks for admission will be furnished upon request.

#### MASTER OF ARTS

The holder of a bachelor's degree from a reputable college or university authorized by law to grant such a degree will be admitted to course

work applicable to the degree of Master of Arts, provided the transcripts of his college record indicate that he is able to pursue graduate work. The following criteria based on undergraduate work will be employed in determining eligibility: (1) Graduation from an approved institution; (2) acceptable scholastic average; and (3) a program showing a breadth of content in the major field.

A student working for the Master of Arts degree will be admitted to full standing (candidacy for the degree) in the Graduate School after he has been in residence a sufficient length of time to enable his instructors and the Graduate Council to judge his ability to do graduate work.

#### Doctor of Education

The degree of Doctor of Education is offered only in the Division of Education.

The holder of a master's degree from an acceptable graduate school will be admitted to course work applicable to the degree of Doctor of Education, provided the transcripts of his undergraduate and graduate academic records indicate that he is able to pursue advanced graduate work in the field of Education. All students enrolled in work leading to the doctor's degree are admitted as unclassified graduate students until the Graduate Council is able to determine their qualifications for admission to candidacy for the degree.

To be eligible for formal admission to candidacy for the degree of Doctor of Education the student shall have completed twenty-four hours of course work on this campus, shall have met the requirement of the classification examinations, shall have completed Field Study Number 1 and shall have satisfactorily defended this Field Study in an oral examination.

Admission to candidacy will be based upon the evidence available: (1) From staff members with whom the student has worked on this campus; (2) from the official transcripts in the registrar's office concerning the type and quality of the student's work done in other institutions; (3) from the results of the classification examinations; and (4) from the results of the examination on Field Study Number 1. Admission to candidacy will be by action of the Graduate Council upon recommendation of the student's Research Committee.

#### TIME REQUIREMENTS

The minimum time requirement for any degree in the college is one academic year or at least three quarters.

The maximum time limit for completion of graduate work for the master's degree is two full calendar years for students attending during the regular college year, or six years in summer sessions.

The maximum time limit for the doctor's degree is eight years.

graduate and undergraduate programs. The minimum preparation for the degree of Master of Arts is twenty-four quarter hours of basic course work in the field of the major. Sixty-four quarter hours or its equivalent in Education is the prerequisite for the degree of Doctor of Education. The term "basic course work" is construed to mean work that can be used for certification under the North Central Association rules.

If the preliminary preparation of the candidate has not been sufficient to qualify him for graduate work, he must pursue such undergraduate courses as may be suited to his needs or must show evidence of proficiency in these areas.

Each division of the college offers a series of graduate courses known as designated courses. Students working toward their master's degree under Plan B shall enroll for at least three such courses and file with the director of the Graduate School a typewritten report for each of the three courses. The written report shall represent ability to do independent work. All work shall be in conformity with the English Style-Form Standards of the college, especially the section entitled "Reports for Designated Courses." Designated courses are open to all graduate students regardless of the plan or degree being pursued.

The courses numbered 222 and 350a, b, c, Individual Studies, may be offered by members of the graduate faculty in each college division, but for no more than a maximum of eight quarter hours for the master's degree and a maximum of sixteen hours for the doctor's degree. Copies of the written reports shall be filed with the director of the Graduate School. Specific requirements for the written report are to be found in the English Style-Form Standards. This bulletin is available for purchase in the college bookroom. It contains suggestions for making the preliminary outline of the thesis, as well as for the form of tables and figures (graphs), bibliographies and footnotes, English usage, and other conventional criteria. Mastery of these details is essential for successful graduate work. Individual Studies 222 cannot be offered as one of the three required designated courses for the master's degree under Plan B.

Any exceptions to the general graduate rules and regulations shall have the approval of the Graduate Council.

# Specific Requirements Governing the Degree of Master of Arts

#### PLAN A IN DETAIL:

All general requirements for a graduate degree heretofore mentioned in this bulletin apply to this plan. In addition, the student must:

1. Earn forty-eight quarter hours of graduate credit, thirty-six hours of which must be in resident course work. The other twelve hours are credited to the thesis. A maximum of twelve quarter hours of course credit may be earned each quarter.

- 2. Register for the thesis and pay the thesis fee (\$15) at least three months before enrollment for final quarter of residence.
- 3. Plan with the adviser (major professor) a unified program of course work. This adviser also acts as thesis sponsor. He approves the preliminary outline and the final draft of the thesis. The preliminary outline is subject to review and approval by the director of the Graduate School. When the latter is in doubt as to the validity of the research problem, he may refer the outline to a committee of the graduate faculty for criticism and evaluation. If the adviser and the student disagree with the evaluation, they may appeal to the Graduate Council as a whole for a final decision of the case.
- 4. Enroll for the required course or sequence of courses offered by the division in which his major lies. A mimeographed list of these courses will be available at the time of registration.
- 5. Furnish early in his graduate experience evidence that he possesses the necessary skills for writing a thesis. Examples of such skills are: A command of written English, experimental and statistical techniques, historical criticism, etc. Courses to meet any such deficiencies may be required in addition to the regular course work for the degree.
- 6. Present all of his written work in conformity with the standards given in the English Style-Form Standards.
- 7. File signed typewritten copies of his approved thesis outline with the major professor and the director of the Graduate School on or before the end of the sixth week of the second quarter in residence.
- 8. Present to his adviser at least four weeks before the date for conferring the degree a copy of the final draft of his thesis for examination and criticism. The final draft is subject to review and approval by the director of the Graduate School. When the latter is in doubt as to the validity of the research problem he may refer the study to a committee of the graduate faculty for criticism and evaluation. If the adviser (major professor) and the student disagree with the evaluation, they may appeal to the Graduate Council as a whole for a final decision of the case.
- 9. Present four brief typewritten abstracts of the thesis, three of which are to be bound with the final copies of the thesis and one to be filed with the student's records in the graduate office.
- 10. Deliver to the graduate office at least two weeks before the date for conferring degrees three copies of the complete thesis in final typed form, approved and signed by the major professor

and ready for the approval signature of the director of the Graduate School. Three copies shall be filed with the college controller to be sent to the college bindery, after the binding fee is paid to the treasurer of the college (\$1 per copy). Two bound copies, the original ribbon copy and the first carbon, shall be deposited in the college library after they are bound. The third bound copy will be delivered to the major professor for his files.

11. Apply to the registrar for graduation not later than the first week of the last quarter in residence in terms of the following requirements: (1) Forty-eight quarter hours of graduate credit, twelve of which will be for the thesis; (2) a grade average of at least 3.7; (3) satisfactory completion of a thesis; (4) satisfaction of student teaching standards; and (5) reasonable personality and evidence of professional standards.

#### CREATIVE WORK IN LIEU OF THESIS

In harmony with policies of many of the best institutions of higher learning in the country, the Graduate School will recognize a creative project in the field of literature, music, or the fine arts, as the equivalent of the conventional type of thesis for the degree of Master of Arts. The student may attempt this type of research only after his major professor is satisfied that the student has reached the graduate level in creative ability. Upon the completion of the project, the student shall submit a detailed explanation in the usual written form of the thesis report. In this explanation the student shall give a careful account of his techniques, of the materials from which his problem emerged, and an explanation of the problem's contribution to contemporary thought and life. The student is required to observe all the other provisions previously listed for thesis plan students.

#### PLAN B IN DETAIL:

All the general requirements for the master's degree heretofore mentioned in this bulletin apply to this plan. In addition, the student shall:

- 1. Earn forty-eight quarter hours of resident graduate credit. A maximum of twelve hours may be earned each quarter.
- 2. Plan with the adviser (major professor) a unified program of course work. The student shall enroll in three advanced courses (twelve quarter hours) identified by a special mark, in which written reports will be required. A student will present not more than one such report each quarter. The student, with the advice of the major professor, shall determine the designated course from which a written report will be accepted. Type-

written copies of these reports shall be presented to the graduate office to be filed with the student's records. Each report shall be filed at least one week before the end of the quarter in which the paper is written.

- 3. Enroll for the required course or sequence of courses offered by the division in which his major lies. A mimeographed list of such courses will be available at the time of registration.
- 4. Present all written work in conformity with the standards given in the English Style-Form Standards.
- 5. Register for twelve hours outside of the major field if possible; however, the regulation of sixty-four quarter hours in the major field and thirty hours in Education shall be met first.
- 6. Pass a written examination in the content and the latest professional aspects of his major interest. The major professor will be in charge of the examination. The examination will be given on a day designated by the director of the Graduate School. All Plan B students expecting to graduate shall take the examination on the day and date announced for same. The examination, after being evaluated by the major professor, shall be filed with the director of the Graduate School at least 10 days before the degree is to be conferred.
- 7. Apply for graduation to the registrar not later than the first week of the last quarter in residence in terms of the following requirements: (1) Forty-eight quarter hours of resident graduate credit; (2) a grade average in course work of not lower than 3.7; (3) the satisfactory completion of three advanced designated courses (twelve quarter hours) and the filing of the required typewritten reports; (4) passing a written examination in the field of the major interest; (5) satisfaction of student teaching standards; and (6) reasonable personality and evidence of professional standards.

#### CHANGE OF PLANS

Any change from an unclassified status or from Plan B to Plan A shall be made not later than the second week of the second quarter in residence. This change shall have the approval of the major professor and the director of the Graduate School; otherwise, the student will be required to work under Plan B.

The approved preliminary outline for the master's thesis under Plan A shall be filed in the graduate office not later than the sixth week of the second quarter in residence.

#### SENIORS TAKING COURSES FOR GRADUATE CREDIT

Senior students in Colorado State College of Education may register for graduate courses and receive graduate credit for the same under the following regulations.

The courses may be taken only in the last quarter of the student's undergraduate work.

Courses taken without previous arrangement with the office of the Graduate School will not be given credit.

Courses taken by undergraduates who lack more than six quarter hours of having completed the requirements for the bachelor's degree will not be recognized for residence credit.

#### THE DOCTOR OF EDUCATION DEGREE

The Graduate School of Colorado State College of Education offers the opportunity of working for the degree of Doctor of Education to a limited number of qualified students. The Graduate School reserves the right to limit the number of students in terms of the facilities which it has to offer, and to change its requirements from time to time.

The program of work for the degree of Doctor of Education is a program of alternating off-and-on campus activity, and is an *in-service* type of advanced professional education. The program of work is divided into two parts. One calls for the completion of certain course work on the campus during summer quarters. The other looks to the completion of a high quality of practical research done by the student between summer quarters, while the student is engaged in his professional work. Only those persons who are actually employed in educational work are permitted to enroll for work toward the doctorate.

#### Two Plans for the Doctorate\*

Specialization Plan. Under this plan the student selects an area of concentration in which he does approximately one-half of his work. The field studies are to be in this area. Two supporting areas in Education representing about one-fourth of the work for the degree are also selected by the student. The remaining one-fourth of the required course work may be selected from areas outside the field of Education.

GENERAL PLAN. Under this plan the student majors in Education and selects three areas of Education, distributing three-fourths of his work equally among these areas. One-fourth of the required course work may be selected from areas outside the field of Education under this Gen-

<sup>\*</sup>The suggested distributions in the two plans are not to be regarded as a fixed pattern. Each program will be adapted to the student's needs and background.

eral Plan. Both field studies may be in one area or they may be in two areas.

#### Areas of Education

 Areas acceptable for concentration under the Specialization Plan Educational Administration Educational Psychology Elementary Education Secondary Education

2. Areas acceptable for supporting areas under the Specialization Plan

Curriculum
Guidance and Personnel
Higher Education
Philosophy of Education
Tests and Measurements

3. Under the General Plan, the student selects three areas from any of the above areas listed under 1 or 2.

# SPECIFIC REQUIREMENTS GOVERNING THE DEGREE OF DOCTOR OF EDUCATION

All general requirements for the doctor's degree, such as admission, candidacy, residence, etc., heretofore mentioned in this bulletin apply to this degree. In addition, the student is required:

- To earn ninety-six quarter hours of graduate credit beyond the master's degree.
- 2. To be in residence on the campus of Colorado State College of Education at least six summer quarters, earning seventy-two quarter hours of graduate course credit. This residence requirement may be reduced one quarter (twelve quarter hours) by the transfer of credit from an approved graduate school. (See general rules, page 26.)
  - 3. To present two field studies of a practical nature, for each of which the student will receive twelve quarter hours of credit. The student registers for these field studies during the regular academic year, paying a fee of \$30.00 for each study. The preliminary outlines for these studies are prepared under the supervision of the major professor and the student's research committee. For each study the director of the Graduate School, in consultation with the major professor, appoints a research com-

mittee. The student presents his outline in detail to this committee for approval. The committee, of which the major professor is a member, will make recommendations to the student. When these recommendations have been incorporated in the preliminary outline, it shall be the duty of the major professor to obtain the signatures of all of the members of the research committee. Five copies of the outline with approval signatures will be necessary—one copy for each member of the research committee (including the one for the major professor), one copy for the student himself, and one copy for the files of the Graduate School. No student may begin work on the second field study until he has been admitted to candidacy for the doctor's degree, except by permission of the director of the Graduate School, together with the written recommendation of the major professor.

- 4. To pass satisfactorily the following examinations in addition to the usual course examinations.
  - a. CLASSIFICATION EXAMINATIONS. These are generally given in the first quarter in residence and are used as a basis for determining whether or not the student should be encouraged to continue working toward the doctorate and for ascertaining the extent of the student's knowledge of: (1) The place of education in present-day society; (2) the nature of the learner and the learning process; and (3) the organization, administration, and support of public education. The student will also be required by examination to prove his ability to use and interpret data.
  - b. Comprehensive Written Examinations. These are given in the area of concentration and in the two supporting areas. These examinations will be distributed in such a way that the quality of the student's work will be evaluated at several intervals during his progress toward the doctor's degree. In addition to the written examination in the area of concentration, questions may be included covering those areas of the classification examinations in which the student has shown a marked deficiency.
  - c. ORAL EXAMINATIONS IN DEFENSE OF THE FIELD STUDIES. When a student has satisfied his research committee that he has completed a field study in a satisfactory manner and in accord with the English Style-Form Standards of the college, he shall defend his research in an oral examination before a committee composed of (1) his research committee, and (2) at least one representative of the graduate faculty who is not a member of the Division of Education. The field study shall be complete in every detail and ready for the final

typewritten copies to be made before the student or the major professor may ask for the oral examination. A sufficient number of copies of the study shall also be available for the committee at least ten days before the oral examination.

- 5. To arrange for the publication of the field studies. (A mimeographed, detailed statement of the publication policy is available.) In brief, the publication of each field study costs \$27.00. The study is microfilmed and a 1,500 word abstract of the study is lithoprinted. The student receives 150 copies of the lithoprinted abstract and a copy of the annual volume of all abstracts submitted during the year.
- 6. To arrange for binding the field studies. Three copies of each study, each including an abstract, are required to be bound. Two of these copies (the original ribbon copy and the first carbon copy) are filed in the college library; the third copy goes to the major professor. Arrangement for binding the field studies is made with the office of the controller of the college. A charge of \$1.00 per copy is made for binding. An extra copy of the abstract of each study is filed in the office of the Graduate School.

#### Advisement

Each prospective student for the doctorate is asked, upon applying for admission to the Graduate School, to state which plan he intends to follow, the areas in which he plans to take course work, and on what practical problem he intends to do his first research study. Upon receipt of this statement, the director of the Graduate School will assign the student to a member of the graduate faculty who will act as the major professor for the first quarter and with whom the student will register. This assignment will become permanent automatically unless the major professor or the student makes a written request for a change.

A research committee consisting of no fewer than two members in addition to the major professor is appointed by the director of the Graduate School at the time the student presents to the major professor the preliminary outline for each field study. Copies of the preliminary outline shall be provided by the student for each member of his committee. The major professor shall forward these copies to the committee for written criticisms or for approval.

#### THE RESPONSIBILITY OF THE MAJOR PROFESSOR

It shall be the responsibility of the major professor to advise the student as to the course program, the examinations, and the field studies. Each field study prepared under the direction of the major professor shall bear his name as the sponsor of the study.

#### THE RESEARCH PROFESSOR

At the request of the major professor, a research professor may be appointed for directing a particular field study. When such an appointment is made, the research professor has all the responsibilities and prerogatives of the major professor in regard to that field study.

#### THE FIELD STUDY

The purpose of the Field Study is to give training in solving practical educational problems by the use of appropriate research techniques. The Field Study is a type of research that emphasizes the application of the usual educational research techniques to the practical problems arising from one's professional work in the field. It is required that the student be regularly employed in the professional field in such a manner as to make it possible to gather the data for solving a practical problem growing out of the student's professional position. The student normally will enroll for each Field Study during the school year following the completion and filing of his preliminary outline. Each Field Study will be filed for publication with the college before credit is granted.

### DIVISION OF THE ARTS

The Division of the Arts includes Fine Arts, Home Arts, and Industrial Arts. A student may major or minor in any one of these fields.

### Fine Arts

The major in Fine Arts requires seventy-two quarter hours credit. The courses listed below form the basic prescription for all Fine Arts majors. This allows approximately twenty hours of elective work within the major. Twelve of the elective hours shall be concentrated in one of the following fields of emphasis:

Drawing and Painting Crafts Modeling and Sculpture Design Commercial Art

One minor shall be taken outside the division. One minor may be taken within the division, in which case the major requirement of twelve hours in a particular field of emphasis is waived.

The following courses are required for all Fine Arts majors:

No.	Course	Cr. Hrs.	No.	Course	Cr. Hrs.
1	Drawing	4	4-104	Figure Construction	4
11-111	Introduction to Design	4	13-113	Lettering	2
8-108	Modeling and Carving	2-4	3-103	Introduction to Painting	
	or			Art in the Elementary School	
17-117	Pottery			Color Theory	
6-106	Introduction to Art Education	n 4		Art History-Ancient	
2-102	Composition	4		Art History-Modern	
16-116	Crafts Processes and Design	4	123-223	Art in the Integrated Progra	m 4

Fine Arts majors and minors are not required to take F.A. 20.

It is recommended that students majoring in Fine Arts meet the requirements in observation and student-teaching by enrolling for both in the same quarter.

The following courses are recommended for a teaching minor in the Fine Arts.

			Cr.			Cı	:.
No.	Course		Hrs.	No.	Course	Hr	
11-111	Introduction to	Design	4	13-113	Lettering		2
1	Drawing		4	17-117			
3-103	Introduction to	Painting	4	24-124	Art in the El	ementary School	4
16-116	Craft Processes	and Design	4			=	

In addition a course in Art History would be desirable.

Advisers may make substitutions in this list, if necessary, but it is desirable to maintain the general distribution of subject matter indicated.

## Major in Fine Arts

(Without Teaching Certificate)

A candidate for the Bachelor of Arts degree with a major in the Fine Arts without the teaching certificate should plan his program in conference with his adviser. In addition to the core requirements in general education the student should have a total of seventy-two quarter hours credit in the Fine Arts, and at least one minor outside the field.

Students majoring in this field shall complete the core requirements in general education listed on page 21.

The minor in Fine Arts without the teaching certificate should be planned in conference with the student's adviser. It should consist of a minimum of twenty-four hours and should approximate the distribution indicated for the major under this plan.

#### GRADUATE STUDY

Course work will be outlined by the student's major professor.

## Description of Courses

- 1. DRAWING. The foundation course in drawing. Designed to develop the student's power in graphic expression. Attention is given to plan and procedure in drawing, aims and objectives, analysis of the problem of form, analysis of modes of representation, essentials of perspective. Work is done in a variety of media. Four hours credit.
- 2-102. COMPOSITION AND DRAWING. Prerequisite, F.A. 1 or equivalent. The purpose is to develop power in drawing and in the use of compositional principles. In working out problems, line quality and meaning of line directions, and dark and light relations are considered. These structural attributes are used both in their two dimensional design relations and in the building of plastic or three dimensional form. Four hours credit.
- 3-103. INTRODUCTION TO PAINTING. Prerequisite, F.A. 1 or equivalent. A course in painting for beginning students. The purpose is to gain freedom of expression in both water color and oil media and to develop understanding of compositional relationships in painting with color. Two or four hours credit.
- 4-104. FIGURE CONSTRUCTION. Prerequisite, F.A. 1. The study of the human figure, its essential anatomy and construction. The figure as an important motif in design and composition. Work in a variety of media and modes of expression. Study from life. May be continued for two or four hours additional credit as 4a-104a. Four hours credit.
- 6-106. INTRODUCTION TO ART EDUCATION. Prospective art teachers are introduced early in their college program to the problems of art education, philosophy, and child psychology so that they may work more purposefully throughout the period of their professional preparation. Four hours credit.
- 8-108. MODELING AND CARVING. Creative design in the field of small sculpture. Modeling for terracotta, various techniques. Sculpture with and without armature, plaster casts, carving in plaster, stone and wood. This course may be continued for four hours as 8a-108a. Two or four hours credit.

- †10-110. COMMERCIAL DESIGN AND ILLUSTRATION. Students study the techniques of modern industry and processes of commercial art. Emphasis is placed on art principles through a study of book, magazine and newspaper illustrating and industrial design. Prerequisite, Drawing 1 or principles of Drafting. Four hours credit.
- 11-111. INTRODUCTION TO DESIGN. Progressively planned problems interspersed with lectures, demonstrations, discussions. The student becomes aware of the basic elements of design, develops an emotional response to their relationships, becomes increasingly aware of the concept of unity and learns the application of principles of organization. The relation of function, structure and materials in relation to the final form is emphasized. Four hours credit.
- 13-113. LETTERING. The student learns the basic letter forms as well as many useful variants. Emphasis is placed upon lay-out, design, and organization of every lettering problem. The course includes work in manuscript, show card, and poster composition. Two hours credit.
- 14-114. DESIGN IN TEXTILES. A study of art structure in historic woven and printed textiles. Experience in designing, stitchery, tie dyeing, batik, block printing and free brush are presented through the study of color, and basic principles of design. Two hours credit.
- 16-116. CRAFT PROCESSES AND DESIGN. The purpose of this course is to develop a professional viewpoint for teaching the crafts and understanding harmonious relationships of design and construction in artistic products. The best literature of the subject is studied and interpreted in terms of modern educational theory. The student has creative experience in loom weaving, leather craft, simple wood and metal problems, plastics, block printing, and other crafts. Two or four hours credit.
- 17-117. POTTERY. The principles of design in mass, volume, and decoration. The course offers opportunities for experience in the coil and slab method. Turning on the potter's wheel, glazing, casting, and firing. Two or four hours credit.
- 18-118. PUPPETRY. A study of the various types of puppets and marionettes. This includes the writing of story, stage design, and characterization. The student analyzes the types of construction to fit the interest and abilities of the kindergarten and other school levels. Two hours credit.
- †19-119. POSTER AND DISPLAY. Prerequisite 13-113. A study of modern poster art and the principles of display. Creative work in advanced poster techniques, including stencil and air brush. Modern window setting including the principles and practice of layout, color, lighting and construction. Four hours credit.
- 20a, b, c. ART APPRECIATION. The course provides opportunity and guidance for the student in discovering his own potentialities through art experiences in drawing, painting, modeling, pottery, and the general crafts such as leather, metal, weaving, textiles, and wood. Two hours credit each quarter.
- 24-124. ART IN THE ELEMENTARY SCHOOL. Presents methods of teaching art to elementary and rural majors. Gives experience in art expression and the use of art elements and principles as a basis for the creative approach. Organization of units of work including drawing, painting, design, color, modeling, block printing, lettering, and the mural, as they relate to the integrated school program. Four hours credit.

- †29-129. FASHION DRAWING. Prerequisite F.A. 1 and F.A. 4-104. A practical course in the techniques of costume and fashion illustration. Work in various media pertinent to the processes of reproduction used in newspaper and magazine advertising. Four hours credit.
- 102a-202a. ADVANCED COMPOSITION. Prerequisites, Art 1 and 2. Composition and Drawing. Structural principles practiced in advanced problems of three dimensional rhythms, such as poising form in space through the understanding and use of the focal plane, and the structural use of color in three dimensions. Mural painting given if desired. Two or four hours credit.
- 103a-203a. WATER COLOR PAINTING. Prerequisite, Art 1, 2, 3, or equivalent. The aim of the course is to give the student a technical command of the medium; principles of color in the interpretation of plastic form; to develop individual expression in creative painting; and to acquire a professional approach and teaching power in the medium. Two or four hours credit.
- 105-205. COLOR THEORY AND COMPOSITION. An extensive study of the field of color as one of the major design elements. The student learns to think constructively about color relationships and develops understanding of organizational principles pertinent to the color unit. Four hours credit.
- 109-209. PRINT MAKING (Summer Quarter only). A study of print processes: etching, dry-point, lithograph, stencil, woodcut, linoleum block, monoprint. Experience is offered in the making of prints and the adaption of print making to secondary school uses. Two or four hours credit.
- 112-212. PROBLEMS IN DESIGN. Prerequisite, Art 11-111 or equivalent. This course provides opportunity for individual growth in solving design problems in areas of student's choice. The student learns to organize the elements of designs in diverse materials, first as abstract factors in the design unit, later as applied to functioning forms serving human need. Advanced projects are organized in terms of students' abilities. Four hours credit.
- 115-215. DESIGN FOR THE STAGE (See also L. & L. 115-215). A study of the art of theater from the designer's viewpoint. Practical experience in working out of the art problems involved in production. Four hours credit.
- 120-220. OIL PAINTING. Prerequisite, Art 1, 2 or equivalent. This course seeks to develop the student's individual power of expression through the fundamentals of good painting. This course may include advanced painting projects in figure composition, portrait, landscape or mural decoration. May be continued for two or four hours additional credit as 120a-220a. Two or four hours credit.
- 121-221. ART HISTORY I. A study of the development of art from Prehistoric time to and including the Gothic Age. Four hours credit.
- 123-223. ART IN THE INTEGRATED PROGRAM. A study of the integrated Program and its relation to basic needs of individuals with emphasis laid upon types of art activities, illustrative materials and methods of presentation. Art of the world will be studied with the purpose of interpreting the life and interests of other civilizations. Four hours credit.
- Art 124a. ART IN RURAL SCHOOLS. Prerequisite, Art 24-124. The inservice laboratory course for teachers majoring in elementary education, Plan B. Intensive study of specific problems in the actual teaching of art. The

<sup>†</sup>Not offered 1942-43.

- in-service teacher analyzes learning conditions in art and studies and employs methods of improving them in particular situations. Detailed study guides adaptable to his situation are furnished. A final written report is made upon the completion of the study. Four hours credit.
- 130-230. ART HISTORY II. A study of the development of art from the Renaissance to the present day. Four hours credit.
- 133a, b, c-233a, b, c. INDIVIDUAL PROBLEMS IN GRAPHIC AND PLASTIC ARTS. Prerequisite: Permission of the instructor. A student may pursue creative work according to the individual needs through a sequence up to three quarters for a maximum of twelve hours credit. These courses may be substituted for required courses in art. The student may continue his study of drawing, composition, design, and color; paint in oil, water color, or work in other media according to his needs and interests. Two or four hours credit each quarter.
- 204. FIGURE AND COMPOSITION. Prerequisite, Art 1 or 2-102, or equivalent. Organic inner construction of the figure and special emphasis on modern theories of organization and picture building are stressed. Students' professional reading from modern sources on creative expression in art and the philosophy of art education is discussed in class. Subject matter from life experiences is integrated into compositions. Students choose different media. Course may be continued for two or four hours additional credit as 204a. Four hours credit.
- 208. PLASTIC DESIGN. The theory and techniques of sculpture, with a study of the processes. Creative work in a choice of plastic media. Two or four hours credit.
- 216. CRAFT PROCESSES AND DESIGN FOR SECONDARY SCHOOLS. A study of design and arterafts adapted to secondary school levels. Two or four hours credit.
- 217. CERAMICS. Prerequisite, 17-117 or equivalent. Historical research in design and processes of ceramics ware. Individual creative and technical competence stressed. Four hours credit.
- 222. INDIVIDUAL STUDIES IN ART EDUCATION. Provides for independent study, particularly in fields of specialization not provided for in formal classes. Qualified students who can outline a definite problem are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
- 226. ART EDUCATION IN THE SCHOOLS (Summer Quarter only). Art education for teachers, supervisors, and administrators. A study of current trends in philosophy and method with stress laid upon the creative approach and its relation to personality development as well as community needs. Members of the class may do concentrated work on their own teaching problems. Four hours credit.
- 228. THE CURRICULUM IN ART EDUCATION (Summer Quarter only). A review of the best literature on the content and organization of the curriculum in general education and a study of the more recent professional literature in art education. The student will experience curriculum building, development of significant units for teaching art, analysis and evaluation of courses of study, and examination of available tests in the arts. Four hours credit.
  - 299. THESIS. Required of all Plan A students. Twelve hours credit.

- 91-191. HOME MANAGEMENT. Practice. This course will be taken in the Practice Cottage on the campus, and includes the managerial, physical, and social problems any well-managed home requires. Five days a week. Two or three hours credit.
- 175-275. THE HOME AND ITS DECORATION. A study of suitable furnishings for homes of various types. Opportunity is given to visit many homes, and also to attend lectures by experienced decorators in home furnishing departments of large Denver stores. Advanced students prepare illustrative materials with extensive research on types of architecture, furniture, and fabrics suited to certain historical periods in house furnishing. Four hours credit.
- 176-276. DIETETICS. Review and interpretation of the literature of the field, emphasizing recent advances. The fundamental priciples of human nutrition as applied to the feeding of experimental animals will be developed as individual research problems. Materials and methods of teaching nutrition in high school will be presented. Dietaries for families of various income levels are planned. Prerequisite H. A. 74. Four days a week, one double laboratory. Four hours credit.
- 179-279. DEMONSTRATION COOKERY. To develop techniques of demonstrating to a group the preparation of food. Individual laboratory problems. Prerequisite H. A. 77 and 78a. One hour lecture, two hours laboratory. Two hours credit.
- 182-282. NUTRITION IN DISEASE. A study of the fundamental principles involved in the treatment of disease through diet. Prerequisite. H. A. 74. Four hours credit.
- 184-284. INSTITUTION ECONOMICS. A study of the problems involved in the purchasing of foods, equipment, and furnishings for the institution. Field trips will be taken to provide practical experience. Four hours-credit.
- 185-285. EXPERIMENTAL COOKERY. Provides an opportunity for the advanced student to determine effects of temperatures, time, and different manipulations on finished products. New commercial products are tested and compared with those already in use. Careful records are kept of all experiments, and conclusions are drawn. One hour lecture, four hours laboratory. Three hours credit.
- 186-286. INSTITUTION COOKERY. Application of the principles of cookery to large quantity preparation. Practice in the use of labor saving devices used in the modern institutional kitchen. Planning of meals for various types of food service. The laboratory will be the dormitory kitchen. Four hours credit.
- 187-287. INSTITUTION MANAGEMENT. The organization and management of various types of institutions. Special emphasis is given to problems of personnel. Floor plans are studied from the standpoint of the efficient planning and routing of work. Cost accounting is studied. Four hours credit.
- 188-288. COSTUME DESIGN. Prerequisite, 72, 73, or equivalent. With a knowledge of evaluating color, line, and fabrics, as taught in previous courses, students should be able in this course to design dresses of artistic merit, using fabrics that require skill in handling. The advanced students do research work in either historic costume or in the field of advanced textiles. Four hours credit.

- 190-290. HOUSEHOLD ECONOMICS (Summer Quarter only). Discussion of home-making as a business. Special emphasis is given to the economical use of time, energy and money. Consumer problems of the home maker are studied. Criteria for the purchasing of household equipment are developed. Four hours credit.
- 192. METHODS IN THE HOME ARTS. This course is organized for Home Arts minors. A study is made of the organization of Home Arts in public schools with special emphasis upon objectives, curricula, courses of study, methods of instruction and evaluation. Opportunity is given for observation in the high school Home Arts classes. Two hours credit.
- 193-293. TAILORING. Advanced problems in clothing construction with emphasis on the techniques of tailoring. Two hours credit.
- 200c. TEACHING PROBLEMS IN HOME ARTS (Summer Quarter only). This course is planned to give the teacher of Home Arts an opportunity to become familiar with modern methods and trends in Home Arts education. Teaching problems of the individual teacher will be studied and assistance given in working out practical solutions. Two hours credit.
- 201. CHILD WELFARE (Summer Quarter only). A study of the effect of welfare agencies upon the child in the home and in society. Four hours credit.
- 205. PROBLEMS IN INTERIOR DECORATION (Summer Quarter only). The application of art principles to the decoration of the home. Four hours credit.
- 222. INDIVIDUAL STUDIES IN HOME ARTS. Provides for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
- 271. ADVANCED TEXTILES (Summer Quarter only). This course is planned to encourage students in the study of recent textile developments. If the economics of textiles are studied, one of the five chief fibers will be chosen, as the field is too broad to include all. Four hours credit.
- 299. THESIS. Required of all Plan A graduate students. Twelve hours credit.

## Industrial Arts

School administrators are tending to employ teachers who can direct a variety of activities as compared to the specialist in one type of work in demand a few years ago. Industrial arts in most schools is a phase of general education rather than vocational education and demands a broad background on the part of the teacher. This background may be appreciably strengthened with minors or course work in Fine Arts or the physical sciences. In the Industrial Arts, classes are offered in five areas: woodworking, drafting, printing, bookbinding and leathercraft, and metalwork.

- 137-237. TEACHING PROBLEMS IN INDUSTRIAL ARTS. Considers teaching problems in the industrial arts field. How to purchase equipment, materials, and supplies. Shop accounting, budgeting, and problems of evaluation are presented along with the organizing of lesson plans in terms of each area of the arts. Four hours credit.
- \*138-238. CURRENT THEORY AND PRACTICE IN THE ARTS. Current controversial issues that confront the teacher of the arts. Problems of standardization, measurement and evaluation, laboratory organization, administrative and community attitudes, the "frill" controversy, correlation with other areas, and the place of the arts in general education. Four hours credit.
- 142a,b,c. ADVANCED THEORY AND PRACTICE OF TYPOGRAPHIC DESIGN. Prerequisite 41-141 or equivalent. An advanced course which treats printing from the standpoint of design. Offers student opportunity to do creative work beyond ordinary run of commercial printing. Two or four hours credit each quarter.
- 147-247. PROBLEMS IN LEATHERWORK. Methods of tanning leather. Inexpensive tool designing and tool making for camps and school shops. Analysis of leather courses for different school levels. Processes, supplies, equipment, and methods of teaching. Shop records and issuing of supplies. Four hours credit.
- 148-248. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN BOOKBINDING. Objectives, equipment, materials and supplies, teaching techniques, and methods of relating the bindery to the library and the classroom. Problems of keeping records, methods of shop accounting, and a course of study to meet individual requirements is developed. Four hours credit.
- 153a,b. WOODTURNING. Prerequisite 50a-150a or equivalent. Developments of techniques and processes, and the care and use of woodturning tools and equipment. The use of the lathe to supplement regular shop teaching as an aid for making tools. Two or four hours credit each quarter.
- 154c-254c. ORGANIZING WORKSHOP PROBLEMS FOR THE RURAL AND ELEMENTARY SCHOOL. Prerequisite 154a or equivalent. A continuation of 154a with special emphasis on purposes, teaching methods, problems of finance, working under regular classroom conditions, course organization, and integration with other subject matter fields. Two or four hours credit.
- 159-259. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN METALS (Summer quarter only). Objectives, course content, and methods of teaching in all phases of metal working. Industrial, social, and economic significance of metals. A study of the various types of metal shop organization. Four hours credit.
- 164-264. INDUSTRIAL ARTS DESIGN. Principles of design and their relation to the problems that confront industrial arts teachers. Problems of design are considered in terms of materials, tools, and processes, and are applied to each field of emphasis. An opportunity to work out methods of teaching and applying design to any industrial areas activity. Four hours credit.
- 167. WOODFINISHING AND UPHOLSTERY. Techniques and processes in woodfinishing and upholstering. Two or four hours credit.
- 169-269. IMPROVEMENT OF INSTRUCTION IN THE ARTS (Summer Quarter only). An analysis of current difficulties and failures in teaching

<sup>\*</sup>Given also by Correspondence.

- the arts. Curriculum problems, integration problems, administrative and community pressures are studied. Many techniques of teaching will be studied and their application considered. Four hours credit.
- 200a. INTRODUCTION TO GRADUATE STUDY IN INDUSTRIAL ARTS (Summer Quarter only). A study of the literature, research and current concepts of the arts. Critical analysis of objectives, methods, and course organization. Criteria for the selection of graduate work in industrial arts for subsequent quarters. A brief presentation of methods of research and a study of research techniques. Required of all graduate majors in industrial arts the first quarter in residence. Four hours credit.
- 201. SEMINAR IN INDUSTRIAL ARTS. An opportunity for all students doing independent research to report and receive criticism on their studies. Each student is expected to have a problem in which he is vitally interested and discussion centers around these and closely related problems. Four hours credit.
- 222. INDIVIDUAL STUDIES IN INDUSTRIAL ARTS. Provides for independent study in special phases of a field of specialization not provided for in formal classes. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
- 236. PRINCIPLES OF GENERAL SHOP ORGANIZATION (Summer Quarter only). The purposes and philosophy underlying the organization of general shops. Methods of organization, the equipment problem, the teacher problem, and various teaching techniques are considered in terms of each individual's teaching situation. Problems of shop accounting, teaching aids, evaluation, and other shop problems will be considered. Four hours credit.
- 239. DEVELOPMENT OF SHOP PROBLEMS AND INSTRUCTION AIDS IN INDUSTRIAL ARTS (Summer Quarter only). The advantages and disadvantages of the use of instruction, job, operation, and information sheets in the shop. The value of such units and the techniques used in their construction. The use of movies, film strips, and slides; how to make and use graphs, wall charts, job analysis sheets, planning sheets, models, and other visual aids. Four hours credit.
- 240. COURSE ORGANIZATION IN INDUSTRIAL ARTS (Summer Quarter only). The philosophy and criteria underlying the organization of a course of study in industrial arts education. The procedures and techniques by which such courses are developed and the problems that must be met in order to organize such courses. Each student develops a course of study in the area in which he is most interested. Four hours credit.
- 243. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN PRINTING AND THE GRAPHIC ARTS (Summer Quarter only). Objectives of printing and graphic arts; their historical development and place in our cultural background; art in printing; shop planning, equipment, and management; course content and organization; first-hand contact with tools, techniques, and machines of a school print shop. Four hours credit.
- 244. PROBLEMS OF DESIGN IN PRINTING AND THE GRAPHIC ARTS (Summer Quarter only). Prerequisite 243. Development, theory, forms and trends of design and methods by which it functions in the graphic arts; methods and aids for helping students apply design in printing field; problems and projects arising out of interest of pupils; opportunity for individual creative work. Four hours credit.

- 249. ORGANIZATION OF AUTO MECHANICS AND DRIVER EDU-CATION COURSES FOR THE SECONDARY SCHOOLS (Summer Quarter only). Objectives, course content and teaching techniques in driver education and automobile courses are discussed and evaluated. An analysis of present practices in safety education and the school's responsibility for such programs is made. An opportunity to do laboratory work on the automobile is offered. Four hours credit.
- 251. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN WOODWORKING. A study of woodworking processes and techniques. Courses of study are analyzed and a comparison is made with current practices in teaching woodworking. Teaching techniques for all phases of woodworking are presented along with an evaluation of each in terms of different school levels. This evaluation leads to the construction of a course in some phase of woodworking to meet individual requirements. Four hours credit.
- 252. PROBLEMS IN WOODWORKING (Summer Quarter only). Prerequisite 151-251 or equivalent. A study of the problems the specialized teacher of woodworking in secondary schools must meet. The selection of tools and equipment needed for woodworking will be made along with a study of materials and supplies that are most applicable for school shops. Four hours credit.
- 256. ADVANCED ART METAL (Summer Quarter only). Prerequisite 155c or equivalent. Processes include etching, chasing, enameling, bezel making, and stone setting. Coin silver, sterling silver, and gold may be used in addition to the metals introduced in the beginning course. Teaching problems in the field of art metal. Two or four hours credit.
- 260. PROBLEMS OF THE METAL SHOP (Summer Quarter only). Prerequisite 159-259 or equivalent. Special tools and equipment to be used for metal classes will be planned. Various problems in the field of metal work will be considered including records, evaluations, equipment, materials, visual aids, class demonstrations, and teaching procedures. Methods of organizing courses either from a unit or general shop basis will be discussed. Four hours credit.
- 262. PROBLEMS IN DRAFTING AND PLANNING (Summer Quarter only). Problems in the organization of a functional drafting and planning program to meet the demands of the general education emphasis in industrial arts. Objectives, course content, and teaching procedures to make such a program workable are discussed. Four hours credit.
- 266a,b,c,d. INDUSTRIAL ARTS IN NATIONAL DEFENSE (Summer Quarter only). Course a, pattern making; course b, carpentry and building construction; course c, organization, administration, finance, evening courses, legislation, etc.; course d, the problem of metals. (These courses do not have to be taken in sequence.) Four hours credit each quarter.
- 268a,b. ADVANCED ARCHITECTURAL DRAFTING (Summer Quarter only). Prerequisite 161c or equivalent. Architectural planning as it applies to the home and the function of the architect in the building of a home will be presented. Schoolhouse planning, laws, standards, and the computation of costs will be offered school administrators as well as teachers in industrial arts. The objectives, course content, and methods of teaching architecture in the secondary school. Two or four hours credit each quarter.
- 299. THESIS. Thesis course required of all Plan A students. Twelve hours credit.

## DIVISION OF EDUCATION

The Divison of Education includes curricula in Education and Business Education.

#### UNDERGRADUATE

The division offers the following four-year curricula leading to the Bachelor of Arts degree for

#### 1. ELEMENTARY TEACHERS

- Plan A—the A.B. degree in four years of pre-service preparation without public school teaching experience
- Plan B—the A.B. degree in a minimum of five calendar years, including two years of public school teaching experience.
- 2. Secondary Teachers: a general secondary or distributed majors curriculum
- 3. SCHOOL LIBRARIANS: a cooperative curriculum with the School of Librarianship of the University of Denver
- 4. TEACHERS IN BUSINESS EDUCATION

#### GRADUATE

The division offers specialized graduate curricula leading to the Master of Arts degree in

- 1. SCHOOL ADMINISTRATION
- 2. SECONDARY EDUCATION
- 3. ELEMENTARY EDUCATION
- 4. SUPERVISION IN ELEMENTARY AND SECONDARY SCHOOLS AND LABORATORY SCHOOLS IN TEACHERS COLLEGES
- 5. EDUCATIONAL PSYCHOLOGY
- 6. TEACHING OF BUSINESS EDUCATION

The division offers graduate specialization leading to the Doctor of Education degree in school administration, educational psychology, elementary education, and secondary education.

## Elementary Major

PLAN A—The A.B. degree in four years of pre-service preparation without public school teaching experience.

This is a plan whereby prospective teachers complete the usual four year pre-service curriculum. Besides the required courses in general education the student should utilize elective work throughout the four years to obtain appropriate background courses in subject matter in such fields as art, English,

geography, history, home arts, music, science, and sociology. In selecting these courses the adviser of elementary majors should be consulted.

Specific professionalized courses for elementary majors are as follows:

Div. Art	No. 24-124	Course Cr. Hrs. Art in the Elementary School
Music	49-149	Music in the Elementary School
H.&PE	102-202	Problems in School Health Education
L&L	13-113	Story Telling 4
L&L	21-212	Literature in the Elementary School 4
Sci.	1-101	Science in the Elementary School 4
Ed.	110-210	Improvement of Instruction in Reading and Literature in the Elementary School
Ed.	111-211	Improvement of Instruction in Language in the Ele-
Ed.	112-212	Improvement of Instruction in Arithmetic in the Elementary School
Ed.	113-213	Improvement of Instruction in Social Studies in the Elementary School

Elementary majors will find it valuable to learn to play simple accompaniments on the piano. Students may enroll for group piano instruction.

PLAN B—The A.B. degree in five years, including two years of public school teaching experience.

This is a plan whereby a high school graduate can obtain an A.B. degree with elementary education as a major and two years of teaching experience within a minimum five-year period. During the freshman and sophomore years the student completes ninety-six quarter hours of college work in general and professional education. The professional work will be that designed to prepare him to teach successfully in rural communities.

Div.	No.		Cr. Hrs.	Div. No.		Cr. Hrs.
		Required Courses, Subjects in		L&L 21	Literature in the Elementar	y
		General Education	36		School	
Ed.	50a	Observation	8	L&L 13	Story Telling	4
Ed.	51	Student Teaching	8	Mus. 49	Music in the Elementary Sch	100l 4
Ed.	30	Rural Education	4	Sci. 1	Science in the Elementary	
Art	24	Art in the Elementary School	4		Electives in Subject Matter	Fields 20

At the end of the sophomore year the student will be granted a special certificate to teach under the supervision of the college. During the first year of responsible full time teaching the student enrolls in the college for in-service laboratory courses in three subjects (one each quarter) for a total of twelve hours credit. The courses are offered in education, art, music, health and physical education, children's literature, and elementary science. Each such course is carefully planned with the student by the director of student teaching. In this planning an attempt is made to help the student work constructively on the improvement of one subject at a time in his school.

At the end of the student's first year of teaching he will return to the campus for a conference concerning these laboratory courses led by the director of student teaching. The student then enrolls for twelve hours of college work on campus in summer school.

During his second year of teaching, preferably in the same position, the student earns an additional twenty-four quarter hours of college work—twelve in service and twelve on campus in summer school. Thus, during the two years of teaching experience opportunity is provided for a student to earn a total of forty-eight quarter hours of credit, completing his junior year.

The student returns to the campus in the fall quarter of the fifth year to complete his senior year of undergraduate work in residence. The following additional professional courses are required:

Div.	No.	Course	Cr. Hrs.
Ed.	177a	Child Psychology	
	195	Philosophy of Education	4
	110-210	Improvement of Instruction in Reading and Literature in	the
		Elementary School	
	111-211	Improvement of Instruction in Language in the Elemen	4
Ed.	112-212	Improvement of Instruction in Arithmetic in the Elemen	4
Ed.	113-213	Improvement of Instruction in Social Studies in the mentary School	

Students may be excused from one or more of the Improvement of Instruction courses if in the judgment of the adviser of elementary majors superior work has been done in one or more of the in-service laboratory courses related to the required senior work.

# Elementary Minor

#### The elementary minor includes:

		•	
	Div.	No.	Course Cr. Hrs.
	Ed.	110-210	Improvement of Instruction in Reading and Literature in the
	Ed.	111-211	Elementary School 4 Improvement of Instruction in Language in the Elementary School 4
	Ed.	112-212	Improvement of Instruction in Arithmetic in the Elementary School
	Ed.	113-213	Improvement of Instruction in Social Studies in the Elementary School
an	d two	of the	following:
	Art	24-124	Art in the Elementary School 4
	Mus.	49-149	Music in the Elementary School 4
	L&L	13-113	Story Telling 4
	L&L	21-121	Literature in the Elementary School.
	Sci.	1-101	Science in the Elementary School

## General Secondary Major

A general secondary major is provided for those students who do not care to select a major in any one of the divisions that prepare secondary teachers. Four subject matter minors of at least twenty-four hours each, or three of at least thirty-six hours each, should be selected with the approval of the adviser of the general secondary majors.

## Cooperative Curriculum for School Librarians

Colorado State College of Education has arranged with the School of Librarianship of the University of Denver for a joint curriculum on the undergraduate level. Students enrolled at Greeley for this program should take the required courses in general education and in addition should complete twenty-four hours in each of two teaching minors. Courses in the two minors should be planned by the student with his faculty adviser. During the junior year at Colorado State College of Education the student will complete all education require-

ments, including observation and student teaching. Work for the major in the library field will be taken during the senior year at the University of Denver School of Librarianship. The A.B. degree will be conferred by Colorado State College of Education when the student has successfully met the requirements of the first three years at Colorado State College of Education and the fourth year at the University of Denver School of Librarianship. The diploma for library work will be conferred in the usual way by the University of Denver. The adviser of students interested in this cooperative curriculum and in the library science minor is the chairman of the Division of Education.

The college library also appoints graduates of the School of Librarianship of the University of Denver as graduate library interns. Those interested in this internship should write the librarian of Colorado State College of Education.

# Library Minor

Students interested in positions as teacher librarians may minor in library science. The work is given entirely at Colorado State College of Education. The following courses are outlined for such a minor:

		Course	r. Hrs.
Ed.	180-280	Organizing a School Library	4
Ed.	181-281	Selection and Integration of Library Materials for the Scho	
		Curriculum	4
Ed.	182	Directed Library Practice	4

Besides this basic program at least twelve hours more from the following shall be selected:

		Course	Cr. Hrs
Ed. 1	108a-208a	Visual Aids in Education	4
	183-283	Individual Studies of Library Problems	4
	13-113	Story Telling	4
	119-219	Laboratory Course in Remedial Reading	4
	126	Materials for English in Secondary Schools	4
*IA	49-149	Bookbinding for School Librarians	4

#### GRADUATE STUDY

Course work will be outlined by the student's major professor.

## Description of Courses

20a. ORIENTATION TO EDUCATION. This guidance course deals with effective techniques of study, planning the student's work programs, acquaintanceship with the various facilities and equipment of the college, and is directed toward the understanding and appreciation of the school as an institution, and of the community as an education agency. Four hours credit.

20b. HUMAN BEHAVIOR. This course is designed to give the student a fundamental understanding of human behavior. Topics include man's efforts to explain his behavior, man's inheritance, the modification of man's behavior, individual differences, abnormalities of behavior, mental health, and personality. Emphasis throughout the course is placed upon growth. Four hours credit.

25-125. GENERAL PSYCHOLOGY. This course introduces the student to the fundamental characteristics of human behavior. Open to those students whose course schedule suggests a general introduction to psychology but who are not eligible for enrollment in Education 20b. Four hours.

- 26a-126a. CAMP FIRE GIRLS' LEADERSHIP. Preparation for leadership in leisure-time activities for girls. The course is designed for teachers interested in sponsoring extra-curricular activities for girls. The course leads to the National Camp Fire Girls' certificate for leadership in Camp Fire Girls' work. A desirable elective for women. Two hours credit.
- 26b-126b. ELEMENTS OF BOY SCOUT LEADERSHIP. This course is designed to give students taking it a general knowledge of the aims and content of the Boy Scout program, with emphasis on the methods that can be used to teach the program to boys. It is intended to give the prospective scoutmaster a logical viewpoint of scouting and a systematic basis upon which he may build his future activities with boys. Two hours credit.
- 30-130. RURAL EDUCATION. The course deals with organization and management of school and of school-community relationships, the selection, organization and adaptations of curriculum materials that are peculiar to the multiple-grade situations common to the small type school. Four hours credit.
- 34-134. A STUDY OF RURAL SOCIETY. The purpose of this course is to supply a knowledge of the importance of rural America in the national life, of the rural heritage of that life, and of rural-urban relationships. It furnishes, if not techniques, at least clues for the understanding of places where the teacher works and lives, and of the backgrounds of associates and friends. Four hours credit.
- 50a-150a. OBSERVATION AND APPLIED TECHNIQUES OF TEACH-ING IN THE ELEMENTARY SCHOOL. Prerequisite, Ed. 30 or 105. Organized to include class study of the learning problems in the elementary school, scheduled observation and participation, weekly conference, Tuesday, 4:00 p. m. Problems emphasized are learning problems in elementary school subjects, growth periods during childhood, individual differences and their significance, use of child's interest, discipline problems, evaluation of pupil progress, pupil reaction to different learning situations, teacher's relation to pupils, co-workers, and community, organization of materials in teaching. Daily class meetings. Eight hours credit.
- 51-151. STUDENT TEACHING. Prerequisites, Ed. 50a-150a for elementary majors or 150b for secondary majors plus the qualifications required for admission to professional standing for the teaching certificate. Required of those students completing work for the Bachelor of Arts degree with a teaching certificate and for those graduate students without previous adequate student teaching or public school experience. Assignments are made in affiliated and cooperating public schools and to a limited extent in the campus laboratory schools. Content includes planning of definite teaching units, teaching in actual classroom situations under close supervision for extended periods, evaluating pupil progress, conferences with supervising teachers on teaching procedures employed, participation in general school activities. Four to sixteen hours credit.
- 100-200. UNIT COURSES IN EDUCATION. For a number of summers, particularly since the summer term has been divided into two-week, six-week, and eight-week sessions, short courses of two weeks duration, usually covering one unit of a larger quarter course, have been offered. The title of each specific unit implies the purpose and content of the course. One hour credit.
- 105. AMERICAN EDUCATION (This course should be taken before or with Ed. 116 or 176a or b). Topics covered include objectives of education, techniques of educational thinking, characteristics and trends in the American

school system, the program and materials of instruction, and problems of teachers such as teacher growth, recreation, professional ethics, teachers' professional organizations, community participation of teachers, school law, rewards and opportunities in teaching, and tenure and retirement of teachers. Four hours credit.

107-207. PERSONALITY OF YOUNG CHILDREN (Summer Quarter only). Prerequisite:, a general course in psychology or a course in child psychology. A course dealing with the development of personality from birth through later childhood, problems arising in personality development, and methods of diagnosing and treating problems that may be dealt with in the class-room. Four hours credit.

108a-208a. VISUAL AIDS IN EDUCATION (Summer Quarter only). The purposes of this course are to give understanding of and some measure of skill in all types of visual aids. Topics discussed include: the general philosophy and content of visual education, objective materials—objects, models, dioramas, exhibits, museum materials, motion picture appreciation, the still picture, the instructional film, and graphic materials. Four hours credit.

108b-208b. THE RADIO IN EDUCATION (Summer Quarter only). The purposes of this course are to give understanding of, and some measure of skill in utilizing the radio in the educational process. Topics discussed include: educational method and philosophy in relation to radio, class-room utilization of radio equipment selection and use, problems of school broadcasting, radio production, and radio program appreciation. Four hours credit.

110-210. IMPROVEMENT OF INSTRUCTION IN READING AND LITERATURE IN THE ELEMENTARY SCHOOL. Prerequisite, Ed. 150 or 151, or teaching experience. The purpose of this course is to acquaint the student with the objectives, materials, and methods of effective teaching of reading from the kindergarten through the eighth grade. The course covers the four large divisions of an adequate program in reading: basal reading, the reading-study skills, literature, and oral reading. Four hours credit.

110a-210a. READING IN THE PRIMARY GRADES (Summer Quarter only). This course covers the nature of reading, the curriculum in reading for the primary grades, the selection of effective methods and materials for teaching, and the use of an adequate testing program. Three or four hours credit.

110b-210b. IMPROVEMENT OF INSTRUCTION IN READING IN INTERMEDIATE GRADES (Summer Quarter only). The topics emphasized are definition of reading, the reading activities these children do and should engage in, the problems of enabling children to understand what they read, developing desirable reading ability in study situations, developing adequate skill in oral reading, using reading as a leisure activity, diagnosis of reading difficulties, providing remedial instruction, and measuring progress and achievement in reading. Four hours credit.

110c-210c. A LABORATORY COURSE IN REMEDIAL READING (Observation in reading clinic to be arranged). This course covers personality and its effect on learning to read, a complete reading program for the poor reader, the thinking side of reading, the mechanics of reading, the testing program, remedial reading in the content field, and recreatory reading. The lectures are supplemented by demonstration lessons with groups of children in the reading clinic. Four hours credit.

Ed. 110d. TEACHING OF READING IN RURAL SCHOOLS. The inservice laboratory course for teachers enrolled as elementary majors, Plan B. Intensive study of specific problems in the actual teaching of reading. The in-

- service teacher analyzes learning conditions in reading in his school and studies and employs methods of improving them. Detailed study guides adaptable to a particular situation are furnished. Final written report made upon completion of the study. Four hours credit.
- 110f-210f. A COURSE TO IMPROVE THE READING-THINKING ABILITIES OF STUDENTS. In this course attention is given to an analysis of the student's own reading abilities, to a self-orientation to the material to be read, to vocabulary building, to the improvement in ability to see relationship between ideas, to draw inferences, to make interpretations, to generalize, to find the main idea and thus to organize what is read. Four hours credit.
- 110g-210g. NEW TECHNIQUES IN TEACHING SPANISH-AMERI-CAN CHILDREN. This course presents the problem of bilingualism in the public schools of the United States, the number of children, location, and nationalities involved. Specific attention is given to the experimental work in the field, foundational work in learning the English language, correct use of speech organs in making English sounds, methods for teaching initial learnings, and vocabulary guidance through the grades. Four hours credit.
- 111-211. IMPROVEMENT OF INSTRUCTION IN LANGUAGE IN THE ELEMENTARY SCHOOL. Prerequisite, Ed. 150 or 151, or teaching experience. The purpose of this course is to acquaint the student with the problems in the selection of what is to be taught, grade placement of content, and effective methods and materials in teaching language from the kindergarten through the sixth grade. The course covers oral composition, written composition, speech, spelling, and handwriting. Four hours credit.
- Ed. 111a. TEACHING OF LANGUAGE IN RURAL SCHOOLS. The in-service laboratory course for teachers enrolled as elementary majors, Plan B. Intensive study of specific problems in the actual teaching of language. The inservice teacher analyzes learning conditions in language in his school and studies and employs methods of improving them. Detailed study guides adaptable to a particular situation are furnished. Final written report made upon completion of the study. Four hours credit.
- 111c-211c. LANGUAGE IN THE PRIMARY GRADES (Summer Quarter only). The course aims to give the student an understanding of the problems involved in teaching the language arts in the primary grades, and problems of selection of curriculum content, methods, and materials. The course includes language, spelling, and handwriting. Three or four hours credit.
- 112-212. IMPROVEMENT OF INSTRUCTION IN ARITHMETIC IN THE ELEMENTARY SCHOOL. Prerequisite, Ed. 150 or 151, or teaching experience. The purpose of this course is to acquaint the student with the objectives, materials, and methods of effective teaching of arithmetic from the kindergarten through the sixth grade. The course deals with the selection of what to teach, the grade placement of content, method and materials of teaching and means of measuring pupil achievement. Four hours credit.
- Ed. 112a. TEACHING OF ARITHMETIC IN RURAL SCHOOLS. The in-service laboratory course for teachers enrolled as elementary majors, Plan B. Intensive study of specific problems in the actual teaching of arithmetic. The in-service teacher analyzes learning conditions in arithmetic in his school and studies and employs methods of improving them. Detailed study guides adaptable to a particular situation are furnished. Final written report made upon completion of the study. Four hours credit.
- 112d-212d. DEVELOPMENT OF ARITHMETIC CONCEPTS FOR YOUNG CHILDREN (Summer Quarter only). This course presents, for study

and discussion, ways of developing the meanings of numbers and the simple processes in arithmetic. Three hours credit.

- 113-213. IMPROVEMENT OF INSTRUCTION IN THE SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. Prerequisite, Ed. 150 or 151, or teaching experience. The objective of the course is to acquaint the student with the aims, selection, and organization of content, and practical methods of teaching of unified and correlated types of programs. Individualized study procedures, effective use of textbooks, teaching aids, learning procedures, and essential reading and language skills are considered in relation to the major problems of the course. Four hours credit.
- Ed. 113a. TEACHING OF SOCIAL STUDIES IN RURAL SCHOOLS. The in-service laboratory course for teachers enrolled as elementary majors, Plan B. Intensive study of specific problems in the actual teaching of social studies. The in-service teacher analyzes learning conditions in social studies in his school and studies and employs methods of improving them. Detailed study guides adaptable to a particular situation are furnished. Final written report made upon completion of the study. Four hours credit.
- 114-214. READING READINESS (Summer Quarter only). The purpose of the course is to present the latest theories, research, and practices regarding readiness for the initial period of reading instruction, readiness to read specific materials at all other educational levels, and readiness to read particular fields of subject matter. It is suited particularly to the needs of kindergarten and primary teachers and supervisors but extends over all educational levels. Four hours credit.
- \*115-215. VOCATIONAL GUIDANCE (Summer Quarter only). The purpose of this course is to survey current practices and critical interpretations of recent literature in the field. Four hours credit.
- 115c-215c. GUIDANCE IN SECONDARY SCHOOLS (First Course. Summer Quarter only). An introduction to guidance programs in secondary schools. Emphasis is placed upon the functions of guidance in relation to adolescent needs, the principles and techniques of guidance, the functions of different guidance workers, and an analysis of representative programs of guidance in selected secondary schools. Three or four hours credit.
- 115e-215e. PROBLEMS IN SECONDARY SCHOOL GUIDANCE (Summer Quarter only). An advanced course which covers specialized problems such as home room guidance, tests, and use of tests and guidance, and guidance records and reports. One, two, or three hours credit.
- \*116-216. SECONDARY EDUCATION. Prerequisite, Ed. 105. The purpose of this introductory course in secondary education is to direct the student in the development of a broad, general understanding of why we have secondary schools, how the secondary school has come to be what it is, how it is to do what it is supposed to do, how we can tell if it is doing what it is supposed to do, and what it takes to be a successful teacher in the secondary school. Four hours credit.
- 116bc-216bc. IMPROVEMENT OF READING INSTRUCTION IN THE SECONDARY SCHOOL. The major topics are: The reading activities engaged in by secondary school pupils, the degree of reading ability to be expected at the close of secondary school work, measurement of achievement and progress,

<sup>\*</sup>Given also by Correspondence.

peculiar reading difficulties presented by subject matter in the different areas, particular points of instructional emphasis in reading in the secondary school, diagnosis and remedial reading instruction, and preparation and use of reading materials. Four hours credit.

- 117-217. EXTRA-CURRICULAR ACTIVITIES AND GUIDANCE. Prerequisite, Ed. 105. Topics covered include school councils and government, athletics, debating, literary and social clubs, the school newspaper and magazine, musical and dramatic activities, and civic clubs and projects that relate to pupil participation. The purposes and values of such activities in forming proper habits, attitudes, and ideals are appraised. Four hours credit.
- 118a. FUNDAMENTALS OF GUIDANCE. The objectives of the course are to develop understanding of the fundamental principles of guidance and the purpose of a guidance program in high school and college, and to develop an understanding of some of the basic needs of individuals and ways in which these needs may be met through guidance. Four hours credit.
- 118bc. APPLICATIONS OF GUIDANCE (Fall and Winter Quarters). Prerequisite, 118a. The students in this course are those who are participating in the freshman guidance program of the college. Each student is allocated eight or ten freshmen, grouped wherever possible on the basis of like interests. The student counselors work closely with faculty advisers of freshmen and with the staff of the Department of Student Personnel in helping the freshman student become orientated to college. Two hours credit each quarter.
- 120. INDIVIDUAL EDUCATIONAL RESEARCH FOR SENIOR COLLEGE STUDENTS. Registration is permitted only after conference with the chairman of the division. Independent study, particularly concerning special phases of professional education not provided for in formal class courses. Qualified students outline a definite problem to be undertaken and spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the chairman of the division. Two or four hours credit for one problem; a maximum of eight hours is permitted.
- \*127-227. TEACHERS' CLASSROOM TESTS. The objectives of this course are to give the student adequate training in the construction, administration and scoring of classroom tests, the interpretation and use of scores, the selection of the best types of tests, the translation of scores into marks, and the evaluation of marking systems. Four hours credit.
- 127a-227a. IMPROVING THE MARKING SYSTEM (Summer Quarter only). This is a unit course designed to aid students to improve the grading systems in schools. One hour credit.
- 127b-227b. CONSTRUCTION AND USE OF ACHIEVEMENT TESTS (Summer Quarter only). This is a unit course, the purpose being to help students construct and use various types of achievement tests. One hour credit.
- 128a-228a. MENTAL HYGIENE. Prerequisite, Ed. 20b or its equivalent. A general, non-technical course designed to give an understanding of the principles of mentally healthy living and the application of such principles. The content of the course includes such topics as the meaning of mental health, the origin and development of mental conflict, mental health hazards peculiar to dif-

<sup>\*</sup>Given also by Correspondence.

ferent stages of development, the relationship of mental hygiene to religious education and sex education, and mental health needs in a changing society. Four hours credit.

128b-228b. PROBLEM CHILDREN IN SCHOOL (Summer Quarter only). Prerequisite, teaching experience and Ed. 20b. Attention is given to such topics as the mental health of the child as a major emphasis in school, the role of the teacher, curriculum, administration, and school philosophy in determining the mental health of the pupils, securing and interpreting diagnostic data, and development and use of remedial measures that fall within the scope of the teacher's control. Four hours credit.

128c-228c. IMPROVING TEACHER PERSONALITY. Prerequisite, Ed. 20b or its equivalent. An additional course in psychology is prerequisite for graduate credit. This course includes such topics as the nature of the wholesome adult personality, analysis and diagnosis of adult personality, the concept of "pattern" in personality, typical ways of changing personality "pattern," professional mental health hazards in the school and in the community, and, the effects of teaching personality impact upon pupil personality development. Four hours credit.

\*129a-229a. EDUCATIONAL MEASUREMENTS IN THE ELEMENTARY GRADES AND JUNIOR HIGH SCHOOL (Summer Quarter only). The purpose of this course is to acquaint the students with the available standardized tests below the high school level. The various types of tests and the specific functions of each, the evaluation of standardized tests, their administration, and the interpretation of the results are among the topics dealt with. Four hours credit.

129b-229b. MENTAL TESTS AND MEASUREMENTS (Summer Quarter only). The purpose of this course is to acquaint the student with the available mental tests and their merits and weaknesses; to prepare him to administer intelligently such tests and interpret the results obtained, and to give him practical suggestions for using these results. Four hours credit.

Ed. 130a. RURAL SCHOOL-COMMUNITY RELATIONSHIPS. The first in-service laboratory course for teachers enrolled as elementary majors, Plan B. Careful study and analysis of the particular school in which the teacher is employed, study of school and community facilities and relationships. Detailed study guide is furnished. Final written report made upon completion of the study. Four hours credit.

136-236. NEW TECHNIQUES OF TEACHING IN RURAL SCHOOLS. This course offers opportunities to become familiar with and evaluate new teaching techniques which are especially adapted to the instructional programs of rural schools. Four hours credit.

137-237. RURAL SOCIOLOGY AND RELATED COOPERATIVE PRO-CEDURES IN RECONSTRUCTING RURAL SCHOOLS. It is the purpose of this course to analyze the institutions and organization of rural society with a view to discovering the inherent advantages offered for cooperative effort in reconstruction of the rural school curriculum. The student will be encouraged to attempt creative work in this field in addition to evaluating procedures that have been utilized. Four hours credit.

\*140-240. PARENT EDUCATION. The purpose of this course is to acquaint teachers with the important parent-home-school relationships in the educational process. The course deals with the philosophy of parent-teacher organ-

<sup>\*</sup>Given also by Correspondence.

ization, methods of promoting a parent-teacher program, and local units of parent-teacher associations. Two hours credit.

- 141a-241a. ADMINISTRATION OF VILLAGE AND CONSOLIDATED SCHOOLS. Since this course is intended for those relatively inexperienced in the field, most of the practical examples will be drawn from the small school systems and applied to the administration of village and consolidated systems. Men undergraduate majors in other divisions are advised to take this course. Students with administrative experience should take Ed. 142-242, 143-243, or 144-244. Four hours credit.
- 141b-241b. ADMINISTRATION FOR TEACHERS (Summer Quarter only). A course designed to equip the classroom teacher with a basic knowledge of how a public school is administered, with emphasis constantly on the teacher's problems. Four hours credit.
- 142-242. SCHOOL ADMINISTRATION (First Course). Prerequisites, twelve quarter hours of Education, experience, and senior or graduate classification. Topics to be given special consideration are: Federal relations to education, the state as the fundamental educational unit, local units for school control, duties and powers of the superintendent, and the administration of teacher personnel. (Administration majors may earn up to twenty hours in this field by taking Ed. 142-242, 143-243, 144-244, 342 and 343). Four hours credit.
- 143-243. SCHOOL ADMINISTRATION (Second Course). Prerequisites, twelve quarter hours in Education, experience, and senior or graduate classification. Topics include: The school census, attendance, and pupil accounting records and reports, business administration, preparation and use of the budget, cost accounting and fiscal control, indebtedness, short time borrowing, and bonds. Four hours credit.
- 144-244. SCHOOL ADMINISTRATION (Third Course). Prerequisites, twelve quarter hours in Education, experience, and senior or graduate classification. This course will consider selection of school sites, planning buildings, architectural and educational features of school building, school building management, maintenance and operation, the purchasing and use of school supplies and equipment, and auxiliary agencies. Four hours credit.
- 145-245. TECHNIQUE OF MAKING THE SCHOOL CURRICULUM. An appraisal of past and present theories and practices of curriculum making, presentation of a modern functional philosophy of curriculum making, and, survey of the applications of this functional theory to the major areas of experience including the fundamentals, health, economic life, home and family life, civic education, leisure and recreation and creative living, and individual or personality development. (This is the first of three courses in the curriculum field: Ed. 145-245, 146-246, 147-247.) Four hours credit.
- 146-246. ADVANCED CURRICULUM CONSTRUCTION. This course is the second in the curriculum series (Ed. 145-245 is not a prerequisite). The aim of this course is to provide guidance for detailed consideration of what to teach in the major areas of experience which include health, economic life, home and family life, civic education, leisure and recreation and individual or personality development. The reconstruction of materials in the fields is considered in similar ways to those developed in the courses in the elementary supervision subjects such as Ed. 110-210, 111-211, and 112-212, and thus supplements curriculum theory and practice in areas other than the latter. Four hours credit.

- 147-247. EDUCATIONAL SOCIOLOGY (Formerly 148-248, Non-School Education). This course is the third in the curriculum sequence. It attempts to survey and appraise the implications of outside-the-school agencies such as associational influences—one's friends and neighbors, customs, social control, vocational education, parent education, youth problems, creative education, libraries, motion pictures, museums, political parties, the press, the radio, and the like. Four hours credit.
- 150b. OBSERVATION AND APPLIED TECHNIQUES OF TEACHING IN THE SECONDARY SCHOOL. Prerequisites: Ed. 105 and 116. Organized to include five hours weekly of discussion of learning problems and seven hours weekly scheduled observations and participation in the field of the student's major. Problems emphasized are growth periods during adolescence, learning principles applicable in particular situations, provision for individual differences, analysis and evaluation of pupil progress, discipline problems, pupil reaction to learning situations, organization and presentation of materials used in teaching, the teacher's relation to pupils, co-workers, and community. This course combines the methods course in a given major area with observation for the following credit: fine and industrial arts, business education, English, speech and dramatics, foreign languages, mathematics, science, social studies—eight hours credit; home arts—six hours credit; health and physical education—four hours credit; music—four hours credit;
- 152-252. STUDENT SUPERVISION. Students enrolled must have had distinctly successful teaching experience. This course is for those who are preparing for supervisory positions in public schools or as supervising teachers in teachers colleges. Course content: what to look for when observing a teacher, directing the student teacher in assembling and organizing teaching materials, conducting conferences, and, evaluating teaching ability. Four to eight hours credit.
- 158. ADVANCED OBSERVATION—STUDENT TEACHING. Prerequisite: Public school teaching experience and Ed. 105 or equivalent. Observation under careful direction of teaching procedures employed in the Ernest Horn Elementary School, analysis and evaluation in group discussion of techniques employed, and, consideration of ways of adapting the observed procedures to the student's own teaching situation. Particular emphasis given to the study of pupils as a basis for planning their work, the development of study habits, the outstanding learning difficulties in elementary school subjects, and the development of standards for classroom teaching. Four hours credit.
- 162-262. CREATIVE EDUCATION (Summer Quarter only). This course is designed to appraise the place and contribution of the theory of children's interests in education. Four hours credit.
- 163a-263a. ORGANIZATION AND ADMINISTRATION OF THE EL-EMENTARY SCHOOL. Desirable prerequisites: Previous experience, or one or more of the basic courses in elementary education—Ed. 110-210, 111-211, 112-212, 113-213. The content of the course includes school-community relationships, objectives and functions of an elementary school, course of study and its relation to the objectives, administration of the school plant, plan of organization in the school, pupil accounting, welfare problems of elementary children, the elementary school teacher, the elementary school principal, co-curricular activities, and some new technics applied to elementary education and solution of practical problems. Two or four hours credit.
- 163b-263b. NEW TECHNIQUES APPLIED TO ELEMENTARY EDU-CATION. Desirable prerequisite, some elementary school experience as teacher, supervisor or principal. The course includes such topics as the "maturation"

- thesis, visual aids in the elementary school, excursions and school journeys, radio in the elementary school, safety education, use of library resources in the community, health practices, auditorium work, civic activities for elementary school children, etc. Four hours credit.
- 165-265. JUNIOR-SENIOR HIGH SCHOOL ADMINISTRATION AND SUPERVISION. Prerequisite, Ed. 116-216, or its equivalent, is recommended. The course is designed to further the effectiveness of secondary school administrators and supervisors, to give prospective secondary school administrators and supervisors an opportunity to prepare for their positions, and to make it possible for secondary school teachers to develop a better understanding of the problems that demand cooperative attack in a school which is democratically administered. Three or four hours credit.
- 166-266. PROBLEMS IN SECONDARY SCHOOL CURRICULUM, IN-STRUCTION AND ADMINISTRATION (Summer Quarter only). Prerequisite, Ed. 116-216 or the equivalent. Following a brief restudy of basic problems in Ed. 116-216, the first general course in Secondary Education, and a review of recent significant, related research, students enrolled in this course organize themselves into committees or study groups, each concerned with some basic curricular, instructional, or administrative problem on which they are working in service. The remainder of the quarter involves an intensive, cooperative study of the problem and the reporting of recommendations and implications for school practices. Four hours credit.
- 167-267. RECONSTRUCTING SECONDARY EDUCATION (Summer Quarter only). Desirable prerequisite, Ed. 116-216, or equivalent. In addition to the objectives of Ed. 116-216, the course is concerned with the development of an understanding of the modern philosophy of secondary education and especially the major teaching field of the student for the purpose of stimulating and promoting the improvement of public school practices. Four hours credit.
- 168-268. THE SMALL HIGH SCHOOL (Summer Quarter only). This course attempts to adapt the basic principles of secondary education to very small high schools. Emphasis is consistently directed to those problems that are intimately associated with these smaller-sized educational units. Three to four hours credit.
- 169-269. CURRICULUM AND INSTRUCTIONAL EXPERIMENTA-TION IN THE SECONDARY SCHOOL (Summer Quarter only). Desirable prerequisite, Ed. 167-267. This course is concerned with the application of the newer philosophy of secondary education to the Secondary School of Colorado State College of Education. The course attempts to provide experiences that students may duplicate in public school practice in the promotion of a cooperative attack on the improvement of secondary education. Four hours credit.
- 171-271. TECHNIQUES OF ADULT EDUCATION (Summer Quarter only). The purpose of this course is to familiarize school administrators and teachers with the need for meeting an expanding educational program as the school faces the problem of the education of adults. This course will emphasize the development of the adult education movement in this country, the psychology and philosophy of adult education and methods and techniques in practical application. Four hours credit.
- 175-275. APPLIED GENERAL STATISTICS. The purpose of this course is to acquaint the prospective teacher with the meaning of the common statistical terms, and to train him in the use of those concepts applicable to ordinary classroom teaching. Among the topics presented are the collection and classification of data, the use and interpretation of the results of tests and measurements and

the meaning and use of measures of central tendency, variability and relationship. Four hours credit.

175a-275a. STATISTICAL METHODS FOR RESEARCH. Prerequisite, Ed. 175-275. The purpose of this course is to familiarize the student with the statistical techniques applicable to administrative and research work in education. Consideration is given to the calculation, interpretation and application of the measures of reliability and validity, of coefficients of correlation, regression equations, etc. Four hours credit.

\*176-276a. PSYCHOLOGY OF LEARNING FOR ELEMENTARY TEACHERS. Prerequisite, Ed. 20b, or equivalent. Part one of this course deals with the development of children particularly during the elementary school years. Problems of growth, health, interests and incentives, emotional stress, intelligence, and the formation of social attitudes are discussed. Part two considers learning in school with special emphasis on the nature of learning, factors influencing improvement, measurement of achievement, transfer of training, and the development of a wholesome personality. Four hours credit.

176b-276b. PSYCHOLOGY FOR SECONDARY SCHOOL TEACHERS. The first part of this course deals with learning as a process of organizing experiences. The psychological activities of understanding, expressing, thinking, appreciating, and transferring are treated as they are related to the subject matter interests of the individual member of the class. The second part of the course deals with the nature of the secondary school pupil with special attention given to the problems of the adolescent's interests, capacities, and outlook on life. Four hours credit.

177a-277a. CHILD PSYCHOLOGY. Prerequisite, Ed. 25-125, or 20b, or the equivalent. Topics covered include origins of child behavior, principles of learning, behavior of infants, growth of bodily size, development of physical and motor capacities, language, development of mental functions, growth of intelligence, emotional behavior and its problems, childhood motivation, social development, character and religion, personality traits and their development, personality adjustments and the organization of traits; and guidance and control of child behavior. Four hours credit.

177b-277b. PSYCHOLOGY OF ADOLESCENCE (Summer Quarter only). Prerequisite, Ed. 20b, or equivalent. The aim in this course is to give latest data concerning physical developments of normal adolescence, emotional developments of normal adolescence, social developments of normal adolescence, moral and religious developments of normal adolescence, intellectual developments of normal adolescence, types of adolescents, and, the adolescent's environment in the home, school and community. Four hours credit.

179-279. THE DEVELOPMENT OF AMERICAN PSYCHOLOGY. Prerequisite for this course should be an introductory course in general psychology, or its equivalent. Using an historical approach, various schools of psychology are studied starting with the introspectionism of E. B. Titchner. The Functionalists, Dynamic or Stimulus-Response Psychologies, Behaviorism and John B. Watson, American versions of Gestalt Psychology, and a final cross-section of the psychological field of today are the topics met with in the last two thirds of the course. Four hours credit.

180-280. ORGANIZING A SCHOOL LIBRARY. The purpose of the course is to aid teachers to organize libraries in small schools. The course is an introduction to the principles of maintaining and administering the school library. Includes simple classification and cataloging, principles in the planning of the

<sup>\*</sup>Given also by Correspondence.

- library room, and simple circulation procedures. In the summer this course is differentiated for elementary and secondary schools as 180a-280a and 180b-280b. Four hours credit.
- 181-281. SELECTION AND INTEGRATION OF LIBRARY MATE-RIALS FOR THE SCHOOL CURRICULUM. Designed to introduce to teachers and librarians printed materials, e.g., handbooks, encyclopedias, visual aids, etc. Coordination of materials with class needs is emphasized and applications are made to both the elementary and secondary school levels. Four hours credit.
- 182. DIRECTED LIBRARY PRACTICE. Prerequisites, Ed. 180 and 181, or their equivalent. This course will include a minimum of eight hours a week of directed work in the elementary, secondary or college libraries. Acceptable written evaluations of library activities participated in by the student will be required. Four hours credit.
- 183-283. INDIVIDUAL STUDIES OF LIBRARY PROBLEMS. Prerequisites, Ed. 180-280, Ed. 181-281 or their equivalent. (See Ed. 222 for equivalent requirements as to written work.) A careful analysis of a practical library problem culminating in an individual study. Four hours credit.
- 190-290. THE TEACHERS COLLEGE AND THE PROFESSIONAL ED-UCATION OF TEACHERS (Summer Quarter only). Deals with general administration and control, executive officers and their duties, the teaching staff and its qualifications and duties, selection, admission, and supervision and control of students, records and reports, placement, finance in teachers colleges, budgets, costs, sources of revenue, curriculum, educational research, and, relationships with other educational institutions. Two to four hours credit.
- 192-292. STUDENT TEACHING AND THE PROFESSIONAL EDUCATION OF TEACHERS (Summer Quarter only). Course content: Function of observation, participation and student teaching, qualifications of students enrolling in student teaching, techniques employed in supervising student teachers, such as the conference, demonstration lesson, ability to plan teaching units, to question, make assignments, provide for individual differences, study pupils and increase progress, evaluation of student teachers, qualifications of supervising teacher. Three to four hours credit.
- \*195-295. PHILOSOPHY OF EDUCATION. Prerequisites, Ed. 105, 116. The purpose of this course is to develop a real understanding of certain meanings, concepts, principles, and relationships peculiar to this area of knowledge. The content of this course includes such problems as the meaning of education, educational aims and values, democracy and education, the development of ideals, the nature of thinking, method and subject matter. Open only to seniors and graduate students. Four hours credit.
- \*195a-295a. FOUNDATIONS OF MODERN EDUCATION (Summer Quarter only). Prerequisites, Ed. 105 and 176. This course is designed to study important historical and philosophical backgrounds for the interpretation of present day educational issues. An analysis is made of the evolution of the major educational theories and their influence on changing practices. Four hours credit.
- 196-296. HISTORY OF PHILOSOPHY. Prerequisites, Ed. 105, 116, 176 and 195. This course includes a study of the three types of philosophy—naturalism, idealism, and pragmatism. As representative of naturalism, a brief study is made of Bacon and Spencer, among the idealists, Plato, Aristotle, Rousseau, Kant, Fichte, Hegel, Royce, and Gentile, among the pragmatists, James, Dewey, and Bode. Four hours credit.

<sup>\*</sup>Given also by Correspondence.

- 197-297. CONCEPTIONS OF MIND IN EDUCATIONAL THEORY. Prerequisites, Ed. 105, 116, 176, and 195. The purpose of this course is to show that our conception of the nature of the mind determines in part the aims of education; furthermore, it traces the historical development of three major conceptions of mind and the relation of each to the aims of education. Four hours credit.
- 198-298. CURRENT EDUCATIONAL TRENDS AND ISSUES (Summer Quarter). This course attempts in an overview fashion to appraise the current studies and publications in education in such areas as objectives of education, experimentation and evaluation, articulation (federal, state, and local schools, and elementary school, secondary school, and higher education), non-governmental controls, the program of education, personnel (children and youth), and teacher welfare. Three or four hours credit.
- 200. INTRODUCTION TO EDUCATIONAL LITERATURE AND EX-PERIMENTATION. This course is designed to give an overview of recent educational research with emphasis upon interpretation, evaluation, and use of research rather than upon the techniques of research. Each student is expected to become acquainted with the literature of the field of education as a whole but will have opportunity to do most of the work with the reports of research within the area of his special interest. Four hours credit.
- 215a. STUDENT PERSONNEL AND GUIDANCE PRACTICES. This course is designed to give a general understanding of some of the basic principles of guidance as well as to give a survey of guidance practices, including the administration of a guidance program. It includes discussion of various areas of guidance, such as vocational, social, and educational guidance. Four hours credit.
- 222. INDIVIDUAL STUDIES IN EDUCATION. Independent study, particularly in fields of specialization not provided for in formal class course. Qualified students outline a definite problem and spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit is permitted.
- 225-325. SURVEY OF CONTEMPORARY PSYCHOLOGICAL PROB-LEMS (Summer Quarter only). The purpose of this course is to acquaint the student with the contemporary status of some of the persistent problems in the study of human behavior. The naturalistic and organismal developments permit a re-evaluation of such fields of psychological investigation as intelligence, physiology of the so-called mental processes, learning, thinking, and personality. Four hours credit.
- 264. ELEMENTARY SUPERVISION FOR SCHOOL ADMINISTRA-TORS (Summer Quarter only). The purpose of this course is to acquaint the superintendent or principal with that minimum information relative to actual classroom teaching in the elementary school that is needed by him in order to engage in the supervision of instruction. The fields covered usually include reading, social studies, language and arithmetic. The course covers instructional problems from the kindergarten through the sixth grade. Four hours credit.
- 278-378. SOCIAL SIGNIFICANCES OF THE LEARNING PROCESS (Summer Quarter only). Instead of dealing with the learning process from the mental analysis approach, this course proposes to observe learning in its social

- setting. Factors which influence effective learning, interpretations of the learning process from the field approach, and a critical evaluation of so-called laws of learning are some of the topics studies. Four hours credit.
- 291a,b,c. SEMINAR IN HIGHER EDUCATION. The purposes of this course are orientation and study of the problems of higher education. Three main types of problems are considered: Personnel and guidance, curriculum, and instruction. Two hours credit each quarter for three quarters.
- 299. THESIS. Thesis course required of all Plan A students. Twelve hours credit.
- 322a. RESEARCH PRELIMINARY TO FIELD STUDY NO. 1. Required of candidates for the Doctor of Education Degree in their first residence summer quarter, preparatory to research for Field Study No. 1.
- 322b. RESEARCH PRELIMINARY TO FIELD STUDY NO. 2. Required of candidates for the Doctor of Education Degree preparatory to research for Field Study No. 2.
- 322c. RESEARCH PRELIMINARY TO FIELD STUDY NO. 3. Required of candidates for the Doctor of Education Degree preparatory to research for Field Study No. 3.
- 323 a,b,c. GRADUATE RESEARCH CREDIT FOR FIELD STUDY NO.

  1. Each course four hours—maximum twelve hours for Field Study No. 1. This graduate research credit is offered for fall, winter, and spring quarters respectively. For example, 323a, fall quarter, four hours; 323b, winter quarter, four hours; and 323c, spring quarter, four hours. For the second and third studies the credit is offered in the same way.
- 324a,b,c. GRADUATE RESEARCH CREDIT FOR FIELD STUDY NO. 2. Each course four hours—maximum twelve hours for Field Study No. 2.
- 325a,b,c. GRADUATE RESEARCH CREDIT FOR FIELD STUDY NO. 3. Each course four hours—maximum twelve hours for Field Study No. 3.
- 342. SCHOOL ADMINISTRATION (Fourth Course) (Summer Quarter only). Prerequisites, twelve quarter hours in education, experience, and senior or graduate classification. The purpose of this course is to consider the problems of general school law applicable in typical states; court decisions relative to schools, public relations and school publicity. Four hours credit.
- 343. SCHOOL ADMINISTRATION (Fifth Course). This course is designed to acquaint school administrators with special types of activities with which they must be familiar, such as adult education, federally supported courses in agriculture, home economics and vocational education, art, music, and industrial arts education, methods of dealing with handicapped children, organization of school libraries, and other specialized fields. Four hours credit.
- 350. INDIVIDUAL STUDIES IN EDUCATION FOR DOCTOR'S CAN-DIDATES. Each candidate for the degree of Doctor of Education is required to enroll for three individual studies, one in his major area and one in each of two supporting areas. The rules and regulations governing Ed. 222, Individual Studies, apply to these studies. Four hours credit for each study.
- A. Major Areas
  - 1. Educational Administration
  - 2. Educational Psychology
  - 3. Elementary Education
  - 4. Secondary Education
- B. SUPPORTING AREAS
  - Curriculum
     Guidance and Personnel
  - 3. Higher Education
  - 4. Philosophy of Education
  - 5. Tests and Measurements

## Business Education

The field of Business Education provides curricula leading to the Bachelor of Arts degree, either with or without a teaching certificate, and short programs of courses for intensive preparation for office, store, and other clerical positions in business and industry. Appropriate diplomas will be issued to students who meet the course and proficiency requirements of the short terminal programs.

Students who have established high school credits in the business skill subjects should observe the following regulations: For one unit of credit each in bookkeeping, shorthand, and typewriting, the student will be exempted from the beginning or introductory courses in these subjects in college; for two high school credits in each of the business skill subjects, the student will be exempted from the first and second quarter courses in the same subjects in college. Those who are exempted under the above regulations will be required to pass proficiency examinations in the subjects from which they are exempted. In no case will college credit be given for passing the proficiency examinations in the business skill subjects.

The four-year curriculum for majors in Business Education leading to a degree with a teaching certificate gives the necessary preparation for the teaching of the subjects in business that are offered in secondary schools, junior colleges, teachers colleges, and similar institutions. By proper selection of electives a student may prepare for the teaching of the subjects included in the area of distributive education in schools which sponsor such a program.

All students who are preparing to teach in the field of Business Education or Distributive Education shall complete one teaching minor in a field other than Business Education.

The following program should be followed:

No.	Course	Cr. Hrs.
1 and 2	Typewriting	
20, 21, and 22	Accounting Business Law	
37	Business Mathematics	
41	Introduction to Business	
110, 111, and 112	†Gregg Shorthand	
172	Secondary School Business Curriculum	4
	Elective in Business Education	4-16
	Elective in Economics	16
		68

The following are recommended as minors in business education for students majoring in other divisions. The business education minors listed below are the minimum requirements for teaching the subject in high schools accredited by the North Central Association. Any variation should have the approval of the major adviser in business education.

No.	Course	Cr. Hrs.	No.	Course	Cr. Hrs.
1	Typewriting	2	152	Improvement of Insti	
20 and 21	- Accounting or		155 056	in the Business Su	bjects 4
10 and 11	ShorthandBusiness Law		155-256	Business Organization Principles of Economi	
<i>)</i> (	Dusiness Law		•••••	Frinciples of Economic	ICS 7

<sup>†</sup>Not required in distributive education.

# Major in Business Education

(Without Teaching Certificate)

A major in Business is offered to students desiring a Bachelor of Arts degree without a teaching certificate. This gives the preparation necessary for those who wish to enter the more responsible positions in business and industry as accountants, minor executives, and managers. A major should consist of at least forty-eight hours in business subjects, with additional courses required in the field of economics. Within the field of business, the student may select secretarial science or general business as an area of concentration. Course work will be outlined by the student in consultation with his major professor. A non-teaching minor is offered also in selling.

The students majoring in this field shall complete the core requirements in general education listed on page 21. A minor shall be completed outside the major field.

The minor in Business Education without the teaching certificate should be planned in conference with the student's adviser. It should consist of a minimum of twenty-four hours and should approximate the distribution indicated for the major under this plan.

## Terminal Curricula

Terminal curricula are offered in the field of business to students who wish to prepare for accounting, clerical, stenographic and secretarial positions. These curricula are intended primarily for those who do not plan to continue in college, but wish to prepare for business positions in the shortest possible time.

#### GRADUATE STUDY

Course work will be outlined by the student's major professor.

## Description of Courses

- \*1. TYPEWRITING. A beginning course in typewriting which includes practice in the use of the typewriter, the history of the development of the typewriter, its significance in business correspondence, and similar topics. Students who have one or more units of high school credit in typewriting may not take this course for credit. Two hours credit.
- \*2. ADVANCED TYPEWRITING. Prerequisite, 1 or the equivalent. An advanced course in typewriting. A thorough mastery of the uses of the different devices and parts of the typewriter must be acquired together with a reasonable speed in writing and a high degree of accuracy. Students who have two or more units of high school credit in typewriting may not take this course for credit.
- 10-110. GREGG SHORTHAND. The scope and content of this course is equivalent to the principles of Gregg Shorthand covered in the first half of the manual. Students who have one or more units of high school credit in shorthand may not take this course for credit. Four hours credit.

<sup>\*</sup>Given also by Correspondence.

- 11-111. ADVANCED GREGG SHORTHAND. Prerequisite, 10-110 or the equivalent. The materials covered in this course are equivalent to the principles of Gregg Shorthand included in the second half of the manual. The student is expected to be able to take dictation of new matter at the rate of seventy words a minute when the course is completed. Students who have two or more units of high school credit in shorthand may not take this course for credit. Four hours credit.
- 12-112. ADVANCED SHORTHAND TRANSCRIPTION. Prerequisite, the ability to take dictation at the rate of seventy words a minute and typewrite at the rate of thirty words a minute with a high degree of accuracy. This course offers practice in taking dictation at about seventy words a minute at the beginning of the course, and a minimum speed of one hundred words a minute will be expected at the end of the course. Four hours credit.
- 13-113. SECRETARIAL PRACTICE. Prerequisite, 12-112 or the equivalent. Students taking this course will be required to take dictation at one hundred words a minute, and a minimum of one hundred twenty words a minute will be expected at the end of the course. The principal emphasis will be placed on transcription practice, correspondence forms, special arrangements of typed material, and the development of secretarial duties and traits. Four hours credit.
- 14-114. ADVANCED SECRETARIAL PRACTICE. Prerequisite, 13-113 or the equivalent. Attention will be given to speed in taking shorthand dictation, advanced secretarial duties and traits, business reports, filing, special office equipment, and other secretarial duties. Four hours credit.
- 15-115. BUSINESS REPORTS AND CORRESPONDENCE. An opportunity is provided in this course for the student to review the fundamentals of English including composition, language, grammar, spelling, and punctuation as it is applied to business letter writing, special reports, and many other business communications. Attention will be given to both oral and written forms of expression including the use of the telephone and other mechanical devices which reproduce the human voice. Four hours credit.
- \*20. INTRODUCTORY ACCOUNTING. This is a beginning course in the fundamental principles of record keeping. It is offered as a prerequisite to 21-121. Students who have had one year of bookkeeping in high school may not take this course for credit. Four hours credit.
- \*21. ACCOUNTING PRINCIPLES. Prerequisite, 20 or the equivalent. The principles of accounting and the theory of accounts are developed in this course through the equation and balance sheet approach. The entire accounting cycle is covered and special attention is given to financial statements and other periodic reports. Four hours credit.
- \*22. ADVANCED ACCOUNTING PRINCIPLES. Prerequisite, 21 or the equivalent. The principles of accounting are applied to sole proprietorship and partnership records including the adjusting entries for supplies, insurance premiums, depreciation, interest and discount, and to the handling of controlling accounts. Four hours credit.
- 23-123. CORPORATION ACCOUNTING. Prerequisite, 22 or the equivalent. The principles of accounting are applied to the special books and records of the corporation, accounting for bond issues, sinking funds, special reserves, and advanced financial statements and other reports. Four hours credit.

<sup>\*</sup>Given also by Correspondence.

- 24-124. SECRETARIAL ACCOUNTING. This course presents a system of records for professional people such as doctors, lawyers, and engineers without going into detail in the development of advanced accounting principles. Short practice sets are completed by the student illustrating the necessary books and records which might be kept and the kinds of transactions that would ordinarily be handled. All of the theory involved is based on good accounting principles and the double entry system of bookkeeping. Four hours credit.
- 25-125. INDIVIDUAL AND FAMILY RECORDS. A course in which adequate systems of accounts and books are presented for recording the business transactions of the individual and the family. Short sets and exercises are used to illustrate the method of keeping records for persons in different walks of life, under different financial conditions, and in different social circumstances. Considerable attention is given to budgeting and individual income tax records and reports. Four hours credit.
- 26-126. COST ACCOUNTING. Prerequisite, 22 or the equivalent. An advanced course in accounting dealing with the principles of distribution of overhead and burden to the unit costs of production. The principles will be developed through a complete set of accounting records and cost sheets. Four hours credit.
- 27-127. SOCIAL SECURITY AND PAYROLL ACCOUNTING. Prerequisite, 22 or the equivalent. Payroll records, accounting for the reserves set aside as required by the government, and special problems involved in the keeping of the necessary records are the phases of accounting which are treated in this course. Two hours credit.
- \*31-131. BUSINESS LAW. A beginning course in business law dealing with contracts and negotiable instruments. The essential elements of contracts, both oral and written, will be studied. Attention will be given to the characteristics of negotiable instruments including drawing, negotiating, and other aspects of this particular class of contracts. Four hours credit.
- 132-232. ADVANCED BUSINESS LAW. Prerequisite, 31-131 or the equivalent. This is an advanced course, dealing with the subjects of agency, bailments, partnerships, corporations, real estate, and personal property. Four hours credit.
- \*37. BUSINESS MATHEMATICS. This course deals with the business applications of mathematics. Special attention is given to interest, bank discount, averaging account balances, insurance investments, elementary business statistics, and graphical presentation of data. Four hours credit.
- 41. INTRODUCTION TO BUSINESS. An introductory treatment of the different phases of American business and industry. This is a general survey course which is intended to aid the student in the selection of courses and curricula, and at the same time give him a better understanding of the agencies, methods, and practices of business. It is a good general course in business for non-majors who desire a general overview of the whole field of business and industry. Four hours credit.
- 152. IMPROVEMENT OF INSTRUCTION IN THE BUSINESS SUB-JECTS. The teaching of such business subjects as shorthand, typewriting, bookkeeping, introduction to business, office appliances, and the cooperative teaching

<sup>\*</sup>Given also by Corrrespondence.

of retailing will receive special attention in this course. It is offered every quarter in conjunction with student observation and teaching. Four hours credit.

- 153-253. TEACHING THE BUSINESS SUBJECTS. Short methods courses are offered in the summer school only in each of the following subjects: (a) consumer economics; (b) cooperative courses in retailing; (c) introduction to business; (d) Gregg Shorthand; (e) typewriting; (f) office appliances; and (g) handwriting. Two hours credit.
- 154-254. CONSUMER BUSINESS MANAGEMENT. The intelligent spending of income is the primary aim of this course, which includes the following: Reliable buying information; standards of living; insurance; home ownership; consumer credit; cooperatives; taxes; investments; government buying methods; advertising and business ethics; laws affecting the consumer; and the background of the consumer movement. Four hours credit.
- \*155-255. BUSINESS ORGANIZATION. The evolutionary development and the importance of organization in business will be treated from the standpoint of economic and social progress. Particular attention will be given to the different types of organizations in common use in business and industry. Four hours credit.
- 56-156. RETAIL MERCHANDISING. The principles of retail merchandising will be studied through a cooperative plan whereby the student will be required to spend fifty hours during the term in a retail store. A nominal wage may be paid by the merchants who cooperate and the student may arrange with the store manager to work more than fifty hours during the period of study if he desires to do so. Four hours credit.
- \*57-157. PRINCIPLES OF INSURANCE. A survey of the different types of insurance protection in use, the nature and functions of insurance, and its economic and business significance. Attention is given to the analysis of insurance policies, the rights and obligations of the parties, and the customary practices involved in transactions where insurance purchases, adjustments, and settlements are made. Four hours credit.
- 58-158. ADVERTISING. The problems of selection of media for retail store advertising and the preparation of copy for these media are important phases of the course. Problems of what to advertise, how to prepare the advertisement, writing effective copy, mechanics of advertising, layout, and evaluation of advertising will be considered. Actual displays are set up by students, and store windows and interior displays are studied. Extensive use is made of advertisements, displays, and exhibits in current use. Four hours credit.
- 59-159. SALESMANSHIP. The principles of good salesmanship will be approached from the observations, contacts, and experiences of students as the services and facilities of local retail stores are studied. Some of the phases of retail selling which are studied include personal adjustments and observations which must be made by the new salesperson; characteristics of a good salesperson; important information to be learned about the store, the merchandise, the store's customers, the mechanics of selling, and the social and economic significance of selling. Four hours credit.
- 60-160. OFFICE EQUIPMENT AND MANAGEMENT. Prerequisite, 2 or the equivalent. A variety of modern office machines, filing systems, and other equipment will be demonstrated and the student will be given an opportunity to

<sup>•</sup>Given also by Correspondence.

- use them for practice purposes. The course is offered in the following sections:
  (a) Duplicating and recording machines; (b) filing; (c) adding and calculating machines. Two hours credit for each unit.
- 61. CALCULATING MACHINE PRACTICE. The development of speed and accuracy in the operation of a variety of modern calculating machines is the objective of this course. The levels of achievement in speed and accuracy that will be expected of the student will be determined by the demands of business and office managers for beginning calculating machine operators. From sixty to ninety hours of practice will be required on each of the different machines used by the student. At least one laboratory hour will be required daily in addition to the class period. Two hours credit.
- 170-270. ADMINISTRATION AND SUPERVISION OF BUSINESS EDUCATION. Some of the topics to be studied are: The organization and supervision of coworkers; the employment, preparation, promotion, and discharge of teachers; cooperation with business concerns and the establishment of desirable relationships between the school and business employers; placement and follow-up of graduates; vocational information and guidance; tests, measurements, and examinations; textbooks, materials, equipment, and supplies. Four hours credit.
- 171-271. PROBLEMS IN BUSINESS EDUCATION. This course provides for the treatment by individual research of some of the most important current problems in business education. Each student is permitted to select a problem for study and he will be expected to present his findings in class and prepare a formal written report. Required of all graduate students who expect to become candidates for the degree of Master of Arts with a major in business education. Four hours credit.
- 172-272. THE SECONDARY SCHOOL BUSINESS CURRICULUM. The current philosophy of business education, the analysis of the high school business curriculum, and the problems involved in the improvement of the curriculum are the principal topics studied. Four hours credit.
- 275. ADVANCED ACCOUNTING PROBLEMS. Prerequisite, at least twelve hours of college credit in accounting or the equivalent. Advanced problems in partnerships, corporations, inventories, security accounting, and special analytical reports will be some of the topics treated. Four hours credit.
- \*276. ANALYSIS OF FINANCIAL STATEMENTS. Prerequisite, at least twelve hours of college credit in accounting or the equivalent. The course deals with the terminology and principles of the analysis of financial statements, special types of statements for analysis such as, industrials, public utilities, and moneyed corporations. Four hours credit.
- 222. INDIVIDUAL STUDIES. A course for graduate students who want to do individual research on a problem in the field of business education. The purpose of the course is to provide for independent study, particularly in business education. Selection of the problem, the research methods and techniques to be used, and a definite plan of work must be arranged through individual conferences with the instructor. Two typewritten reports of the study must be presented for approval. Two to four hours of credit for one problem.
- 299. MASTER'S THESIS. Graduate students who elect the thesis plan should enroll for this course during the regular school year. Twelve hours credit.

# DIVISION OF HEALTH AND PHYSICAL EDUCATION

First year women are expected to take one group sport, one individual sport, and one class in dance for one hour credit each. After the first year women students in residence may take any one hour course not previously taken; courses may be repeated with permission of the medical adviser or the divisional staff members.

First year men students are expected to enroll in H. & P. E. 3, Freshmen Orientation in Physical Education Activities, for one hour credit each quarter of their freshman year. Men majoring or minoring in the Division of Health and Physical Education and members of freshman or varsity athletic squads are not required to take H. & P. E. 3 during any quarter in which they are actively engaged in other departmental activity courses. Students should get permission of the instructor before enrolling for freshman or varsity sports.

A regulation gymnasium suit which may be purchased through the college bookroom is required of all women students.

An extensive program of intramural sports is provided for women students through the Women's Athletic Association. It has for its aim activity for every student and consists of an organized program which attempts to bring every student into some athletic activity each quarter. No credit is granted, but awards are given.

A rounded program of intramural sports is provided for all men students through the department of physical education for men. Membership on freshman and varsity sports squads is regulated by the Board of Athletic Control through membership in the Rocky Mountain Faculty Athletic Conference.

Men and women students registered for activity courses in the Division of Health and Physical Education are required to obtain a locker padlock in the college bookroom. Women students will obtain a locker assignment in Gunter Hall 109. Men students will obtain a locker assignment in the gymnasium equipment room.

Both men and women students are advised to note the following regarding numbered courses:

- 1. Odd numbered courses, from 1 to 59 inclusive, are for men students only.
- 2. Even numbered courses, from 2 to 58 inclusive, are for women students only.
- 3. Dual numbered courses, e. g., 9-10, 11-12, 52-53, from 1 to 59 inclusive, are for both men and women students.
- 4. All courses numbered from 60 to 299 inclusive are for both men and women students unless stated otherwise in the course description.

Bachelor's and master's degrees may be obtained by both men and women in the Division of Health and Physical Education, the selection of subject matter to be chosen with the approval of the major professor.

Both men and women undergraduates majoring in Health and Physical Education shall have the approval of the divisional staff. Approval will be based

on the teaching possibilities of the student, success in physical education work, administrative tests, and health.

#### FOR WOMEN

The major for women in the Division of Health and Physical Education has been planned to prepare the prospective teacher in the areas of health, physical education, and recreation. Each woman majoring in this division is required to be a member of the Dance Club for one year.

The following courses are required:

		Cr.			Cr.
No.	Course		No.	Course	Hrs.
52a	Techniques in Folk Dances	2	137a	Teaching of Physical Education	in
52b	Techniques in Tap Dancing	2		the Elementary School	
52c	Techniques in the Modern Dan	ce 2	137b	Teaching of Physical Education	
54	Minor Individual Sports	2		the Secondary School	
56a	Use of Music in the Dance	2	102-202	Problems in School Health Edu	
56b	Problems in Teaching the Dance			tion	4
58	Tumbling	2	132-232	The Problems of Individual Gy	
60	First Aid			nastics	
120	Anatomy and Physiology	4	135-235	History and Principles of Physi	
122	Kinesiology	4		Education	
129a	Teaching of Sports for Women.	4	172-272	Recreational Leadership	4
129Ь	Teaching of Sports for Women	2			

#### SUGGESTED ELECTIVES

Div. Ed.	No. 26a-126a	Course Camp Fire Girls' Leadership	Cr. Hrs.	Div. Sci. Sci.	Course Human Physiology Genetics and Eugen	
H. A.	78-178	Elementary Nutrition		H.&P.E.	Massage	

The minor for women in the Division of Health and Physical Education has been designed to meet the needs of students majoring on the elementary or secondary school level who may be required to handle a limited program of physical education in addition to that of their major areas.

Out of the twenty-four hours required for a minor the following should be selected:

#### FOR SECONDARY SCHOOL TEACHERS

	•	Cr.			Cr.
No.	Course	Hrs.	No.	Course	Hrs.
56a	Use of Music in the Dance		137ь	Teaching of Physical Education	
56b	Problems in Teaching the Dance			the Secondary School	
129a	Teaching of Sports for Women		172	Recreational Leadership	4
129b	Teaching of Sports for Women	2			

### FOR ELEMENTARY SCHOOL TEACHERS

		Cr.			Cr.
No.	Course	Hrs.	No.	Course	Hrs.
52b	Techniques in Tap Dancing		129b	Teaching of Sports for Women	
52c	Techniques in the Modern Dance		137a	Teaching of Physical Education in	
56a	Use of Music in the Dance			Elementary School	4
129a	Teaching of Sports for Women	4			

#### FOR MEN

The major for men in the Division of Health and Physical Education is planned to prepare men to meet the present needs of the field in health, physical education, athletics, and recreation. The curriculum is designed to comply

with the requirements of state departments of education and of other agencies that have adopted professional standards.

Men majors are expected to participate in a rounded sports program as members of intramural, freshman, or varsity athletic teams and have sufficient ability in swimming to pass the elementary swimming tests,

Men majors are advised to minor in academic subjects. Students are advised to confer with their major professor regarding minors.

The following courses are required:

No. 19a 19b 21a	Course Cr. Hrs. Theory and Practice of Football 2 Theory and Practice of Gymnastics and Matwork 2 Theory and Practice of, Basketball 2	No. 120 122 137b 161	Course Cr Hrs Anatomy and Physiology Kinesiology	s. 4 4					
21Ь	Theory and Practice of Boxing and Wrestling2	162 163	Coaching of Basketball						
23a 23b 53b 53d 59a, b, c	Theory and Practice of Track and Baseball         2           Theory and Practice of Minor Sports         2           Techniques in Tap Dancing         2           American Square Dances         2           Technique of Teaching Physical Education Activities         6           First Aid         2	164 102 135 170	or Coaching of Baseball	4 4					
SUGGESTED ELECTIVES									
L.&L. 6	No.   Course   Cr. Hrs.    -126b   Elements of Boy Scout    -126c   Leadership   2    -137   Informal Speaking   4    -138   Human Physiology   4    -139   The Problems of Individual    -130   Gymnastics   4	Div. H.&P.E. H.&P.E.		4					

The minor for men in the Division of Health and Physical Education is planned to prepare men to meet the present needs in a limited field. It is especially designed to prepare men who plan to teach academic subjects and coach athletics, teach general physical education, and administer school recreation programs.

		Cr.			Cr.
No.	Course	Hrs.	No.	Course	Hrs.
19a	Theory and Practice of Fo	otball 2	60	First Aid	2
21a	Theory and Practice of Bas	sketball 2	137b	Teaching of Physical Edu	ucation in
23a	Theory and Practice of Tr	ack and		the Secondary School -	
	Baseball		161	Coaching of Football	
59a, b, c	Technique of Teaching F	Physical	162	Coaching of Basketball	
• •	Education Activities	6	172	Recreational Leadership	

## GRADUATE STUDY

Course work will be outlined by the student's major professor.

# Description of Courses

1. PERSONAL HYGIENE. This course presents the essentials of personal hygiene and aims to obtain better personal health habits among teachers. Four hours credit.

- 2. PERSONAL HYGIENE. This course presents the essentials of personal hygiene and aims to obtain better personal health habits among teachers. Four hours credit.
- 3. FRESHMAN ORIENTATION IN PHYSICAL EDUCATION ACTIVITIES. Required of all freshmen except members of freshman and varsity athletic squads and physical education majors and minors. Furnishes a seasonal rounded program of physical activities. Fall: matwork, volleyball, touch football; Winter: basketball, boxing, wrestling; Spring: swimming, tennis, softball, archery. One hour credit each quarter.
  - 4. TAP DANCING. One hour credit.
- 5. PHYSICAL FITNESS ACTIVITIES. Required of all men students except those previously enrolled for a physical activity course requiring a minimum of one class hour daily. Vigorous physical activity program varying in content seasonally. Games, sports, and conditioning activities. One hour credit each quarter.
  - 6a, b. MODERN DANCING. One hour credit each quarter.
  - 7-8. FOLK DANCING. One hour credit.
  - 9-10. SOCIAL DANCING. One hour credit.
  - 11-12. AMERICAN SQUARE DANCING. One hour credit.
  - 13. TOUCH FOOTBALL. One hour credit.
  - 14. PLAYS AND GAMES. One hour credit.
- 15. MODIFIED SPORTS AND ACTIVITIES. Physical activities, games, and sports program adapted to meet the needs of the individual. One hour credit each quarter.
  - 16. SOCCER. One hour credit.
  - 17a. FRESHMAN BASKETBALL. One hour credit.
  - 17b. VARSITY BASKETBALL. One hour credit.
  - 18. BASKETBALL. One hour credit.
- 19a. THEORY AND PRACTICE OF FOOTBALL. Physical education majors and minors only. Fundamental skill techniques in football. Two hours credit.
- 19b. THEORY AND PRACTICE OF GYMNASTICS AND MAT-WORK. Physical education majors and minors only. Fundamental skill techniques in gymnastics and matwork. Two hours credit.
  - 20. SOFTBALL. One hour credit.
- 21a. THEORY AND PRACTICE OF BASKETBALL. Physical education majors and minors only. Fundamental skill techniques in basketball for the physical educator. Two hours credit.
- 21b. THEORY AND PRACTICE OF BOXING AND WRESTLING. Physical education majors and minors only. Fundamental skill techniques in boxing and wrestling. Two hours credit.

- 22. HOCKEY. One hour credit.
- 23a. THEORY AND PRACTICE OF TRACK AND BASEBALL. Physical education majors and minors only. Fundamental skill techniques in track and baseball. Two hours credit.
- 23b. THEORY AND PRACTICE OF MINOR SPORTS. Physical education majors and minors only. Fundamental skill techniques in minor sports. Two hours credit.
  - 24. VOLLEYBALL, One hour credit.
  - 25. TENNIS. One hour credit.
  - 25a. FRESHMAN TENNIS. One hour credit.
  - 25b. VARSITY TENNIS. One hour credit.
  - 26. TENNIS. One hour credit.
  - 27. WRESTLING. One hour credit.
  - 27a. FRESHMAN WRESTLING. One hour credit.
  - 27b. VARSITY WRESTLING. One hour credit.
  - 28-29. GOLF. One hour credit.
  - 30. MINOR INDIVIDUAL SPORTS. One hour credit.
  - 31. SWIMMING. One hour credit.
  - 31a. FRESHMAN SWIMMING. One hour credit.
  - 31b. VARSITY SWIMMING. One hour credit.
  - 31d-32d. LIFE SAVING AND WATER SAFETY. One hour credit.
  - 32a, b, c. SWIMMING. One hour credit each quarter.
  - 33. GYMNASTICS. One hour credit.
  - 33a. FRESHMAN GYMNASTICS. One hour credit.
  - 33b. VARSITY GYMNASTICS. One hour credit.
  - 34. INDIVIDUAL GYMNASTICS, One hour credit.
  - 35. MATWORK. One hour credit.
  - 35a. ELEMENTARY MATWORK. One hour credit.
  - 35b. ADVANCED MATWORK. One hour credit.
  - 37. DOUBLE TUMBLING. One hour credit.
  - 43. PYRAMIDS. One hour credit.
  - 45a. FRESHMAN FOOTBALL. One hour credit.

- 45b. VARSITY FOOTBALL. One hour credit.
- 45c. SPRING FOOTBALL. One hour credit.
- 47a. FRESHMAN TRACK. One hour credit.
- 47b. VARSITY TRACK. One hour credit.
- 49a. FRESHMAN BASEBALL. One hour credit.
- 49b. VARSITY BASEBALL. One hour credit.
- 52a-53a. TECHNIQUES IN FOLK DANCES OF VARIOUS COUNTRIES. Two hours credit.
- 52b-53b. TECHNIQUES IN TAP DANCING AND COMPOSITION. Two hours credit.
- 52c. TECHNIQUES IN THE MODERN DANCE. Modern dance techniques of movement, rhythm, and composition. Two hours credit.
- 52d-53d. AMERICAN SQUARE DANCES. Fundamental skills and techniques of teaching the American square dance. Two hours credit.
- 54. MINOR INDIVIDUAL SPORTS. Techniques in deck tennis, badminton, ping-pong, shuffleboard, archery, quoits, and bowling are presented in this course. Two hours credit.
- 56a. USE OF MUSIC IN THE DANCE. A study of the relationship between music and dance. Musical form and dance form, the history of dance and music and the use of music as dance accompaniment gives the class an opportunity to improvise and compose for dance. Two hours credit.
- 56b. PROBLEMS IN TEACHING THE DANCE. The analysis of techniques from a teaching standpoint will be presented for folk, tap, social, and modern dancing. Opportunities for practice teaching will also be offered. Two hours credit.
- 58. TUMBLING. Work on mats, horse, ropes, and parallel bars will be presented in this course. Two hours credit.
- 59a, b, c. TECHNIQUE OF TEACHING PHYSICAL EDUCATION ACTIVITIES. Instruction is given to cover all types of physical education and athletic activities. Emphasis is placed on organization and procedures in teaching physical education activities to individuals and groups. Two hours credit each course.
- 60-160. FIRST AID. The course emphasizes the prevention, diagnosis, and treatment of the common accidents seen in daily life. Study is made of what to do in emergencies and the factors which demand a physician's care. Simple bandaging, the making and application of splints for fractures, and the use of tourniquets are considered. Two hours credit.
- 83-183. HOME HYGIENE AND HOME CARE OF THE SICK. Materials and methods of caring for the sick in the home. Special emphasis is given to conserving time, energy, and money. Four hours credit.
- 102-202. PROBLEMS IN SCHOOL HEALTH EDUCATION. A philosophy for health teaching and the presentation of criteria for judging materials

and methods of health teaching are included in this course. Opportunity will be given to each student to construct a teaching program to meet the needs of his situation. Four hours credit.

- 102a. HEALTH EDUCATION IN RURAL SCHOOLS. Prerequisite, 102. The in-service laboratory course for teachers enrolled as elementary majors, Plan B. Intensive study of specific problems in the actual teaching of health education. The in-service teacher analyzes learning conditions in health education in his school and studies and employs methods of improving them. Detailed study guides adaptable to a particular situation furnished. Final written report made upon completion of the study. Four hours credit.
- 103-203. SOCIAL HYGIENE. A consideration of the hygienic implications of those social contacts that are particularly influenced by sex. Four hours credit.
- \*120. ANATOMY AND PHYSIOLOGY. The study of structure in the systems of the human body, including skeletal, digestive, circulatory, respiratory, reproductive, nervous, excretory, endocrine, and in brief fashion the muscular. Four hours credit.
- 122. KINESIOLOGY. This course gives detailed work on the skeletal and muscular systems. Is advised especially for students wishing to go into physical therapy work. Four hours credit.
- 125-225. PHYSIOLOGY OF EXERCISE (Summer Quarter only). Prerequisite, Science 117. Effects of muscular activities in the various organs and systems of the body; what is meant by training; the interrelation of exercise and fatigue; changes in altitude and effect upon individuals; application of these principles to the problems of teaching in physical education activities. Four hours credit.
- 129a. TEACHING OF SPORTS FOR WOMEN. A consideration of basic techniques of sports emphasizing teaching procedures; participation in the sports; officiating in actual games; and construction of unit plans. The sports presented are hockey, soccer, speedball, volleyball, basketball, and swimming. Laboratory required. Four hours credit.
- 129b. TEACHING OF SPORTS FOR WOMEN. A continuation of 129a. The sports considered are baseball, track, tennis, archery. Two hours credit.
- 132-232. THE PROBLEMS OF INDIVIDUAL GYMNASTICS. The science of muscle action in relation to postural defects, their treatment, the organization of corrective work for various age levels; methods of giving postural examinations. Four hours credit.
- 133. MASSAGE. Work will be presented on purposes of and kind of massage with opportunity offered for practical experience in it. Two hours credit.
- 135-235. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION. The history presented in this course is for the purpose of giving a background of knowledge essential to the understanding of physical education today. The principles of physical education will be presented in the light of laws of biology, physiology, psychology, and sociology. Four hours credit.
- 137a. TEACHING OF PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL. Physical education activities for children of the elementary

<sup>\*</sup>Given also by Correspondence.

- level will be discussed and practiced. A study of psychological and physiological needs of the children at various age levels. Program planning and physical education teaching techniques will be included. Four hours credit.
- 137b. TEACHING OF PHYSICAL EDUCATION IN THE SECONDARY SCHOOL. Physical education activities for children of the secondary level will be discussed and practiced. A study of psychological and physiological needs of the children at various age levels. Program planning and physical education teaching techniques will be included. Two hours credit.
- 137c. TEACHING OF PHYSICAL EDUCATION IN RURAL SCHOOLS. Prerequisites, 7, 14, and other required activity courses. The in-service laboratory course for teachers enrolled as elementary majors, Plan B. Intensive study of specific problems in the actual teaching of physical education. The in-service teacher analyzes learning conditions in physical education in his school and studies and employs methods of improving them. Detailed study guides adaptable to a particular situation are furnished. Final written report made upon completion of the study. Four hours credit.
- 142-242. SUPERVISION OF PHYSICAL EDUCATION IN THE ELE-MENTARY SCHOOL (Summer Quarter only). Desirable prerequisite, 137a. Topics discussed are position of supervisor of physical education in the administrative organization of a school system; unified course of study in physical education; difficulties recognized by elementary school home room teachers who have responsibility for teaching physical education; devices for improving their work in physical education; and a correlation of physical education activities with projects undertaken in home room. Two hours credit.
- 155. MODERN DANCE TECHNIQUE (Summer Quarter only). Includes basic work in techniques and rhythms of the modern dance and the fundamentals of composition. Laboratory work required. Four hours credit.
- 156-256. MUSIC IN THE MODERN DANCE (Summer Quarter only). The technique of playing percussion instruments and composition of rhythms for percussion. The study of music form and composition in relation to the dance. Four hours credit.
- 161. COACHING OF FOOTBALL. This course includes study of the sport techniques, rules, strategy, teaching procedures, training regulations, and reading material in the field. Two hours credit.
- 162. COACHING OF BASKETBALL. Theory and practice in scouting, charting, scoring, timing, officiating. Principles of modern offensive play: deliberate and quick break attacks. Principles of modern defensive play: variations of the man-for man and zone defenses. Applied fundamental basketball. Conditioning. Equipment. Tournament play. Intensive individual study of successful modern styles of play. Procedures in developing and utilizing playing personnel. Classwork supplemented by student participation, visual aids, and individual conference. Two hours credit.
- 163. COACHING OF TRACK AND FIELD. This course includes a detailed study of competitive track and field athletics and experience in organizing and conducting track meets. Two hours credit.
- 164. COACHING OF BASEBALL. Theory and practice of individual and team play. Defensive baseball: pitching, catching, infielding, outfielding, strategy of team defensive play. Offensive baseball: batting, baserunning, strategy of team offensive play. Signals. Conditioning. Purchase and care of

- equipment. Techniques and procedures in developing individual and team play. Classwork supplemented by visual aids and individual conference. Two hours credit.
- 170-270. THE ORGANIZATION AND ADMINISTRATION OF PHYS-ICAL EDUCATION AND ATHLETICS. This is an advanced course for physical education teachers and coaches, covering the problems of function, organization, relationships, procedures and policies of physical education and athletics. Four hours credit.
- 172-272. RECREATIONAL LEADERSHIP. A discussion of the school's recreation program in regard to noon hours, school parties, co-recreational activities, and parent-teacher groups; the co-ordination of the present and possible community recreational facilities and leadership; types of programs for various groups in relation to age, interests, etc.; budget needs for specific projects. Four hours credit.
- 180. ATHLETIC TRAINING. To give the prospective coach a knowledge of the prevention, diagnosis, and treatment of the usual injuries incurred in athletics; of the inactive phases of training, such as diet, sleep and habits; of the technique and application of massage; of the common bandages; of the use of tape for protection and support; and of the bridge theory of padding for the typical injuries. Two periods. Two hours credit.
- 210. CAMPING (Summer Quarter only). Topics discussed include trends in camping, the layout of organized camps, camp organization, camp and the courts, youth hostels, over-night hikes, the camp program, and waterfront safety. Two hours credit.
- 212. TESTS AND MEASUREMENTS. Topics discussed include tests of strength, tests of general motor capacity and general motor ability, tests of endurance, tests of special abilities, testing and measuring in the health field, methods of test construction, and the use of tests in classification. Four hours credit.
- 222. INDIVIDUAL STUDIES IN HEALTH AND PHYSICAL EDUCA-TION. The purpose of this course is to provide for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
- 223. PROBLEMS IN HEALTH AND PHYSICAL EDUCATION. Required of H. & P. E. majors for the master's degree under Plan A. Course follows panel discussion and seminar procedure pre-supposing broad academic and professional experience on part of student. An attempt is made to develop a scientific approach to problems. Research techniques and procedures especially applicable in the field are discussed and illustrated. Brief survey and analysis of typical problems precede individual study on localized problem or thesis. Classwork supplemented by individual conference with the instructor. Four hours credit.
- 238. SOCIOLOGY OF PLAY (Summer Quarter only). Prerequisite, 172-272. The extent, need, and functions of play, the sociological theories of play, the nature of play, the development of the play movement, qualifications and development of play leaders, and recent trends in the play movement. Four hours credit.

- 240. CURRICULUM IN PHYSICAL EDUCATION (Summer Quarter only). This course will include principles involved in curriculum making; an appreciation of the wide scope of the physical education field; the necessity of a comprehensive curriculum; and the formulation of a progressively graded curriculum. Four hours credit.
- 241. ADMINISTRATION OF PHYSICAL EDUCATION. This course deals with the policies in the organizations of a program of physical education, considering such items as legal aspects, time schedule, classification of children, handicapped children, equipment in the physical education plant, locker rooms, and gymnasium costumes. Four hours credit.
- 250a, b. MATERIALS IN PHYSICAL EDUCATION (Summer Quarter only). Thorough study of content within the present-day course of study, including fields of story plays, creative rhythms, singing games, folk dance, group games, team games, individual activities, and social dancing. Provision will be made for participation in these activities and for leadership in an individual's new areas. 250a includes activities of the elementary school. Two hours credit. 250b includes activities of the secondary school. Two hours credit.
- 255. ADVANCED TECHNIQUE AND COMPOSITION IN THE MOD-ERN DANCE (Summer Quarter only). A continuation of 155 with stress on composition. Advanced work in technique and composition with special emphasis on original composition. Laboratory work required. Four hours credit.
- 257. WORKSHOP IN MODERN DANCE (Summer Quarter only). Prerequisites, 155, 255. Teaching principles of dance; composition for groups; planning and presenting a dance concert; lighting, costuming, color and design for dance performances. Laboratory work required. Four hours credit.
- 260. WATER SAFETY (Summer Quarter only). This course combines a study of the teaching of swimming with training in life saving techniques. Confidence-building and analyses of the major swimming strokes will be included. Two hours credit.
- 271. SAFETY EDUCATION. Comprehensive course for probable administrators of safety programs in public schools. Presentation of materials and methods for promotion, administration, supervision of safety education, prevention of accidents, and co-ordination of school and public agencies. Detailed reports and study cover specific areas of public school safety including clubs, monitors, patrols, junior safety councils; home, water, shop, gymnasium, playground, and highway safety. Classwork supplemented by laboratory work, visual aids, committee assignments, and individual conference. Four hours credit.
- 273. ORGANIZATION AND ADMINISTRATION OF RECREATION (Summer Quarter only). This course includes making budgets, necessary facilities and equipment, efficient records, actual visits to recreational projects and reports on these supervisory visits. Four hours credit.
- 274. PROGRAM OF PHYSICAL FITNESS IN SCHOOL AND COM-MUNITY. Brief study of physical fitness programs in public schools, colleges, communities, and camps. Functional details for operation of fitness programs including co-ordination of agencies, measurement, supervision, and administration precedes composition of fitness program adapted to needs of educators and physical educators. Four hours credit.
- 275. CURRICULUM IN RECREATION (Summer Quarter only). Principles involved in curriculum making; an appreciation of the wide scope of the field in recreation; the necessity of a comprehensive curriculum; the formulation of a progressively graded curriculum. Four hours credit.
  - 299. THESIS. Required of all Plan A students. Twelve hours credit.

# DIVISION OF LITERATURE AND LANGUAGES

The Division of Literature and Languages provides preparation in English language and literature, American literature and world literature, in speech and dramatics, and in ancient and modern foreign languages: Latin, French, Spanish and German. These offerings are designed to develop skills in speaking, reading, writing, and listening, and a comprehensive understanding of the cultural backgrounds of modern society. A judicious patterning of courses affords preparation in both subject matter and method for the teaching of literature and languages in the elementary school, secondary school, junior college, and college of education.

The prospective English major should realize that his subject field is closely related to movements in social, scientific, philosophic and æsthetic thought. In planning his total program he should seek combinations of courses which would be mutually reenforcing; for instance, Contemporary Word Literature, Contemporary World History, and Contemporary Art. In choice of minors, he should seek preparation in other fields commonly demanded of English teachers: Foreign Languages or Speech and Dramatics; Social Studies, Music or Art.

# English

The English teacher should have a broad understanding of the part that literature has played and is playing in the culture of the Western World, and a specific knowledge of the contributions that American and English literatures have made and are making to contemporary society. The English teacher should know the relationship of speaking, reading, and writing to the development of human personality. He should be competent to devise appropriate methods through which students develop their own critical abilities. His preparation, beyond proficiency in basic skills, shall involve a minimum of forty-eight credit hours of course work, chosen by him in consultation with his major adviser. He should plan to take the following basic courses:

		Cr.			Cr.
No.		Irs.	No.	Course	Hrs.
4a, b	Elementary Composition	4-8	125	Materials of Speech and Dramatics	
5	Reading and Speaking English or	•		for Secondary Schools or	•
•	Voice and Diction	4	126	Materials for Teaching English in	
58a. b	Survey of English Literature	8		Secondary Schools	
58c	Survey of American Literature	4	164	Introduction to a Remedial Program	
111	English Language for Teachers	4		in Speech	. 4
63-163	First Course in Dramatic Art	4			

Elective literature courses or additional work in speech and dramatics totaling forty-eight to sixty-four hours.

The student minoring in English shall have some work in composition, speech, dramatics, and literature. The student emphasizing literature should choose twenty-four hours of work from the basic courses listed for the English major. An additional elective may be World Literature.

The student minoring in Speech and Dramatics should select at least twenty-four credit hours of work from the following:

No. 4a, b 125 16-116 164	Course Elementary Composition Materials of Speech and I for Secondary Schools Voice and Diction or Introduction to a Remedia	Oramatics 4	163 114 62-162	Course Argumentation and Debate or Discussion Techniques	4
164	Introduction to a Remedia in Speech		117	Oral Interpretation for Secondar School Teachers	y 4

# Major in English

(Without Teaching Certificate)

The Divison of Literature and Languages is prepared to offer courses leading to the degree of Bachelor of Arts without a certificate to teach. The program of studies for such a major includes sixty-four hours of course work, to be arranged in consultation with the major adviser in the division. Emphasis may be placed upon literature, or upon speech and dramatics. In either instance the student must demonstrate proficiency in language skills.

Students majoring in this field shall complete the core requirements in general education listed on page 21. A minor shall be completed outside the major field.

The minor in Literature and Languages without the teaching certificate should be planned in conference with the student's adviser. It should consist of a minimum of twenty-four hours and should approximate the distribution indicated for the major under this plan.

#### GRADUATE STUDY

Course work will be outlined by the student's major professor.

# Description of Courses

- 4a,b. ELEMENTARY ENGLISH COMPOSITION. The basic needs for correct, acceptable usage in writing, and practice in written expression. Open to English majors and others who need directed practice. Four hours credit each quarter.
- 21-121. LITERATURE IN THE ELEMENTARY SCHOOL. Required of Elementary majors. A survey of children's literature appropriate for grades three to six inclusive; consideration of interests and abilities governing the choice of literature in these grades; wide reading of recent children's literature. Four hours credit.
- \*58a-158a. SURVEY OF ENGLISH LITERATURE, 700-1744. Comprehensive readings in English literature following its development through the early poetic and prose forms to their more definite expression in the early seventeenth century. Four hours credit.
- \*58b-158b. SURVEY OF ENGLISH LITERATURE, 1744-1935. The same plan as that indicated for 58a. Fours hours credit.

<sup>\*</sup>Given also by Correspondence.

- \*58c-158c. SURVEY OF AMERICAN LITERATURE. A course in American literature following the plan of the survey courses in English literature. The work is professionalized by the consideration of the selection of material for the schools. Four hours credit.
- 60a,b-160a,b. LANDMARKS IN WORLD LITERATURE. Five culture epochs in Western Civilization, with particular attention to the changing concept of "self" revealed in the outstanding literary symbol for each period. Symbols of culture studied include a group of Greek plays, Dante's Divine Comedy, Shakespeare's Hamlet, Goethe's Faust and Melville's Moby Dick (60a), and a selection of contemporary literature with world perspectives (60b). Under special circumstances 60b may be taken by itself. Four hours credit for each quarter. See paralleling History 69a, b-169a, b.
- 100. JOURNALISM AND THE SCHOOL NEWSPAPER. Instruction in all phases of work involved in the preparation and publication of school papers. This is not a preparation for professional journalism. Four hours credit.
- 101-201. SCHOOL PUBLICATIONS (Summer Quarter only). Four hours credit.
- 108f-208f. INTRODUCTION TO RADIO. Laboratory acquaintance with practices and techniques of broadcasting for school and community use. Scripts are written and produced by class members. Four hours credit.
- 109-209. LATIN AMERICAN LITERATURE IN TRANSLATION (Summer Quarter only). Lectures in English on the literary movements and principal writers of the Spanish American countries. Students read the literary works and present a paper on some phase of their reading. Four hours credit.
- 110. ADVANCED COMPOSITION. Individual practice in writing, for improvement in technique, form, and content. Four hours credit.
- \*111-211. THE ENGLISH LANGUAGE. A non-technical study of the English language from the teacher's point of view. The first half considers principles of general language and history of the English language. The second half deals with usage and grammar, with children's errors, the psychology of language teaching, and the studies that have been made of language problems in the schools. Four hours credit.
- 121a. THE TEACHING OF CHILDREN'S LITERATURE IN RURAL SCHOOLS. Prerequisite, L. & L. 21-121. The in-service laboratory course for teachers enrolled as elementary majors, Plan B. Intensive study of specific problems in the actual teaching of literature. The in-service teacher analyzes learning conditions in literature in his school and studies and employs methods of improving them. Detailed study guides adaptable to a particular situation are furnished. Final written report made upon completion of the study. Four hours credit.
- 119-219. LABORATORY COURSE IN REMEDIAL READING. Survey of methods of diagnosing and treating remedial reading problems in the secondary school. Practical application of principles to actual cases in the remedial reading laboratory. Students have the option of assisting in the laboratory (For graduate students only, in Summer Quarter). Four hours credit.
- 125. MATERIALS OF SPEECH AND DRAMATICS FOR THE SEC-ONDARY SCHOOL. A consideration of the problems of teaching speech in high school, and of methods used in creative and formal dramatics and discussion. Four hours credit.

<sup>\*</sup>Given also by Correspondence.

- \*126. LITERATURE IN SECONDARY SCHOOLS. Evaluation of the practices current in teaching English in secondary schools, principles for the selection of literature for senior high school pupils, and critical study of selected pieces; composition work for high schools. Four hours credit.
- 127-227. LITERATURE IN SECONDARY SCHOOLS (Summer Quarter only). Advanced inquiry into practices current in teaching English in secondary schools. Primarily for experienced teachers. Four hours credit.
- \*131-231. THE SHORT STORY. The study of typical modern short stories to observe the methods of modern writers and the interpretations of our present-day life embodied in this form of literature. Four hours credit.
- 132-232. THE DEVELOPMENT OF THE NOVEL. Survey of changes in the novel from the eighteenth century to the present. A specified number of novels, with considerable latitude in choice, are read and reported on. Emphasis upon social background of the individual novelist and upon the widening scope of the novel in the range of its subject matter and the effectiveness of its construction. Four hours credit.
- 133-233. THE CONTEMPORARY NOVEL. The form of representative novels of the past decade as expressions of present day viewpoints. Four hours credit.
- 134-234. THE STUDY OF MODERN DRAMA. Reading and class discussion of plays that best represent the thought currents and the dramatic structure of our time. Four hours credit.
- 135-235. GREAT NOVELS OF THE TWENTIETH CENTURY. Discussion of great books since 1900 that have enlarged the scope and importance of the novel. Eight novels will be intensively studied in class. Four hours credit.
- 136-236. THE THEATRE AND THE WORLD TODAY. Recent drama and motion pictures; reading, discussion, and papers on comparative values of materials. Attendance at theatre or motion pictures when possible. Four hours credit.
- 140-240. PROSE AND POETRY OF THE ROMANTIC MOVEMENT. The sources and development of the Romantic Movement, the historical background of thought leading to the American and French Revolutions, and their effect upon the writers and statesmen of that period and the present one. The works of outstanding poets and critical prose writers of the movement are studied. Four hours credit.
- 144a-244a. WORLD LITERATURE (Odd Summer Quarters only). The emergence of the idea of conscious selfhood through the literature of successive culture epochs in Western civilization: Greek, Medieval, Renaissance, 18th Century, and 19th Century. Four hours credit.
- 144b-244b. WORLD LITERATURE (Even Summer Quarters only). Continuation of 144a-244a into the diverse expressions of the value of self in modern world literature. Four hours credit.
- 146-246. PROSE AND POETRY OF THE VICTORIAN PERIOD. Reading and discussion of the best essays, criticism, and poetry of the Victorian era. Contrasts and comparisons with present-day poets, critics, and conditions. Four hours credit.

<sup>\*</sup>Given also by Correspondence.

- 155a-255a. SHAKESPEARE'S EARLIER WORK. Developing a critical appreciation of various types of plays through understanding the standards of drama and poetry represented by Shakespeare. A study of the comedies, tragedies, and histories of Shakespeare's earlier periods, and of his sonnets and narrative poems. Four hours credit.
- 155b-255b. SHAKESPEARE'S LATER WORK. Continuation of 155a-255a. Reading and discussion of Shakespeare's greatest tragedies and final plays, a summation of his life and times together with an evaluation of his work as dramatist and poet, as that evaluation is made by some of the leading critics, from Ben Jonson and Dryden to Bradley and Dover Wilson. Four hours credit.
- 155c-255c. ELIZABETHAN DRAMA (1585-1642). The great dramatic literature of the Elizabethan period other than that of Shakespeare; consideration of Elizabethan stage conditions, acting companies, and changes in dramatic form, with special emphasis upon the changing themes and subjects reflecting the life of the time. Four hours credit.
- 189-289. TEACHING THE BIBLE AS LITERATURE. Development of the appreciation of the Bible as literature with emphasis on its literary value through the study of the folklore, the short stories, the poetry, the biography, and the prophetic writings of both the Old and the New Testaments. Text: preferably, The Bible Designed to be Read As Living Literature, edited by Ernest Sutherland Bates. Four hours credit.
- 210. ADVANCED COMPOSITION (Summer Quarter only). Writing the research paper. Four hours credit.
- 212. OLD ENGLISH. Anglo-Saxon grammar and vocabulary and the reading of important documents from the period (Alfred's Translations, Charters and Historical Documents, Anglo-Saxon poetry, etc.) with emphasis on background for contemporary grammar. Four hours credit.
- 213. CHAUCER AND MIDDLE ENGLISH. The writings of Goeffrey Chaucer (Canterbury Tales, Troilus and Cressida) in the Middle English, showing the transition from the complicated Anglo-Saxon toward the speech of today, and relating the literary and linguistic to the historical background. Four hours credit.
- 222. INDIVIDUAL STUDIES IN ENGLISH. Independent study, in a field of specialization not provided for in formal classes. Qualified students outline a definite problem and present two typewritten copies of a paper similar in form and style to designated courses for Plan B for the master's degree. Two to four hours credit for one problem. A maximum of eight hours credit toward the master's degree is permitted.
- 237. THE DEMOCRATIC THEME IN RECENT FICTION (Summer Quarter only). Books and correlative reading are chosen pointing to the necessity for maintaining and developing the way of life which we call democracy. The artistic merit is not neglected in such study and discussion. Four hours credit.
- 239. THE FORMS AND MEANINGS OF POETRY. A critical study of the forms and content of some of the greatest poetry written through the centuries, with special reference to the poets of the twentieth century. Significant ideas and movements of our day as reflected in current poems are discussed, verse structure noted, and a general evaluation of merit attempted. Four hours credit.

- 241. WORLD VIEWS IN NINETEENTH AND TWENTIETH CENTURY POETRY (Summer Quarter only). A survey of the waves of revolutionary thought as expressed by poets from the time of the French Revolution to the present crisis. Four hours credit.
- 245. SEMINAR IN CURRENT APPROACHES TO LITERATURE. Inquiry into the primary contributions of literature to the individual's curriculum, and into the values underlying the organization of programs in English, Language Arts, and the Humanities. Four hours credit.
- 256. SHAKESPEARE FOR HIGH SCHOOL READING (Summer Quarter only). Intensive study of the plays usually selected for secondary schools. The enriched background, depth and beauty of thought, and universality of understanding are emphasized. Four hours credit.

299. THESIS. Twelve hours maximum credit.

### Speech and Dramatics

- 5. READING AND SPEAKING ENGLISH. An aid to students who find difficulty in expressing themselves in speaking or reading. Activities give the student ease, poise, flexibility in use of body and voice and a knowledge of an increased skill in such fundamentals of oral reading as emphasis, grouping, good articulation and enunciation. Offered each quarter during the regular year. Four hours credit.
- 12-112. CREATIVE DRAMATICS. Lecture and laboratory in dramatics for elementary and secondary school teachers. The contribution of creative dramatics to education, the selection of materials, and the demonstration of procedure best adapted to work in children's dramatics. Four hours credit.
- 13-113. STORY TELLING. Through the project approach the principles of the art of story telling are applied in class and laboratory practice. Attention is given to the arrangement and selection of stories and current books for the several school levels. Four hours credit.
- 16-116. VOICE AND DICTION. Provision for individual differences of each student with regard to voice difficulties. Students who make transcripts of their voices will be charged a nominal fee for records. Two or four hours credit.
- 18. ARGUMENTATION AND DEBATING. The principles of argumentation and their application in speech situations. Emphasis upon analysis of propositions, determination of issues, evidence, methods of reasoning, and methods of refutation. Students form teams for debating practice. Helpful to English majors and minors who may be called on to direct debating activities in high school. Four hours credit.
- 62-162. INFORMAL SPEAKING. Classroom experience in principles governing speaking to groups of people. Students give at least seven prepared extemporaneous talks designed to inform, stimulate, persuade, or entertain the audience. Reading of published speeches to study principles used. Four hours credit.
- 63-163. FIRST COURSE IN DRAMATIC ART. Basic principles of dramatic art for those students who need greater bodily freedom. Participation in pantomimes, scenes from plays, and one-act plays. Four hours credit.
- 114-214. THE ART OF DIRECTING PLAYS. Prerequisite, L. & L. 63. Advanced lecture and laboratory in play production carries through the actual

- preparation of several plays, from the casting and directing, to make-up and presentation. Choice of materials for amateur theatricals. Four hours credit.
- 114a,b,c-214a,b,c. DIRECTING IN THE LITTLE THEATRE (Laboratory Method). Actual directing and stage management through the production of a public performance. Offered to advanced students who have completed 114 or 115 or equivalent. Two to four hours credit in one quarter; eight hours maximum.
- 115-215. SCENE DESIGN AND STAGECRAFT (See also Fine Arts 115-215). Technical training in lighting, costuming, and scenery construction to clarify problems of the director. Laboratory attendance is required. Four hours credit.
- 117-217. ORAL INTERPRETATION FOR SECONDARY SCHOOL TEACHERS. The forms of oral interpretation of literature. Participation by the student is required. Technique used in directing high school students toward presentation of festival reading and contest materials (declamatory) are explained. Four hours credit.
- 118-218. DISCUSSION TECHNIQUES. The principles and practice of organizing, conducting, and participating in the various forms of group discussion for programs of educational, religious, and community organizations. The student plans and conducts examples of the forum, the symposium, the round table, and the panel, with attention to speech skills for effective discussion. Four hours credit.
- 120-220. CHORAL READING. Procedure and techniques of training the speaking choir with emphasis on choice of materials. A public performance will close the class work. Two hours credit.
- 125. MATERIALS OF SPEECH AND DRAMATICS FOR THE SEC-ONDARY SCHOOL. Problems in teaching speech and dramatics in the high school. Examination of materials for creative and formal dramatics, and discussion techniques. Four hours credit.
- 152-252. PUBLIC SPEAKING FOR TEACHERS AND ADMINISTRATORS (Summer Quarter only). Public speaking for the professional needs of teachers and executives. Emphasis is on platform work applying the principles of speech construction and audience psychology. Four hours credit.
- 164. AN INTRODUCTION TO A REMEDIAL PROGRAM IN SPEECH. A general survey of phonetics, voice, science, and speech pathology with particular attention to the speech problems presented by students. In addition to lectures and discussions of library reading, full use is made of recordings, demonstrations, and case studies. Four hours credit.
- 165-265. THE CORRECTION OF SPEECH DISORDERS (Summer Quarter only). Lecture-discussion-demonstration to provide a knowledge of the manifestations and causes of disorders of speech and of reeducation procedures. Students devote at least thirty minutes each afternoon to work in the speech clinic where they acquire practical laboratory experience in diagnosis and treatment of speech difficulties, collection of remedial materials, and maintenance of clinical records. Four hours credit.
- 170-270. THE PSYCHOLOGY OF SPEECH (Even Summer Quarters only). Primarily for teachers of language, with special application to problems

of speech; consideration of the nature and origin of speech; the basic psychological aspects of speech, including the relationships of speech to emotion, learning, meaning, and thought; the development of speech and language in the child; personality and speech. Four hours credit.

222. INDIVIDUAL STUDIES IN SPEECH AND DRAMATICS. Independent study in a field of specialization not provided for in formal classes. Qualified students outline a problem, and present two typewritten copies of a paper similar in form and style to designated courses for Plan B for the master's degree. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.

299. THESIS. Twelve hours maximum credit.

# Foreign Languages

Students expecting to be certified as foreign language teachers shall be proficient in one foreign language before being accepted for entrance upon that major. This proficiency may be acquired in high school, or partly in high school and partly in college. Before being granted the Bachelor of Arts or Master of Arts degree the candidate shall be proficient in one or more languages chosen from the following:

Latin, Spanish, French, or German (Greek or Italian may be offered by students having already acquired one or the other before entering the college).

A Foreign Language major shall have from forty-eight to fifty-six hours of work in foreign languages, depending on whether he has had two years of a language in high school and starts with the intermediate course in college or whether he starts with the elementary course. A student who has had two years of a language in high school will not be given college credit for the elementary course in that language.

The Foreign Language major shall have the use of two languages before graduating with the Bachelor of Arts degree. The student may use English as one minor if he so chooses, but he is required to take the other minor outside the division. Junior and senior students may receive credit for foreign language courses numbered under 100 with the consent of the adviser.

Students who plan to major in the foreign languages should take as many of the following courses as are necessary to obtain proficiency in the languages described above:

			Cr.				Cr.
Div.	No.		Hrs.	Div.	No.	Course	Hrs.
Latin	105-205	Cicero's Essays	4	L.&L.	131-231	The Teaching of Romance	e
	106-206	Pliny	4			Languages	
	107-207	Horace	4	French	125-225	Eighteenth Century Frenc	h
French	105-205	Survey of French Literati	ure 4			Literature	4
	106-206	Survey of French Literati	ure 4		126-226	French Romanticism	. 4
	107-207	Survey of French Literati			127-227	Twentieth Century Frenc	h
	108-208	French Civilization	4			Literature	
Spanish	105-205	Romantic Drama	4	Spanish	125-225	Don Quijote	4
_	106-206	Modern Drama	4	-	126-226	Classical Drama	4
	107-207	Modern Spanish Novel	4		127-227	Classical Prose and Poetry	7 4
	108-208	Modern Poetry and Essa		L.&L.	122	Individual Studies in	
	109-209	Spanish Civilization	4			Foreign Languages	2-4
	110-210	Spanish Conversation	2			2	

A student entering with two years of language study in high school shall continue with the second, or intermediate, year of that language in college. Twenty-four quarter hours in that language will constitute his minor. A student entering language study for the first time in college shall take twenty-eight quarter hours in one language to fulfill a minor. Two minors shall be considered the equivalent of a major in Foreign Languages.

# Major in Foreign Languages

(Without Teaching Certificate)

Students may take courses in Foreign Languages leading to the degree of Bachelor of Arts without a certificate to teach. The program of studies for such a major includes sixty-four hours of course work, to be arranged in consultation with the major adviser in the division. Emphasis may be placed upon literature, or upon speech and dramatics. In either instance the student must demonstrate proficiency in language skills.

Students majoring in this field shall complete the core requirements in general education listed on page 21. A minor shall be completed outside the major field.

The minor in Foreign Languages without the teaching certificate should be planned in conference with the student's adviser. It should consist of a minimum of twenty-four hours and should approximate the distribution indicated for the major under this plan.

### GRADUATE STUDY

Course work will be outlined by the student's major professor.

#### FRENCH

- 1, 2, 3. ELEMENTARY FRENCH. Study of pronunciation, including phonetics and principles of grammar. Practice in reading. Students are expected to be able to read simple French with ease by the end of the year, to understand from hearing, and to express simple concepts in French in speech and in writing. Credit is not given until the three quarters are completed. Four hours credit each quarter.
- 5. INTERMEDIATE FRENCH. Prerequisite, two years of high school or one year of college French. A review of the principles of grammar including extensive composition. Phonetics are studied more intensively than in the first year. Four hours credit.
- 6. INTERMEDIATE FRENCH. A continuation of French 5, but with emphasis on reading. Lavisse's Histoire de France is studied to give historical background for subsequent study of French literature. Reading French aloud, asking and answering questions in French, and occasional dictation. Four hours credit.
- 7. INTERMEDIATE FRENCH. Varied readings in the literature of the 19th and 20th centuries; short stories and comedies from a large number of authors. Four hours credit.

- 105-205. A SURVEY OF FRENCH LITERATURE. Prerequisite, two years of college French or the equivalent. (a) Modernized and abbreviated versions of the outstanding works of early French literature. One play each of Corneille, Racine, and Moliere, and biographical material about the authors and historical material of their times. Reading in French, questions and answers on the text in French, critical discussion in English. Offered alternate years. Four hours credit.
- 106-206. A SURVEY OF FRENCH LITERATURE. Procedure and prerequisite the same as in French 105-205. (b) a study of French literature from about 1700 to 1870. Four hours credit.
- 107-207. A SURVEY OF FRENCH LITERATURE. Procedure and prerequisite the same as in French 105-205 (c) Extensive reading in the novel, drama, and short story since 1870. Four hours credit.
- 108-208. FRENCH CIVILIZATION. Lectures in English to provide students and prospective teachers of French with a knowledge of French life and customs. Each student chooses one phase of French civilization, writes a paper on it, and makes an oral report toward the end of the course. Offered on request. Four hours credit.
  - 122. INDIVIDUAL STUDIES. Two or four hours credit.
- 125-225. EIGHTEENTH CENTURY FRENCH LITERATURE. Prerequisite, three years of college French or its equivalent. Selections from Voltaire and Rousseau read for class discussion, and other eighteenth century writers read and reported on individually. Questions and answers on text in French. Discussion of literary merit in English. Offered on request. Four hours credit.
- 126-226. FRENCH ROMANTICISM. Procedure and prerequisite same as for 125-225. The Romantic writers in France with relation to the movement elsewhere in Europe. Emphasis on Hugo and Musset. Offered on request. Four hours credit.
- 127-227. TWENTIETH CENTURY FRENCH LITERATURE. Prerequisite, same as for French 125-225. Lectures on the novelists, dramatists, and short story writers of this century with extensive readings and reports by the class. Offered on request. Four hours credit.
- 160-260. FRENCH LITERATURE IN ENGLISH TRANSLATION (Summer Quarter only). Lectures on the most important French writers. Outside readings with reports. No knowledge of French required. Four hours credit.

### GERMAN

- 1, 2. ELEMENTARY GERMAN. Development of accurate pronunciation, to enable students to read directly, without mental translation; to use and understand simple spoken German, and to gain some knowledge and appreciation of German culture. The essentials of grammar and pronunciation are taught through exercises in reading, writing, and speaking. Four hours credit each quarter.
- 3. ELEMENTARY GERMAN. Literary and scientific German to meet individual needs. Literary German: poems, sketches, plays, and short stories, such as Roessler and Ber's Altes and Neues. Vail's Scientific German, Koischwitz' Introduction to Scientific German, or Sokol and Nye's Beruhmte Forscher und ihre Beitrage. Four hours credit.

- 5. INTERMEDIATE GERMAN. A review of grammar, taking up in greater detail the grammatical principles learned the first year and familiarizing the student with numerous idioms. Constant practice in imitative composition based on cultural material, individual reading of easy fiction outside of class, and reports on this in German. Four hours credit.
- 6. INTERMEDIATE GERMAN. German history through Jockers' Die Deutschen, ihr Werden und Wesen, Friederich's Kurze Geschichte des deutschen Volkes, or Jordan's Deutsche Kulturgeschichte. Emphasis is on the cultural development rather than on strictly political history as a background for the further study of German literature. Appropriate readings, chiefly in verse. Four hours credit.
- 7. INTERMEDIATE GERMAN. Schiller's Wilhelm Tell is studied as a representative drama of Germany's greatest literary period, supplemented by reading to increase interest in the Swiss contribution to German culture. In addition to reports from Friederich's Die Schweiz, each student reads and reports upon some work of fiction by a Swiss author, Gotthelf, Keller, Meyer, or Zahn. Four hours credit.

#### ITALIAN

1, 2, 3. ELEMENTARY ITALIAN. A three quarter sequence to fit the needs of music majors. Pronunciation, peculiarities of Italian orthography, singing popular songs; also elementary grammar exercises, simple reading and vocabulary building, with emphasis on musical terms. Sight-reading is provided by passages from opera libretti. In the third quarter a simple play is read such as Goldoni's La Locandiera or a short novel such as Farina's Fra le Corde d'un Contrabasso. Twelve hours credit.

### LATIN

- \*5. INTERMEDIATE LATIN. Prerequisite, one year of Latin in college or two in high school. A thorough grammar review, using Bennett's Latin Grammar with constant grammatical analysis of the reading text; geography of the ancient world and acquaintance with historical allusions; outside reading of some piece of historical fiction dealing with Greek or Roman times. Four hours credit.
- \*6-7. INTERMEDIATE LATIN: VERGIL. The first six books of Vergil's Aeneid, with attention to Vergil's vocabulary, figures of speech and stylistic devices; the difference between the language of poetry and the language of prose; Vergil's influence upon medieval thought and upon later poets. Eight hours credit.
- 105. ADVANCED LATIN: CICERO. Cicero as a private citizen, a philosopher. Reading De Senectute and De Amicitia affords an opportunity to examine the principles of Stoic philosophy and of the Greek and Roman view of life. Supplementary reading in Hamilton's The Roman Way and The Greek Way. Four hours credit.
- 106. ADVANCED LATIN: PLINY THE YOUNGER. Selected letters of Pliny. Comparison of the Latin of the Silver Age with that of the Golden Age and comparison of Pliny with other great letter writers of world literature. Four hours credit.

<sup>\*</sup>Given also by Correspondence,

- 107. ADVANCED LATIN: HORACE. Selected odes and epodes of Horace. An introduction to the study of Latin lyric poetry, the three commonest verse-forms: the Alcaic strophe, the Sapphic strophe, and the Asclepiadean verse. The Epicurean philosophy of Horace is contrasted with the modified Stoicism of Cicero. Four hours credit.
- 125-225. INTRODUCTION TO ROMAN COMEDY. One play each of Plautus and Terence will be read, with attention to the archaic and colloquial features of the language. Four hours credit.

#### Spanish

- 1, 2, 3. ELEMENTARY SPANISH. A three-quarter sequence in pronunciation, principles of grammar, and practice in reading simple Spanish, understanding and expressing simple concepts in Spanish. Credit is not given until the three quarters are completed. Four hours credit each quarter.
- 5. INTERMEDIATE SPANISH. Prerequisite, two years of high school or one year of college Spanish. Review of the principles of grammar; extensive composition. Some practice is given in speaking. Four hours credit.
- 6. INTERMEDIATE SPANISH. Prerequisite, two years of high school or one year of college Spanish. While primarily a reading course, there is considerable emphasis on grammatical principles and on conversation. The texts read are Emilio y los Detectives and Julio Camba's La Rana Viajera. Four hours credit.
- 7. INTERMEDIATE SPANISH. A continuation of Spanish 6 with the same procedures and prerequisites. Novels and short stories are read. Four hours credit.
- 75-175. SPANISH READING (Summer Quarter only). Prerequisite, at least one year of college Spanish. Designed to fit the reading abilities of the various members. The class meets two days a week for intensive reading. Extensive outside reading is reported on in conference. Spanish is spoken in class. Four hours credit.
- 105-205. SPANISH: ROMANTIC DRAMA. Prerequisite, two years of college Spanish, or the equivalent. The Romantic movement in Spain, its causes, its exponents, and their works. Three plays are read in class, and reports are made by students on additional romantic plays read outside. Emphasis on vocabulary and pronunciation as well as the literature of the second third of the nineteenth century. Four hours credit.
- 106-206. MODERN SPANISH DRAMA. Procedures and prerequisites similar to those of 105-205. A study of the "Generation of '98" and its transition to the less emotional type of theatre, as personified by Benavente, and to the poetic type as represented by Marquina. Plays by these authors are read in class, together with Martinez Sierra's Sueno de una Noche de Agosto. Reports on outside readings. Four hours credit.
- 107-207. THE MODERN SPANISH NOVEL. Prerequisite the same as for 105-205. A study of the novel beginning with the costumbrista movement. More emphasis is placed on extensive individual reading, which is reported on in writing. Lectures on modern Spanish novelists two days each week. Four hours credit.

- 109-209. SPANISH CIVILIZATION. Lectures in English for students and prospective teachers of Spanish on the history, government, art, educational system, social structure, etc., of Spain. Each student chooses one phase of Spanish civilization, writes a paper on it, and makes an oral report. No knowledge of Spanish required. Four hours credit.
- 110-210. SPANISH CONVERSATION. Prerequisite, at least two years of college Spanish or the equivalent. Exposition, narration, description, and debates as bases for conversation. Lists of words and expressions for special subjects are given. Offered on request. Two hours credit.
  - 122. INDIVIDUAL STUDIES. Two or four hours credit.
- 125-225. DON QUIJOTE. Prerequisite, three years of college Spanish. Readings from the Quijote, a study of the life of Cervantes, and the reading of one of his Novelas Ejemplares. Conversation based on the texts. Offered on request. Four hours credit.
- 126-226. CLASSICAL DRAMA. Prerequisite, three years of college Spanish. A study of the theatre in Spain under Philip III and Philip IV. Discussion of Culteranismo and Conceptismo and their effect on Spanish literature. Plays by Alarcon, Lope de Vega, and Calderon are read in class, and books in English on the literary background of the period are read outside. Four hours credit.
- 131-231. THE TEACHING OF FOREIGN LANGUAGES (See Ed. 150b). Consideration of those problems of particular concern in the teaching of French, Spanish, and Latin in secondary schools; functions and values of language study; courses of study; organization of materials; conventional and progressive methods; illustrative materials; selection of texts; testing. Four hours credit.
- 222. INDIVIDUAL STUDIES IN FOREIGN LANGUAGE. Independent study in a field of specialization not provided for in formal classes. Qualified students outline a definite problem to be undertaken, and present two typewritten copies of a paper similar in form and style to designated courses for Plan B for the master's degree. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
  - 299. THESIS. Twelve hours maximum credit.

# DIVISION OF MUSIC

The Division of Music presents a varied program. Those who do not plan to major in Music will find individual instruction and class courses suited to their needs. Individual lessons are offered in voice, piano, organ, violin and other stringed instruments, brass and woodwind instruments, all of which may be taken with or without credit.

The following courses are open to students:

		Cr.			Cr.
No.	Course	Hrs.	No.	Course	Hrs.
21-121	Instrumental Ensemble	1	35-135	Brass and Reed Instrumer	t Lesenne
22-122	Vocal Ensemble	1		Individual Instruction	1
30-130	Voice Lessons. Individual In	netruction 1		Beginning Orchestra	
	Piano Lessons, Individual In		41 141	Beginning Band	l
	Violin or other Stringed Ins			Deginning Dand	!
32-132	violin or other stringed ins	strument	44-144	A Cappella Choir	l
	Lessons. Individual Instru	uction l	45-145	Piano Lessons (Class)	1
33-133	Organ Lessons. Individual In	nstruction I			

The Division of Music provides opportunities for cultural and professional experience in the field of music education. Instruction includes musical theory,

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musical history and appreciation, music education, and an opportunity to study and participate in the various phases of musical performance.

Admission to the college as a music major is open to students who show evidence of satisfactory musical aptitude. Before graduation, both the music major and the music minor shall pass a proficiency test in playing and singing. This test is given by a committee from the Division of Music.

#### SPECIAL MUSIC FEES

Individual Lessons (for all music majors approved by the chairman of the division) per quarter\$	10.00
Individual Lessons (for all students, other than music majors, in the	
college or its affiliated schools) Lesson series each quarter	
its affiliated schools) Lesson series each quarter	15.00
Individual Lessons, less than a full quarter	
Each, for voice, piano, organ, or strings	2.00
Each, for all other instruments	1.50
Piano Rental	4.00
Orchestra or Band Instrument Rental	3.00
Organ Rental	9.00

All music majors shall meet the following requirements:

- 1. The ability to play, at sight, a simple piano accompaniment.
- 2. The ability to sing agreeably.
- 3. Demonstrate a teaching knowledge of a stringed, a brass, and a woodwind instrument.
- 4. The ability to make a creditable public appearance in either playing or singing.

All music majors shall take individual lessons on a musical instrument or in voice each quarter and may take up to six quarter hours of additional individual instruction without extra fee. The type of instruction needed by the individual student is to be determined by agreement between the director and the student. Credit toward graduation in this type of work shall not exceed eighteen quarter hours for music majors and six quarter hours for music minors.

All music majors are expected to be affiliated with a major musical organization each term. The organizations regularly approved for this purpose are: band, orchestra, a cappella choir, and instrumental and vocal ensemble. Credit up to six quarter hours will be allowed toward graduation for participation in musical organizations. Philharmonic Choir is required of all music majors.

Students who plan to major in the Division of Music shall take the following courses:

No. 2a, b, c 50a, b, c 52a, b, c 100a, b, c 150-250 152a, b, c 153a, b 155 58-158a, b, c	Course Sight Singing, Ear Training and Notation (3 hours each quarter)
	Music Courses         52           Individual Instruction         18           Music Activity         6
	Total

Those students wishing to minor in music shall take the following courses:

No. 2a, b, c 50a, b, c 58-158a, b, c	Course Cr. F. Sight Singing, Ear Training and Notation (3 hours each quarter) Countries of Music Education (2 hours each quarter)	Irs.
	Music Courses2 Individual Instruction	
	Total 24	1

Students interested in a minor in instrumental music should substitute Music 100a,b,c, Beginning Instruments, for Music 58-158a,b,c, History of Music.

A special minor in music is offered for elementary education majors. This minor includes Music 48-148, Music Fundamentals for Elementary Teachers, and Music 49-149, Music Methods and Materials for Elementary Teachers. The remaining requirements are to be determined by consultation with the adviser.

# Major in Music

(Without Teaching Certificate)

The Division of Music makes provision for work leading to the Bachelor of Arts degree with particular emphasis on the performance and cultural aspects of music. Requirements include seventy-six hours of credit within the division. Courses to be taken are decided upon by the student in conference with the chairman of the Division of Music.

Students majoring in this field shall complete the core requirements in general education listed on page 21. A minor shall be completed outside the major field.

The minor in music without the teaching certificate should be planned in conference with the student's adviser. It should consist of a minimum of twenty-four hours and should approximate the distribution indicated for the major under this plan.

### GRADUATE STUDY

Course work will be outlined by the student's major professor.

# Description of Courses

1a, b, c. MUSIC APPRECIATION. Survey music course for freshmen. Objective: To enlarge musical background approaching music from the practical as well as the cultural viewpoint. It deals with music as everyday experience, covering all phases of American music, including Negro, Indian and cowboy influences and popular music. Music 1b progresses to European music showing racial influences, nationalism, and historical developments. Various activities, including individual lessons may be substituted for Music 1c lecture period. Materials fee, one dollar (\$1.00) each quarter. Two hours credit each quarter.

2a, b, c. SIGHT SINGING, EAR TRAINING AND NOTATION. This course aims to develop the skills that are requisite to success in music reading, to acquaint the student with sight reading and rote materials used in the elementary

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school, to develop in each student the ability to use his own voice and to serve as an introduction to and preparation for Music 52a, b, c. A year's course meeting five days a week each quarter. Three hours credit each quarter.

- 21-121. INSTRUMENTAL ENSEMBLE. Classes in woodwind quintet, string quartet, string trio, brass ensemble, and other small instrumental groups are available for students who wish training in ensemble playing. This course is designed to prepare students for instrumental group instruction in the field of public school music. One hour credit.
- 22-122. VOCAL ENSEMBLE. Vocal trios, quartets, and other small groups receive training in this course for satisfactory public performance, with a view towards being of service in the community. One hour credit.
- 30-130. INDIVIDUAL INSTRUCTION IN VOICE. For all those interested in correct tone production, refined diction, and intelligent interpretation of songs of classical and modern composers. The purpose of this course is to experience and understand the correct use of the singing and speaking voice. Special emphasis is placed on building useful song repertoire, coaching in performance, and diagnosing vocal difficulties. One hour credit.
- 31-131. INDIVIDUAL INSTRUCTION IN PIANO. Instruction is offered to both beginners, and advanced students, using the standard technical works of Czerny, Clementi, as well as compositions of Bach, Beethoven, Schumann, Chopin, Debussy, and other classical, romantic and modern composers. Emphasis is also placed on keyboard harmony and accompanying. One hour credit.
- 32-132. INDIVIDUAL INSTRUCTION IN VIOLIN (or other stringed instruments). In addition to violin instruction, lessons are provided in cello, string bass, and viola. Opportunities are also provided for individual and class instruction in other stringed instruments. One hour credit.
- 33-133. INDIVIDUAL INSTRUCTION IN ORGAN. Instruction is given in pipe organ and Hammond organ to those students who have had enough piano instruction to be able to play Bach two-part inventions satisfactorily. One hour credit.
- 35-135. INDIVIDUAL INSTRUCTION IN BRASS AND REED INSTRUMENTS. Lessons are provided in brass and reed instruments of the band and orchestra for students who wish to become proficient in teaching and performance. One hour credit.
- 40-140. BEGINNING ORCHESTRA. This organization is devoted to those whose playing is in the less advanced stage. Music suitable to the students' ability is chosen. All are welcome who desire to perfect themselves in orchestral playing, and who enjoy this activity. One hour credit.
- 41-141. BEGINNING BAND. This course is designed for those who like to play band instruments and who wish to improve their performing ability. As advancement is made it is hoped that a keener appreciation for music will be developed. One hour credit.
- 42-142. COLLEGE ORCHESTRA. The symphony orchestra is available for those who wish an outlet for their previous study. Students will be provided with a first hand knowledge of the great orchestral works by classical, romantic and modern composers. This organization is open to all who show sufficient qualifications, determined by an audition with the director. One hour credit.

- 43-143. CONCERT BAND. Students are trained to play the finest band literature, and practice in public performance is obtained through various concerts by this organization during the year. Membership is by tryout. One hour credit.
- 44-144. A CAPPELLA CHOIR. All students are eligible to membership in this organization with the approval of the director. The finest sacred and secular music is sung, and for those who are interested in vocal work it is hoped that this experience will lead to better choir organization and directing in school and community. One hour credit.
- 45-145. PIANO CLASS LESSONS. Opportunities are offered for class piano instruction. This course provides actual experience in class piano procedures, using the piano and individual practice key-boards. This course aims to provide experience in both group performance and class teaching procedures. One hour credit.
- 46-146. PIANO CLASS METHODS. A modern course of study in piano pedagogy, presented in successive units, which include the song approach, technical problems, harmonic analysis, sight reading, ear training, creative expression, and materials as applied to the teaching of class piano. Two hours credit.
- 47-147. LABORATORY BAND AND ORCHESTRA. Maintained for those who have just begun to play band and orchestral instruments, and for those who wish to examine materials suitable for all classes of school bands and orchestras. One hour credit.
- 48a, b-148a, b. MUSIC FUNDAMENTALS FOR ELEMENTARY TEACHERS. A two quarter sequence in music for elementary majors. Specific objectives are: Acquiring skill in the reading of music, training the ear to a more accurate discrimination of pitch, music-writing from dictation, and active experience in rhythm. A musical background is built through the study of key signatures, scale formations, musical terms and symbols, and a simple knowledge of the composers and of vocal and instrumental forms. Four hours credit each quarter.
- 49-149. MUSIC METHODS AND MATERIALS FOR ELEMENTARY TEACHERS. Prerequisite, Music 48a, b-148a, b. A course for rural and elementary teachers specifically designed to give a practical working knowledge of music in all elementary grades. The following topics are stressed: Proper use of the child voice; selection and teaching of the rote song with suggested materials; presenting the various rhythms to children and organization of the rhythm band; music appreciation with the phonograph and by other means; and creative music writing. A knowledge of school music material is given as is a knowledge of further experience in music reading and ear training. Four hours credit.
- 50a, b, c. INTRODUCTION TO MUSIC EDUCATION. A preparatory course for special teachers of school music.<sup>3</sup> The contents of the course include such problems as the place of music in the general program of education; the teaching of singing, listening, music reading, rhythm, instrumental music, and creative expression as applied to both the elementary and secondary school levels. Course procedures include observation and participation in music in the laboratory school. A three-quarter sequence to be taken in the student's sophomore year. Two hours credit each quarter.
- 51-151. PHILHARMONIC CHOIR. A course in choral singing required of all music majors. No credit.

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- 52a, b, c. SIGHT SINGING, DICTATION AND HARMONY. Prerequisite, Music 2a, b, c. A year's course meeting two days a week. Objectives are to create an interest and some skill in the structure and movement of chords, beginning with relationships of tones as intervals and triads, through 7th, 9th, 11th, and 13th chords. Procedures consist of class work in hearing, writing, singing and spelling intervals and chords; harmonic analysis, using examples from classical, romantic and modern music; and harmonization of melodies, including chords of three and four voices. Three hours credit each quarter.
- \*58a, b, c-158a, b, c. HISTORY OF MUSIC. A cultural course which deals with the development of ancient, medieval, and modern music and musicians. This course leads to a greater appreciation of music and definitely adds to life's enjoyment. Six hours credit.
- 100a, b, c. BEGINNING INSTRUMENTS. Objectives: To provide an opportunity for gaining a working knowledge of band and orchestra instruments; to develop a broader knowledge of available instrumental materials. Procedure: Instrumental combinations are studied and rehearsed in small groups. Instruments not available among students will be demonstrated by qualified visiting instructors. Materials will be studied and performed in class. Two hours credit each quarter.
- 149a. MUSIC METHODS AND MATERIALS FOR RURAL TEACH-ERS. Prerequisite, Music 49-149. The in-service laboratory course for teachers enrolled as elementary majors, Plan B. Intensive study of specific problems in the actual teaching of music. The in-service teacher analyzes learning conditions in music in his school and studies and employs methods of improving them. Detailed study guides adaptable to a particular situation are furnished. Final written report made upon completion of the study. Four hours credit.
- 150-250. SPECIAL PROBLEMS IN PUBLIC SCHOOL MUSIC. Prerequisites to this course are Music 50a, b, c and student teaching. The course attempts to refine procedures in the school music program with reference to problems in the selection and organization of materials, classroom management, and curriculum building. Students will be granted ample opportunity to study individual problems growing out of their student teaching experience. Four hours credit.
- 152a, b, c. HARMONY, COUNTERPOINT, AND COMPOSITION. Prerequisite, Music 52a, b, c. The working rules of counterpoint, and beginning composition. Procedures include the teaching of the development of medieval two-part music through the more complicated three and four voice forms, florid counterpoint, and the writing of canon and fugue in three and four parts. The course also serves as an introduction to instrumentation and arranging. Two hours credit each quarter.
- 153a, b. INSTRUMENTATION, ORCHESTRATION, AND COMPOSITION. Prerequisite, Music 152a, b, c. Two quarter course meeting two days a week. The student learns transposition for all instruments, the pitch range for all instruments, and discovers how to obtain tonal balance and orchestral color. Two hours credit each quarter.
- 154-254. PRINCIPLES OF MUSIC EDUCATION (Offered Summer 1943). The philosophy of musical education, evaluation of current practices in teaching music reading, rhythmic experience, creative music, the musical and non-musical child. Four hours credit.

<sup>\*</sup>Given also by Correspondence.

- 155. TECHNIQUE AND PRACTICE OF CONDUCTING. To acquaint and prepare prospective teachers with techniques and practice in conducting bands, orchestras, and other musical ensembles. Actual experience is obtained through group and individual instruction. Music in all forms is studied with special reference to the director's problems. Two hours credit.
- 156-256. PSYCHOLOGY OF MUSIC. Objectives: To furnish students with the knowledge and techniques necessary for the measurement of musical capacity, and to develop an understanding of the psychology of musical performance, composition, and listening. The subjects included in this course are measurements of musical talent, tests and measurements in music, and the psychology of musical performance. Four hours credit.
- 157-257. THE PHYSICS OF MUSICAL INSTRUMENTS. The objectives of this course are to develop an understanding of the physical principles involved in the production of music. Two hours credit.
- 161-261. MUSICAL AESTHETICS (Summer Quarter only). A study of the aesthetics of Dewey, Puffer, Parker, Bell, Santayana, et al. Special emphasis is placed on the implication of aesthetics in teaching of music. Graduate students only. Four hours credit.
- 162-262. SYMPHONIC LITERATURE. Formerly "Advanced Music Literature." A detailed study of the music of the symphony orchestra, based mainly on recordings made by the world's leading orchestras, as an opportunity for music students to become familiar with the larger works of the masters. Four hours credit.
- 170-270. ADVANCED HARMONY AND FORM ANALYSIS (Summer Quarter only). A thorough knowledge of harmonic and formal aspects of musical composition is of great value to the music teacher who must make new musical arrangements for school groups, and is necessary as a basis for creative work in music. This course deals with the many types of modulation and altered chords, as well as the study of the harmonic and formal aspects of musical composition. Four hours credit.
- 171-271. ADVANCED COMPOSITION AND ORCHESTRATION (Summer Quarter only). This course offers an opportunity to advanced students to continue individual projects in composing and arranging under guidance, thus enhancing their musical worthiness. Four hours credit.
- 172-272. INSTRUMENTAL SUPERVISION (Summer Quarter only). An analysis is made of the problems found in the instrumental field such as balanced instrumentation, the marching band, pre-band instruments, sectional rehearsals, beginning instrumental classes, competitive festivals, program building, and advertising the music program in the community. Four hours credit.
- 173-273. VOCAL SUPERVISION (Summer Quarter only). This course is based upon the analysis of the professional problems of vocal teachers and will include the study of current practices in music teaching, selection and evaluation of new materials, etc. Four hours credit.
- 174-274. PROBLEMS OF MUSIC APPRECIATION (Summer Quarter only). Appreciation defined, evaluation of the present approach, construction of an original program for elementary and secondary schools. Four hours credit.
- 175-275. PROBLEMS IN ORCHESTRAL AND CHORAL CONDUCT-ING (Summer Quarter only). The development of fluency in conducting is an essential in the successful training of musical organizations in the school program. The problems that are found in instrumental and choral conducting will be studied. An opportunity will be given to practice the art of conducting under expert supervision. Four hours credit.

- 176-276. SURVEY OF MUSIC IN AMERICA (Summer Quarter only). A study of the growth and development of all phases of American music, such as music education, folk music, music composition, radio, etc. Four hours credit.
- 177-277. HISTORY OF MUSICAL THEORY (Summer Quarter only). The development of the theoretical study of musical composition is traced from the Greek modes to the present day techniques. This background is helpful in the understanding of present day practices. Four hours credit.
- 200. RESEARCH IN MUSIC EDUCATION (Summer Quarter only). Investigation of recent research in music education and related fields; directed practice in the scholarly and scientific approach to problems of the students' interests. Required of all first quarter graduate students. Four hours credit.
- 222. INDIVIDUAL STUDIES IN MUSIC. The purpose of this course is to provide for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two type-written copies of a well organized and well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
- 299. THESIS. The thesis course for Plan A students. A master's thesis may be in written form or a creative piece of work, such as a musical composition. Twelve hours credit.

### DIVISION OF THE SCIENCES

The courses offered by the Division of the Sciences are designed especially to give prospective teachers the specialized education needed for success in their work. At the same time they should furnish a desirable background of science for majors in other divisions, and also afford knowledge of science to meet the educational needs of the American citizen.

Students who plan to major in the Division of the Sciences should have a high degree of interest in science and early in their training should demonstrate their ability to do superior work in this field.

In view of the number of courses needed for a major in Science, it is advisable for the student to take some of the courses in this field as early in his college experience as possible.

Students who wish to major in Science cannot take Science 3a or 3b for credit. The following courses are required:

#### SCIENCE

#### GROUP A

		Cr.			Cr.
No.	Course	Hrs.	No.	Course	Hrs.
11, 12	General Zoology	8	43	Qualitative Chemistry	
21, 22	General Botany	8	61, 62, 63	General Physics	12
41, 42	General Chemistry	8	133	Integrated Science	4

In addition to the forty-four hours in group "A" students who desire to concentrate additional courses in the Biological sciences shall select, with the approval of their adviser, twenty-eight hours from the following:

GROUP B						
91-191	Course Field Botany General Geology Descriptive Astronomy Conservation of Natural Reso Elementary Entomology Human Physiology		128-228 130 131-231	Plant Ecology	4 4	

In addition to the forty-four hours in group "A" students who desire to concentrate additional courses in the Physical sciences shall select, with the approval of their adviser, twenty hours from the following:

GROUP C						
No. 56-156 64-164a 64-164b 64-164c 66-166	Course General Geology Mechanics and Heat General Electricity Sound and Light Radio Transmission and Recep	4 4 4	141, 142 143-243 62a-162a	Systematic Qualitative	Chemistry 4	

Students who major in science, to facilitate their placement in public school positions, are advised to minor in mathematics.

### MATHEMATICS

No.	Course	Cr. Hrs.	No.	Course	Cr. Hrs.
75a, b 76 78a, b, c	College Algebra <sup>1</sup> Plane Trigonometry General Mathematics <sup>1</sup>		77-177Ь 175 176	Analytic Geometry I Differential Calculus Integral Calculus	4

In addition to the twenty-four hours in Group "A", students shall select, with the approval of their adviser, twenty-four hours from the following:

No. 77a 80-180	Solid Geometry			Mathematics	Secondary 4
81-181 91-191 177-277 177c	Surveying Navigation Descriptive Astronomy Theory of Equations Analytic Geometry II	4 4 4	184-284 188	Modern Euclidean Geo History of Mathematic Mathematics for Daily Integrated Mathematics	s 4 Use 4

Students majoring in mathematics, to facilitate their placement in public school positions, are advised to minor in either the physical or the biological sciences.

Students who major either in Science or in a division other than Science and desire to minor in mathematics shall take the following:

No. 75a, b 76	Course College Algebra <sup>1</sup> Plane Trigonometry	Cr. Hrs. 8	No. 78a, b, c 77-177b	Course General Mathematics <sup>1</sup> Analytic Geometry	
<del></del>	Trane Trigonometry	4	//-1//D	Analytic Geometry	4

Students who have had Math. 75a and b and 76 cannot take for credit 78a, b, and c also, and vice versa.

Elect	eight	hours	from	the	following:

		Cr.			Cr.
No.	Course	Hrs.	No.	Course	Hrs.
80-180	Mathematical Instruments and		176	Integral Calculus	
	Surveying	4	183-283	Modern Euclidean Geometry	· 4
91-191	Descriptive Astronomy	4	184-284	History of Mathematics	4
175	Differential Calculus	4	188	Mathematics for Daily Use	

### BIOLOGICAL SCIENCES

Students who major in mathematics and desire to minor in the biological sciences shall take the following:

No. 11, 12	Course Hrs. General Zoology 8	No. 21, 22	Course Cr. Hrs. General Botany 8		
Elect	eight hours from the following	:			
117 130	Human Physiology	131-231 132-232	Evolution 4 Genetics and Eugenics 4		
Students who major in divisions other than Science and desire to minor in the biological sciences shall take the following:					
No. 3b 11, 12	Course Hrs. Introduction to Biological Science 4 General Zoology	No. 21, 22	Course Cr. Hrs. General Botany 8		
Elect	four hours from the following: Human Physiology	132-232	Genetics and Eugenics 4		

### PHYSICAL SCIENCES

Students who major in mathematics and desire to minor in the physical sciences shall take the following:

		Cr.			Cr.
No.	Course	Hrs.	No.	Course	Hrs.
41, 42	General Chemistry	8	61, 62, 63	General Physics	12
43	Qualitative Chemistry	4	, ,		

Students who major in divisions other than Science and desire to minor in the physical sciences shall take the following:

		Cr.			Cr.
No.	Course	Hrs.	No.	Course	Hrs.
3a	Introduction to Physical Sc	ence 4	61, 62, 63	General Physics	12
41 42	General Chemistry	8	, ,		

# Major in Science

(Without Teaching Certificate)

The Division of the Sciences is prepared to offer to students desiring a Bachelor of Arts degree without a teaching certificate a major in Biological Science, Physical Science, and Mathematics. A major in one of these fields should consist of at least forty-eight hours taken in the specific field or related fields as outlined by the student in consultation with his major adviser. In addition,

the division will offer a major in the Natural Sciences which should consist of sixty hours of work taken within this general field and should include a minimum of twenty-four hours in either the Biological Sciences or the Physical Sciences. Course work will be outlined by the student in consultation with his major adviser.

Students majoring in this field shall complete the core requirements in general education listed on page 21. A minor shall be completed outside the major field.

The minor in the Sciences without the teaching certificate should be planned in conference with the student's adviser. It should consist of a minimum of twenty-four hours and should approximate the distribution indicated for the major under this plan.

#### GRADUATE STUDY

Course work will be outlined by the student's major professor.

### Description of Courses

#### Non-Specialized Science

- 3a. INTRODUCTION TO PHYSICAL SCIENCE. Includes the study of important general concepts in astronomy, physics, chemistry, meteorology, and geology. Designed to give a knowledge of such concepts in these fields as are needed by the every-day citizen; also to introduce the student to problem solving and acquaint him with the applications of physical science to everyday life. May be taken either before or after Science 3b. Four hours credit.
- 3b. INTRODUCTION TO BIOLOGICAL SCIENCE. A study of the important general concepts concerning the origin of life, structure and function of both plant and animal bodies, evolution, heredity, vitamins, hormones, resistance to disease, and the improvement of plants and animals through the application of genetic laws. This course further attempts to develop scientific attitudes and a knowledge of the scientific method of problem solving. May be taken either before or after Science 3a. Four hours credit.
- 100-200. UNIT COURSE IN SCIENCE (Summer Quarter only). Units may be given different letters and different descriptions each summer. One hour credit.
- 108. SCIENCE OF THE OUT-OF-DOORS (Summer Quarter only). Designed especially for elementary and secondary school teachers. Acquaints students with the less complex geological aspects of the Greeley region and enables them to see how topography, geological features, character of soil, rainfall, and other factors determine the nature of the plant and animal life in any locality. Principles are dealt with in the classroom and then students are taken to the field to become acquainted with the manner in which these principles interact to affect the geology and the plant and animal life of the region. Field trips required. Four hours credit.
- 110-210. CONSERVATION OF NATURAL RESOURCES (Summer Quarter only). A course designed to give students an overview of our natural resources and the extent to which man has depleted them. Also treats of con-

servation measures that must be taken to adequately conserve the soil, forests, range land, water resources, and wild life. Four to six hours field work and mountain trips. Four hours credit.

#### PROFESSIONALIZED SCIENCE

· 1-101. SCIENCE IN THE ELEMENTARY SCHOOL. Prerequisites, Science 3a and 3b or equivalent. Deals with objectives, materials and methods of teaching science in the grades. Students observe children's classes, set up problems and have some experience in carrying out problem solving activities. Four hours credit.

Science 102a. TEACHING OF ELEMENTARY SCIENCE IN RURAL SCHOOLS. Prerequisite, Science 1-101. In-service laboratory course for teachers majoring in elementary education, Plan B. Intensive study of specific problems arising in the actual teaching of elementary science. The in-service teacher analyzes learning conditions in elementary science and studies and employs methods of improvement in particular situations. Detailed study guides adaptable to his situation are furnished. A final written report is made upon the completion of the study. Four hours credit.

102-202. SPECIAL PROBLEMS IN THE TEACHING OF ELEMENTARY SCIENCE. Deals with problems of content and teaching techniques needed by supervisors or teachers who are especially interested in teaching science to children; also with individual problems of integration with school curricula, organization of courses of study or other instructional areas. Four hours credit.

104-204. THE TEACHING OF SEX EDUCATION IN THE SECOND-ARY SCHOOLS (Summer Quarter only). The purpose of the course is to help teachers prepare to counsel high school students in sex-social education through class or individual conferences. The course deals entirely with sex problems common to high school boys and girls. The content of the course includes the reproductive system, venereal diseases, social adjustments to the opposite sex, an analysis of current literature in the field, sensory aids available for instruction, discussion of adolescent attitudes toward sex education, and an evaluation of courses in the field. Four hours credit.

- 105. MATERIALS AND AIDS USEFUL IN SCIENCE TEACHING (Summer Quarter only). Prerequisite, General Biology or eight hours of physics or chemistry. This course is designed to acquaint the student with many novel, inexpensive materials and devices, and how to make and use them in the classroom. The class will study home made lantern slides; simple laboratory equipment; reading materials; sources of visual aids, and commercial exhibits, to determine how they can be used in science classes to help improve instruction. Four hours credit.
- 200. INVESTIGATION IN THE FIELD OF TEACHING SCIENCE. This is not a course in the techniques of research, but rather is an attempt to coordinate the intellectual materials of science; acquaint the student with the meaning of "science"; stimulate the student and help him formulate an appreciative attitude toward science and the scientific method; and help the student understand something of the nature and characteristics of research. Four hours credit.
- 206. IMPROVEMENT OF SCIENCE INSTRUCTION IN THE SEC-ONDARY SCHOOL (Summer Quarter only). Prerequisite, Ed. 116, or its equivalent. In this course, teachers are encouraged to bring their specific instructional problems for study and probable solution. The teacher is expected

to use the results of his work in the course in his own school. From time to time the group will discuss the relationship of the science program to the whole secondary school curriculum, so that the teacher may critically evaluate instruction in the light of the purposes and trends of secondary education. Four hours credit.

- 207. LEARNING AND CURRICULAR STUDIES IN SCIENCE (Summer Quarter only). This course is designed primarily to teach the techniques of educational research as they apply to science education. Sufficient educational statistics for reading and interpreting educational research will be included in the course. The class will make a critical analysis of some of the better research in the field of science education. The findings will also be discussed as they apply to classroom problems. Four hours credit.
- 222. INDIVIDUAL STUDIES IN SCIENCE. A course to give special emphasis to fields of specialization not provided for in formal class courses. Qualified students who are able to outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. A well-organized typewritten report of each problem must be filed with the instructor who directs the study and one with the director of the graduate school. (Maximum of eight hours credit toward the master's degree is permitted. Two or four hours credit for one problem.
- 299. THESIS. Required of all Plan A students. Designed to enable the Plan A student to organize his problem, complete his research, and report his findings. This course meets the division research requirement for the master's degree in the biological, mathematical, and physical science fields. A maximum of twelve hours credit.

### ASTRONOMY

- \*91-191. DESCRIPTIVE ASTRONOMY. The student is acquainted with the heavens as they are viewed from the earth. He studies and learns to know in some detail the planets, the constellations and the principal stars to be seen in this latitude. Four hours credit.
- 291. ADVANCED ASTRONOMY (Summer Quarter only). This course presents the ordinary topics of the preceding course and in addition the study of the spectroscope as applied to astronomy, distances to the stars, classification of stars, magnitudes of stars, binaries, and nebulae. Four hours credit.

#### BIOLOGY

- 131-231. EVOLUTION. Prerequisites, Zoology 11 and 12, or equivalent. A study of the factors and evidences that indicate that gradual development has taken place. Considerable time will be given to a study and discussion of the theories that have been proposed to explain evolution and to those that have been given to disprove the theory. Students will be expected to do extended readings and prepare written reports. Four hours credit.
- 132-232. GENETICS AND EUGENICS. A study of the fundamental principles of heredity. In addition to the Mendelian laws, more recent discoveries in the field such as imperfect dominance, multiple factors, sex determination, lethal factors, and mutations are discussed. On the eugenics side the inheritance of natural abilities and capacities are noted and special attention is given to the differential birthrate, the present eugenic trend of the American people, possible ways to eliminate the defective streams of germplasm, and suggested measures to improve the superior strains. Four hours credit.

<sup>\*</sup>Given also by Correspondence.

133. INTEGRATED SCIENCE. A course designed for seniors, to help integrate and bring together the principles of biological science which they have studied in previous courses. Relationships are emphasized and the application of biological science principles in the interpretation of life situations is stressed.

#### BOTANY

- 21. GENERAL BOTANY. A study of type forms representing the plant kingdom from the blue-green algae up to and including mosses and liverworts. Emphasis is also placed on the study of bacteria, molds, yeasts, rusts, and the smuts of cereal grains. Four hours class, three hours laboratory. Four hours credit.
- 22. GENERAL BOTANY. Prerequisite, Botany 21. Treats of the higher plants from ferns to flowering plants. Emphasis is placed upon the relationship of the plants in these groups to industry, commerce, food supply, shelter, clothing, range and water shed management, and soil conservation. Evolutionary development is emphasized. Four hours class, three hours laboratory. Four hours credit.
- 25-125. FIELD BOTANY. Designed to enable students to become acquainted with plants in their natural habitats. Emphasis is placed upon classification and an attempt is made to familiarize students with the tree and plant life of this region. Four hours class, three hours field and laboratory work. Four hours credit.
- 121-221. PLANT PHYSIOLOGY. Prerequisites, Botany 21 and 22 or their equivalent. Designed to give the student a working knowledge of such physiological functions of plants as absorption, transpiration, the transpiration stream, translocation, photosynthesis, fat and protein synthesis, digestion and respiration, and to enable him to see the relation of these processes to gardening, flower culture and field crop production. Four hours class, four hours laboratory. Four hours credit.
- 126-226. BOTANICAL TECHNIQUE AND PLANT HISTOLOGY. Prerequisites, Botany 21 and 22 or their equivalent. The science of killing, staining, and making botanical material into permanent slides is combined with the study of plant tissues. The tissues are studied as to origin, differentiation, and organization. Instruction in freehand methods is followed by a study of the paraffin method of preparing sections. Three hours class, five hours laboratory. Offered 1942 and alternate years. Four hours credit.
- 127-227. SYSTEMATIC BOTANY. Prerequisite, Botany 22 or its equivalent. This work is carried on in the laboratory and field. Its purpose is to give the student a knowledge of the characteristics and relations of the different groups of flowering plants. It enables the student to use the botanical manual with ease and to classify plants with considerable facility. Three hours class, four hours laboratory and field. Four hours credit.
- 128-228. PLANT ECOLOGY (Summer Quarter only). Prerequisites, eight to twelve hours of general botany. The purpose of this course is to give teachers of the biological sciences an adequate understanding of the interrelation and interaction of plant life and the factors of the environment. Plant succession including both the hydrosere and the xerosere is stressed. The different plant formations represented in the changing elevations from plains to mountain summit are also studied. Five hours class, four to six hours field work. Four hours credit.

130. GENERAL BACTERIOLOGY. Emphasis is placed on the social and economic implications of bacteriology. A study of the effects of bacteria, yeast and molds on personal health, the care and handling of foods, on sanitation and in industrial processes. Four hours class work, three hours laboratory. Four hours credit.

#### CHEMISTRY

- 41. GENERAL CHEMISTRY. Some natural laws and fundamental principles underlying chemical changes. Some of the elements and compounds, such as are found in foods, clothing, shelter, air, water and commercial substances pertaining to human welfare. The cause, the nature and the effects of some of the most common chemical changes. Laboratory exercises involving some of the principles of chemistry. Three hours class, four hours of laboratory work. Four hours credit.
- 42. GENERAL CHEMISTRY. Prerequisite Chemistry 41. This course is a continuation of Chemistry 41 and carries the student farther into the study of the elements, their compounds, and the fundamental principles involved in the useful reactions occurring among them. Three hours class, four hours laboratory. Four hours credit.
- 43. QUALITATIVE CHEMISTRY. Prerequisites, Chemistry 41 and 42. The sources, preparation and properties of the most common and useful metals are studied. Tests for metals in their most commonly occurring compounds are included. The simple reactions involved in these tests, some practice in a scheme for finding metals and non-metals in unknown solutions, constitute the understandings and skills to be developed. Two hours class, five hours laboratory. Four hours credit.
- 141. ORGANIC CHEMISTRY. Prerequisites, Chemistry 41 and 42. The carbon compounds of the aliphatic or chain series as they are related to life and human welfare. The aliphatic hydrocarbons and their halogen, oxygen, sulfur, and phosphorous derivatives are studied. The laboratory work is devoted to the preparation and properties of some familiar compounds; and the qualitative analysis of some organic substances. Three hours class, four hours laboratory. Four hours credit.
- 142. ORGANIC CHEMISTRY. Prerequisites, Chemistry 41, 42, and 141. The objectives and the plan of this course are same as in 141 excepting it goes into the aromatic or ring series of compounds. Three hours class, four hours laboratory. Four hours credit.
- 143-243. SYSTEMATIC QUALITATIVE CHEMISTRY (Offered odd years only). Prerequisites, Chemistry 41, 42, and 43. The purpose of this course is to enable the student to find the metals and non-metals that may be in substances of any kind of form. Graduate students work on complex mixtures such as ores and soils. Two hours class, five hours laboratory. Four hours credit.
- 144-244. QUANTITATIVE ANALYSIS. Prerequisites, Chemistry 41, 42, and 43. Quantitative relationships as they exist among the elements, practical determination of amounts of useful substances in complex mixtures. Gravimetric and volumetric methods are used. Graduate students work on complex mixtures. One hour class, six hours laboratory. Four, six or eight hours credit.
- 148-248. CHEMISTRY OF FOOD CONSERVATION. The chemistry of economic food production. The preparation of food materials for preservation, transportation, and consumption. Economic rations required for different body activities. Four hours credit.

- 251. PHYSIOLOGICAL CHEMISTRY. Prerequisites, Chemistry 41 and 42. The chemistry involved in the natural production of food products, artificial foods and drugs, vitamins and hormones, and what they have to do with metabolism, the chemistry of blood and the circulatory processes, secretions and waste products of the body, the chemistry of food preparation, digestion, absorption and assimilation are also studied. Three hours class, four hours laboratory. Four hours credit.
- 253. CHEMISTRY FOR THE CONSUMER (Summer Quarter only). Prerequisite, eight to twelve hours of general chemistry. Chemistry of problems of everyday life. Such topics as foods, cosmetics, drugs, detergents and textiles are studied. Technics for testing and judging the quality and value of these household necessities are worked out in order that the individual who takes the course may be a better informed and more economical consumer. Four to six hours laboratory. Four hours credit.

#### GEOLOGY AND METEOROLOGY

- 56-156. GENERAL GEOLOGY. The basic course in Geology. The purpose of this course is to develop an understanding of the surface of the earth together with the forces and processes that have changed and are modifying it. A broad outline of the geologic history of north central Colorado is developed through observed evidence, reading and scientific thinking. Four hours credit.
- 157. HISTORICAL GEOLOGY. Prerequisite, Science 56-156. The aim of this study is the development and application of principles that result in an acceptable history of the earth with its plant and animal life from earliest times to the present. Field trips, museum materials, and readings are used as a basis for scientific reasoning. Special attention is given to the local area. Time must be reserved for excursions. Four hours credit.
- 62a-162a. METEOROLOGY. The basic course in the study of weather. This course aims to develop an understanding of the elements and forces together with the interaction of the forces that cause weather changes. Local observations of temperature, wind, clouds, atmosphere pressure, snow, rain, hail, storms, frost, are interpreted in terms of local factors and atmospheric conditions over broad areas. The characteristics of different types of air masses and their zones or lines of contact are stressed. Observations, maps, charts, and reading serve as a basis for scientific reasoning. Four hours credit.
- 159-259. GEOLOGY OF THE ROCKY MOUNTAINS (Summer Quarter only). Prerequisite, consent of the instructor. This course has as its function the development of skill in discovering and applying principles in interpreting the structure, land forms and geologic history of a local area, particularly the front range of the Colorado Rockies and adjacent foothills and plains. The study of this area through directed observation, reading and scientific thinking constitute the experiences of the students. Individual studies are encouraged. Field trips are required. Four hours credit.

### MATHEMATICS

\*75 a, b. COLLEGE ALGEBRA. A brief review of and continuation of the study of the language of symbolism and its importance in showing number relationships. The activities of this course will be the development of algebraic skills, the extension of knowledge to subjects beyond those studied in high school, the practice of clear and independent thinking, the emphasis of understandings which lie back of the processes. Four hours for each course.

<sup>\*</sup>Given also by Correspondence.

- \*76. PLANE TRIGONOMETRY. Presents a clear understanding of the trigonometric functions, their relationships and their uses both from the theoretical and practical viewpoint. Emphasis is placed upon the applications of trigonometry to practical problems and upon approximate calculations by means of natural functions. The more accurate results obtained by logarithmic calculations are emphasized in the solution or oblique triangles. Four hours credit.
- 77a. SOLID GEOMETRY. Extends the methods of plane geometry to three dimensions. It helps fix in the student's mind the values and methods of logical thinking required in geometry; shows the many applications of space concepts to physical problems; and lays the foundation for more advanced work in the field of three dimensions. Four hours credit.
- \*77b-177b. ANALYTIC GEOMETRY I. Prerequisites, Math. 75a, 75b and 76 or Math. 78a, b, c. Deals with geometrical problems from the analytic point of view; explains and develops algebraic methods as used in solving geometric problems, thus acquainting the student with a powerful method of unifying algebra and geometry, and emphasizing the applications of mathematics to science. It is especially valuable as a margin of information and background for potential teachers of both algebra and geometry. Four hours credit.
- \*78a, b, c. GENERAL MATHEMATICS. Presupposes two and one-half to three years of high school mathematics. These three courses constitute a sequence of the materials from algebra, geometry, trigonometry, and the elements of analytic geometry and the calculus so organized and related that the student must call upon any or all of his mathematical experiences for new interpretations and understandings. The emphasis is definitely upon understandings rather than mere manipulations. Twelve hours credit (four hours for each course).
- 80-180. MATHEMATICAL INSTRUMENTS AND SURVEYING. Prerequisite 75a, b, 76. Acquaints the student with the use of the slide rule, the sextant, the level and the transit. The course emphasizes the solution of problems, as obtained from the field, by the practical use of these instruments. One of the main outcomes is the recognition as to how such work can be used to enrich mathematics on the secondary level. Four hours credit.
- 81-181. NAVIGATION. Treats the more important methods of celestial navigation. In solving the problems of the course the student will have an opportunity to become familiar with the instruments of navigation, particularly the sextant, as precision instruments. At the same time the practical application of mathematics as a tool in measurement will be emphasized. Four hours credit.
- \*175. DIFFERENTIAL CALCULUS. Prerequisites, Math. 75a, b, 76, 77b-177b, or equivalent. Presents the fundamental concept of differentiation and its importance in the solution of problems in mathematics and related fields. Four hours credit.
- \*176. INTEGRAL CALCULUS. Prerequisite, Math. 175. Introduces the student to the field of integration; relates integration to differentiation; emphasizes the importance of the evaluation of the definite integral as an important process in solving the problems of science and engineering. Four hours credit.
- \*177-277. THEORY OF EQUATIONS. Prerequisites Math. 77-177b, 175. Deals with the study of functions, graphic representation and solution of functions, complex numbers, determinates, and symmetric functions. Four hours credit.

<sup>\*</sup>Given also by Correspondence.

- 177c. ANALYTIC GEOMETRY II. Prerequisite, Math. 77-177b. A continuation of Analytic Geometry I emphasizing such topics as transformation of coordinates, tangents, polar coordinates, parametric equations, Cartesian coordinates in space. Four hours credit.
- \*182-282. PRINCIPLES OF TEACHING SECONDARY MATHE-MATICS. For those who must give thought to the place that mathematics has occupied, does occupy, and should occupy in the secondary school program; the course will deal with instructional problems arising from the subject matter itself and with specific difficulties which students often encounter in their study of mathematics. Four hours credit.
- 183-283. MODERN EUCLIDEAN GEOMETRY. An introduction to the ideas and methods of modern geometry; an extension of Euclidean geometry to theorems not usually included in present high school courses; special attention to methods of proof; emphasis on geometry as a field of human knowledge. Four hours credit.
- \*184-284. HISTORY OF MATHEMATICS. Attempts to show something of the importance of the contributions of mathematics to intellectual life; emphasizes the nature of the science which is commonly labeled "abstract" and "deductive"; attempts to do this in an informal way without having to draw upon a long-forgotten secondary mathematical experience. Four hours credit.
- 188. MATHEMATICS FOR DAILY USE. This course deals with the general needs in mathematics of all adults. It starts with a thorough review of the fundamentals of arithmetic in connection with whole numbers, fractions, decimals, and per cents. Emphasis will be placed on understanding principles and the nature of our number system so that operations to be performed will be meaningful. This will lead into applications of mathematics in budgeting, keeping of personal accounts, installment purchasing, reading and understanding statistical statements in newspapers and magazines, and similar problems met by all adults. Four hours credit.
- 285 a, b. ADVANCED CALCULUS. Prerequisites, Math. 175, 176. A continuation of those topics of differential and integral calculus which are not adequately treated in Math. 175 and Math. 176. The subject matter deals with infinite series, construction of tables, indeterminate expressions, partial differentiation and applications of both differentiation and integration. Four hours credit each course.
- 286. DIFFERENTIAL EQUATIONS. Prerequisites, Math. 176, 175. Introduces the student to the extensive field of differential equations and their application to the solution of problems in mathematics and related fields of science. Four hours credit.
- 287. INTEGRATED MATHEMATICS. The course is intended to give the student a comprehensive and unified view of the whole field of college mathematics. It redevelops the principles of the various courses and shows their real meanings and interrelationships. It emphasizes the contribution mathematics has made and is now making to the development of modern society; it shows the interaction and interrelation among mathematics, sciences in general, and philosophy. Four hours credit.

#### PHYSICS

61. GENERAL PHYSICS. The fundamental principles and generalizations of mechanics and heat are studied with a view to future work in physics. The

<sup>\*</sup>Given also by Correspondence.

application of these principles to everyday situations and their adaptability to teaching. Problems dealing with the mechanics of bodies, their motions and properties are solved. The subject of heat is also approached from the point of view of its practical applications. Three hours lecture, four hours laboratory per week. Four hours credit.

- 62. GENERAL PHYSICS. A continuation of Physics 61. The principles and generalizations of elementary electricity are taught with a view to stressing the theory involved and its application to everyday experiences. The relation of heat to electricity is considered. Electricity is approached through the study of static electricity, magnetism, current electricity and electromagnetism. Emphasis is laid upon the teaching aspects and upon the background material needed for future study in electricity. Three hours lecture, four hours laboratory per week. Four hours credit.
- 63. GENERAL PHYSICS. A continuation of Physics 61 and 62. The principles and generalizations relating to radio, light and radiant energy with a brief review of modern atomic physics. These subjects in addition to those given in Physics 61 and 62 complete one year of elementary, non-technical college physics, furnishing the physics necessary for teaching and for further study. Three hours lecture, four hours laboratory per week. Four hours credit.
- 64a-164a. MECHANICS AND HEAT. Prerequisites, Physics 61, 62, and 63. The first quarter of the second year of college physics deals with the more specialized applications of the principles and generalizations of mechanics and heat. A good knowledge of mathematics is of utmost importance. The specialized principles are approached from the standpoint of problem solving and application. Four hours lecture, and three hours laboratory per week. Four hour credit.
- 64b-164b. GENERAL ELECTRICITY. Prerequisites, Physics 61, 62, and 63. Electricity is one of the important branches of physics which is having an increasing breadth of application. This course is specialized and those principles and generalizations are stressed which will emphasize these. An attempt is made to give the student both theoretical and practical training in static electricity, magnetism, direct current electricity and alternating currents. Four hours lecture, three hours laboratory per week. Four hours credit.
- 64c-164c. SOUND AND LIGHT. Prerequisites, Physics 61, 62 and 63. This course deals with the more technical aspects of sound and acoustics as well as those of light. An attempt is made to teach the most important generalizations and principles of these subjects and their applications. A thorough study of sound enables one to specialize in sound and acoustics or to delve deeply into a study of physical optics. Ample opportunity is afforded the student to do individual work and to become familiar with the experimental technique in these subjects. Four hours lecture and three hours laboratory per week. Four hours credit.
- 65-165. HOUSEHOLD PHYSICS. A course in physics which is designed to teach those principles and generalizations in physics which one will encounter about the home. This course is for those students whose major interest is in home economics. It is as nearly a non-technical course in physics as is possible. Home appliances and their principles of operation are studied as well as the systems about the home which depend upon physical principles for their operation. Four hours lecture, three hours laboratory per week. Four hours credit.
- 66-166. RADIO TRANSMISSION AND RECEPTION. Prerequisites, Physics 61, 62, and 63. The purposes of this course are to teach the fundamental principles of the radio as we know them today and to give the student a practical training in the application of these principles. The use of alternating cur-

- rents and the properties of these circuits is studied and related to the radio. Audio amplification systems, broadcasting principles and practices are taken up in as much detail as is possible. The course closes with study of television and telephoto systems. Four hours lecture, three hours laboratory per week. Four hours credit.
- 67-167. ELEMENTARY PHOTOGRAPHY. No prerequisites. The elementary principles of light, optics and photographic processes are treated in an elementary and easy-to-understand manner. The laboratory consists of taking pictures, developing the film, printing pictures by contact and projection, the making and finishing of portraits as well as copying and lantern slide making. Three hours lecture, four hours laboratory per week. Four hours credit.
- 70-170. PHYSICS OF THE AIRPLANE. The important physical principles upon which this mode of transportation depends are thoroughly discussed and practical application is made to the machine in question. A critical analysis of different machines is made for sturdiness and safety. The airplane is studied from the point of view of aerodynamics. The theory of flight, aircraft types, aircraft structures, motor structures, motor types and the principles of the instruments and their use are included in the latter part of the course. Four hours lecture, two hours laboratory. Four hours credit.
- 71-171. INTERNAL COMBUSTION ENGINES. A study of the principles, construction and operation of heat engines and the use of these engines in every-day living. A study of this type of engine as applied to airplanes and dieselelectric transportation. Three hours lecture, four hours laboratory per week. Four hours credit.
- 72-172. NAVIGATION. Consists of a study of maps, map making and reading. Classification of systems of navigation. Dead reckoning as a means of navigation. Radio navigation and its application to aerial navigation. Navigation instruments. The celestial globe and the principles of celestial navigation. Designed as a basic course in navigation for students who intend to become pilots. Follows the approved C. A. A. outline for such a course. Four hours lecture per week. Four hours credit.
- 267. ADVANCED PHOTOGRAPHY. Prerequisites, Chemistry 41, 42, Physics 63. This course concerns itself with a study of the fundamental principles involved in photography from the standpoint of both physics and chemistry. While an extended knowledge of physics and chemistry is not essential, it will be found very helpful. A study is made of cameras and their optical systems, emulsions, their characteristics and manufacture, color photography, printing and enlarging, copying and lantern slide work. Three hours lecture, four hours laboratory per week. Four hours credit.
- 268. MODERN PHYSICS. Prerequisites, Physics 61, 62 and 63. The newer principles in the whole field of physics are developed. The subject matter is developed in the order in which it has evolved. The theories of light, origin of the spectrum, older atomic models, newer atomic models, relativity, x-rays, spectra and crystal structure and cosmics rays are among the many subjects covered during the course. Four hours lecture. Four hours credit.
- 269. ELECTRO MAGNETIC RADIATIONS. Prerequisites, Physics 61, 62, 63, 64-164c, and Chemistry 41 and 42. This is primarily a graduate course. Students intending to take this course should have a knowledge of calculus and a good background of physics. X-rays are studied with a view to the important principles involved and their relation to the modern use of these rays. The history of cosmic rays from their discovery up to the present. The apparatus used in the detection of cosmic rays, the phenomena associated with them and the pres-

ent theories of their origin are discussed. In the ultra violet region studies are made in the same way as with x-rays. Special emphasis is placed upon the biological effects of ultra violet rays as well as the theories of production and use. Four hours lecture, three hours laboratory per week. Four hours credit.

#### ZOOLOGY

- 11. GENERAL ZOOLOGY. A beginning course in zoology in which the principles of animal biology will be emphasized. The problem method of approach is used. The problems of this course will be formulated from the following topics. The nature and organization of protoplasm; cell division; the production of a complex animal from a single cell; the principles underlying evolution; the origin of adaptations; and the transmission of characteristics from parent to offspring. Discussion, lecture, and laboratory. Four hours credit.
- 12. GENERAL ZOOLOGY. Prerequisite, Science 11. A continuation of Science 11. The emphasis in this course will be placed on the anatomy and physiology of the vertebrate animals from a comparative evolutionary point of view. The systems of organs will furnish the problems for study. In laboratory the students will study the fish, the frog, and the foetal pig. Four hours credit.
- 15-115. ECONOMIC ZOOLOGY. Prerequisites, Science 11 and 12, or equivalent. The purpose of this course is to enable the student to appreciate the value of animals to man's progress in civilization and the need for conservation of wild life. Problems will be formulated from the following topics: The interrelation of plants and animals; how animals live; the relation of animals to crop production; how animals are related to human diseases; the laws, regulations, and organizations for the promotion of conservation. Four hours credit.
- 16-116. FIELD ZOOLOGY. Prerequisites, Science 11 and 12, or equivalent. Planned to acquaint the student with animals in their natural habitat and to enable him to identify them. The student will be encouraged in collecting animals and in the means of identification. Additional problems will be found in the factors that form a suitable habitat and those that limit production. Four hours credit.
- 113. BIRD STUDY. The subject matter will be selected from the structural adaptations that fit birds for their environment and show their relation to other vertebrates; food and feeding habits; habitats; life histories; seasonal distribution; migrational activities; the importance of protection and the economic importance of birds to man. Considerable time will be spent in the field in identifying the more common species. Four hours credit.
- 114. ELEMENTARY ENTOMOLOGY. A study of the more common insects of the community intended to enable the student to understand and appreciate insect life and its economic importance. Methods of collecting, mounting, and preparing insect material for study will be given attention. In this course students will have an opportunity to become familiar with the insect inhabitants of the region and to prepare a reference collection of the more common species. Lecture, laboratory, and field study. Four hours credit.
- 117. HUMAN PHYSIOLOGY. Prerequisites, Science 11 and 12, or equivalent. The purpose of this course is to enable the student to interpret the normal functions of the human body and to be able to understand behavior as a result of physiological function. A study of the functions of the major systems of organs of the human body. As much as is possible the student will be encouraged

to analyze the functions of his own body and to make practical health deductions therefrom. In the laboratory, experiments will be formulated to demonstrate human functions when possible. Four hours credit.

- 118-218. ANIMAL HISTOLOGY AND MICROSCOPIC TECHNIQUE. Prerequisites, Science 11 and 12, or equivalent. This course is planned to give the student a knowledge of how the body of the complex animal is composed and an understanding of the differentiation that has taken place in the cells that compose the tissues. Opportunity will be given to prepare tissues for microscope study and, if the student desires, he may prepare material for use in the teaching of science in the high school. Four hours credit.
- 119-219. VERTEBRATE EMBRYOLOGY. Prerequisites, Science 11 and 12, or equivalent. Designed to give an understanding of the development of the human body from a single cell and an appreciation of the changes attendant to parenthood. The study will begin with the production of germ cells and be followed by the study of maturation, fertilization, cleavage and the formation of the germ layers. In the laboratory the student will study material selected to show the various steps in the process. Four hours credit.
- 220. VERTEBRATE ORGANOGENY. Prerequisites, Science 11, 12, and 120-220, or equivalent. A study of the Vertebrate Embryo with the purpose of enabling the student to understand how the organs of the body develop from the germ layers. In the laboratory the student will be directed to see the origin of the principal organs of the body as they begin their development in the chick and the pig. Four hours credit.
- 211. COMPARATIVE MORPHOLOGY OF THE VERTEBRATES. Prerequisites, Science 11, 12 and eight hours of embryology, or equivalent. Planned to provide a more complete understanding of vertebrate anatomy than can be obtained from elementary courses. The student is encouraged to make a detailed study of the systems of organs of the major groups of the vertebrates from a comparative viewpoint. In the laboratory the student will be supplied with specimens of the dog-fish, shark, necturus and the cat on which careful dissections and comparisons may be made. Four hours credit.

# DIVISION OF THE SOCIAL STUDIES

The Division of the Social Studies includes Economics, Geography, History, Political Science, and Sociology. It provides a program of related courses designed to give all students a conception of the geographical, economic, social, political, and historical worlds in which they live. In addition it offers a detailed series of courses designed to acquaint the student with the more important fields of study in American history, European history, geography, government, sociology, and economics, together with the working skills essential to further progress in these fields.

Students wishing to major in this division in addition to meeting the core requirements on page .... and the standards provided for admission to professional standing may be required to pass a qualifying examination in selected phases of the field. Such examination will not be required of students whose record in college shows seriousness of purpose and evident capacity to do professional work.

A social studies major shall consist of sixty quarter hours. This should include sufficient specific course work to cover twelve quarter hours in each of the social studies usually found in public high schools that carry a full year of

secondary school credit and eight quarter-hours in such studies that usually are offered for half a year in the secondary schools. All such courses should be selected in closely related sequences. The student should plan his program in consultation with some member of the Social Studies Division in order to supplement his previous training and to prepare for what teaching he expects to do. The Social Studies major's program should include:

	Cr.		Cr.
Course	Hrs.	Course	Hrs.
		Geography	8
European History	12	Political Science	8
Economics	8	Sociology	Q

In addition, each student is expected to plan his program to include one teaching minor of twenty-four hours outside the Social Studies Division and a concentration of twelve hours within the Social Studies Division.

A teaching minor in Social Studies shall include a minimum of eight quarter hours in the specific academic subject to be taught (for example, American History). The student should plan his program in consultation with some member of the Social Studies Division in order to supplement his previous training and to prepare for what teaching he plans to do. To qualify to teach the courses most frequently taught in public high schools the student should include in his program:

		Cr.		Cr.
Course		Hrs.	Course	Hrs.
American H		8	Economics	4
European H	listory	8	Political Science	4

# Major in Social Studies

(Without Teaching Certificate)

The Division of Social Studies is prepared to offer to students desiring a Bachelor of Arts degree without a teaching certificate a major in Economics, Geography, or History. A major in one of these fields should consist of at least forty-eight hours taken in the specific field or related fields as outlined by the student in consultation with his major adviser. In addition, the Division will offer a major in Social Studies which should consist of sixty hours of work taken within the Division and should include a minimum of twenty-four hours in at least one of the fields represented in the Division of Social Studies. Course work will be outlined by the student in consultation with his major adviser.

Students majoring in this field shall complete the core requirements in general education listed on page 21. A minor shall be completed outside the major field.

The minor in Social Studies without the teaching certificate should be planned in conference with the student's adviser. It should consist of a minimum of twenty-four hours and should approximate the distribution indicated for the major under this plan.

#### GRADUATE STUDY

Course work will be outlined by the student's major professor.

# Description of Courses

#### GENERAL

- 60a-160a. CONTEMPORARY ECONOMIC PROBLEMS. A survey of present economic conditions and problems including taxation, priorities, rationing, price-fixing, consumer problems, distribution of income, and labor problems. Four hours credit.
- 60c-160c. CONTEMPORARY SOCIAL PROBLEMS. An examination of present day social relationships in the United States. Emphasis is placed on the more normal aspects of American life although some attention is given to current social problems. Four hours credit.
- 69a, b-169a, b. HISTORY OF WESTERN CIVILIZATION. The major achievements in the history of western civilization will be studied in relation to the societies producing them and in relation to the influences of these achievements in the world today. See Literature 60a, b-160a, b. Four hours credit.

Students may elect 60a, c-160a, c, or 69a, b-169a, b in order to fulfill the general requirement in Social Studies.

#### PROFESSIONAL

- 113-213. THE IMPROVEMENT OF INSTRUCTION IN THE SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. The objective of this course is to acquaint the student with the aims, selection, and organization of content, and the practical methods of teaching unified and correlated types of programs. Direct attention is given to the problems of discovering and increasing or creating children's interests in the social studies; of exploring and utilizing their abilities in study; and of providing opportunities for them to use what they learn. Four hours credit.
- 214. CURRENT ATTEMPTS TO IMPROVE THE TEACHING OF THE SOCIAL STUDIES IN ELEMENTARY SCHOOLS (Summer Quarter). An advanced course in the teaching and supervision of the social studies in the elementary school. It will acquaint the student with the most recently developed thought and practices relative to the aims and content of the social studies program in the public schools. Four hours credit.
- 117-217. THE TEACHING OF THE SOCIAL STUDIES IN SECOND-ARY SCHOOLS. This course is designed to introduce students to the problems of the social studies teacher in secondary schools and to develop techniques for use in meeting these problems. The course combines classroom work with observation of students in the secondary school and deals with the relation of social studies objectives to the objectives of education as well as the selection, organization and use of materials. Four hours credit.
- 218. CURRENT ATTEMPTS TO IMPROVE INSTRUCTION IN THE SOCIAL STUDIES IN THE SECONDARY SCHOOL (Summer Quarter). Teachers will be given an opportunity to evaluate recent attempts to improve instruction in the social studies in the public high schools. There will be a consideration of trends in social studies teaching as well as a study of recent developments in various types of schools. Teachers may secure individual help on problems connected with social studies teaching in their own schools. Four hours credit.

- 222. INDIVIDUAL STUDIES. Independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
- 299. THESIS. Each graduate student working for a master's degree under Plan A registers for this thesis course at least three months before the final quarter of course work. Twelve hours credit.

#### ECONOMICS

- \*20a, b-120a, b. PRINCIPLES OF ECONOMICS. A survey of the fundamental economic principles underlying the organization of modern society, with applications to the outstanding economic problems of the present day. The first quarter (a) will deal with such subjects as rent, interest, wages, profits, value, prices, and money and banking. The second quarter (b) will take up such subjects as taxation, public finance, monopoly, foreign trade, labor problems, and proposed changes in the economic system. Four hours credit each quarter.
- 225. ECONOMIC PLANNING. An interpretation of the purposes and probable effectiveness of current planning programs and proposed post war economic planning movements in the United States. Perspective on world and national programs is furnished by an investigation of the measures taken in American and European countries in the decades 1920-1930, 1930-1940, designed to induce recovery, support employment, conserve resources and stabilize trade. Four hours credit.
- 225a. BUSINESS ANALYSIS OF AMERICAN INDUSTRIES. A survey of the structure and characteristics of representative American industries. Each industry is studied to indicate problems imposed by competition, advancing technology, changing markets, governmental control, and financial and cyclical developments. Attention is given to the role assumed by business administrators. Reference is made to contemporary personalities and companies to illustrate types of management influence and business policy. Four hours credit.
- 130ab-230ab. CURRENT ECONOMIC PROBLEMS. An examination of the foremost economic problems of the day. The course deals with such current subjects as governmental income and expenditures, production and price control, interest rates and their effects on insurance and other investments, monopoly, foreign trade, economic problems of the war, and unemployment. Four hours credit each quarter.
- 132-232. LABOR PROBLEMS. A survey of the principal problems of labor and their relationship to our entire economy. The problems resulting from modern industrial activity, such as child labor, industrial accidents, and unemployment, will be studied. Other elements to be considered include wage theories, A. F. of L. and C. I. O. Four hours credit.
- 133-233. MARKETING. An analysis of the functions and problems involved in getting commodities from the producer to the consumer. Among the topics considered are transportation, department stores, mail-order houses, chain stores, super-markets, the marketing of raw materials, storage, market finance, brands, prices, cooperatives, and governmental laws affecting marketing. Four hours credit.

<sup>\*</sup>Given also by Correspondence.

- 134-234. MONEY AND BANKING. An introductory survey of our monetary and banking system. Problems of money, managed currencies, governmental banking, service charges, recent banking legislation, and proposed monetary and banking reforms are among the topics to be discussed. The Federal Reserve System will be studied with particular emphasis upon credit control. Four hours credit.
- 135-235. ECONOMIC HISTORY OF THE UNITED STATES. A history of the industrial and financial development of the United States, including a discussion of the way in which social life as a whole is influenced by economic forces. Among the topics treated are commerce, tariff, agriculture, slavery, finances and banking, labor, and the development of large corporations and monopolies. Four hours credit.
- 136-236. PERSONAL SAVINGS AND INVESTMENTS. A study of the everyday problems and interests of the investor. Home ownership, savings and savings institutions, life insurance, individual credit and its legitimate uses, real estate mortgages, and other financial problems are some of the topics to be considered. Particular emphasis is laid upon investments in stocks and bonds. Four hours credit.
- \*139-239. CONSUMER ECONOMICS. An analysis of the economic problems of the consumer. Such specific consumer problems as the standard of living, the distribution of income, advertising, aggressive salesmanship, agencies offering assistance to consumers, installment buying, the effects of taxes, the costs of borrowing, from the point of view of the consumer. Four hours credit.
- 237. PUBLIC FINANCE. A study of the expenditures, the revenues, and the financial administration of governments. Specific topics discussed include public ownership and control of industry (as the post office, TVA, water supply, and electric light and power industry), fees, licenses, the property tax, the income tax, the sales tax, governmental borrowing and indebtedness, and the budget. Four hours credit.
- 238. HISTORY OF ECONOMIC THOUGHT. A survey of the development of economic ideas. Ancient and medieval economic thought, the Physiocrats, the "Classical School," the "American School," and the early Socialists are some of the topics to be studied. Four hours credit.

#### GEOGRAPHY

- \*40-140. GEOGRAPHIC PATTERNS OF THE WORLD. A study of geographic principles and of their application to an understanding of a broad view of the world as the home of man. This includes a determination of relationships between the physiographic, mineral, climatic, vegetative, and cultural patterns of the world; the division of the world into climatic types; and an analysis of the effects of peoples of different cultures upon each climatic region. Four hours credit.
- 41. WORLD GEOGRAPHY. This course acquaints the student in his first year with many different parts of the world on which the instructor may give him first-hand information. It encourages in the student an interest in traveling and seeing the world first hand. To such students as desire to go abroad or visit our continent the instructor gladly furnishes advice, steamship guides, etc. Four hours credit.
- 42-142. HUMAN GEOGRAPHY. A study of the various primary races of mankind, the sub-races of these primary races, and the mixture of these races.

<sup>\*</sup>Given also by Correspondence.

Problems arising out of race differences and their geographical distribution will be discussed. "Pseudo races" based on language classification and their effect upon international politics will be taken up. Four hours credit.

- 44a-144a. GEOGRAPHY OF CONTEMPORARY LATIN AMERICA. A study of the countries of Latin America and their physical characteristics, including a consideration of climate, soil, plant and animal life, and human distribution. An effort will be made to promote understandings of the relationships between the natural environment and economic life, cultural development, and inter-American relations. Geographic aspects of current national and international issues will receive emphasis. Four hours credit.
- 44b-144b. GEOGRAPHY OF CONTEMPORARY EUROPE. A study of the natural regions of Europe including a consideration of climate, soil, plant and animal life, and human distribution. An effort will be made to promote understandings of the relationships between the natural environment and economic life, cultural development, and political divisions. Geographic aspects of current national and international issues will receive emphasis. Four hours credit.
- 44c-144c. GEOGRAPHY OF CONTEMPORARY ASIA. A course to develop understandings of the countries, natural regions, resources, nationalities, and cultures of Asia as they are related to each other and to the present world. Four hours credit.
- 44d-144d. GEOGRAPHY OF CONTEMPORARY AFRICA. A study of the natural regions resources, industries, trade and cultures of the continent of Africa. Emphasis will be laid upon the relationships between Africa and the remainder of the world. Two hours credit.
- 16-116. MAP CONSTRUCTION AND INTERPRETATION. A course to develop skill and accuracy in the interpretation and construction of maps. It will deal with such topics as scales, projections, symbols, contours, and isopleths; and will develop skills through practice in the reading and transcribing of aerial photographs and special purpose maps such as topographic, climatic, air navigation, physiographic, dynamic, commodity, land use, and land survey maps. Four hours credit.
- \*46-146. GEOGRAPHICAL INFLUENCES IN AMERICAN HISTORY. The topics considered will be: (a) Newfoundland, (b) French Canada, (c) the Atlantic States of Europe four hundred years ago, (d) the position of the rivers in early American exploration, (e) Appalachian Barrier, (f) environment beyond the Appalachians, (g) the geography of the Louisiana Purchase, (h) the Geography of the War of 1812, (i) the Westward spread of population, (j) growth of the United States to a Continental and World Power, Four hours credit.
- 48-148. ECONOMIC GEOGRAPHY OF THE UNITED STATES. For the development of understanding of the major industries of the United States together with the natural resources, trade relationships, transportation facilities, technological developments, shifts in production areas, and trends in consumption affecting industry. Designed primarily for Economics and Business Education majors. Four hours credit.
- 103-203. GEOGRAPHY OF THE TROPICS. Topics considered in this course will be: (a) climate of the tropics, (b) types of vegetation, (c) animal life, (d) people, (e) field crop resources, (f) cultivated trees, (g) health and sanitation, (h) acclimatization, (i) types of government control, (j) source of mechanical power, and (k) trade with the temperate zones. Four hours credit.

<sup>\*</sup>Given also by Correspondence.

- 106-206. CONSERVATION OF NATURAL RESOURCES. For the development of understandings of the problems, techniques, and policies involved in the conservation and intelligent use of our natural resources especially in terms of the general welfare. The resources studied include soil, timber, minerals, water, and scenic features. Reading materials, field trips, pictures, and maps provide data for reasoning and discussion. Four hours credit.
- 107-207. SOCIAL GEOGRAPHY OF THE SOUTH. Climate, geology, and resultant economic resources as well as economic limitations of the South. On these is built the economic and social patterns that have evolved. The negro problem will be discussed. The evolution of the South and southern life through new crops and through the introduction of manufacturing based on the power resources of the region will be taken up in detail. Two hours credit.
- 108-208. GEOGRAPHY OF THE BRITISH ISLES. Climate, physiography, geologic development, plant and animal life; racial geography; industries past and present; and historical and military results of England's island situation. The effect of the Industrial Revolution upon the people of the British Isles will be stressed. The economic results of England's location in the center of the land hemisphere of the globe will be considered. Four hours credit.
- 109-209. GEOGRAPHY OF CANADA. A survey of the plant, and animal geography, physiographic and geologic backgrounds of Canada. The peoples of Canada—Indians, French Canadians, American loyalists, Scotch, German, Orientals, and the East European elements are discussed. The agricultural, mining, and other industries will be considered in detail. Four hours credit.
- 110-210. GEOGRAPHY OF THE AMERICAN INDIAN. The various Indian groupings from an environmental standpoint are considered in both North and South America: (a) the totem pole Indians; (b) birch bark culture; (c) Mound Builders; (d) broad leaf forest culture; (e) Cliff Dweller—Pueblo culture and the other cultures that reflect the effect of his immediate environment upon the past culture of the Indian are treated in some considerable detail. Four hours credit.
- 111-211. THE GEOGRAPHY OF AUSTRALIA AND NEW ZEALAND. The oceanic position and climatic zones of both of these islands are treated at the beginning of the course. On this background is built the plant and animal life and the life of the aboriginal inhabitants. The social and economic reaction of the European settlers to their new surroundings will be stressed. Two hours credit.
- 112-212. GEOGRAPHY OF THE WESTERN PACIFIC. A study of the area of the Western Pacific including Australia, the East Indies, Malaya, Thailand, Indo-China, China, and Japan. Four hours credit.
- 115-215. GEOGRAPHY FOR THE ELEMENTARY AND JUNIOR HIGH SCHOOLS (Summer Quarter only). This course will include the selection, organization, adaptation, and techniques of presenting geography materials in the grades where the subject is most frequently taught. The work will be highly practical and will be based upon experience under good public school conditions. Teachers will be given an opportunity to study material that they can use directly in their own work. Four hours credit.
- 141-241. GEOGRAPHY OF THE SOCIAL CUSTOMS OF THE WORLD. An advanced study of the social customs of the world as they are related to their geographic backgrounds. Not open to students who have taken Geography 41. Four hours credit.

- 262. COLONIAL EMPIRES OF THE TWENTIETH CENTURY. This course will present the story of the rise of the great colonial empires of our day. Particular attention will be given to the problems of imperial administration, to race equality, and to the aspirations of non-colonial powers. Lectures, discussions, and extensive readings in source materials. Four hours credit.
- 263. THE AMERICAN REVOLUTION. An intensive study of the relationship—governmental, social, economic, and political—between the American colonies and the British government, development of self-government, judicial procedure and control of colonial legislation, commercial legislation affecting the colonies, the issue of representation and taxation, repressive measures, organization of colonial opposition, outbreak of hostilities, loyalists and their treatment, and independence. Library readings, lectures, discussions, extensive use of notes. Four hours credit.
- 264. SLAVERY, SECESSION, CIVIL WAR, AND RECONSTRUCTION. An intensive library course covering the period from 1850-1870 with major emphasis on the period before 1861. Much practice will be given in the detailed use of source materials. Techniques of good graduate study will be inculcated. Four hours credit.
- 265. HISTORY OF THE INDUSTRIAL REVOLUTION. The historic beginnings of machine-industry and the factory are studied in the light of the great changes that were taking place in the eighteenth century in agriculture, commerce, and transportation. Special attention is given to the immediate political and social consequences of these changes. Four hours credit.
- 166a-266a. SOCIAL AND CULTURAL HISTORY OF THE UNITED STATES. A survey of the cultural and intellectual history of the American people and of the economic and social forces which conditioned its development. Extensive use will be made of reading materials; lectures, discussion, and term paper. Four hours credit.
- 267. LATIN-AMERICAN HISTORY. A course designed to furnish a background for understanding the political, social, economic, and to some extent the cultural life of the republics to the south of the United States. Attention will be given to the Monroe Doctrine, Pan-Americanism, and Hispanism. Four hours credit.
- 268. HISTORY OF THE FAR EAST. A survey of the history of the Far East. The economic, social, educational, and political reforms in China and Japan will be emphasized, special attention being given to how these changes have affected other nations. Extensive use will be made of library materials, lectures, discussions, reports, and term papers. Four hours credit.
- 266. THE LITERATURE OF AMERICAN HISTORY. A survey of the materials available for the study of American history; the chief collections of source materials; the more important general accounts; biography; bibliographical aids; special local histories; textbooks and their authors; and the selection of a good working library. Designed to give students an extensive working knowledge of the available literature of the field. Two hours credit.

#### POLITICAL SCIENCE

\*70-170. GOVERNMENT OF THE UNITED STATES. A course to give students a working knowledge of our national government. The emphasis will be upon how the national government operates, the political machinery

<sup>\*</sup>Given also by Correspondence.

- by which it is controlled, and the way the average citizen may participate most effectively in his government. Attention will be given to materials and techniques of study. Textbook, library readings, reports, discussions, current politics. Four hours credit.
- \*71-171. STATE GOVERNMENT. A continuation of 70-170. It will include problems of state and local financing, taxation, budgets, and how laws are enforced. Particular study will be made of the forces that direct state and local policy. An effort will be made to develop a permanent interest in state government, how it operates, and how the citizen can contribute to its efficiency. Textbook, lectures, library readings, study of current reports, current politics. Four hours credit.
- 72-172. MUNICIPAL GOVERNMENT. A continuation of 71-171. Includes the factors affecting the growth of urban areas, the nature of municipal government, and a detailed study of some of the most effective and successful city governments. Emphasis will be placed on what the average citizen should know about his local government, how he can get such information, and how he can participate in local government most effectively. Textbook, lectures, library readings, visits to municipal plants, direct contact with city officers, reports, and discussions. Four hours credit.
- \*173-273. HISTORY OF THE FOREIGN POLICY OF THE UNITED STATES. An examination of the development of our foreign policies and the conditions out of which they have arisen. Some of the chief topics: Origin of foreign policies; development of the Monroe Doctrine; leadership in the practice of peaceful settlement of international questions; diplomatic problems of the Caribbean and the Pacific. Text, lectures, library readings, discussions, and written reports. Four hours credit.
- 173a-273a. PROBLEMS OF THE UNITED STATES AT WAR (Summer Quarter 1942 only). Four hours credit,
- 174-274. INTERNATIONAL RELATIONS. An examination of the principles, practices, ethics, and consequences of international relations. Topics to be discussed include international law, modern attempts to establish cooperation among nations, common public opinion, and formal machinery for handling common international problems. Text, extensive library readings, lectures, discussions, and reports. Four hours credit.
- 276. CONTEMPORARY WORLD GOVERNMENTS. A study of the new governments of Europe-Russia, Germany, and Italy. Attention also will be given to the governments of England, France, Japan, and the Scandinavian countries. The object will be to describe how they work, the changes that have been introduced, and their efforts to deal with social, economic and international problems. Four hours credit.
- 277. THE CONSTITUTION AND ITS INTERPRETATION. A study of the constitution and its development, the machinery for interpretation, the relation of the courts to the process, sections of the constitution that have been most widely interpreted, periodic controversies over various powers of government, the recent controversies and how they were solved. The scope of this course will include an understanding of acute constitutional problems current in American politics. Four hours credit.
- 275. POLITICAL SCIENCE THEORY. An analysis of the various types of government as they have evolved and the underlying theories of the various

<sup>\*</sup>Given also by Correspondence.

## GENERAL INFORMATION

# History

Colorado State College of Education is a state-supported institution. The law creating it was signed on April 1, 1889, and the cornerstone of the first building was laid on June 13, 1890. With continued growth, a constantly widening field of activity, and increased authority in the granting of advanced degrees, the name was changed three times, from the State Normal School of Colorado, to Colorado State Teachers College, to Colorado State College of Education.

# The Campus

The campus comprises eighty-six acres and is located on a hill to the south and overlooking the city of Greeley. It is regarded by many as one of the most attractive college campuses to be found anywhere.

Greeley is located midway between Denver and Cheyenne—52 miles each way. While located on the Union Pacific Railway, Greeley is a common railroad point, and can be reached easily on tickets issued by all trunk lines. It is also located on main national and state through highways, both east and west, and north and south. It is at the crossroads of the Rocky Mountain region. The elevation of Greeley is 4,648 feet.

There are twenty-two buildings on the campus, all of them with the exception of the boys' residence halls being located on the main campus and within easy access of one another. The boys' residence halls are located two blocks from the main campus and adjoining Jackson Field.

All of the buildings are modern, and adequately equipped for the purposes for which they are intended. The past few years has seen many additions and improvements in the building program.

# Government

The college is under the management of a Board of Trustees of seven members, six of whom are appointed by the governor of the state. The state superintendent of public instruction serves ex-officio. The maintenance of the college comes from a state mill tax and from special appropriations made by the legislature.

The control of student affairs in the larger phases of student policy is in the hands of the Associated Students, an organization of the entire student body. Every regularly enrolled student at the time of registration is required to become a member of the association and pay a quarterly fee. This fee entitles the student to admission to all Student Association activities, conference athletic contests, a copy of the student weekly paper, a copy of the student annual, and health service, which provides for medical attention and hospital care.

### Educational Standards

Colorado State College of Education is accredited by the Association of American Universities, The American Association of Teachers Colleges, and The North Central Association of Colleges and Secondary Schools.

The Board of Trustees and the administration of the college deem it a solemn duty to maintain a high standard of scholarship and professional development, hence those who are graduated must consequently be thoroughly prepared and worthy of all for which their diplomas stand. It is the policy of the college to make all graduates "worthy of their hire." In so doing they help protect those who employ them as well as the children they will teach.

# Scholarships

Exclusive of scholarships that may be awarded to individual students by various private and public philanthropic agencies, Colorado State College of Education is able to award a limited number of scholarships to eligible students both at the beginning of their college work as freshmen and at the beginning of their junior year.

#### Freshman-Sophomore Scholarships

Two classes of awards are available for students entering college for the first time. Joint honor scholarships are given to high school graduates each year by the six Colorado state institutions of higher learn ing. These awards are usually presented by the high school authorities at the time of graduation, and they are honored under the conditions stated on the certificate of scholarship.

Colorado State College of Education will also remit tuition for a limited number of students who might not qualify under the joint honor

scholarship plan. Graduates of out-of-state high schools and of non-accredited high schools are eligible for this award. In each case candidates must be formally recommended by a committee of the high school faculty and passed upon by the Scholarship Committee of the college.

The above awards are not negotiable. They are valid during any college quarter. While these awards cover the basic cost of tuition, they do not include the college fees.

To keep the scholarship in force during the freshman year the student must maintain at least the average grade of his class. He must be in the upper twenty-five per cent of the freshman class to be awarded the scholarship for the sophomore year, and must rank in the upper twenty-five per cent of his class during each term of his sophomore year to retain the scholarship for that year.

### JUNIOR-SENIOR SCHOLARSHIPS

Thirty scholarships are established for use during the junior and senior years. These scholarships are awarded on the basis of behavior description, grade average, scores made on entrance tests, tests for vocational interests, and other evaluations that may be available and deemed advisable by the Scholarship Committee. The scholarships are valid for two years but may be revoked if the student fails to maintain an average of 3.75 or upon recommendation to the committee by the chairman of the student's major division for professional attitude and conduct of an unsatisfactory nature.

Approximately three-fourths of these scholarships are awarded at the conclusion of each spring quarter and are thus available for use during the following fall quarter. The remainder of these awards are distributed during the fall quarter in order to permit students transferring from other colleges to demonstrate their eligibility throughout one quarter's residency.

Two scholarships are awarded to the man and woman in the senior class having the highest scholastic standing. These scholarships are known as the State Superintendent of Public Instruction scholarships and cover the tuition for one year of graduate work.

# **Finances**

It is strongly advised that students recognize the economic responsibility associated with a college education. The student should budget his finances. Living accommodations vary, but Residence Halls

rates assure a student clean and healthful room and board. Haphazard and unplanned meals may permit an immediate economy which in the long run exacts a heavy expenditure in terms of health. The student will be furnished on request with an approved list of private homes and eating establishments, as well as complete information pertaining to Residence Halls accommodations. Help will also be given to those students who wish advice on budgeting their expenses.

Numerous loan funds aggregating more than \$30,000 are used to help worthy students. Applications for loans may be made to the Scholarships and Loans Committee.

### Student Personnel

All activities and services for resident students are cleared through the Department of Student Personnel. Applications for admission, matriculation and guidance examinations, registration in courses, student health examinations, counseling of a personal nature as well as academic guidance, housing accommodations, recreational events, student employment, and student loans and scholarships are part of the many functions handled.

# Health Services

A complete health service is offered students of Colorado State College of Education. The Associated Student activity fee, paid each quarter, assures not only attendance at the many college activities assured, but costs of many services of an intrinsic value far beyond the initial outlay are cared for.

Complete physical examinations are given to both men and women on admission to the college, and periodically thereafter. Furthermore, care and attention to temporary illnesses are included. A dispensary, with a graduate nurse in attendance at all times during the college day, is maintained for the benefit of the students. Practicing physicians are also available at specified hours of the day. Annual contracts are made by the Associated Students with the Weld County Medical Society so that the professional services of Greeley's physicians and surgeons are available to students. Each student is entitled to free hospitalization three days each quarter during the school year. Beyond the three-day limit a low flat rate will be charged. Such hospital services are available if the attending physician recommends that such be necessary for the student's good health.

# Living Accommodations and Regulations

The college feels that its responsibility does not end when the student leaves the classroom but should extend over to his place of residence during the student's stay on the campus. If a student is to develop into a good teacher and citizen in his community, he must live in wholesome and attractive surroundings. In accordance with this premise, the college has provided Residence Halls and approved houses in which all students are required to live. Any exceptions must be cleared with the Housing Office.

Parents and students should visit the Housing Office in Cranford Hall before obtaining residence for the school year. This is desirable in order that students may be protected from unreasonable rates, poor living conditions, and misinformation about living regulations.

### Residence Halls

Colorado State College of Education provides eight beautiful Residence Halls for its men and women students. They are more than halls, more than living places. They are the proper setting in which college young people may enjoy comfortable living and an opportunity for study and relaxation under ideal conditions. Here students may gain the maximum of social, educational, and cultural advantages. All buildings are fire-proof structures of stone and stucco, architecturally beautiful and furnished with all the comforts one could wish.

In order that an atmosphere of real home life may be maintained, a married member of the faculty and his wife reside in each of the eight halls. The couples act as social directors. Junior and senior students act as assistants in each hall.

Because of the fact that the accommodations are in great demand, application for residence should be made in advance, to the Housing Office, Department of Student Personnel. Each application should be accompanied by a \$10.00 deposit, which will apply on the room rent.

Students furnish their own bedding and towels. The college, however, will furnish bedding (but not towels), including laundry service, for \$4.00 extra each quarter (exclusive of summer). A charge of \$1.00 is made for linen laundering.

Rates for room and board usually vary directly with the cost of living indices and are subject to change before any quarter on thirty days' advance notice by the Board of Trustees.

A Residence Halls Bulletin, giving more specific information, will be sent upon request.

The Residence Halls will be open for occupancy on Sunday, September 27. The first meal will be served in the dining rooms on Monday morning, September 28.

### RESIDENCE HALLS FOR WOMEN

There are six residence halls for women. One of them, Tobey-Kendel, contains two well-equipped dining rooms accommodating all of the residents of the women's halls. An infirmary, with a registered nurse in charge, is located in Margaret Snyder Hall.

Through participation in the activities of the residence halls it is possible to make a fine adjustment to college life. For this reason all freshman girls are required to live in one of the six halls.

The price of room and board ranges from \$85.00 to \$98.00 a quarter during the fall, winter, and spring quarters. Differences in price depend upon the location and size of the room.

### RESIDENCE HALLS FOR MEN

Two residence halls for men, Hays and Hadden, provide accommodations for sixty-nine. There is a dining room in Hays Hall where the occupants of both halls are served well balanced meals. The price for room and board is \$87.50 per quarter.

### Off-Campus Housing

The proper housing of students has been the increasing concern of the college year by year, but now it can offer to students homes where their physical, social, and educational welfare are the hourly concern of intelligent, responsible homemakers. These householders cooperate with the college in every way in seeing that the ideals, standards, and regulations of the college are observed. In general, the price of rooms in off-campus houses corresponds to those in the dormitories.

There are a number of eating places easily accessible to the approved rooming houses.

# Student Social Standards

It is not in keeping with the philosophy of a modern college to enumerate rules with corresponding penalties. Well-bred, educated people recognize and accept certain limits to propriety and standards of what is right and proper. When any student demonstrates that he lacks the essential qualities of scholarship, health, and character set forth as entrance requirements, his relationship with the college automatically ceases.

A Colorado State College of Education student is a good citizen of his college community, of the city of Greeley, and of the state of Colorado. A good citizen is ever alert to the needs and rights of others. Courtesy and thoughtfulness toward all members of the college community are a part of good citizenship.

The following regulations governing Social Standards have been drafted by a committee, comprised of both students and faculty representatives:

All organizations on the campus must apply each year for charter approval by the Student Council of the Associated Students of Colorado State College of Education. Meetings of all such groups may utilize those facilities of the campus set aside for such purposes at any time, with the exception of Tuesday and Thursday evenings, which have been designated as nights closed to social group activities.

Quiet hours are to be observed in the houses from 8:00 A.M. to 11:00 A.M.; from 1:00 to 4:00 P.M., and after 8:00 o'clock in the evening on school days. Houses should observe this regulation on weekend nights by 11:30.

Freshmen girls are to be in their place of residence on Monday, Tuesday, Wednesday, and Thursday evenings by 10:00 o'clock; Sunday by 10:30.

All women students are to be at home by 1:00 on Friday and Saturday nights and on nights preceding a vacation; all upperclass women are to be in by 10:30 on all nights preceding a school day.

# Student Organizations

Student participation both in government and in extra-curricular activities is encouraged through a number of organizations.

The Associated Students is the student governing body. Membership is compulsory for all students, and a membership fee is collected as a part of the registration fees. It conducts a representative form of government, representatives to an executive body known as the Student Council being elected by the student membership.

Other active clubs of a general character are the "C" Club, Blue Key, Phi Epsilon Phi, (for men only), Tharsay (for women only), Dramatic, A. W. S., W. A. A., Graduate, and a number of divisional clubs devoted to the particular educational interests of the individuals.

### **Athletics**

The athletic activities of the college are governed by a Board of Athletic Control on which both students and faculty are represented. Intercollegiate conference, intramural, and interfraternity contests are systematically carried on in football, basketball, baseball, field and track, wrestling, swimming, gymnastics and tennis. Gunter Hall of Health, the large modern and thoroughly equipped gymnasium, and Jackson Field afford ample facilities for the major outdoor and indoor sports.

Colorado State College of Education is a member of the Rocky Mountain Faculty Athletic Conference, and is bound by the rules of that body in governing eligibility of athletes.

The Women's Athletic Association has charge of and encourages intramural participation in athletic sports suitable for women, including swimming, basketball, softball, volleyball, tennis, track and field, archery, and fencing.

### **Dramatics**

The Dramatics Club presents an excellent opportunity for students with a talent for dramatics. New members are admitted to the club each quarter on merit, determined by try-outs. An outstanding play is presented each quarter.

# **Forensics**

Debating plays an important part in the general program of the Division of Literature and Languages and additional interest is added through Pi Kappa Delta, national honorary debating fraternity, which is represented on the campus by a vigorously active chapter. Intercollegiate debates are held with the leading universities and colleges in the Rocky Mountain region.

# **Publications**

Students with an interest in journalism will find opportunity for an expression in two campus publications owned and published exclusively by students, "The Mirror," a weekly newspaper, and the "Cache la Poudre." the student annual.

# Religious Activities

While it does not hold any regular religious services, the college seeks to emphasize the value of a religious life and encourages its students to attend the churches of their choice. Members of the administration and the faculty are actively associated with churches in the community and welcome students to their religious, discussional, and social gatherings.

The city of Greeley is noted as a city of churches. Practically every denomination is represented by an active church and organization.

# Musical Organizations

Music plays an important part in the college life. Leaders in this phase of the cultural development of the students are the a cappella choir, the college band, the orchestra, and the philharmonic. Each year the music division presents some opera, and at Easter and Christmas special appropriate music festivities are presented.

# Extension Classes

Every effort is made to organize classes in those communities where a group of people wish to study the same course. In addition to the off-campus classes the extension service of the Department of Public Relations will upon demand of fifteen or more students organize classes to meet on the campus during late afternoons, evenings, or Saturdays. All classes taught on the campus carry residence credit.

# Correspondence Study

For the convenience of those who cannot meet in extension classes the college provides individual correspondence courses. Each course consists of a set of study units, which are worked through by the student. The student's responses are made in writing to the instructor who reads and grades the papers. In all cases the instructors grading the correspondence papers are regular faculty members.

### Limitations of Extension Credit

Forty-eight quarter hours is the total of extension credit which may be applied toward meeting the requirements for the completion of the Bachelor of Arts degree.

Students not on the campus who expect to graduate must communicate with the registrar before the opening of the quarter in order that proper arrangements may be made. In such cases, the last extension course, if in progress, must be completed and graded ten days before the end of the quarter in which the student expects to graduate.

Students in residence are not permitted to take work by correspond-This regulation shall not be interpreted as prohibiting students from completing four quarter hours in correspondence between the end of the summer quarter and the beginning of the fall quarter.

Correspondence students when enrolling in residence should apply to the extension service of the Department of Public Relations for an extension of time which will permit the completion of correspondence courses at a time when the student is not enrolled in residence courses. Students in residence are not permitted to enroll in correspondence courses during vacation periods except during the vacation between the end of the summer quarter and beginning of the fall quarter.

### Placement Bureau

The college maintains a bureau as a part of the Department of Public Relations to serve graduates seeking positions and school boards and superintendents seeking teachers. The only charge for this service is a small one to cover in part the cost of assembling data concerning nominees and is paid by the applicant. Superintendents and school boards are invited to visit the college, to make use of the placement bureau in looking for teachers, and to meet applicants in whom they are interested.

Honorary Fraternities and Sororities

Phi Delta Kappa, professional fraternity in education open to men of junior, senior, and graduate rank.

KAPPA DELTA PI, national honor society in education open to both men and women students of upper class rank.

PI LAMBDA THETA, honorary educational fraternity for women of senior college and graduate rank.

PI KAPPA DELTA, national honorary debating fraternity.

ALPHA PSI OMEGA, national honorary dramatic fraternity.

PHI ALPHA THETA, national honorary historical fraternity.

PHI SIGMA IOTA, national honorary romance language fraternity.

ALPHA GAMMA PHI, national honorary fraternity in art open to students above freshman rank.

PI OMEGA PI, national honorary fraternity in business education.

LAMBDA SIGMA TAU, honorary science fraternity.

PHI MU ALPHA, Sinfonia, national honorary music fraternity.

Delta Omicron, national honorary music sorority for women above freshman rank.

ALPHA DELTA, national journalistic fraternity.

DELTA PHI DELTA, national creative arts fraternity.

Most of the social fraternities and sororities are represented by local chapters.

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