# COLORADO STATE COLLEGE OF EDUCATION 

. GREELEY .


Bulletin yearbook 1945-1947

# COLORADO <br> STATE COLLEGE OF EDUCATION 

. GREELEY.



## Bulletin

 YEARBOOK 1945-1947
## Calendar

| JUNE-1945 |  |  |  |  |  |  | FEBRUARY-1946 |  |  |  |  |  |  | OCTOBER-1946 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| S | M | Tu | W | Th | F | S | S | M | Tu | W | Th | F | S | S | M | Tu | W | Th |  | S |
|  |  |  |  |  | 1 | 2 |  |  |  |  |  | 1 | 2 |  |  | 1 |  |  | 4 | 5 |
|  | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 2 | 25 | 26 | 27 | 28 | 29 | 30 | 24 | 25 | 26 | 27 |  |  |  | 27 | 28 | 29 | 30 | 31 |  |  |
| JULY |  |  |  |  |  |  | MARCH |  |  |  |  |  |  | NOVEMBER |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |  |  | 1 | 2 |  |  |  |  |  | 1 | 2 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 29 | 30 | 51 |  |  |  |  | $\left[\begin{array}{l} 24 \\ 31 \end{array}\right.$ | 25 | 26 | 27 | 28 | 29 | 30 | 24 | 25 | 26 | 27 | 28 |  |  |
| AUGUST |  |  |  |  |  |  | APRIL |  |  |  |  |  |  | DECEMBER |  |  |  |  |  |  |
|  |  |  | 1 | 2 | 3 | 4 |  | 1 | 2 | 3 | 4 | 5 | 6 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |
|  | 27 | 28 | 29 | 30 | 31 |  | 28 | 29 | 30 |  |  |  |  | 29 |  | 31 |  |  |  |  |
| SEPTEMBER |  |  |  |  |  |  | MAY |  |  |  |  |  |  | JANUARY-1947 |  |  |  |  |  |  |
|  |  |  |  |  |  | 1 |  |  |  | 1 | 2 | 3 | 4 |  |  |  | 1 | 2 | 3 | 4 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 | 26 | 27 | 28 | 29 | 30 | 31 |  | 26 | 27 | 28 | 29 | 30 | 31 |  |
| OCTOBER |  |  |  |  |  |  | JUNE |  |  |  |  |  |  | FEBRUARY |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 |  |  |  |  |  |  | 1 |  |  |  |  |  |  | 1 |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 2 | 3 | 1 | 5 |  | 7 | 8 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 9 | 10 | 1 | 12 | 13 | 14 | 15 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 16 | 17 | 18 |  |  | 28 | 22 |
| 28 | 29 | 30 | 31 |  |  |  | $\left\lvert\, \begin{aligned} & 23 \\ & 30 \end{aligned}\right.$ | 24 | 25 | 26 |  |  | 29 | 23 |  |  |  |  |  |  |
| NOVEMBER |  |  |  |  |  |  | JULY |  |  |  |  |  |  | MARCH |  |  |  |  |  |  |
|  |  |  |  | 1 | 2 | 3 |  | 1 | 2 | 3 | 4 | 5 | 6 |  |  |  |  |  |  | 1 |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 25 | 26 | 27 | 28 | 29 | 30 |  | 28 | 29 | 30 | 31 |  |  |  | 23 | 24 | 25 | 26 | 27 | 28 | 29 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | 30 | 31 |  |  | - |  |  |
| DECEMBER |  |  |  |  |  |  | AUGUST |  |  |  |  |  |  | APRIL |  |  |  |  |  |  |
|  |  |  |  |  |  | 1 |  |  |  |  | 1 | 2 | 3 |  |  | 1 | 2 | 3 | 4 | 5 |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 27 | 28 | 29 | 30 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| JANUARY-1946 |  |  |  |  |  |  | SEPTEMBER |  |  |  |  |  |  | MAY |  |  |  |  |  |  |
|  |  | 1 | 2 | 3 | 4 | 5 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |  |  |  | 1 | 2 | 3 |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26. | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 27 | 28 | 29 | 30 | 31 |  |  | 29 | 30 |  |  |  |  |  | 25 | 26 | 27 | 28 | 29 | 30 | 31 |

## Education of War Service Personnel

The Federal Government, in the law commonly called "The G. I. Bill of Rights," has provided for the continued education of men and women returning to civilian life from the armed forces. The college has made its plans to take care of all these who choose to enroll here.

For such discharged personnel the law permits each one to choose the college he prefers. The Government will pay the cost of tuition, books, supplies and equipment. In addition, the student has an allowance of fifty dollars a month for subsistence if he has no dependents, or seventy-five dollars a month if he or she has one or more dependents. Application for this educational allowance may not be made until the man or woman is discharged from the armed service.

An application Form 1950 will be supplied upon request by the Department of Student Personnel of the college, or by the U. S. Veterans Administration. With the form will be sent the details and interpretations of the provisions. Students who have earned credits in schools conducted by the armed services or through extension courses may have these evaluated at any time by a veterans committee of this college. Students may enroll at any time after leaving the armed services, but most advantageously at the beginning of a quarter.

Men and women not high school graduates who do not wish to return to high school may enroll in the college and take advantage of a plan to complete the secondary school course in the briefest possible time on the college campus in classes of adults.

The college is in continuous session through the four quarters of the year. A student may, under this plan, complete a four-year course in three years, a two-year course in six quarters, etc.

For complete information about requirements, courses, living accommodations, student activities, degrees, loan funds, employment, etc., see the appropriate sections of this catalog. Any additional information will be supplied upon request.

# The College Calendar 

## SUMMER QUARTER

1945

| June | 4 | Monday |
| :--- | ---: | :--- |
| June | 15 | Friday |
| June | 16 | Saturday |
| June | 18 | Monday |
| June | 30 | Saturday |
|  |  |  |
| July | 2 | Monday |
| July | 4 | Wednesday |
| August | 9 | Thursday |
| August | 10 | Friday |
| August | 13 | Monday |
| August | 24 | Friday |

Pre-Session Begins
Pre-Session Ends
Registration (8 a.m. to 4 p.m.)
Classes Begin
Registration for Short Session ( 8 a.m. to Noon)
Short Session Classes Begin
Holiday
Summer School Convocation
Summer Sessions End
Post-Session Begins
Post-Session Ends

## FALL QUARTER <br> 1945

| September <br> September | 24-25 |
| :--- | :--- | :--- | :--- |$\quad$| Sunday |
| :--- |
| Monday \& Tuesday |$\quad$| Residence Halls Open to Students |
| :--- |
| Marticulation Tests and Interviews |
| with Advisers |

WINTER QUARTER
1946

| December | 31 | Monday | Registration |
| :--- | ---: | :--- | :--- |
| January | 2 | Wednesday | Classes Begin |
| March | $14-15$ | Thursday \& Friday | Final Examinations |
| March | 16 | Saturday | Spring Vacation Begins |

## SPRING QUARTER <br> 1946

| March | 25 | Monday | Registration |
| :--- | ---: | :--- | :--- |
| March | 26 | Tuesday | Classes Begin |
| May | 30 | Thursday | Insignia Day |
| June | 2 | Sunday | Baccalaureate |
| June | 4 | Tuesday | Senior Ceremonial |
| June | 5 | Wednesday | Commencement |
| June | $6-7$ | Thursday \& Friday | Final Examinations |


|  | SUMMER QUARTER |  |  |
| :---: | :---: | :---: | :---: |
|  | 1946 |  |  |
| June | 10 | Monday | Pre-Session Begins |
| June | 21 | Friday | Pre-Session Ends |
| June | 22 | Saturday | Registration (8 a.m. to 4 p.m.) |
| June | 24 | Monday | Classes Begin |
| July | 4 | Thursday | Holiday |
| July | 6 | Saturday | Registration for Short Session ( 8 a.m. to Noon) |
| July | 8 | Monday | Short Session Classes Begin |
| August | 15 | Thursday | Summer School Convocation |
| August | 16 | Friday | Summer Sessions End |
| August | 19 | Monday | Post-Session Begins |
| August | 30 | Friday | Post-Session Ends |

## FALL QUARTER

1946

| September 22 | Sunday | Residence Halls Open to Students <br> September 23-24 | Monday \& Tuesday |
| :--- | :--- | :--- | :--- |
| Marticulation Tests and Interviews |  |  |  |
| with Advisers |  |  |  |

## WINTER QUARTER <br> 1947

| December | 30 | Monday | Registration |
| :--- | :--- | :--- | :--- |
| December | 31 | Tuesday | Classes Begin |
| March | $13-14$ | Thursday \& Friday | Final Examinations |
| March | 15 | Saturday | Spring Vacation Begins |

## SPRING QUARTER

1947

| March | 24 | Monday | Registration |
| :--- | :---: | :--- | :--- |
| March | 25 | Tuesday | Classes Begin |
| May | 28 | Wednesday | Insignia Day |
| June | 1 | Sunday | Baccalaureate |
| June | 3 | Tuesday | Senior Ceremonial |
| June | 4 | Wednesday | Commencement |
| June | $5-6$ | Thursday \& Friday | Final Examinations |

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## FUNCTIONS OF THE COLLEGE

Colorado State College of Education was established by an act of the Legislature in the year of 1889 and opened to receive students in the fall of 1890. The college 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 administration and the faculty of the college expect each student to maintain a high standard of scholarship and professional development and to be thoroughly prepared and worthy of continuation in the college and of his diploma at the time of graduation.

The Undergraduate Programs. There are five distinct undergraduate programs. These are:

1. A complete program of education for the preparation of teachers and administrators for all kinds of educational positions. This has been maintained at a high level by the college since its beginning. The degree of Bachelor of Arts (A.B.) is granted upon the completion of the fouryear program, and a life certificate to teach in Colorado (accepted in most other states) accompanies the degree and diploma.
2. A complete liberal arts program leading to the degree of Bachelor of Arts (A.B.) in all the usual academic fields.
3. A specialized program leading to the degree of Bachelor of Music (B.M.) in the Division of Music.
4. A program providing two-year courses, some of them leading to the degree of Associate in Arts (A.A.).
5. A number of pre-professional courses, each two years in length, leading to continued advanced studies in other colleges or universities.
The Graduate Program. The Graduate School offers an advanced program in each of the seven divisions of the college, leading to the degree of Master of Arts (A.M.) with a life certificate to teach in the schools of Colorado (accepted in most other states).

The degree of Doctor of Education (Ed.D.) is offered in the Division of Education. It is based upon advanced study, successful experience, and research.

The Graduate School also grants the Advanced Graduate Diploma of Specialization to those who complete studies covering one year of special work beyond that required for the master's degree.

Extension and Correspondence Study. 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.

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 instructors grading the correspondence papers are regular faculty members.

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.

## THE UNDERGRADUATE PROGRAM

The student body and faculty of the college welcome all new students into immediate active membership. The residence halls are open for occupancy the week-end before the beginning of each school quarter.

An Orientation Week of important activities and services essential for the introduction of new students to the campus is scheduled at the beginning of the fall quarter. New students meet with their counselors to arrange programs of classes. Matriculation tests are given during this week, and their results are used thereafter in the college guidance program. Class meetings and other social affairs are under the auspices of the Associated Students. Orientation Week is concluded with an all-college assembly and a welcome from the President.

## GUIDANCE EXAMINATIONS

The college offers a testing program and counselling service for each student in order that full recognition may be given to general learning capacity, achievement, and to individual differences in social and intellectual maturity. A student takes a group of tests at the time when he is admitted to the college. The results obtained from these tests become a part of the guidance material used to assist a student early in his college career to make the intelligent choices of courses in which he is advised to enroll. Proficiency examinations in certain subjects may also be taken to determine whether or not the student may be excused from certain courses, or to determine whether credit may be granted for work done in educational centers other than accredited colleges. A maximum of twelve quarter hours in any one division, and a total of eighteen hours for credit granted on account of proficiency examinations may be applied toward graduation. All test scores may be discussed with the student in conference with his adviser.

## UNDERGRADUATE ADMISSION

Admission will be approved in any one of the following ways:

1. Graduation from an accredited high school. Applicants must show evidence of satisfactory health, good character and ability to do college work. Graduates of unaccredited high schools will be considered individually.
2. Matriculation Examinations. Psychological, Achievement and English tests are used. (Limited to applicants 20 years of age or over, who do
not qualify under (1) above.)
3. Special. Applicants who wish to take courses without reference to graduation may do so on individual approval.
4. Advanced standing from other colleges or universities.

Other requirements:
a. Matriculation fee-paid once on first enrollment as a candidate for graduation.
b. Standardized tests-Psychological, Achievement, English, and Contemporary Affairs. (Used for placement and advising.)
c. Health Examination-at matriculation and other specified times.
d. Photograph-due at registration or soon thereafter. Approximate size 3"x4".

Special students of the regular school year will not be held for (a) and (b) above. Special summer students who do not plan to graduate are not held for undergradute admission requirements.

Special students may enroll for an indefinite period to take courses suitable for the different vocations and professions. A transcript of courses completed will be furnished on request.

High school records should be sent to the college as soon after graduation as possible. Colorado high schools will supply the adopted application form. Other applicants who enter as freshmen or as transfer students will write to the Registrar for blanks and instructions. Applicants must be considered eligible for enrollment by the last school attended, and must possess good health and good character. If an applicant's past academic achievement is low, provisional admission will be given, if accepted. Students who transfer from other colleges will receive proper credit on application. Acceptable transcripts are due before enrollment.

All requirements for enrollment must be completed the first week of the quarter to avoid a late fee. A special fee will be charged for late registration.

A special group of faculty advisers will aid first year. students in planning quarterly programs of study which may include making substitutions for required courses. Upper class students will receive similar aid from an adviser of the student's major division. Necessary changes in required courses (sophomore, junior and senior) given on page 20 will be made by the Registrar. Classification of transfer students will be completed by the chairman of the student's major division and the Registrar.

## STUDENTS' QUARTER COURSE LOAD

The "quarter hour" is the credit value assigned to a class that meets once a week for approximately twelve weeks. The normal load for a quarter is 16 hours. Laboratory courses require extra periods. A maximum of 20 hours may be taken by students who have a scholastic average of " $B$ " or better. Extra hours for other students who have good records, but below "B", will be considered individually. High scores in matriculation examinations and a superior scholastic average in high school or college will be required for extra hours the first quarter in residence. Extra hours must be approved by the Registrar.

Such factors as health, grades, scores in matriculation examinations, employment, and financial status may require approval of less than the normal course load for a quarter.
(See "The Graduate School" for information about graduate load for a quarter.)

Grades and Grade Averages

Grading System
A-Superior
B-Above average
C-Average
D-Below average, passing*
F-Failure
*Undergraduates only.

Numerical Value
for Averages
5
4
4
3
2
1
(Numerical values are assigned to grades to compute the student's scholastic standing each quarter)

## Illustrative Example:

For the normal quarter course load of 16 hours, if all of a student's grades were C's they would have a numerical value of 3 . If one-half were C's and the other half B's, the numerical average would be 3.5. If one-half were C's and the other half D's, the numerical value would be 2.5, the lowest average permitted.* "W", "S", and "Inc." are not computed in grade averages. "TF", "WF" and "IF" have the same value as "F".
OTHER CLASS MARKS: Inc.--incomplete; W-approved withdrawal; TF -unapproved withdrawal; WF--failing at withdrawal; IF-condition not removed; S-satisfactory; and U-unsatisfactory. An Inc. must be removed by the middle of the succeeding quarter to yield credit. Withdrawal from a class or from college must be arranged with the Registrar in advance.

## SPECIAL REQUIREMENTS

Matriculated students are expected to maintain a scholastic average above 2.3 throughout the freshman and sophomore years and an average above 2.5 for the junior and senior years. A general grade average of 3.0 assures recommendation for graduation.

Ability to keep the general scholastic average above the required averages is accepted as evidence of ability to continue college work. A quarterly scholastic average below the established minimum may justify recommending enrollment in the succeeding quarter on probationary status only. A scholastic average below the minimum for two successive quarters will justify recommending withdrawal from the college.

Students who are employed by the college or who are employed on col-lege-directed work projects shall maintain a general scholarship average of 3.0 ("C") in order to continue such employment throughout any succeeding school quarter. Students failing to maintain acceptable grade averages will not be permitted full participation in varsity athletics, dramatics, debate, and other college-directed extra-curricular activities.

Absences without acceptable excuses are not permitted. Both tardiness and absences are dealt with by the individual instructors. Anticipated, as well as emergency, absences shall be cleared through the Department of Student Personnel.

A final examination in each class is to be taken by the student on the dates officially announced. A special examination fee is assessed for students requesting their final examinations on other dates. All fees and tuitions for the quarter must be paid by the student before final examinations.

Senior students shall arrange a conference with the Registrar about graduation early in the senior year. Application for the Special Limited Certificate shall be made at least one quarter in advance of issuance.

Matriculated students may receive the first transcript without charge. Each additional transcript costs a dollar payable in advance.

## REQUIREMENTS FOR GRADUATION

## I. Bachelor of Arts Degree (with teaching certificate).

This plan of study applies to the following majors: Fine Arts, Industrial Arts, Home Arts, Business Education, Elementary Education, Physical Education (men and women), English, Foreign Languages, Speech, Music, Science, Mathematics, and Social Studies.

1. Major and Minor Plan
a. Required courses as shown on page 20.
b. Major courses required in field of specialization.
c. At least one minor ( 24 hours) outside the major.
d. Sufficient electives to complete 192 hours of academic credit.
e. Six quarters of physical exercise (first two years).
2. General Secondary or Distributive Major
a. Required courses as shown on page 20.
b. Minimum of 36 hours in each of three subject matter fields, or 24 hours in each of four subject matter fields. Subjects selected on advice to qualify for high school teaching in each field.
c. Sufficient electives to complete 192 hours of academic credit.
d. Six quarters of physical exercise (first two years).

## 3. Elementary Education Major

a. Required courses as shown below.'
b. Major courses as shown on page 46 plus adequate preparation in content courses prescribed by the student's adviser.
c. Sufficient electives to complete 192 hours of academic credit.
d. Six quarters of physical exercise (first two years).

## II. Bachelor of Arts Degree (Liberal Arts).

a. Required courses as shown below.
b. Major: Maximum of 72 hours in one of the following six major fields:
(1) The Arts (Fine and Home Arts or combination), (2) The Sciences
(Physical Sciences, Biological Sciences, Mathematics, or combination),
(3) Social Studies (History, Geography, Sociology, Economics, or combination), (4) Humanities (Humanities, English, Foreign Languages, or combination), (5) Health (Physical Education, Nursing), (6) Business Education.
c. Minor: Foreign Language, 24 hrs .; or 24 hours outside the major.
d. Electives sufficient to complete 192 hours of academic credit.
e. Physical exercise: six quarters (first two years).
III. Associate in Arts Degree (A.A.) (Two-year course- 96 qtr. hrs.)
a. Required courses for Associate in Arts Degree as shown on page 21.
b. Major courses to be agreed upon between adviser and student.

## REQUIRED COMMON COURSES

## Bachelor of Arts (with Teaching Certificate)

All students are required to have a common background of general and professional education. All candidates for the degree Bachelor of Arts with teaching certificate must complete the following courses (students who demonstrate proficiency in any of these fields will not be required to take such courses) :

Freshman Year-Humanities, 10 hrs ; Psychology, 3 hrs ; Hygiene, 3 hrs ; Physical Exercise, 3 hrs ; 20 hours to be selected, according to the needs of students, from at least two of the following fields outside the student's major: Music Appreciation; Art 20; English 4a, 4b, 5; Science 3a, 3b; Econ. 24; Soc. 81; Hist. 40, 50.

Sophomore Year-Community Life and Problems, 6 hrs; Child Psychology and Adolescent Psychology, 6 hrs; Physical Exercise, 3 hrs.

Junior and Senior Years-American Education, 4 hrs ; Observation and Methods, 8 hrs ; Student Teaching $8-16 \mathrm{hrs}$; The Elementary School or Secondary Education, 4 hrs ; Philosophy of Education, 4 hrs .

## Bachelor of Arts (Liberal Arts)

All candidates for the liberal arts degree Bachelor of Arts must complete the following courses (students who demonstrate proficiency in any of these fields will not be required to take such courses):

Humanities, 10 hrs ; Psychology, 3 hrs ; Hygiene, 3 hrs ; English, 12 hrs ; Social Studies, 12 hrs ; Laboratory Science, 12 hrs ; Physical Exercise, 6 hrs .

## Associate in Arts Degree

All candidates for the degree Associate in Arts must take the following courses:

Humanities, 10 hrs ; Psychology, 3 hrs ; Hygiene, 3 hrs ; Physical Exercise, $6 \mathrm{hrs} ; 20$ hours to be selected, according to the needs of students, from at least two of the following fields outside the student's major: Music Appreciation; Art 20; English 4a, 4b, 5; Science 3a, 3b; Econ. 24; Soc. 81; Hist. 40; 50.

## STUDENT TEACHING

The college provides opportunity for the laboratory study of problems in the theory and art of teaching. The courses providing for this work are offered in sequence, beginning with directed observation of classroom methods and procedures, progressing into participation, and culminating in the work in which the student becomes responsible, under close supervision, for the learning done by the children.

The Ernest Horn Elementary School and The College Secondary School are laboratory school units of the college and provide opportunities for practical observation in connection with the course in directed observation and applied techniques. The members of the teaching staffs of these schools have full faculty ranking and assume responsibility for the direction of small groups of students in the actual classroom observation and participation, and in consideration of the principles of learning as they apply to a particular area.

Student teaching assignments are made in three kinds of situations. The first is that available in the two college laboratory schools. The second is made in the Big Bend School. This is a public school, located eight miles from Greeley, and is affiliated with the college for student teaching purposes. It includes elementary and junior high school units. The third is made in cooperating public schools. Students are sent out as associate teachers for the period of one college quarter in a public school. The student is assigned to a particular member of the teaching staff of the cooperating school and undertakes his work as a teacher in the system under the immediate supervision of this staff member. Sixteen quarter hours of credit are earned by the associate teachers.

The third is made in cooperating public schools. Students are sent out as associate teachers for the period of one college quarter in a public school. The student is assigned to a particular member of the teaching staff of the cooperating school and undertakes his work as a teacher in the system under the immediate supervision of this staff member. Sixteen quarter hours of credit are earned by the associate teachers.

All assignments for student teaching are made with the approval of the Director of Student Teaching. Before assignments can be made, students must have the health and personal characteristics and the professional attitudes considered essential for successful teaching. Students offering advanced standing from other institutions must make arrangements regarding student teaching with the Director of Student Teaching immediately on matriculation.

Mature students who submit required evidence of at least three years of satisfactory teaching experience may obtain exemption from student teaching. Formal application for such adjustment shall be made to the Director of Student Teaching prior to the student's last quarter of residence in a regular college year. Factors considered in granting such exemption are quality of teaching experience, kind of school in which the experience was obtained, scholarship standing, and ability shown in the matriculation tests.

## THE GRADUATE PROGRAM

Colorado State College of Education offers graduate study leading to the degrees of Master of Arts and Doctor of Education. It also provides an academic recognition beyond the master's degree in the form of an advanced graduate diploma of specialization. Graduate study was first offered during the summer session of 1913, and the first master's degree was conferred in June 1914. In 1929, the Board of Trustees authorized the college to provide a program leading to the doctor's degree.

## ORGANIZATION OF THE GRADUATE SCHOOL

Each of the instructional divisions of the college has a graduate committee. The chairmen of these seven graduate committees comprise the Graduate Council, which is the legislative body of the Graduate School. Any exceptions to the general graduate rules and regulations must have the approval of the Graduate Council. The director of the Graduate School is the chairman of the Graduate Council. All correspondence concerning graduate work should be addressed to the director of the Graduate School.

## ADMISSION

The student should file with the director of the Graduate School an application for admission, accompanied by a certified transcript of all academic. credits, at least thirty days before registration. Blanks for application for admission to the Graduate School will be provided upon request. Admission to the Graduate School does not imply admission to candidacy for a degree. For those requirements see the detailed rules for each degree.

A student whose preliminary preparation has not been sufficient to qualify him for graduate study in the field of his choice may be required to make up the deficiency by taking undergraduate courses or to show other evidence of proficiency in the areas in question.

## REGISTRATION

For those students who have applied for admission and who have filed their transcripts, the director of the Graduate School appoints a major professor, who aids the student in planning a unified program and who acts as the student's permanent adviser. Any change in this relationship must have the approval of the director of the Graduate School.

Students who have not filed their transcripts before registration will enroll as unclassified graduate students until an evaluation of their transcripts is possible. When the student is admitted to full graduate standing, all courses of graduate rank taken as an unclassified student will be credited toward the graduate degree, provided they can be made a part of the unified program.

Graduate students who are not candidates for higher degrees will register as unclassified students. However, each student is urged to plan a unified program at the beginning of his graduate experience.

A former graduate student will register directly with his major professor. All registrations must be approved by the Director of the Graduate School.

## STUDENT RESPONSIBILITY

The graduate student is expected to know the requirements for the degree he plans to earn. While the personnel of the graduate school office will endeavor to aid in every way possible, the responsibility for any error in his own enrollment or in the interpretation of the rules rests with the student.

## COURSE LOAD AND CREDIT

The maximum course load for credit is 12 hours each quarter. A general grade average of at least 3.7 must be maintained for graduation. In the computation of this average a mark of "A" counts 5, " $B$ " counts 4, and " $C$ " counts " C " No graduate credit will be allowed for courses in which the grade is below "C".

Courses bearing catalog numbers of 200 or above carry graduate credit.
Only 8 quarter hours may be earned in one-hour unit courses.
Students may offer not more than 8 quarter hours in courses numbered 222, Individual Studies. A typewritten copy of the report in each such course shall be filed with the director of the Graduate School. Individual Studies 222 may not be offered as one of the three designated courses for the master's degree under Plan B.

## ENGLISH STYLE-FORM STANDARDS

The student's written material which is to be filed with the Director of the Graduate School is expected to conform with the English Style-Form Standards. This bulletin is available for purchase in the college bookstore. It covers standards for designated papers, written reports of individual studies, and preliminary and final thesis and field study reports.

## SENIORS TAKING COURSES FOR GRADUATE CREDIT

Senior students who are within six quarter-hours of having completed the requirements for the bachelor's degree, may in their last quarter of undergraduate study, register for graduate courses and receive graduate credit for them. If, however, graduate credit is to be granted, the total course load will be limited, and previous arrangement must be made with the Director of the Graduate School.

## PROFESSIONAL REQUIREMENTS

Any student receiving an advanced degree or diploma from Colorado State 'College of Education must have at least 30 quarter hours of undergraduate and graduate credit in education, educational psychology and related fields, regardless of the division in which he majors.

## THE MASTER'S DEGREE

Students working toward the master's degree are offered a choice of two plans. Plan A requires 36 quarter hours of graduate course credit earned in three quarters in residence, and 12 quarter hours of thesis credit. Under Plan $B$ the student presents 48 quarter hours of graduate credit earned in four quarters of residence, and a final written examination. For purposes of record the phrases "three quarters in residence" and "four quarters in residence" are understood to mean completion on the campus of not less than 36 quarter hours of course credit for Plan A, and not less than 48 quarter hours of course credit for Plan B.

## Specific Requirements Governing the Degree of Master of Arts

The degree of Master of Arts is offered in the seven instructional divisions of the college, with majors in each division as follows: The Arts-(Fine Arts, Home Arts, Industrial Arts); Education-(Elementary Education, Secondary Education, Educational Administration, Educational Psychology, Business Education, Supervision in Elementary or 'Secondary Education); Health-(Phys-
ical Education); Humanities-(English, Speech, Foreign Languages); Music; The Sciences-(Biological Science, Physical Science, Mathematics); The Social Studies-(Economics, Geography, History, Social Studies).

The holder of a bachelor's degree from a college or university, authorized by law to grant such a degree, will be admitted to courses applicable to the degree of Master of Arts, provided the transcripts of his college record indicate that he is able to pursue graduate study. The minimum undergraduate preparation for the Master of Arts degree is 24 quarter hours of basic course credit in the field of the graduate major.

## ADMISSION TO CANDIDACY FOR THE MASTER'S DEGREE

Action on admission to candidacy for the degree of Master of Arts will be taken after the student has been in residence a sufficient length of time to enable his instructors and the Graduate Council to judge his ability, and after he has met the matriculation requirements of the college.

## TIME REQUIREMENTS

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

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

If the time limit is to be exceeded, all necessary adjustments must have the approval of the Director of the Graduate School.

## TRANSFER OF CREDIT

Graduate credit earned elsewhere is not applicable toward the master's degree under Plan A. Afier a student has been admitted to candidacy for the master's degree, there may be some transfer of credit under Plan B, up to a maximum of 12 quarter hours. Transfer of graduate credit is made only upon authorization of the Director of the Graduate School, after formal request has been made by the student. All transferred credit must have been earned within the time limits prescribed. Graduate credit earned in off-campus classes or in courses classified as "extension" is not transferable.

## MINIMUM REQUIREMENTS FOR THE MAJOR

For the degree of Master of Arts, the student must have a minimum of 64 quarter hours of undergraduate and graduate credit in his major field. At least one-half of the graduate credit for the master's degree must be in the field of the major. The 12 hours of thesis credit under Plan A is a part of the major.

## Plan A in Detail

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

1. Earn 48 quarter hours of graduate credit, 36 hours of which must be in resident courses. The other 12 hours are credited to the thesis.
2. Register for the thesis and pay the thesis fee of $\$ 15$ at least three months before enrollment for the final quarter of residence.
3. Plan with the adviser a unified program of courses. 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 concerning the evaluation, they may appeal to the Graduate Council as a whole for a final decision.
4. Furnish early in his graduate experience evidence that he possesses the necessary skills for writing a thesis. Courses to meet deficiencies may be required in addition to the regular program for the degree.
5. Present all of his written work in conformity with the standards given in the English Style-Form Standards.
6. File one signed typewritten copy of his approved thesis outline with the major professor and one with the director of the Graduate School on or before the end of the sixth week of the second quarter in residence.
7. Present to his adviser at least four weeks before the end of the term in which he expects to graduate, a complete copy of his thesis for examination and criticism. The final draft is subject to the same procedure for review and approval as the preliminary outline.
8. At least two weeks before the end of the quarter in which he expects to graduate, present to the Director of the Graduate School at least three copies of the thesis in final typed form, approved and signed by the major professor and ready for the director's signature. After being signed and bound, three copies of the thesis become the property of the college. The original ribbon copy and the first carbon copy are filed in the college library; the third copy is delivered to the student's major professor. A charge of $\$ 2$ per copy is made for binding.
9. Each bound copy of the thesis must contain an abstract of the study; in addition, one copy of the abstract is filed with the student's records in the office of the Graduate School.
10. Apply for graduation not later than the first week of the last quarter in residence.

## A CREATIVE PROJECT IN LIEU OF A THESIS

In harmony with policies of many of the best institutions of higher learning, 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 of the other provisions previously listed for thesis-plan students.

## Plan B in Detail

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

1. Earn 48 quarter hours of resident graduate credit.
2. Plan with the major professor a unified program of courses. This program shall include three advanced courses (12 quarter hours) identified by a special mark and known as designated courses, for each of which a written report will be required. Only one such written report may be presented by the student each quarter. The student, with the
advice of the major professor, shall decide on the course in which a designated paper will be written. The paper shall be in conformity with the English Style-Form Standards of the college. A typewritten copy is to be filed in the office of the Graduate School at least one week before the end of the quarter in which the paper is written.
3. Register for 12 hours outside of the major field if possible; however, the requirement of a total of 64 quarter hours in the major field (graduate and undergraduate credit) and 30 hours in Education shall be met.
4. Pass a written examination in the major field. The major professor will be in charge of the examination and will announce the time it is to be given. The student's paper, evaluated by the major professor, shall be filed in the Graduate School office at least ten days before the end of the last quarter in residence.
5. Apply for graduation not later than the first week of the last quarter in residence.

## 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 must 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.

## ADVANCED GRADUATE DIPLOMA

For many years Colorado State College of Education has noted a definite need for advanced study above the master's degree, which would not involve the academic restrictions or the longer program of the doctor's degree. To meet this need the Graduate School now offers programs leading to an Advanced Graduate Diploma of specialization.

The Graduate School is offering this specialized diploma distinct from the plan leading to the doctor's degree. However, under some circumstances, the course credit for the diploma of specialization might be applicable toward the degree of Doctor of Education.


#### Abstract

Admission Students must have the master's degree or its equivalent from a recognized graduate school. Each applicant for admission must file with the Director of the Graduate School, prior to registration, official transcripts of all previous undergraduate and graduate credit. Application blanks are available in the office of the Graduate School.


#### Abstract

\section*{Advisement}

Upon receipt of the student's official transcripts and his application for admission to the Graduate School, the Director will assign the student to a member of the graduate faculty who will act as his major professor.


## Areas of Spectalization

The advanced graduate diploma of specialization will be offered in elementary school supervision, secondary school supervision, educational administration, personnel and guidance, curriculum and instruction, and supervision in the fields of industrial arts, fine arts, physical education, music and other similar areas.

Programs in areas not specifically mentioned above will be arranged for the student, provided such plans can be implemented within the academic resources of the Graduate School.

## Specific Requirements for the Diploma

The general rules of the Graduate School relative to matriculation, course load, grade average, and graduate courses apply to this program. To be eligible for the advanced graduate diploma of specialization the student shall meet the following specific requirements:

1. Earn 36 quarter hours of graduate credit above the master's degree. All 36 of these hours shall be residence credit, earned on the campus of Colorado State College of Education. Graduate credit earned in offcampus classes or in other institutions cannot apply toward this diploma.
2. Eight of the 36 hours of course credit must be in some form of practical professional activity such as supervision in the college elementary or secondary schools, technical assistance in the college personnel or administrative offices, or classroom experimentation in the various academic areas of the undergraduate school. The purpose of this requirement is to increase the student's competence.
3. At least one-half of the required 36 quarter hours of credit must be in the area of specialization.
4. All of the requirements for this diploma must be completed within a period of six years.

## THE DÓCTOR'S DEGREE

The Graduate School offers to a limited number of qualified students the opportunity of earning the degree of Doctor of Education (Ed.D.) 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 for the degree of Doctor of Education is a program of alternating campus and off-campus activity, and is an in-service type of advanced professional education. The doctor's program is divided into two parts. One calls for the completion of certain courses 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 activities. Only those persons who are actually employed in the educational field are permitted to enroll for study toward the doctorate.

## Course Program

Each student is required to select an area of specialization in the field of Education. This will be the student's major: A supporting area, or minor, in Education must also be selected. Normally, the two field studies will be in the area of the student's major.

A maximum of 24 quarter hours of course credit in areas outside the field of Education may be selected by the student.

## Majors-and Minors

Candidates for the doctorate may major in Educational Administration, Educational Psychology, Elementary Education, or Secondary Education. Minors are offered also in Curriculum, Personnel and Guidance, Higher Education, and Philosophy of Education.

## Admission

The holder of a master's degree from an acceptable graduate school will be admitted to courses 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 study in the field of Education. All students enrolled in courses and research 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. Sixty-four quarter hours or its equivalent in Education is the prerequisite for enrollment toward the degree of Doctor of Education.

## Candidacy

To be eligible for formal admission to candidacy for the degree of Doctor of Education, the student shall have earned at least 24 quarter hours of resident graduate course credit, shall have met the requirements of the written examination on research, shall have completed Field Study Number 1, shall have satisfactorily defended this Field Study in an oral examination, and shall have completed all registration requirements. As a part of the registration requirements the Graduate Council may require the student to furnish records of acceptable scores on standardized intelligence tests.

Admission to candidacy will be based upon the evidence available: (1) From staff members with whom the student has studied on this campus; (2) from the official transcripts concerning the type and quality of the student's accomplishments in other institutions; (3) from the results of the written examination on research; 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 major professor.

## Time Requirements

The maximum time limit for the doctor's degree is eight years.
If the time limit is to be exceeded, all necessary adjustments must have the approval of the Director of the Graduate School.

## Residence Requirements

The residence time requirements for the degree of Doctor of Education is six summer quarters ( 72 quarter hours of graduate credit).

## Transfer of Credit

Advanced standing to the extent of 12 quarter hours of graduate credit beyond the master's degree may be granted toward the doctorate, but only after the student has been admitted to candidacy for the degree. Any such advanced standing will be subject to the following rules: (1) That it may be made an integral part of the student's total plan; (2) that it is of excellent quality; (3) that it was earned on the campus of an institution offering the doctor's degree and approved by the Association of American Universities; (4) that it has been earned within five years preceding the date of the student's matriculation for the doctorate at Colorado State College of Education. All credit transferred toward the doctor's degree will be counted as elective and will reduce the amount of elective credit which may be offered for the doctorate.

[^7]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.

## 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 examination, and the field studies.

## 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 particular field study.

## Specific Requirements Governing the Degree of Doctor of Education

In addition to requirements stated in the foregoing paragraphs for the doctor's degree, the student shall:

1. Earn 96 quarter hours of graduate credit beyond the master's degree.
2. Be in residence on the campus of Colorado State College of Education at least six summer quarters, earning 72 quarter hours of graduate course credit. This residence requirement may be reduced one quarter (12 quarter hours) by the transfer of credit from an approved graduate school.
3. Present two field studies of a practical nature, for each of which the student will receive 12 quarter hours of credit. The student registers for these field studies during the regular academic year, paying an offcampus registration fee of $\$ 30$ for each study. The preliminary outlines for these studies are prepared under the supervision of the major professor and a research committee of three appointed for each study by the Director of the Graduate School. The student presents his outline in detail to this committee for criticism and suggestions. When the committee has approved the outline, the student prepares five copies-one copy for each member of his committee, one for the files of the Graduate School, and one for the student himself. It is the duty of the major professor to obtain the required signatures. No student may begin his 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. Pass satisfactorily the following examinations in addition to the usual course examinations:
a. Written Examination on Research. This examination is intended to test the student's awareness of problems needing research and his ability to appraise critically research procedures. The preparation and evaluation of the examination is the responsibility of the major professor. Normally the student will be permitted to take this examination in his second quarter of residence. The examination paper, after being evaluated by the major professor, shall be filed with the student's records in the office of the Graduate School.
b. 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 StyleForm Standards of the college, he shall defend his research in an oral examination before a committee composed of: (1) His re-
search 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 the Director of the Graduate School to set the date for the oral examination.
c. Comprehensive Written Examinations. These will be given in the final quarter of residence and will test the student's comprehension of the materials in his major and minor areas. The major professor will be in charge of the examinations. He will prepare and evaluate the examination in the student's major, and will have another member of the graduate faculty prepare and evaluate the examination covering the minor. The examination papers after being evaluated shall be filed with the student's records in the office of the Graduate School.
5. Pay $\$ 27$ for the publication of each field study. The field study is microfilmed and a 1500 word abstract of the study is lithoprinted. For the purpose of publication the student files in the office of the Graduate School an extra copy of the abstract of each study. This abstract cannot be more than 1500 words and must include a vita. It is in addition to the copies of the abstract which are bound with the typewritten copies of the field studies. The student receives 150 copies of the lithoprinted abstract and a copy of the annual volume of all abstracts submitted during the year.
6. Pay $\$ 2$ per copy for the binding of each field study. At least three copies of each field study, including an abstract in each study, are required to be bound. These copies become the property of the college. After being bound, the original ribbon copy and the first carbon copy are filed in the college library; while the third copy is delivered to the student's major professor.

## STUDENT PERSONNEL

All out of class activities and services for resident students are supervised by the Department of Student Personnel. These include application for admission, matriculation and guidance examinations, registration for courses, student health services, counselling of a personal nature as well as academic guidance, living accommodations, recreational events, student employment, and student loans and scholarships.

## STUDENT RESIDENCE

The college provides ten attractive and well-equipped residence halls for its men and women students. Residence in these halls provides the fullest social, educational, and cultural advantages to the student. Each hall is under the supervision of its director chosen for his or her experience and interest in the personal and social growth of college-age students. Student government is active not only within each residence hall, but also through elective representation on the Residence Hall Council.

Students are expected to provide their own personal linens and towels and may provide their own bedding. The college is, however, equipped to furnish and launder all bedding at a charge of $\$ 5.00$ each quarter except in the summer session. Students residing in the residence halls have their meals in the dining rooms maintained on the campus. Rates are established on a room-andboard basis. These rates may vary slightly depending upon location and size of the room as well as upon any marked fluctuations in food costs. Such changes are authorized by the Board of Trustees. Notification of changes in rates is given at least thirty days in advance of any school quarter.

Since the accommodations in the residence halls are in great demand, application for rooms should be addressed early to the Housing Office, Department of Student Personnel. Each application should be accompanied by a $\$ 10.00$ deposit. This will be applied on the regular rental charge,

All first-year students are expected to reside in the residence halls. This privilege is extended to other students in the order of their applications. The Housing Office has also investigated and approved many Greeley homes near the campus, and will assist the student who finds it impossible to make use of the residence hall accommodations to find rooms in these private houses. Students living off-campus will find boarding places near the college.

Address all inquiries concerning student residence to the Housing Office, Department of Student Personnel. All resident students are required to live either in the college residence halls or in approved private residences.

## HEALTH SERVICES

Health service is maintained without cost for all students. The Student Health Offices maintained within the Department of Student Personnel offer extensive dispensary facilities with graduate nurses in attendance at all times during the college day and with physicians available at specified office hours.

Allocation of $\$ 2.50$ per quarter of the Associated Students activity fee provides students with adequate off-campus health services. Each student is provided with a card giving the names, addresses and telephone numbers of all physicians in Greeley. Any student is allowed to go to the office of any Greeley physician, or he may call the physician to his residence. All such fees and costs of certain operations are paid for from this Associated Students health fund.

Special diets recommended by physicians are provided by the dietitian in charge of the student dining room. The directors of all the residence halls maintained by the college are alert to the individual health needs of each student.

## STUDENT EMPLOYMENT

The majority of the students of the college have in the past found it necessary to secure part-time employment to assist them in paying the ordinary costs of a college education. Many work projects are established on the college campus itself and are staffed by student help. Rates of hourly pay vary with the skill of the worker and the kind of work done. Many kinds of work are also provided for students by the business places and homes of the city of Greeley.

Recommendations for college employment are regarded as an important part of a student's college record. Employment is encouraged only if the college is assured that such employment will not interfere with the student's main interest-satisfactory achievement in his college classes. Each student employed on a college work project must maintain a general average of "C" (3.0) to be assured the continuation of such employment. In all cases a student's employment record is considered with other college data in evaluating him as a valuable citizen of the community.

Inquiries concerning student employment should be addressed to the Student Employment Office, Department of Student Personnel.

## SCHOLARSHIPS AND AWARDS

Colorado State College of Education cooperates fully in the recognition of Joint Honor Scholarships established by the six Colorado State Institutions of Higher Learning. These scholarships are granted at high school commencements and may be used in any of the six State Institutions of Higher Learning. A high school senior may inquire of his own principal or superintendent as to his eligibility for such a scholarship.

In addition to recognition of the Joint Honor Scholarships, the college awards scholarships to graduates of Colorado high schools and junior colleges who deserve such recognition and are especially interested in becoming teachers. These scholarships cover the cost of tuition, but do not include the payment of college fees.

To keep college scholarships in force the recipient must maintain a satisfactory grade average.

Waiver of Tuition Scholarships may be awarded by the college in individual cases to those students who are judged worthy of receiving recognition for merit demonstrated in a particular field of endeavor. General college ability as well as a previous record of a particular skill will influence the granting of such awards.

Two scholarships are awarded annually to the man and woman in the senior class who have maintained the highest undergraduate scholastic standing. These scholarships are known as the State Superintendent of Public Instruction Scholarships. They cover the tuition charges for one year of graduate work at Colorado State College of Education.

Inquiries and applications for all scholarships in this group should be directed to the Scholarship Committee, Department of Student Personnel.

## SCHOLARSHIP FUND FOR CHINESE STUDENTS

Scholarships for Chinese students in amounts up to $\$ 500$ each are awarded annually by the Jack Petteys Memorial Foundation. The college also grants free tuition to the recipients of these scholarships.

The Jack Petteys Memorial Foundation was established by Mr. and Mrs. Alonzo Petteys of Brush, Colorado, in memory of their son, Jack Petteys, who lost his life in the service of his country.

The scholarships will be awarded to Chinese men and women, preferably to those born in China, for either graduate or undergraduate study. Two essential conditions are a knowledge of both the Chinese and English languages and the intention to return to China, after this period of study, to engage as active citizens in some phase of Chinese life, education, business or government.

Letters of application shall include, in addition to the transcript of previous study, a statement of the applicant's birthplace, age, sex, present occupation, intended occupation, probable location of residence upon return to China, recent photograph, health certificate from a duly accredited physician, and names of references or letters of recommendation. All inquiries should be addressed to: Scholarship Fund for Chinese Students, Colorado State College of Education, Greeley, Colorado.

## THE FREDERIC J. ALLNUTT SCHOLARSHIPS


#### Abstract

Five scholarships are available to graduates of high schools in Weld County, Colorado, through the generosity of Frederic J. Allnutt of Greeley. Each scholarship pays all college tuition and fees (value $\$ 100.00$ per year). Students to receive these scholarships are selected by the Director of Student Personnel, the Vice-President of the college and Mr. Allnutt. A student who maintains a satisfactory scholastic record may have the scholarship renewed each year through four years. A scholarship holder forfeits the scholarship at any time when he or she withdraws from the college. Information about applying for one of the Allnutt Scholarships may be obtained by letter or by calling in person upon the Director of Student Personnel.


## LOAN FUNDS

Twelve college loan funds with aggregate resources of $\$ 30,000$ are available to assist worthy students who need financial aid. Applications for loans may be made to the Committee on Loans and Scholarships.

All loans are completed on personal, unsecured notes bearing a low rate of interest. Over-all living costs, job prospects, potential earning power, and the credit experience of the student are given careful consideration by the committee in arranging the terms for a loan and its date of repayment. Strict business standards are maintained in the management of all loan fund accounts. Borrowers are expected to fulfill their obligation to the funds promptly as agreed. Over four thousand students have been accommodated with assistance in the form of loans since the first organization of college loan funds in 1911. The circulation of funds has accounted for $\$ 325,000$ in loans and repayments.

A brief description of the various funds follows:
William Porter Herrick Memorial Fund, established in 1913 and largest of the restricted loan funds, was formed with an original capital of $\$ 5,000$. It was given in trust by William Porter Herrick for the help of all students fulfilling stipulated terms of eligibility set forth in the trust agreement.

Sarah Platt Decker Memorial Fund is a fund for women students created in 1926 by her friends as a memorial to Sarah Platt Decker, pioneer worker in the women's club movement in Colorado and for many years president of the National Federation of Women's Clubs.

Rotary Fund, established in 1925, is a fund for men students and is the gift of the Rotary Club of Greeley.

WTK Fund, a fund organized in 1933 for scholastically capable women, was started by a prominent women's study group of Greeley. A policy of the Club calls for an enlargement of the fund at frequent intervals by added gifts.

Fortnightly Music Club Fund was established by the foremost women's musical organization of Greeley to aid students of promise in music.

Kendel Music Club Fund is derived from the net income of several successful musical events given prior to 1924. It was created in honor of John C. Kendel, for many years Chairman of the Division of Music, to assist students with talent in musical subjects.

Altrusa Fund is a fund being built up by a professional women's service club of Greeley to help any class of student.

Shyn Fund is a large consolidated fund representative of many unrestricted, independent gifts to the loan funds and available to all students enrolled. The fund also incorporates the old Senior College Scholarship Fund, YWCA Student Aid Fund, Hospital Loan Fund, and Normal Students Relief Fund.

Other small funds include the Sigma Upsilon Graduate Fund, Panhellenic Fund, and two Laboratory Schools Funds. Each is restricted to a specific class of students.

## STUDENT FINANCES

Every student must acknowledge the economic responsibilities associated with a college education by making adequate provision for all expenses. Costs of living vary somewhat among students; but all must budget finances in advance to avoid difficulty. College residence halls provide room and board in pleasant, healthful surroundings at nominal cost. Students who arrange haphazardly for meals and lodging may effect immediate economies; but these savings may be more than offset later by medical expenditures incurred in restoring good health. The college maintains for the protection of its students an approved list of private homes and eating establishments and is ready at all times to advise students about living accommodations.

A minimum of $\$ 450$ a year in cash, or its equivalent, is needed fully to finance three consecutive quarters of study. A majority of students are freed from financial problems when they have, in assistance from home, part-time employment, savings, or scholarships, an equivalent of $\$ 200$ a quarter for college expenses.

## 1 Estimated Expenses for One Quarter <br> These apply to the three regular quarters. <br> For cost of Summer Quarter see special bulletin.




Associated Student Fee, including Health Fee. (Average)
Room and Meals (Average) .-.-- 107.00



## STUDENT SOCIAL STANDARDS

The college has no fixed set of rules of conduct and penalties for breaking them. A student is expected to be a good citizen of his college community and of the town, state and nation. When a student shows that he lacks the essential qualities of scholarship, health, and character, his relationship with the college automatically ceases.

The observance of the following regulations drafted by a committee of students and faculty representatives is expected:

Tuesday and Thursday evenings are designated as nights closed to social group activities. Quiet hours are to be observed on school days in all residence halls and college approved houses from 8:00 to 11:00 a.m.; from 1:00 to 4:00 p.m.; and after 8:00 o'clock in the evening. Quiet hours are also in effect after 11:30 p.m. on week-end nights.

All women students are to be in their places of residence by 10:30 p.m. on all nights preceding a school day, and by 1:00 a.m. on Friday and Saturday evenings.

All students are accountable to their residence hall directors, or to their householders for their mutual cooperation in observing the social standards deemed appropriate for a good college citizen.

## STUDENT GOVERNMENT

Student government and the direction of student affairs on the campus of Colorado State College of Education are administered by the membership and elected officers of the Associated Students. Each student automatically, at the time of registration, becomes an active member of this organization through the payment of the quarterly fee. Membership in the Associated Students entitles one to admission to cultural, social, dramatic, and athletic programs without payment of other fees, and to the many facilities of the Student Union Building. Students also are provided with a copy of each issue of the student weekly paper, The Mirror, and a copy of the student annual, The Cache La Poudre.

The administration of the affairs of the Associated Students is carried on by elected officers of the Student Council of the Associated Students. All campus organizations must apply each year to the Student Council for charter approval. When organizations are recognized both by the Student Council and by the Administration of the college, those facilities of the campus set aside for such purposes may be used by all such groups for their needs.

## STUDENT ORGANIZATIONS

All women students are also members of the Associated Women Students. This organization supports the many projects which further the growth and betterment of the college as a whole and has been particularly active in assuring to each new studentia friendly welcome upon his arrival on the campus.

About one-fourth of the total student body belongs to recognized national social fraternities and sororities. Membership in these groups is by invitation and is entirely optional. An Independent Club extends invitation membership to those not wishing to affiliate with a social fraternity or sorority.

A student majoring or minoring in any field of study will find in that division an active organization welcoming him to membership and opportunity for further social and cultural contacts. Some of these with long records of active existence on the campus at Colorado State College of Education are: the Dickerson Club (Social Studies), Colvin Club (Business Education), Science Club, Elementary Club, Dramatic Club, English Club, and Women's Athletic Association.

There are active student religious organizations on the campus formed around the membership of particular faiths. The Catholic students are organized into the Newman Club. The Fellowship Club extends its religious activities on a non-denominational basis. The Religious Council, composed of elective representatives of the respective church groups, coordinates and administers the many campus and intercollegiate student religious activities of the college.

## HONORARY FRATERNITIES

Special recognition is given to those students who have demonstrated outstanding achievement in the field of education as a whole or in an area of particular study, through invitational membersnip in national honorary fraternities. Among these are Phi Delta Kappa, national 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 upperclass 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; and Delta Phi Delta, national creative arts fraternity.

## 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 and intramural contests are systematically carried on in football, basketball, baseball, field and track, wrestling, swimming, gymnastics and tennis. Gunter Hall, 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

Students at Colorado State College of Education have the opportunity to participate in a modern and comprehensive program of intercollegiate debate and public discussion. The college is a member of the Colorado-Wyoming Intercollegiate Forensic League and holds the Colorado Beta chapter of Pi Kappa Delta, national forensic society. Under faculty direction, student speakers take part in the regional and national programs of these organizations and carry on a schedule of timely discussions before various audiences in Northern Colorado.

## 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 <br> (With Teaching Certificate)

The major in Fine Arts, with teaching certificate, requires credit for sev-enty-two quarter-hours in the arts. 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 will be concentrated in one of the following fields of emphasis: Drawing and Painting, Crafts, Design, Modeling and Sculpture, or Commercial Art.

In addition to the requirements listed on pages 20-21, these courses are also required of all majors in Fine Arts: Art 1, 2, 3, 4, 6, 8 or17, 11, 13, 16, 24, 105, 121, 123, 130.

One minor may be taken within the division, and one must be taken in some other division.

## Minor in Fine Arts

These courses are recommended for a teaching minor in Fine Arts: Art 1, $3,11,13,16,17,24$. A course in the history of art is also desirable. Substitutions in this list may be made only with the consent of the student's adviser.

## Liberal Arts Major and Minor in Fine Arts

A candidate for the liberal arts degree of Bachelor of Arts with a major in the Fine Arts should plan his program in conference with his adviser. In addition to the requirements listed on pages $20-21$, the student should have a total of seventy-two hours in the Fine Arts, and at least one minor outside the field.

The liberal arts minor in Fine Arts should be planned in conference with the student's adviser. It should consist of a minimum of twenty-four hours and should approximate the selection of courses in art shown above.

## Graduate Study

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

## Description of Courses

1. Drawing. A foundation course open to anyone who wishes to learn to draw. Visual training, technical procedures, the essentials of perspective. Media: chiefly charcoal and pencil. Four hours credit.

2-102. Composition. Prerequisite F.A. 1 or the equivalent. The technical problems of pictorial composition involving the organization of all the visual elements. This course is recommended to precede the courses in painting. Four hours credit.

3-103._Introduction to Painting. Prerequisite F.A. 1 or the equivalent. This course is offered in either the water color or the oil medium. 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. Study from life. Four hours credit.

6-106. Introduction to Art Education. Prospective art teachers are introduced 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. Prerequisite F.A. 1 and 4. Procedures and techniques of modern commercial art. Four hours credit.

11-111. Introduction to Design. A study of the basic elements of design and the techniques of organization. Creative projects in abstract and applied fields. Four hours credit.

13-113. Lettering. The basic letter forms and useful variants. A study of layout and design. The course includes work in manuscript, showcard and poster. Two hours credit.

14-114. Design in Textiles. Prerequisite, F.A. 11-111. Practical experience in designing textiles in a variety of media including blockprint, stencil, stitchery, batik and silkscreen. Two hours credit.

16-116. Crafts Processes and Design. Prerequisite, F.A. 11-111. Creative experience in a variety of crafts including loom weaving, leather craft, simple woodwork and metal craft, plastics and others. Two or four hours credit.

17-117. Pottery. Creative experience in the design and construction of pottery. Various methods are studied. Glazing, casting, firing. Two or four hours credit.

18-118. Puppetry. Design and construction of puppets and marionettes adapted to the interests and abilities of the various grade levels. Practical experience in puppet play production. Two hours credit.

19-119. Poster and Display. Prerequisite, F.A. 13-113. Advanced poster techniques, including stencil and airbrush. Principles of display applied to organization of exhibit material and modern window setting. Four hours credit.
20. Art Appreciation. Opportunity and guidance are offered to the student who wishes to discover his own potentialities in creative art experiences in drawing, painting, modeling, pottery and the crafts. Four hours credit.

24-124. Art in the Elementary School. Methods of teaching art at elementary school levels. Organization of work units and practical creative experience in a wide variety of media. Four hours credit.

29-129. Fashion Drawing. Prerequisite, F.A. 1 and F.A. 4-104. A 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.

32-132. Cartoon and Caricature. Prerequisites, F.A. 1 and 4. The cartoon figure in commercial art. Principles, techniques and construction. Pen and ink. Two hours credit.

35abc-135abc. Life Class. Opportunity to draw from the human figure. Two hours credit each quarter.

36-135. Techniques and Material. The use of wash, oil, Wolfe crayon, watercolor, gouache, pen and ink, and other media in relation to the processes of reproduction in magazine, newspaper and book illustration. Four hours credit.

40-140. Problems in Commercial Design. A general study of the forms of commercial design and illustration with specific emphasis upon merchandising and advertising media. Four hours credit.

45-145. Advanced Problems in Commercial Design. Prerequisite F.A. 40-140. Specific problems in the forms and techniques of newspaper, magazine, mail and outdoor advertising, including a study of the prevailing methods of reproduction. Four hours credit.

50-150. Photography in Commercial Art. Prerequisite Phys. 67-167-Elementary Photography. The techniques of modern photography utilized in the solution of problems in Commercial Art. Four hours credit.

102a-202a. Advanced Composition. Prerequisites, F.A. 1 and 2. Advanced problems in pictorial and graphic composition. Four hours credit.

103a-203a. Watercolor Painting. Prerequisites, F.A. 1, 2, and 3, or the equivalent. This course seeks to develop individual expression in creative painting, and technical mastery of the medium. Four hours credit.

105-205. Color Theory. Prerequisite F.A. 11-111. An extensive study of the field of color as one of the major design elements. Four hours credit.

109-209. Print Making. 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. Four hours credit.

112-212. Problems in Design. Prerequisite F.A. 11-111, or the equivalent. A study of the techniques of organization of the design variables. Opportunity for individual growth in solving design problems in areas of student's choice. Four hours credit.

115-215. Scene Design and Stagecraft (See also Eng. 115-215). A study of the art of the theater from the designer's point of view. Practical experience in working out the art problems involved in production. Four hours credit.

120-220. Oil Painting. Prerequisites F.A. 1, 2, and 3, or the equivalent. This course seeks to develop individual expression in creative painting, and technical mastery of the medium. May be continued for four hours additional credit as 120a-220a. 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 Secondary School. Methods of teaching art at the junior high and high school levels. A study of the relation of art activities to the school program. Four hours credit.
$\mathbf{1 3 0} \mathbf{- 2 3 0}$. Art History II. A study of the development of art from the Renaissance to the present day. Four hours credit.

133abc-233abc. Individual Problems in the Fine Arts. Open to advanced students who may pursue creative work according to their individual needs. Where pertinent this course may be substituted for required courses in Fine Arts. Two or four hours credit each quarter.
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.
213. Graphic Layout and Design. A study of the development of letter forms, and the principles of graphic design. Advanced problems in lettering and composition. Four hours credit.
216. Craft Processes and Design for Secondary Schools. A study of design and artcrafts adapted to secondary school levels. Two or four hours credit.
217. Ceramics. Prerequisite, 17-117 or the 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 in fields of specialization not provided for in formal classes. Qualified students 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 is permitted.
226. Art Education in the Schools (Summer Quarter only). 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 the professional literature in art education. Analysis and evaluation of courses of study, the building of curricula and significant units for teaching art. Four hours credit.
229. Thesis. Required of all Plan A Art students. Twelve hours credit.

## HOME ARTS

Two majors are offered in Home Arts-one in teaching and the other in dietetics. The major in dietetics is planned to meet the requirements for dietetic internship prescribed by the American Dietetics Association. A combined major may be selected in Home Arts and Social Studies which prepares for social welfare work.

## Major in Home Arts <br> (With Teaching Certificate)

Students must complete the required courses listed on pages 20-21; also H.A. 70, 71, 72, 73, 74, 77, 78, 175, 179, 180, 181, 183, 184, 188, 191a, b, 195; F.A. 11, 114, 116; Sci. 3b; Chem. 41, 42, 43; Bot. 130; Phys. 165.

Dietetics Major
(Granting Liberal Arts A.B. Degree)
H.A. 70, 71, 72, 74, 77, 78, 175, 176, 179, 180, 181, 182, 184, 185, 186, 187, 189 , 197; Chem. 41, 42, 43, 141, 147; Zool. 117; Bot. 130.

## Minor in Home Arts

The following courses constitute a minor in Home Arts: H.A. 70, 72 or 73, 74, 77 or 78, 191a, 192; Elective 2 hours.

## Two-Year Home Arts Curriculums

A student may earn the Associate in Arts degree after successfully completing the two-year curriculum in the following areas in the field of Home Arts: Child Care Center Aide, Air Hostess, Commercial Demonstration, Personal Shopper, Dietitian's Aide, Catering. Under the supervision of a faculty adviser, the student plans her curriculum to meet the specific course requirements for the area in which she is specially interested.

## Graduate Study

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

## Description of Courses

70-170. Dress Appreciation. This course is planned to develop the student's interest in personal appearance. Good grooming is stressed together with the importance of color and line in suitable and becoming dress. Four hours credit.

71-171. Textiles. A study of the nature and limitations of commonly used fabrics; the design of weaves and their wearing qualities. Testing of recently discovered fibers in the textile field. Four hours credit.

72-172. Fundamentals of Clothing Construction. Instruction in the care and operation of sewing machines and their attachments. A commercial pattern is used in constructing a dress or remodeling a garment. Four hours credit.

73-173. Dress Design and Construction. To develop the ability to work with fabrics and create attractive costumes. The student will select and make an appropriate dress for afternoon or street wear. Four hours credit.

74-174. Elementary Nutrition. To enable students to select food suited to their needs, in the light of the newer knowledge of nutrition and individual physical fitness. Four hours credit.

77-177. Cookery and Table Service. A study of the fundamentals of nutrition, meal-planning, marketing, cooking and table service. Simple meals suited to families of moderate means are planned, prepared and served. Four hours credit.

78-178. Food Preparation and Service. Emphasis is given to principles of cooking involved in more difficult food preparation. More elaborate and formal types of table service are used. Four hours credit.

79-179. Preservation of Food. Laboratory practice in home methods of food preservation. Discussion and observation of commercial canning methods and preservation of food by the quick freeze and dehydration processes. Prerequisite H.A. 77, 78 or the equivalent. Two hours credit.

80-180. Family Rlationships. The relationship of the individual to his immediate human contacts. The establishment of the successful American home through happy marriage and the family group. Four hours credit.

81-181. Child Care and Training. A study of the child as an integrated personality; his physical, emotional and social development as affected by the home and other socializing agencies. Observation of nursery school children. Four hours credit.

83-183. Home Nursing. Materials and methods of caring for the sick in the home. Two or four hours credit.

91a-191a. Home Management (Theory). A study of the techniques of efficient home-making. Emphasis is given to economical management in terms of time, energy,' and money. Four hours credit.

91b-191b. Home Management (Practice). Students live for a period of six weeks in the Practice Cottage on the campus. Here they put into practice the principles of efficient home-making. Prerequisites 91a plus either 77, 78 or an equivalent. Two hours credit.

98-198. Household Physics. A course designed to teach those principles and generalizations in physics which one will encounter about the home. Four hours credit.

175-275. The Home and Its Decoration. A study of suitable furnishings for homes of various types. Advanced students prepare illustrative material with extensive research on types of architecture, furniture and fabrics of historical periods. Four hours credit.

176-276. Dietetics. Advanced human nutrition. Animal feeding experiments developed as individual research problems. Dietaries for families of various income levels are planned. Prerequisite H.A. 74. Four 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. Demonstration Cookery. Practice in the techniques of demonstrating the preparation of food to groups. Prerequisite H.A. 77, 78 or the equivalent. Two hours credit.

185-285. Experimental Cookery. An opportunity to determine the effects of temperature, time and different manipulations on foods. Commercial products are tested and compared with home methods of preparation. Prerequisites H.A. 77, 78 or the equivalent. Four hours credit.

186-286. Institution Cookery. Application of cookery to large quantity preparation. Meal planning for various types of food service. Practice in using labor saving devices of modern institutional kitchens. Four hours credit.

187-287. Institution Management. The organization and management of various types of institutions. Specific emphasis is given to problems of personnel, floor plans and efficient work schedules. Four hours credit.

188-288. Costume Design. The study of color, line and material. Students design and construct dresses of artistic merit, using fabrics that require skill in handling. Prerequisite 72, 73 or the equivalent. Four hours credit.

189-289. Institution Economics. Problems involved in the purchase of foods and equipment for an institution. Elementary principles of cost accounting are studied. Two hours credit.

190-290. Household Economics (Summer Quarter only). Discussion of homemaking as a business. Consumer problems of the homemaker. Criteria for the purchasing of household equipment. Four hours credit.

192-292. Methods in the Teaching of Homemaking. A study and observation of the factors involved in the teaching and learning process in homemaking, such as teacher adjustment, adolescent characteristics, organization of instruction and teaching materials. Two hours credit.

195-295. Tailoring. The making of tailored suits and coats. A remodeling problem may also be used. Special emphasis is placed on tailored finishings. Prerequisite H.A. 71 or 72 or an equivalent. Two hours credit.

196-296. Demonstration Techniques in Clothing. Experience in demonstrating before audiences, the problems and techniques used in clothing construction and the making of household furnishings. Prerequisites H.A. 72 and 73. Two hours credit.

197-297. Institution Furnishings. Projects involving the selection and arrangement of furnishings needed in institutions, with emphasis on the artistic as well as on durability. Two hours credit.

200c. Teaching Problems in Homemaking (Summer Quarter only). Modern methods and trends in homemaking education. Problems of the individual teacher will be studied and assistance given to the working out of 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. The course provides for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. 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). A study of recent textile developments. Problems of individual interest are developed. Four hours credit.
299. Thesis. Required of all Plan A graduate students in Home Arts. Twelve hours credit.

## INDUSTRIAL ARTS

School administrators are tending to employ teachers who can direct a variety of activities rather than a specialist in one type of work. Industrial arts in most schools is a phase of general education rather than vocational education. It 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.

## Major in Industrial Arts <br> (With Teaching Certificate)

In addition to the requirements listed on pages $\mathbf{2 0 - 2 1}$, the following courses are required of all Industrial Arts majors who wish certification as teachers: I.A. $34,41 \mathrm{a}, \mathrm{b}, 45,46 \mathrm{a}, \mathrm{b}, 50 \mathrm{a}, \mathrm{b}, \mathrm{c}, 51,55 \mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}, 61 \mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}, 153$, and one of the following: I.A. 135, 137, or 138.

If the student does not select a minor in fine arts, the following courses or their equivalent in Fine Arts should be added: F.A. 11, 16, 17.

Other courses recommended for Industrial Arts majors include: P.E. 60; Ed. 266; Physics 67; P.E. 172.

One minor outside of the division is required of all Industrial Arts majors.

## Minor in Industrial Arts

The following courses are the usual requirements for a teaching minor in the field of Industrial Arts. However, for individuals expecting to become craft counselors in summer camps or recreational leaders on city playgrounds, suitable substitutions will be made. In accredited high schools a minimum of six hours credit is required in the kind of work one expects to teach. I.A. 34,45 , 50a, b, 55a, c, d, 61a, b, c, 153a; Elective, 2 hrs.

## Graduate Study

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

## DESCRIPTION OF COURSES

34. Introduction to Industrial Arts. The basis for the development of a modern philosophy of industrial arts. Orientation to problems of teaching and teacher preparation. Required of all freshman majors in Industrial Arts. Two hours credit.

41abc-141abc. Elements of Printing. Course $a$ is elementary, $b$ intermediate, $c$ advanced. Experience with fundamental operations used in a school print shop. Two or four hours credit each quarter.

45-145. General Shop. Exploration in woodwork, art metal, ornamental iron, sheet metal, bookbinding, plastics, and leather work. Required of all freshman majors. Two or four hours credit.

46abc-146abc. Bookbinding. Basic processes ranging from elementary to advanced binding. Part of course devoted to work with limited equipment. Bookcrafts and leatherwork may be studied. Two or four hours credit each quarter.

49-149. Bookbinding for School Librarians. Opportunity to develop skills in library binding and repairing. A study of handmade equipment, purchasing of supplies, and economical ways of binding books. Four hours credit.

50abcd-150abcd. Woodwork. Courses a, b and c progress from elementary to more advanced work. Machine work is included in d. Study of woods, materials and supplies parallel development of skills. Two or four hours credit each quarter.

51-151. Equipment and Maintenance Problems. The care of tools and maintenance of machines. Problems of issuing materials and tools. Purchasing supplies, equipment, and keeping shop records. Construction of shop equipment. Four hours credit.

54ab-154ab. Workshop in Industrial Arts for Elementary Teachers. Development of basic skills through elementary work in wood, metal and other materials easy to get. Adaptation of work to classroom or small shop. Creative work with limited equipment. Two or four hours credit each quarter.

55abcd-155abcd. Metalwork. Courses a, b, c, and d deal with sheet metal, ornamental iron, art metal, and general metal. Opportunity is provided for the designing and construction of simple practical projects with each kind of material. Two or four hours credit each quarter.

61abcd-161abcd. Principles of Drafting. Course $a$ is geometric construction, orthographic projection and pictorial drafting. Course $b$ includes pattern development and machine drawing. Course $c$ is architectural drafting. Course $d$ consists of advanced practical problems in drafting. Two or four hours credit each quarter.

63-163. General Shop Electricity. Elementary principles of electricity that are applicable to projects on the junior high school level, and an opportunity to construct projects that use these principles. Methods of organizing a unit. Two or four hours credit.

135-235. Foundations of Industrial Arts. The origins and the development of the arts. Early movements toward industrial arts, organizations, leadera, schools, philosophies and their influences. Four hours credit.

137-237. Teaching Problems in Industrial Arts. All problems an industrial arts teacher faces from organizing and planning work to budgets and evaluation. How to strengthen weak areas and expand offerings. Four hours credit.

138-238. Current Theory and Practice in the Arts. Current controversial issues which confront the teacher of the arts. Problems of standardization. laboratory organization, administrative and community attitudes, and correlation with other departments. Four hours credit.

142abc. Advanced Theory and Practice of Typographic Design. Prerequisite 41-141 or the equivalent. An advanced course which treats printing from the standpoint of design. Offers opportunity to do creative work beyond ordinary commercial printing. Two or four hours credit each quarter.

147-247. Problems in Leatherwork. Development of basic techniques in leatherwork. Tool designing and tool making for camps and school shops. Study of tanning, course organization, and relation of work to other areas. Four hours credit.

148-248. Teaching Techniques and Course Organization in Bookbinding. Methods of relating the bindery to the library and the classroom. Organization of binding as a general shop unit. Development of courses to meet individual needs. Four hours credit.

153ab. Woodturning. Prerequisite 50a-150a or the equivalent. Development of basic skills in woodturning and the use of the lathe to supplement bench woodwork. Two or four hours credit each quarter.

154c-254c. Workshop Organization in the Rural and Elementary School. Prerequisite 154a or the equivalent. A continuation of 154a with special emphasis on purposes, teaching methods, problems of finance, and working under difficult classroom conditions. Two or four hours credit.

159-259. Teaching Techniques and Course Organization in Metals (Summer Quarter only). Objectives, course content, and methods of teaching all phases of metal work. 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 as they apply to the several areas of industrial arts. Four hours credit.
167. Woodfinishing and Upholstery. Techniques and processes in woodfinishing and upholstering. Study of materials. 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 the arts. Curriculum problems, objectives, and administrative and community pressures are studied. Four hours credit.

200a. Introduction to Graduate Study in Industrial Arts (Summer Quarter only). A study of the literature and research in the arts. Criteria for the selection of graduate work in industrial arts for subsequent quarters. Study of research techniques. Required of all graduate majors in industrial arts. Four hours credit.
201. Seminar in Industrial Arts. An opportunity for all students doing independent research to report and receive criticism. Four hours credit.
222. Individual Studies in Industrial Arts. Opportunity for independent study not provided in regular classes. Open only to qualified students. Credit toward the 'master's degree limited to eight hours.
236. Principles of General Shop Organization (Summer Quarter only). The purposes and philosophy underlying the organization of general shops. 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. Techniques by which such courses are developed. 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. Four hours credit.
244. Problems of Design in Printing and the Graphic Arts (Summer Quarter only). Prerequisite, 243. Forms and trends of design and methods by which it functions in the graphic arts. Problems and projects arising from pupil's interests. Opportunity for individual creative work. Four hours credit.
251. Teaching Techniques and Course Organization in Woodworking. Critical study of current practices. A "refresher" course for teachers who have been away from the field. Includes techniques in both bench and machine work. Four hours credit.
252. Problems in Woodworking (Summer Quarter only). Prerequisite, 251 or the equivalent. A study of the problems the specialized teacher of woodworking in secondary schools must meet. Four hours credit.
256. Advanced Art Metal (Summer Quarter only). Prerequisite, 155c or equivalent. Advanced processes in art metal and jewelry work. Two or four hours credit.
260. Problems of the Metal Shop (Summer Quarter only). Prerequisite, 159-259 or the equivalent. Methods of organizing courses on both unit and general shop basis. Four hours credit.
262. Problems in Drafting and Planning (Summer Quarter only). Objectives, course content and teaching procedures. Four hours credit.

268ab. Advanced Architectural Drafting (Summer Quarter only). Prerequisite, 161 c or the equivalent. Home and school planning. Laws, standards and computation of cost. Open to school administrators as well as industrial arts teachers. Two or four hours credit each quarter.
299. Thesis. Thesis course required of all Plan A graduate students in Industrial Arts. Twelve hours credit.

## DIVISION OF EDUCATION

The Division of Education offers the following four-year curricula leading to the degree of Bachelor of Arts with teaching certificate:

1. Elementary Teachers
a. The Four-Year Plan leading to the A.B. Degree in four years of pre-service preparation without public school teaching experience.
b. The Five-Year Plan leading to the A.B. Degree in a minimum of five calendar years, including two years of supervised 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.

The division offers specialized graduate curricula leading to the Master of Arts degree in Business Education, Educational Psychology, Elementary Education, School Administration, Secondary Education, Supervision in Elementary and Secondary Schools and Laboratory Schools in Teachers Colleges.

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

## ELEMENTARY MAJOR

Four-Year Plan-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: F.A. 24, Mus. 49, P.E. 102, Eng. 13, 21, Sci. 101, Ed. 110, 111, 112, 113.

Elementary majors are required to take P.E. 14, Plays and Games, as a part of the active physical education courses.

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

Five-Year Plan-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. The required courses are: Ed. 30, 50a, 51, F.A. 24, Eng. 13, 21, Mus. 49, Sci. 1. Twenty credit hours of electives in subject-matter fields.

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 inservice laboratory courses in three subjects (one each quarter) for a total of twelve hours credit. The courses are offered in education, art, music, 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 with the Director of Student Teaching. The student then enrolls for twelve hours of college work on the campus in summer school.

During his second year of teaching, preferably in the same position, the student will earn an additional twenty-four quarter hours credit for 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 then 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 for elementary majors are required: Ed. 110, 111, 112, 113. Students may be excused from one or more of the 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 courses.

## ELEMENTARY MINOR

The elementary minor includes twenty-four credit hours as follows: Ed. 110, 111, 112, 113 and two of the following: F.A. 24, Mus. 49, Eng. 13, 21, Sci. 101.

## GENERAL SECONDARY MAJOR

A general secondary or distributed majors curriculum is provided for those students who do not care to select a major in any one of the divisions that prepare secondary teachers. In contrast to specialization in one subject taught in the secondary school, this major is particularly designed for students who wish balance or equivalent preparation in three or four secondary school subjects. 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

The College has arranged with the School of Librarianship of the University of Denver for a joint curriculum on the undergraduate level. Students enrolled for this program should take the required courses in general education and in addition should complete at least 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 sophomore and junior years at Colorado State College of Education the student will complete all education requirements, including observation and student teaching. Work for the major in the library field will then 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 internes. Those interested in this internship should write to 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: Ed. 80, 181, 182. Besides this basic program at least twelve hours more from the following shall be selected: Ed. 108a, 183, Eng. 13, 119, 126a, I.A. 49.

## GRADUATE STUDY

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

## DESCRIPTION OF COURSES


#### Abstract

*25. General Psychology. Introducing the student to the scientific study of human behavior, with emphasis upon the growth and development of the individual within his physical and social environment. Three or four hours credit.


26a-126a. Camp Fire Girls' Leadership. Training for leadership in extracurricular activities for girls. The course leads to the National Training Course Certificate of the Camp Fire Girls. Two hours credit.

26b-126b. Boy Scout Leadership. Designed to give students 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. Two hours credit.

26c-126c. Girl Scout Leadership. For young women interested in becoming sponsors of Girl Scout Troops. Two hours credit.

30-130. Rural Education. The place and function of rural schools in public education. Organization and management of rural schools, and selection and use of teaching materials adapted to multiple-grade situations. Three or four hours credit.

50a-150a. Observation and Applied Techniques in Elementary Schools. Prerequisites, Ed. 30 or Ed. 105 and personal qualifications essential for a teacher. Scheduled observation and participation periods and weekly group conferences, Tuesday, 4:00 p.m., in addition to regular class study and discussion. Eight hours credit.

51-151. Student Teaching. Prerequisites, Ed. 50a-150a for elementary majors, or 150b for secondary majors, and the personal qualifications essential for a teacher. Content includes planning of definite teaching units, classroom teaching under close supervision for extended periods, conferences with supervising teachers on teaching procedures used, and participation in school and school-community activities. Four to sixteen hours credit.

77abc. Psychology of Childhood and Youth. Prerequisite, Ed. 25 or the equivalent. The study of the physical, social and intellectual growth and development of the pupil from pre-school age through the high school. This course meets educational psychology requirements. Two hours credit for each of three quarters; six hours total credit.
85. Community Life and Problems. A course providing a study of and participation in Colorado community life. Two hours credit for each of three quarters.

100-200. Unit Courses in Education. Short courses of two weeks duration, usually covering one unit of a larger quarter course, are offered each summer. The title of each specific unit implies the purpose and content of the course. One hour credit for each unit.

[^8]103-203. Aviation for Elementary and Secondary Teachers. A non-technical aviation course for elementary and secondary teachers dealing with maps, weather, navigation, identification, aerodynamics, civil air regulations, workers in aviation, and social significance of aviation. Three or four hours credit.
*105. American Education. (This course should be taken before or with Ed. 114 or Ed. 116.) Objectives of education, techniques of educational thinking, characteristics and trends in the American school system, the general program and materials of instruction, and problems of teacher-education and welfare. Four hours credit.

107-207. Personality of Young Children (Summer Quarter only). Prerequisite, a course in psychology. Development of personality from birth through early childhood with methods of diagnosing and treating classroom problems of personality development. Four hours credit.

108a-208a. Visual Aids in Education (Summer Quarter only). Topics include the general philosophy and content of visual education, objective mate-rials-objects, models, dioramas, exhibits, museum materials, motion picture appreciation, the still picture, and the instructional film. Three or four hours credit.

108b-208b. The Radio in Education (Summer Quarter only). Topics include educational method and philosophy in relation to radio, classroom utilization of radio equipment, problems of school broadcasting, radio production, and appreciation. Three or four hours credit.

110-210. Reading in the Elementary School. Prerequisites, Ed. 150a or 151, or teaching experience. Content, methods, and materials to be used in the teaching of reading from the kindergarten through the sixth grade. Four hours credit.

110a-210a. Reading in the Primary Grades (Summer Quarter only). 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 tests. Three or four hours credit.

110b-210b. Reading in the Intermediate Grades (Summer Quarter only). The purpose of this course is to provide guidance in attacking problems to be met in the teaching of reading in the fourth, fifth, and sixth grades. Four hours credit.

110c-210c. Reading in Rural Schools. In-service laboratory course for elementary teachers. The in-service teacher learns to analyze the teaching of reading in his school and to devise methods of improving it. Four hours credit.

110d-210d. Remedial Reading in the Elementary School (A lecture course. Summer Quarter only). (Note the laboratory course, Ed. 110e-210e.) A course dealing with remedial reading from grades one through six, testing and diagnosis of problem cases, and techniques and materials for use in remedying the difficulties. Four hours credit.

110e-210e. Laboratory Course in Remedial Reading (A laboratory course. Summer Quarter only). Prerequisite, Ed. 110d-210d. A practice course with actual remedial cases with which the materials and techniques of diagnosis and treatment of difficulties are used. Four hours credit.

110f-210f. Reading Readiness. Presenting theories, research, and practices regarding readiness for reading in the first grade and on through the elementary school, and readiness to read in subject-matter fields. Three or four hours credit.
$110 \mathrm{~g}-210 \mathrm{~g}$. Teaching Spanish-American Children. New techniques, methods, and materials for teaching non-English speaking children, emphasizing foundational work in oral English for beginners and continued guidance through the grades. Four hours credit.

[^9]111-211. Language in the Elementary School. Prerequisites, Ed. 150a or 151, or teaching experience. Improvement in instruction, content, methods, and materials to be used in the teaching of speaking and writing from the kindergarten through the sixth grade. Four hours credit.

111a-211a. Language in the Pre-School and Primary Grades (Summer Quarter only). A course in oral language from pre-school through grade three, and written language, penmanship, and spelling in the primary grades. Curriculum content, materials, and techniques will be studied. Three or four hours credit.

111b-211b. Language in the Intermediate Grades (Summer Quarter only). The purpose of this course is to provide guidance in coping with problems to be met in the teaching of language in the fourth, fifth, and sixth grades. Four hours credit.

111c. Language in Rural Schools. In-service laboratory course for elementary teachers. With the aid of detailed study guides, the in-service teacher analyzes the teaching of language in his school and methods of improving it. Four hours credit.

112-212. Arithmetic in the Elementary School. Prerequisites, Ed. 150a or 151, or teaching experience. Selecting what to teach, the grade placement of content, method and materials of teaching, and means of evaluating achievement. Four hours credit.

112a-212a. Arithmetic Concepts for Young Children (Summer Quarter only). Study and discussion of the development of number readiness and the utilization of the meanings of numbers in teaching the fundamental processes. Four hours credit.

112b-212b. Arithmetic in the Intermediate Grades (Summer Quarter only). Problems in the teaching of arithmetic in the fourth, fifth, and sixth grades. Four hours credit.

112c. Arithmetic in Rural Schools. In-service laboratory course for elementary teachers. The teaching of arithmetic and methods of improving it. Four hours credit.

113-213. Social Studies in the Elementary School. Problems of selecting and organizing content, learning activities, and devising methods of teaching unified and correlated programs. (Divided into two sections in the summer quarter. Ed. 113a-213a deals with social studies in the primary grades. Ed. 113b-213b is concerned with social studies in the intermediate grades.) Three or four hours credit.

113c. Social Studies in Rural Schools. In-service laboratory course for elementary teachers. The teaching of social studies and methods of improving it. Four hours credit.
*114-214. The Elementary School. Prerequisite, Ed. 105. The purposes of the elementary school, types of organization, curriculum, accounting, organizations, assemblies, parent relationships, and other non-instructional problems. Four hours credit.

115a-215a. Principles of Counseling. The fundamental principles of guidance programs. Two or four hours credit.

115b-215b. Applications of Counseling. Prerequisite 115a-215a. Opportunities are given here for students to participate in guidance programs. Two or four hours credit.

115c-215c. Guidance in Elementary Schools. The scope and best techniques for carrying out a program in personnel and guidance from pre-school through grade six. Three or four hours credit.

115d-215d. Guidance in Secondary Schools (Summer Quarter only). Principles and techniques of guidance, functions of guidance workers, and analysis of representative guidance programs in secondary schools. Three or four hours credit.

115e-215e. Problems in Secondary School Guidance (Summer Quarter only). An advanced course which considers specialized problems such as home room guidance, tests and their use in guidance, records and reports, and individual guidance problems. One to four hours credit.

115f-215f. Personnel Work in Colleges and Universities. General discussion of the administrative principles and functions of student personnel work. Admission policies, college orientation, housing, program planning, and interpretation of tests. Three or four hours credit.
$115 \mathrm{~g}-215 \mathrm{~g}$. Vocational Guidance (Summer Quarter only). A survey of current practices and critical interpretations of recent guidance literature. Three or four hours credit.
*116-216. Secondary Education. Prerequisite, Ed. 105. An introductory course in secondary education concerned with the general problems of the evolution of the secondary school, purposes, the curriculum, learning materials, methods and evaluation. (This course ordinarily to be taken in the same quarter with Ed. 150b.) Four hours credit.

117-217. Extra-Curricular Activities and Guidance. Prerequisite, Ed. 105. Topics covered include school government, athletics, debating, literary and social clubs, the school papers, musical and dramatic activities, and civic clubs and projects. Four hours credit.

119-219. Unifying Learning in Junior High Schools. Study of purposes, organization of content, techniques for teaching skills. in a general education program. Four hours credit.
120. Individual Educational Research for Senior College Students. 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 written paper must be filed before credit is given, one with the instructor who directs the individual study and one with the chairman of the division. $A$ maximum of eight hours. Two or four hours credit for one problem.

127-227. Teachers' Classroom Tests. Practical and technical training in the construction, evaluation, and interpretation of teacher-made tests, with special emphasis given to interpreting results. Three or four hours credit.

127a-227a. Improving the Marking System. A unit course designed to assist teachers and administrators in the improvement of school marking and reporting practices. One hour credit.

127b-227b. Construction and Use of Achievement Tests. How to construct and use various types of achievement tests. One hour credit.

128a-228a. Mental Hygiene. Prerequisite, Ed. 25 or its equivalent. A general non-technical course designed to give an understanding of the problems and principles of mental hygiene observed in normal community life. Three or four hours credit.

128b-228b. The Psychology of Exceptional Children (Summer Quarter only). Prerequisite, teaching experience and Ed. 25. The evaluation and adjustments necessary for understanding and teaching the brilliant, retarded, physically handicapped, and emotionally maladjusted child. Three or four hours credit.
*129a-229a. Educational Measurements in Elementary Schools (Summer Quarter only). A survey of the available standardized measuring instruments appropriate for use below the high school level. Three or four hours credit.

129b-229b. Mental Tests and Measurements (Summer Quarter only). Mental testing and measurement. Training provided in administering tests and in evaluating the tests and their results. Three or four hours credit.

[^10]129c-229c. The Stanford-Binet Scale of Intelligence. A laboratory course in the use of the scale, leading to the student's becoming qualified to administer it in schools and clinics. F'our hours credit.

136-236. Techniques of Teaching in Rural Schools. This course offers opportunities to become familiar with and evaluate new teaching techniques adapted to the instructional programs of rural schools. Four hours credit.

137-237. Comparative Education (Summer Quarter only). The philosophy and practices of education in foreign countries, usually including education in Germany, France, Russia, Norway, Great Britain, China, Australia, Canada, Mexico, and certain South American countries. Four hours credit.
*140-240. Parent Education. To acquaint teachers with the important par-ent-home-school relationships in the educational process. The course deals with the philosophy of parent-teacher organization, 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. (For men undergraduate majors and students with limited administrative experience.) A study of problems of small schools from the administrative standpoint. Curricula, supervision, transportation, records, and other problems. Three or 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. Three or four hours credit.

142-242. School Administration. (First Course.) Prerequisite of twelve quarter hours in education, experience, and senior or graduate classification. Federal relations to education, the state as the fundamental educational unit, local administrative units, duties and powers of the superintendent, and the administration of personnel. (Administration majors may earn up to 20 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. Child accounting, 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. School building plans, specifications, construction, maintenance, operation, insurance, and purchase and care of supplies and equipment. Four hours credit.

145-245. Curriculum Construction. An appraisal of theories and practices of curriculum making, presentation of modern functional philosophy of curriculum making, and survey of the applications of this functional theory to the major areas of knowledge. (This is the first of three courses in the curriculum field: Ed. 145-245, 146-246, 147-247.) Three or four hours credit.

146-246. Advanced Curriculum Construction. This course discusses what to teach in the major areas of experience, including health, economic life, home and family life, civic education, leisure and recreation, religion, and individual development. Three or four hours credit.

147-247. Educational Sociology. Surveys and appraises the implications of outside-of-school agencies, such as associational influences, customs, social control, parent education, youth problems, libraries, motion pictures, museums, the press, the radio, and the like. Three or four hours credit.
*Also given by correspondence.

149-249. Problems of Organizing a Community (Summer Quarter only). This course attempts to help administrators and teachers to utilize the resources of the community in a broad educational program in and out of school. Four hours credit.

150b. Observation and Applied Techniques in Secondary Schools. Prerequisite, Ed. 105. Study of teaching at the secondary school level. A methods course in a given major area combined with observation for the following credit: fine, industrial, and home arts; business education; English, speech, and dramatics; foreign languages; mathematics; science; social studies-Eight hours credit; health, physical education, music-Four hours credit.

152-252. Student Supervision. Prerequisites: evidence of distinctly successful teaching experience, and Ed. 192-292. Enrollment limited to those preparing for supervisory positions in public schools or for supervision of student teachers. A laboratory course to give practical experience, under supervision, in directing the work of student teachers. Four hours credit.
158. Advanced Observation-Student Teaching. Prerequisites: public school teaching experience and Ed. 105. Carefully directed observation, analysis, and evaluation of teaching in Ernest Horn Elementary School and discussion of adapting observed methods to student's particular teaching situation. Four hours credit.

161-261. Pre-School and Kindergarten Education (Summer Quarter only). A course presenting the theories, research, and best practices for the education of children in schools from the age of two years until their entrance to first grade. 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 Elementary School. The course deals with the elementary school, its functions, and organization and administration for effective instruction, pupil welfare, guidance and accounting, teacher growth, and school-community relationships. Four hours credit.

163b-263b. New Techniques Applied to Elementary Education. Desirable prerequisites, some elementary school experience as a teacher, supervisor, or principal. Topics include visual aids, excursions and school journeys, radio, safety education, use of library resources in the community, health practices, auditorium work, civic activities, etc. Three or four hours credit.

164-264. Improvement of Instruction in the Elementary Subjects. (For school administrators.) This course offers a consideration of the most crucial problems to be solved in supervising the teaching of the basic elementary school subjects. Four hours credit.

165-265. Junior-Senior High School Administration and Supervision (Summer Quarter only). Prerequisite, Ed. 116 or the equivalent. The important problems in school administration and supervision as recognized and selected by secondary school administrative personnel enrolled in this course will determine its content. Three or four hours credit.

166-266. Secondary School Curriculum, Instruction, and Administration (Summer Quarter only). Prerequisite, Ed. 116 or the equivalent. The problems of teachers, particularly those concerning curriculum and instruction on which the members of this class are working in service will be used for cooperative committee study and development of recommendations for improved practices. Three or four hours credit.

167-267. Reconstructing Secondary Education (Summer Quarter only). Prerequisite, Ed. 116 or the equivalent. Progressive thinking and progressive practices in secondary education and in the major teaching fields of the students enrolled will be used as a basis for the development of plans for the improvement of secondary school teaching. Three or four hours credit.

168-268. The Small High School (Summer Quarter only). Emphasis is directed in this course to those secondary school problems associated particularly with the small school. Three or four hours credit.

169-269. Experimentation in the Secondary School (Summer Quarter only). Desirable prerequisite, Ed. 116 or the equivalent. Secondary school organization, curriculum, and instructional practices as developed by the Secondary School of Colorado State College of Education provide the approach in this course to the study of various plans for the improvement of secondary education. Three or four hours credit.

171-271. Techniques of Adult Education (Summer Quarter only). This course will emphasize the development of the adult educational movement in this country, the psychology and philosophy of adult education and methods and techniques in practical application. Three or four hours credit.

175a-275a. Applied General Statistics. A basic course introducing the student to the meaning and practical use of measures of central tendency, variability, reliability, and relationship. Four hours credit.

175b-275b. Statistical Methods for Research. Prerequisite, Ed. 175a-275a. A course providing the student with advanced statistical techniques appropriate for administrative and research work in education. Special emphasis given to research data. Four hours credit.
*177a-277a. Child Psychology. Prerequisite, a course in general psychology or the equivalent. This course presents important information about the growth, adjustments, and capacities of children from conception through the elementary school years. Emphasis placed upon what to do in guiding the development of children. Three or four hours credit.

177b-277b. Psychology of Adolescence. This course gives data concerning physical, emotional, and social development of normal adolescence; examines critically the school program, and suggests methods of directing growth of the adolescent. Three or four hours credit.

179-279. Development of American Psychology. Prerequisite, Ed. 25-125 or its equivalent. Using a historical approach, a study is made of the various trends leading to the growth of structuralism, functionalism, behaviorism, and organismic-gestalt psychology. Four hours credit.

180-280. Organizing a School Library. Aid for teachers in developing libraries in small schools: principles of maintenance and administration on either elementary or secondary level, simple classification and cataloging, converting schoolrooms to effective libraries. Four hours credit.

181-281. Library Materials for Schools. Evaluation of library resources. Coordination of materials with class needs. For both elementary and secondary schools. Four hours credit.
182. Directed Library Practice. Prerequisites, Ed. 180 and 181, or their equivalent. A minimum of eight hours a week of directed work in the elementary, secondary, or college libraries. 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. Professional Education of Teachers (Summer Quarter only). Deals with general administration and control of teachers' colleges, the teaching staff, selection, admission, and supervision and control of students, records, reports, placement, finance, curriculum, educational research, and relationships with other educational institutions. Two to four hours credit.
*Also given by correspondence.
*191-291. Social Psychology. (See Social Studies 191-291.) Prerequisite, Ed. 25-125 or its equivalent. Human behavior is studied in reference to membership in such culture groups as the family, church, state, and economic organizations. Three or four hours credit.

192-292. Supervision in Public and Laboratory Schools. Study of specific supervisory procedures and of the instructional difficulties met by pre-service and in-service teachers. Three or four hours credit.

193abc-293abc. Seminar in Higher Education (Summer Quarter only). 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. Three units. Three hours credit.

194-294. Applied Logic. Prerequisites, Ed. 105, 116, 195. Logical meaning, logical structure, factual reasoning, dialetical method; the problems of reality, self, moral values, religion, and the esthetic experience. Four hours credit.
*195-295. Philosophy of Education. Prerequisites, Ed. 105 and 116. Educational aims and values, democracy and education, 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). This course is designed to study important historical and philosophical backgrounds for the interpretation of present-day educational issues. Substitute for Ed. 195295. Four hours credit.

196-296. History of Philosophy. Prerequisites, Ed. 105, 116, and 195. A study of three schools of philosophy-naturalism, idealism, and pragmatism. Four hours credit.

197-297. Conceptions of Mind in Educational Theory. Prerequisites, Ed. 105, 116, and 195. Traces the historical development of three major conceptions of mind and shows the relation of each to the aims of education. Four hours credit.

198-298. Current Educational Trends and Issues (Summer Quarter only). Appraises the current studies in such areas as objectives of education, experimentation and evaluation, administration (elementary, secondary, and higher education), non-governmental controls, the program of education, personnel, welfare, etc. Three or four hours credit.

198a-298a. Social and Educational Planning in the Postwar World (Summer Quarter only). The course, dealing with recent social and educational trends, presents needed adaptations for a broadened program for education. Three or four hours credit.
200. Introduction to Educational Literature and Experimentation. Required of Plan A master's degree students and those working for doctorate candidacy. Evaluation and study of major principles and techniques employed in educational research. Four hours credit.

209abc. Seminar in Elementary Education. This course gives intensive consideration to instructional problems in the elementary school. The problems included each quarter are determined by the interests of the students enrolled. Two or four hours credit each quarter.
222. Individual Studies in Education. Qualified students outline a definite problem and spend a minimum of twenty-five clock hours for each quarterhour of college credit. Two typewritten copies of a well written paper must be filed before credit is given, one with the instructor who directs the study and one with the Director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit.
*Also given by correspondence.

225-325. Contemporary Psychological Problems. This course deals with the contemporary status of the most persistent problems identified with the study of human behavior, such as intelligence, learning, thinking, and personality. Four hours credit.

278-378. Social Significances of the Learning Process. Learning viewed in its social setting. Factors of effective learning, the field approach to the learning process, and evaluation of so-called laws of learning. Four hours credit.
299. Thesis. Thesis course required of all Plan A students. Twelve hours credit.

322a. Research Preliminary to Field Study No. 1. Required of all candidates for the degree of Doctor of Education as preparatory to Field Study No. 1. This preparatory work must be done on the campus as a part of a student's regular course load and in consultation with the major professor or the research professor.

322b. Research Preliminary to Field Study No. 2. Required of all candidates for the degree of Doctor of Education preparatory to Field Study No. 2. This preparatory work must be done on the campus as part of a student's regular course load and in consultation with the major professor or the research professor.

323abc. 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; 323c, spring quarter, four hours. For the second and third studies the credit is offered in the same way.

324abc. Graduate Research Credit for Field Study No. 2. Each course four hours-maximum twelve hours for Field Study No. 2.
342. School Administration (Fourth course). Prerequisites, twelve quarter hours in education, experience, and graduate classification. The problems of general school law applicable in typical states and court decisions relative to schools; public relations and school publicity. Four hours credit.
343. School Administration. (Fifth course.) Prerequisites, twelve quarter hours in education, experience, and graduate classification. Administration of adult education, federal-supported classes, such as agriculture, home economics and distributive occupations, libraries, health agencies, military training, and other specialized and allied educational agencies. Four hours credit.

## BUSINESS EDUCATION

Majors are provided in business education leading to the degrees Bachelor of Arts and Master of Arts with teaching certificates, and the Bachelor of Arts in liberal arts. The degree Associate in Arts is awarded at the end of twoyear courses in pre-business management, accounting, secretarial, and general business.

## Major in Business Education <br> (With Teaching Certificate)

Students who are candidates for the bachelor's degree with the teaching certificate must complete the requirements listed on pages 20-21 and also Bus. Ed. 1, 2, 10, 11, 12, 13, 20, 21, 22, 31, 37, 41, 155, 172; eight hours electives in economics. Add also a minor of 26 hours in another division, and 28 hours of free electives.

## Minor in Business Education

Colorado certification requirements for business teachers provide for the following minimum preparation and proficiencies in business education: Bus. Ed. 1, 2, 10, 11, 31, 152, and 155; Econ. 20. Total 26 hours. Proficiency examina-
tions may be taken for exemption from Bus. Ed. 1, 2, 10, and 11, but passing these examinations does not give credit toward a degree in business education.

## Liberal Arts Major in Business Education

Students who are candidates for the bachelor's degree must complete the requirements listed on pages 20-21, and also Bus. Ed. 20, 31, 37, 41, 155; Mod. Lang. 24 hours; electives in business education 28 hours; free electives 96 hours. Total 192 hours.

## Two-Year Business Curriculums

Two-year business curriculums are offered in Accounting, General Business, Pre-Business Management, and Secretarial Studies. The Associate in Arts degree will be conferred on the student who completes the prescribed courses in general education and one of the two-year business curriculums. A student who completes one of the two-year business curriculums without the courses in general education will be certified as a competent operator in the given field.

## One-Year Business Curriculums

One-year business curriculums are offered in Accounting, General Clerical, and Stenographic Studies. These curriculums are offered for students who wish to do intensive preparation for office positions. The student who completes one of the one-year curriculums will be certified according to his preparation.

## Description of Courses

*1. Typewriting. A beginning course in typewriting. Students who have had one year of typewriting in high school may not take this course for credit. Two hours credit.
*2. Advanced Typewriting. The second quarter of typewriting. Students who have taken two years of typewriting in high school may not take this course for credit. Two hours credit.

10-110. Gregg Shorthand. A beginning course in shorthand. Students who have had one year of shorthand in high school may not take this course for credit. Four hours credit.

11-111. Advanced Gregg Shorthand. The second quarter of shorthand. Students who have had two years of shorthand in high school may not take this course for credit. Four hours credit.

12-112. Advanced Shorthand Transcription. A combination of materials equivalent to the third quarters of shorthand and typewriting. Four hours credit.

13-113. Office Practice. Prerequisite, 12-112, or the equivalent. A combination of instruction in the use of office machines and experience in the administrative offices of the College. The class will meet for two consecutive hours each day. Four hours credit.

14-114. Secretarial Practice. Prerequisite, 13-113, or the equivalent. This course deals with the duties of secretaries and gives advanced practice in transcription. Four hours credit.
*20. Introductory Accounting. A beginning course in accounting which deals primarily with the mechanics of bookkeeping. Four hours credit.
*21. Principles of Accounting. A beginning course in the principles and theory of accounting. Four hours credit.
*22. Advanced Accounting Principles. Prerequisite, 21, or the equivalent. The second quarter of accounting principles. Four hours credit.

[^11]23-123. Corporation Accounting. Prerequisite, 22, or the equivalent. The principles of accounting are applied to the books, records, and accounts of a corporation. Four hours credit.

24-124. Secretarial Accounting. This course presents a system of records for individuals and professional people. Four hours credit.

26-126. Cost Accounting. Prerequisite, 22, or the equivalent. This is an advanced course in accounting which deals with the problems of the equitable distribution of costs in manufacturing. Four hours credit.

27-127. Social Security and Payroll Accounting. Prerequisite, 22, or the equivalent. This course presents a modern system of record keeping and the required forms and reports which are required by law under the Social Se curity Act. Four hours credit.
*31-131. Business Law. This course deals with the law of contracts. Four hours credit.

32-132. Business Law. This course deals with the law of negotiable instruments. Four hours credit.

33-133. Business Law. This course deals with the law of agency, bailments, partnerships, personal property, and real estate. Four hours credit.
*37. Business Mathematics. This course deals with the business applications of mathematics. Four hours credit.
41. Introduction to Business. This is a general exploratory and orientation course in the area of business education. Four hours credit.

56-156. Retail Merchandising. This is a cooperative part-time course dealing with the principles of retail merchandising and store selling. Four hours credit.
*57-157. Principles of Insurance. The different types of insurance coverage available, the kinds of policies, and the agencies of insurance are presented in this course. Four hours credit.

58-158. Advertising. The principles and practices of advertising are studied in this course through a cooperative part-time plan. Four hours credit.

59-159. Salesmanship. The principles of good salesmanship will be studied through a cooperative part-time plan. Four hours credit.

60-160. Calculating Machines. This is a beginning course in the use of a number of different kinds of calculating machines. Two hours credit.

61-161. Advanced Calculating Machine Practice. Speed building in the use of one particular calculating machine is the chief objective of this course. Two hours credit.

134-234. Advanced Business Law. This course deals with advanced problems in classroom presentation and the teaching of business law. Four hours credit.
152. Teaching Business Subjects. Offered every quarter in conjunction with observation and techniques of teaching. Four hours credit.

153-253. Teaching the Business Subjects. This course consists of a series of one and two-hour unit courses which deal with teaching methods in: (a) Bookkeeping; (b) merchandising; (c) consumer economics; (d) shorthand; (e) typewriting; (f) office appliances; (g) handwriting; and (h) introduction to business. One and two hours credit.

154-254. Consumer Education. This course deals with the problem of the consumer in the management of his personal business and financial activities. Four hours credit.

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## DIVISION OF HEALTH

The Division of Health includes physical education for women, physical education for men, and nursing.

## PHYSICAL EDUCATION

All first-year women in the college are expected to take one group sport, one individual sport, and one class in dance for one hour of 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 divisional staff members. A regulation gymnasium suit, which may be purchased through the college bookstore, is required of all women students. An extensive program of intramural sports is provided for all women students through the Women's Athletic Association. A rounded program of intramural sports is provided for all men students through the department of physical education for men. Both men and women students are advised to note the following regarding numbered courses: (1) Odd numbered courses, from 3 to 59 inclusive, are for men students only; (2) Even numbered courses, from 4 to 58 inclusive, are for women students only; (3) Dual numbered courses, from 3 to 59, 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 description of the course.

Bachelor's and master's degrees may be obtained by both men and women in physical education, the selection of courses to be made with the approval of the major professor.

Both men and women undergraduates majoring in physical education must 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. Two minors must be selected outside of the division.

## Major in Physical Education for Women (With Teaching Certificate)

The major in physical education for women 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.

In addition to the required courses listed on pages 20-21, the following courses are also required of majors in physical education for women: P.E. 52a, b, c, 54, 56a, b, 58, 60, 102, 120a, b, 122, 129a, b, c, 132, 135, 137a, b, 172. Suggested electives: Ed. 26a, H.A. 74, Zool. 117, Biol. 132 and P.E. 133.

## Minor for Women

The minor for women in 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.

As a part of the twenty-four hours required for a minor the following sixteen hours should be selected by students expecting to become secondary school teachers: P.E. 56a, b, 129a, b, c, 137b and 172. Those expecting to become elementary school teachers should take the following sixteen hours as a part of the twenty-four required as a minor: P.E. 52b, c, 56a, 129b, c, and 137a.

## Major in Physical Education for Men <br> (With Teaching Certificate)

The major in physical education for men is planned to prepare the prospective teacher in the areas of 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.

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. Students are advised to confer with their major professor regarding minors.

Students majoring in this field must complete the requirements listed on pages $20-21$.

The following courses are also required: P.E. 19a, b, 21a, b, 23a, b, 53b, d, $60,102,120 \mathrm{a}, \mathrm{b}, 122,135,137 \mathrm{~b}, 161,162,163,164,170$ and 172 . These courses are suggested electives: Ed. 26b, Eng. 62, Zool. 117, P.E. 132 and 137 a.

## Minor for Men

The minor in physical education for men is especially designed to prepare men who plan to teach academic subjects and coach athletics, teach general physical education, and administer school recreation programs. The recommended courses are: P.E. 19a, 21a, 23a, 60, 137b, 161, 162, 170 and 172.

## Graduate Study

Course work for graduate study 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 improve personal health habits among teachers. Men and women. Three hours credit.
2. Freshman Orientation in Physical Education Activities. Required of all freshmen each quarter except members of freshman and varsity athletic squads and physical education majors and minors. Furnishes a seasonal rounded program of physical activities. One hour credit each quarter.
3. Tap Dancing. One hour credit.
4. Physical Fitness Activities. This course consists of games, sports, and conditioning activities according to the season. One hour credit each quarter.

6ab. Modern Dancing. One hour credit each quarter.
7 and 8. Folk Dancing. One hour credit each quarter.
9 and 10. Social Dancing. One hour credit each quarter.
11 and 12. American Square Dancing. One hour credit each quarter.
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 Matwork. 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 and 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 and 32d. Life Saving and Water Safety. One hour credit.
32abc. 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.

## Courses for Majors and Minors

52a and 53a. Techniques in Folk Dances of Various Countries. Two hours credit.

52b and 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 and 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, pingpong, shuffleboard, archery, quoits, and bowling are presented in this course. Two hours credit.

56a. Use of Music in the Dance. A study of the history of music and dance, of musical and dance forms; dance composition and the use of music as dance accompaniment. 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 be offered. Two hours credit.
58. Tumbling. Work on mats, horse, ropes, and parallel bars will be presented in this course. Two hours credit.

60-160. First Aid. The course emphasizes the prevention, diagnosis, and treatment of the common accidents seen in daily life. Two hours credit.

83-183. Home Hygiene and 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 of health teaching and the presentation of criteria for judging materials and methods of health teaching. Two hours credit. Summer, four hours credit.

103-203. Social Hygiene. A consideration of the hygienic implications of those social contacts that are particularly influenced by sex. Two hours credit.

112-212. Tests and Measurements. A survey of tests in health and physical education, their use and methods of construction, and presentation of necessary statistical material for test interpretation. Required of all graduate majors, first quarter. Four hours credit.
*120ab. Anatomy and Physiology. The study of structure in the systems of the human body, including digestive, circulatory, respiratory, reproductive, nervous, excretory, and endocrine. 120a-four hours credit. 120b-two hours credit.
122. Kinesiology. This course gives detailed work on the skeletal and muscular systems. Advised especially for students wishing to go into physical therapy work. Four hours credit.

125-225. Physiology of Exercise (Summer Quarter only). Prerequisite, P.E. 120ab, Zool. 117. Effects of muscular activities on the various organs and systems of the body. Four hours credit.

129a. Teaching of Sports for Women. A consideration of the basic techniques of fall sports emphasizing teaching procedures. Two hours credit.

129b. Teaching of Sports for Women. A consideration of basic techniques of winter sports emphasizing teaching procedures. Two hours credit.

129c. Teaching of Sports for Women. A consideration of basic techniques of spring sports emphasizing teaching procedures. Two hours credit.

132-232. The Problems of Individual Gymnastics. The science of muscle action in relation to postural defects and treatment. Four hours credit.
${ }^{*}$ Given also by correspondence.
133. Massage. Work will be presented on purposes of, and kinds of, massage with opportunity offered for practical experience. Two hours credit.

135-235. History and Principles of Physical Education. The history and principles presented in this course are for the purpose of giving a background of knowledge essential to the understanding of physical education today. Four hours credit.

137a. Teaching of Physical Education in the Elementary School. Physical education activities for children of the elementary level will be discussed and practiced. 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. Program planning and physical education teaching techniques will be included. Two hours credit.

138-238. Sociology of Play (Summer Quarter only). Prerequisite, 172-272. The extent, need, functions, theories, nature and development of play; and qualifications and development of play leaders. Four hours credit.

140-240. Curriculum in Physical Education (Summer Quarter only). Principles involved in curriculum making; the necessity of a comprehensive curriculum; and the formulation of a progressively graded curriculum. Four hours credit.

141-241. Administration of Physical Education. This course deals with the policies and building construction in the organization of a program of physical education. Four hours credit.

142-242. Supervision of Physical Education in the Elementary School (Summer Quarter only). Desirable prerequisite, 137a. Topics discussed are position and duties of a supervisor of physical education in the administrative organization of a school system. Two hours credit.

150ab-250ab. Materials in Physical Education (Summer Quarter only). 150a-250a-Thorough study of content within the present-day elementary course of study. Provision for participation in activities and for leadership in an individual's new areas. Four hours credit. 150b-250b includes activities of the secondary school. Two hours credit.
155. Modern Dance Technique (Summer Quarter only). 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.

160-260. 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.
161. Coaching of Football. Sport techniques, rules, strategy, teaching procedures, training regulations, and reading material in the field. Two hours credit.
162. Coaching of Basketball. The underlying principles and techniques of coaching basketball. Two hours credit.
163. Coaching of Track and Field. A detailed study of competitive track and field athletics and experience in organizing and conducting track meets. Two hours credit.
164. Coaching of Baseball. The underlying principles and techniques of coaching baseball. Two hours credit.

170-270. The Organization and Administration of Physical Education and Athletics. An advanced course for physical education teachers and coaches, covering the procedures and policies of physical education and athletics. Four hours credit.

171-271. Safety Education. Comprehensive course for probable administrators of safety programs in public schools. Four hours credit.

172-272. Recreational Leadership. A discussion of a recreational program for schools and parent-teacher groups; and their co-ordination with community recreational organizations and types of programs for various groups in relation to age level. Four hours credit.

173-273. 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.

175-275. 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.
210. Camping (Summer Quarter only). Topics discussed include trends in camping, the layout of organized camps, camp organization, camps and the courts, youth hostels, overnight hikes, the camp program, and waterfront safety. Two hours credit.
222. Individual Studies in Health and Physical Education. 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 course. Maximum of four hours credit for one problem; eight hours toward the master's degree.
223. Problems in Health and Physical Education. Required of P.E. majors for the master's degree under Plan A. Follows panel discussion and seminar procedure presupposing broad academic and professional experience on the part of the student. Four hours credit.
255. Advanced Technique and Composition in the Modern 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. L'aboratory work required. Four hours credit.
299. Thesis. Required of all Plan A students. Twelve hours credit.

## NURSING

The college, in cooperation with affiliated Schools of Nursing, offers a combined academic and professional program in nursing leading to a diploma in nursing from the School of Nursing and a degree Bachelor of Arts from the college. Students spend two years in the college and three years in the School of Nursing. The required courses will vary according to the School of Nursing the student is selecting. Details will be supplied upon request.

The plans of a new Weld County Hospital at Greeley include a School of Nursing to be affiliated with Colorado State College of Education. Until that time the college will continue to offer the cooperative plan with Schools of Nursing in Denver.

## DIVISION OF THE HUMANITIES

In answer to the growing need for a broad understanding of human beings and their problems, and for clear thinking, expressing, listening, and reading, the Division of the Humanities has been created. It comprises the fields of reading, writing, and speaking; the study of literature, English, American, and world; and the study of foreign languages. In addition, the creation of this division makes it possible for students to cut across department and division lines to take work in many parts of the college. The division encourages a broad education rather than a specialized one and recommends courses in any division which lead to an expression of the personality and its understanding, all leading to a better understanding of man and his place in the world.

A student may major in any of the following fields within the Division of the Humanities: English; speech and drama; a foreign language; or the broad field of the humanities. A major in any of these fields may lead to the degree of Bachelor of Arts with the teaching certificate, or to the liberal arts degree of Bachelor of Arts.

A student majoring in English, in speech and drama, or in humanities should take the following basic courses: English 4a, 4b, 58a, 58b, 58c, 110, and 111, and Speech 5 or 16, and 20.

A student minoring in English should select 24 hours from the basic requirements as decided upon in conference with the adviser. If the student is planning to qualify for a teaching certificate, he must add English 126.

A student minoring in speech and dramatics should select 24 hours in consultation with the adviser from the following: Speech 16 or 164,118 or 20 or 114,62 or 117, and 125.

## MAJOR IN ENGLISH <br> (With Teaching Certificate)

In addition to the required courses on pages 20-21, the student, with the advice and approval of his adviser, should add additional courses in literature or language making a total of 48 to 64 hours. One of these courses shall be English 126a. Two minors are required, one of which may be speech and dramatics or foreign language, and one outside the division.

## MAJOR IN SPEECH AND DRAMATICS <br> (With Teaching Certificate)

In addition to the required courses on pages 20-21, the student, with the advice and approval of his adviser, shall choose additional courses in the division, emphasizing speech and dramatics, totaling 48 to 64 hours. One of these courses shall be English 125. Two minors are required, one of which may be English or foreign language, and one outside the division.

## LIBERAL ARTS MAJOR IN ENGLISH

The program of studies for the liberal arts degree of Bachelor of Arts with a major in English includes 64 hours, 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 English language skills.

Students majoring in this field must complete the required courses listed on pages $20-21$. A minor outside the major field is required.

## LIBERAL ARTS MAJOR IN THE HUMANITIES

This major is provided for those students who desire a broad cultural education to fit them for an active, interesting, and full life-in a rapidly changing democratic society. The program of studies for a major in the humanities will consist of the general education requirements, the basic courses within the division and selected courses in the social studies, art, music, science, literature, and languages, and physical education. In addition to the required courses listed on pages $20-21$, a typical program might include a selection from 24 additional hours in the humanities, 50 hours in the social studies, 20 hours in science, 15 hours in music with individual lessons and participation in orchestra or chorus, 8 hours in education, 8 hours in physical edućation, in addition to activities courses, and 20 hours in the arts. Finally the student selecting this major will be required to submit a piece of scholarly creative work, usually in the form of a paper, on a subject of interest to the student, but showing a grasp of the broad fields which constitute the humanities and their bearing upon the subject at hand. This paper will be presented during the final quarter of the senior year.

The following courses in other divisions are approved for credit on a humanities major: F.A. 1, $2,3,11,14,17,112,121,130$; H.A. $70,71,80,175,188$; I.A. 46a, b, c, 50 a , b, c, d, 55 a , b, c, d; Ed. 105, 177b, 196, 197; P.E. 172, 238; Music 2a, b, c, 52a, b, c, 58a, b, c, 152a, b, c, 176, 261, and individual lessons each quarter; Sci. 110; Astron. 91 ; Geol. 56, 159; Math. 184; S.S. 60a, b; Econ. 20a, b, 139, 238; Geog. 40, 41, 42; Hist. 50a, b, c, 54a, b, c; Pol. Sci. 70, 71, 72, 174, 275; and Soc. 82, 190, 191, 193.

## Graduate Study

Course work will be outlined in consultation with the student's major professor.

## DESCRIPTION OF COURSES

## Humantities

1 and 2. The Basic Course in the Humanities. Required of all freshmen, fall and winter quarters. Double period. A systematic historical study of the great philosophical ideas from Greek times to the beginning of modern times. These ideas are developed from the artistic expression of the epochs studied. The course is further designed to develop active creative interests in the arts. Five hours credit each quarter.
3. Twentieth Century Humanities. Prerequisite, Hum. 1 and 2. A 'study of philosophical ideas concerning the nature of man in the light of his twentieth century environment as reflected in recent art, literature, and music. Four hours credit.
199. Creative Study in the Humanities. This is an individual creative study leading to the presentation of a piece of work-usually a scholarly papershowing a grasp of the meaning of the Humanities and the interrelationships of the various fields. For seniors in the Humanities only. Eight hours credit.

## English

4ab. Elementary English Composition. The basic needs for correct, acceptable usage in writing, and practice in written expression. 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. Three hours credit.
44. Intermediate Composition. Variety, clearness, and correctness in writing. Special emphasis upon functional grammar. Four hours credit.

58a-158a. Survey of English Literature. 700-1744. Comprehensive readings in English literature following its development from early forms and content to more definite expression in the early eighteenth century. Four hours credit.

58b-158b. Survey of English Literature. 1744-1945. The same plan as that indicated for 58a-158a. Four hours credit.

58c-158c. Survey of American Literature. A course in American literature following the plan of the survey courses in English literature. Four hours credit.

60ab-160ab. Landmarks in World Literature. Four culture epochs in Western civilization. Symbols of culture studied include Dante's Divine Comedy, Shakespeare's Hamlet, Goethe's Faust, and Melville's Moby Dick (60a). Selections of contemporary literature with world perspectives (60b). Four hours credit.
100. Journalism and the School Newspaper. Instruction in all phases of work involved in the preparation and publication of school papers. Four hours credit.

109-209. Latin-American Literature in Translation (Summer Quarter only). Lectures in English on the literary movements and principal writers of Span-ish-American countries. Four hours credit.

110-210. Advanced Composition. Individual practice in writing, for improvement in technique, form, and content. Special attention to term, designated, and research papers. Four hours credit.

111-211. The English Language. Non-technical study of the English language. Principles of general language and history of the English language. Usage and grammar. Psychology of language teaching. 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. (For graduate students only, in Summer Quarter.) Four hours credit.

126a-226a. Teaching English in Secondary Schools. Materials for teaching English in secondary schools. Principles for the selection of literature for high school pupils, and critical study of selected readings. Four hours credit.

126b-226b. English in Junior High Schools (Summer Quarter only). A course similar to 126a in materials and methods. Four hours credit.

127-227. The Eighteenth Century. Readings and discussions of new trends of thinking and expression in literature and life that made the transition between the Renaissance and the modern world. Three 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 presentday life embodied in this form of literature. Four hours credit.

132-232. The Development of the Novel. Reading novels showing changes from the eighteenth century to the present. Emphasis on the range of subject matter, effectiveness of construction, and worth of content. Three hours credit.

133-233. The Contemporary Novel. The form and content of representative novels of recent decades as expressions of present-day points of view. Three 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 the drama of our times. Four hours credit.

135-235. Great Novels of the Twentieth Century. Discussion of great novels 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 Theater and the World Today. Recent drama and motion pictures; reading, discussion, and papers on comparative values of materials. Attendance at theater or motion pictures when possible. Four hours credit.

140-240. Prose and Poetry of the Romantic Movement. Sources and development of Romantic Movement. Historical background of thought leading to the American and French Revolutions, and effect upon writers and statesmen of that period and the present one. Three hours credit.

144a-244a. World Literature (Odd Summer Quarters only). The emergence and development of great ideas 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 expression and value of these ideas 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. Contrast and comparisons with present-day poets, critics, and conditions. Three hours credit.

155a-255a. Shakespeare's Earlier Dramas. Developing critical appreciation of various types of plays through an understanding of the drama and poetry of Shakespeare. A study of comedies, tragedies, and histories of Shakespeare's earlier periods. Three hours credit.

155b-255b. Shakespeare's Later Dramas. Continuation of 155a-255a. Reading and discussion of Shakespeare's greatest tragedies and final plays; summation of his life and times, together with evaluation of his work as dramatist and poet. Three hours credit.

155c-255c. Elizabethan Drama (1585-1642). Great dramatic literature of the period, other than that of Shakespeare; consideration of stage conditions, acting companies, changes in dramatic form and subjects reflecting the life of the time. Three hours credit.

189-289. Teaching the Bible as Literature. Development of appreciation of the Bible as literature, with emphasis on literary value through a study of folklore, short stories, poetry, biography and prophetic writings of the Old and New Testaments. Four hours credit.
212. Old English. Anglo-Saxon grammar and vocabulary. Reading of important documents from the period (Alfred's Translations, Charters and Historical Documents, Anglo-Saxon poetry, etc.). Emphasis on background for contemporary grammar. Four hours credit.
213. Chaucer and Middle English. Writings of Goeffrey Chaucer (Canterbury Tales and Troilus and Cressida) in Middle English, showing the transition from complicated Anglo-Saxon to the speech of today. Four hours credit.
222. Individual Studies in English. Qualified students outline definite problems and present a typewritten paper, similar in form to designated ones of Plan B for the master's degree. Four hours credit.
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. Four hours credit.
239. The Forms and Meanings of Poetry. Critical study of the forms and content of some of the greatest poetry written through the centuries. Special reference to the poets of the twentieth century. Three 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 time. Three or 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, Man of Genius (Summer Quarter only). Intensive study of specially selected plays. The enriched background, depth and beauty of thought, and universality of understanding are emphasized. Three or four hours credit.

258b. Readings in English Literature. (Through the modern period.) Four hours credit.

258c. Readings in American Literature. Four hours credit.
299. Thesis. Twelve hours maximum credit.

## Speech and Dramatics

5. Reading and Speaking English. This course is designed to develop a skill in oral reading and to aid the student in acquiring ease, poise, and effectiveness in speech. Three or four hours credit.

12-112. Creative Dramatics. A lecture and laboratory course in dramatics for elementary and secondary school teachers. Contribution of creative dramatics to education. Demonstration of procedure best adapted to work in children's dramatics. Four hours credit.

13-113. Story-Telling. Principles of the art of story-telling are applied in class and laboratory practice. Attention is given to arrangement and selection of stories 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. Two or four hours credit.

20-120. The Art of Straight Thinking. A study of prejudices, beliefs, propaganda evidence, reasoning, and semantics as they affect thought processes involved in all forms of oral and written discourse. Four hours credit.

62-162. Extempore Speaking. Experience in speaking to groups of people. Emphasis is placed on preparation, outlining and organization, and the use of interest factors in making talks. 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.

108b-208b. Radio in Education. The course gives an understanding and some measure of skill in utilizing the radio in the classroom and auditorium. Problems of radio production and radio appreciation are discussed. Four hours credit.

108f-208f. Radio Workshop. A laboratory course in radio production to meet problems of school broadcasting. Four hours credit.

114-214. The Art of Directing Plays. Prerequisite, 63-163. Advanced lecture and laboratory course in play production carries through actual preparation of several plays, from casting and directing to make-up and presentation. Choice of materials for amateur theatricals. Four hours credit.

114abc-214abc. Directing in the Little Theater. (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 the equivalent. Four hours credit.

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. Four hours credit.

117-217. Oral Interpretation. The student is given an opportunity to read aloud in all the forms of literature and is aided in gaining skill in an artistic presentation. Four hours credit.

118-218. Discussion Techniques. (Suggested prerequisite, 20-120.) Principles and practice in organizing, conducting, and participating in round-table discussions, symposiums, debates, and forums. Four hours credit.

125-225. Teaching Speech and Dramatics in Secondary Schools. Problems in teaching speech and dramatics in the high school. Examination of materials for creative and formal dramatics. Discussion techniques. Four hours credit.
$\mathbf{1 5 0 - 2 5 0}$. Speech Education (Summer Quarter only). Objectives, principles, practices, and trends in speech education in the elementary and secondary schools. Four hours credit.

152-252. Business and Professional Speaking (Summer Quarter only). Public speaking for teachers, administrators, and others who are called upon in the course of their work to address audiences and preside over meetings. Four hours credit.
164. Introduction to a Remedial Program in Speech. A general introductory survey of phonetics, voice science, and speech pathology. Lectures, discussions, recordings, case studies and demonstrations. Four hours credit.

165-265. Correction of Speech Disorders (Summer Quarter only). A study of the manifestations and causes of disorders of speech with emphasis on reeducation. Laboratory work in the speech clinic required as part of the course. Four hours credit.

170-270. The Psychology of Speech (Summer Quarter only). The nature and origin of speech; the relationship of speech to emotion, learning, meaning and thought; the development of speech in the child; speech and personality. Four hours credit.

175-275. Phonetics (Summer Quarter only). The science of speech sounds with special application to the use of phonetics in speech instruction in elementary and secondary schools. Four hours credit.
222. Individual Studies in Speech and Dramatics. Independent study in a field of specialization not provided for in formal classes. Two or four hours credit.
299. Thesis. Twelve hours maximum credit.

## FOREIGN LANGUAGES

Before being granted the degree of Bachelor of Arts or Master of Arts the prospective teacher of foreign languages must be proficient in the use of one or more languages chosen from the following:

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

## Major in Foreign Languages <br> (With Teaching Certificate)

A major in foreign language, in addition to the required courses listed on pages $20-21$, must have from 48 to 56 hours of credit in 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 an 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. English or speech and dramatics may be one minor, but the other minor must be taken outside the division. Junior and senior students may receive credit for foreign language courses numbered under 100.

## Minor in Foreign Languages

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

## Liberal Arts Major in Foreign Languages

Students may take courses in foreign languages leading to the degree of Bachelor of Arts. 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. Students majoring in this field must complete the required courses listed on pages $20-21$. One minor must be completed outside the major field. The minor in foreign languages should consist of twenty-eight hours if the student starts with the elementary course, or twenty-four if he starts with the intermediate.

## Graduate Study

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

## French

1, 2, 3. Elementary French. A study of pronunciation, including phonetics, and the principles of grammar. Practice in reading. Credit is not given until the three quarters are completed. Four hours credit each quarter.
5. Intermediate French. Prerequisite, two years of high school French or one year of college French. Grammar review, study of idioms, imitative composition. Intensive drill in phonetics. Four hours credit.
6. Intermediate French. A history of France in French is studied to give a historical background for subsequent study of French literature. Four hours credit.
7. Intermediate French. Varied readings of plays and short stories, with conversation based on the reading. Four hours credit.

105-205. Survey of French Literature. Prerequisite, two years of college French or the equivalent. Study of Nouvelle Anthologie Francaise by Schins. Discussion in French. Four hours credit.

106-206. Survey of French Literature. Same prerequisite as for French 105-205. Continuation of Nouvelle Anthologie Francaise through the Romantic Period. Four hours credit.

107-207. Survey of French Literature. Same prerequisite as for French 105-205. Conclusion of the study of Nouvelle Anthologie: Literature of the last hundred years. 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. Students choose phases of French civilization for reports. Offered on request. Four hours credit.

116-216. Supplementary Readings in French Literature. Course content varies according to the needs of the students. It presupposes at least 28 hours of study of the language. Four hours credit.
122. Individual Studies. Four hours credit.

125-225. Eighteenth Century French Literature. Prerequisite, two years of college French or the equivalent. Literature, society, and trends of thought of the Eighteenth Century. Discussion in French. Four hours credit.

126-226. French Romanticism. Procedure and prerequisite the same as for 125-225. The Romantic writers in France with relation to the movement elsewhere in Europe. Emphasis on Hugo and Musset. Four hours credit.

127-227. Twentieth Century French Literature. Prerequisite, same as for French 105-205. Lectures on the writers of this century with extensive individual readings and reports. 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. The course aims to develop accurate pronunciātion, to enable students to read simple German directly, without translation, and to use and understand simple spoken German. Credit not given until three quarters are completed. Four hours credit each quarter.
3. Elementary German. The class is divided into two groups, one reading literary German of elementary grade, the other simple scientific German. Four hours credit.
5. Intermediate German. Grammar review, composition, oral practice. Four hours credit.
6. Intermediate German. German history is studied in German, using Friederich's Kurze Geschichte des deutschen Volkes, or a similar textbook. Four hours credit.
7. Intermediate German. Schiller's Wilhelm Tell and short poems are studied as representative of Germany's greatest literary period. Four hours credit.

## Italian

1, 2, 3. Elementary Italian. A three-quarter sequence to meet the needs of music majors. Pronunciation, Italian orthography, singing popular songs; also elementary grammar exercises, simple reading and vocabulary building with emphasis on musical terms. Four hours credit each quarter. No credit recorded until the sequence is completed.

## Latin

5. Intermediate Latin. Prerequisite, one year of Latin in college or two in high school. Thorough grammar review, with constant grammatical analysis; 'geography of the ancient world and acquaintance with historical allusions. Four hours credit.

6,7. Intermediate Latin. First six books of Vergil's Aeneid. Attention to Vergil's vocabulary, figures of speech and stylistic devices; Vergil's influence upon medieval thought and later poets. Four hours credit.
105. Advanced Latin. Cicero. Cicero as private citizen and philosopher. Reading De Senectute and De Amicitia affords an opportunity to examine the principles of Stoic philosophy and of Greek and Roman life. 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. Four hours credit.
107. Advànced Latin. Horace. Selected odes and epodes of Horace. An introduction to the study of Latin lyric poetry with attention to verse forms. 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 and speaking simple Spanish. Credit is not given until the three quarters are completed. Four hours credit for 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, and some speaking. Four hours credit.
6. Intermediate Spanish. Prerequisite, two years of high school or one year of college Spanish. Practice in reading and speaking. Four hours credit.
7. Intermediate Spanish. A continuation of Spanish 6 with the same 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. Class meets two days a week for intensive reading. Extensive outside reading is reported in conference. Four hours credit.

105-205. Survey of Spanish Literature. Prerequisite, two years of college Spanish or equivalent. Plays, poems, and essays of the first half of the nineteenth century are read and literary movements studied. Four hours credit.

106-206. Survey of Spanish Literature. A continuation of the study of nineteenth century literature. 105-205 not a prerequisite. Four hours credit.

107-207. Survey of Spanish Literature. A study of the novel beginning with the costumbrista movement. Lectures on modern Spanish novelists. One novel is read in class; others are read outside. Four hours credit.

109b-209b. Spanish Civilization. Lectures in English for students and prospective teachers of Spanish. History, government, art, educational system, social structure, etc., of Spain are studied. Phases of Spanish civilization are reported. Four hours credit.

110-210. Spanish Conversation. Prerequisite, at least two years of college Spanish or the equivalent. Exposition, narration, description, and debates serve as bases for conversation. Four hours credit.

116-216. Supplementary Readings in Spanish Literature. Course content varies according to the needs of the students. It presupposes at least 28 hours of study of the language. Four hours credit.
122. Individual Studies. 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. Four hours credit.

126-226. Classical Drama. Prerequisite, three years of college Spanish. Study of the theater 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. Four hours credit.

131-231. The Teaching of Foreign Languages. Consideration of problems of particular concern in teaching French, Spanish, and Latin in secondary schools; functions and values of language study; courses of study; organization of materials. Four hours credit.
222. Individual Studies in Foreign Language. Qualified students outline a definite problem to be undertaken, and present papers similar in form and style to designated courses for Plan B for the master's degree. Four hours credit.
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 and in brass and woodwind instruments, all of which may be taken with or without credit.

The Division of Music provides opportunities for cultural and professional experience in the field of music education. 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 must 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 a fultquarter $\$ 10.00$
Individual lessons (for students not regularly enrolled in the college
or 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
Piano rental for a quarter 4.00
Orchestra or band instrument rental for a quarter 3.00

MAJOR IN MUSIC
(With Teaching Certificate)
All music majors shall meet the following requirements: the ability to play, at sight, a simple piano accompaniment; the ability to sing agreeably; demonstrate a teaching knowledge of a stringed, a brass, and a woodwind instrument; the ability to make a creditable public appearance in either playing or singing.

All music majors are required to 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. 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.

In addition to the required courses listed on pages $20-21$, students who plan to major in the Division of Music shall take the following courses: Music 2a, $b$, c, $50 \mathrm{a}, \mathrm{b}, \mathrm{c}, 52 \mathrm{a}, \mathrm{b}, \mathrm{c}, 100 \mathrm{a}, \mathrm{b}, \mathrm{c}, 150$, 152a, b, c, 153a, b, c, 155 , and $158 \mathrm{a}, \mathrm{b}, \mathrm{c}$. Total credit, 52 hours. To this the student adds 18 hours of Individual Instruction and 6 hours for participation in music activities. Total, 76 hours. A minor must be taken outside the division.

## MINOR IN MUSIC

Those students wishing to minor in music shall take the following courses: Music 2a, b, c; 50a, b, c; 58a, b, c; and Individual Instruction, 3 hours. Total, 24 hours.

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

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

## THE DEGREE OF BACHELOR OF MUSIC

The Division of Music makes provision for courses leading to the degree of Bachelor of Music with particular emphasis on the performance and cultural aspects of music. The student must show satisfactory aptitude for an instrument or in voice. He must be prepared to demonstrate this by the playing or singing of some standard composition in his field before a committee of the Division of Music. Majors are offered in piano, organ, violin, orchestral instruments, voice and composition. Each candidate for the degree of Bachelor of Music must give a senior recital in his major instrument or voice. A five-year course of study is offered leading to the combined degrees of Bachelor of Music and Bachelor of Arts with teaching certificate. The following courses are required of candidates for the degree of Bachelor of Music:

First Year: Major and minor instrument or voice, $12 \mathrm{hrs} . ;$ Vocal or instrumental ensemble, 6 hrs.; Music 2a, b, c; or 3a, b, c; Humanities 1, 2; Electives, 11 hrs .

Second Year: Major and minor instrument or voice, 12 hrs .; Vocal or instrumental ensemble, 6 hrs.; Music 52a, b, c; or 53a, b, c; 58a, m, c; Eng. 4a; Electives, 8 hrs .

Third Year: Major and minor instrument or voice, 12 hrs .; Vocal or instrumental ensemble, 3 hrs.; Music 152a, b, c; 170a, b; Electives, 16 hrs.

Fourth Year: Major and minor instrument or voice, 12 hrs .; Vocal or instrumental ensemble, 3 hrs.; Music 153a, b, c; 155a, b, c; Electives, 16 hrs.

## Graduate Study

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

## Description of Courses

2abc. Sight Singing, Ear Training and Notation. To acquaint the student with sight reading and rote materials, and to serve as an introduction to Music 52a, b, c. Three hours credit each quarter.

3abc. Harmony. A study of the elements of harmony through writing, analysis, and hearing, including the structure and movement of chords through chords of the seventh, ninth, eleventh, and thirteenth. Three hours credit each quarter.

21-121. Instrumental Ensemble. Classes in woodwind quintet, string quartet, string trio, brass ensemble, and other small instrumental groups. One hour credit.

22-122. Vocal Ensemble. Vocal trios, quartets, and other small groups receive training in this course with a view toward being of service in the community. One hour credit.

30-130. Individual Instruction in Voice. To experience and understand the correct use of the singing and speaking voice. Special emphasis is placed on building a useful song repertoire and coaching in performance. One hour credit.

31-131. Individual Instruction in Piano. One hour credit.
32-132. Individual Instruction in Violin (Or other stringed instruments). One hour credit.

33-133. Individual Instruction in Organ. Instruction is given in pipe organ and Hammond organ. One hour credit.

35-135. Individual Instruction in Brass and Reed Instruments. One hour credit.

40-140. Beginning Orchestra. This organization is devoted to those whose playing is in the less advanced stage. One hour credit.

41-141. Beginning Band. This organization is devoted to those whose playing is in the less advanced stage. One hour credit.

42-142. College Orchestra. This organization is open to all who show sufficient qualifications. One hour credit.

43-143. Concert Band. One hour credit.
44-144. A Cappella Choir. One hour credit.
45-145. Piano Class Lessons. One hour credit.
46-146. Piano Class Methods. Two hours credit.
48ab-148ab. Music Fundamentals for Elementary Teachers. A two-quarter sequence in music for elementary majors. 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. Four hours credit.

50abc. Introduction to Music Education. A preparatory course for special teachers of school music. 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.

52abc. Sight Singing, Dictation and Harmony. Prerequisite, Music 2a, b, c. A year's course meeting four days a week. Three hours credit each quarter.

53abc. Harmony. A continuation of Harmony 3a, b, c. Includes a study of modulation, altered chords, augmented sixths, enharmonism, and a discussion of impressionistic harmony and atonal styles. Three hours credit each quarter-
*58abc-158abc. History of Music. Two hours credit each quarter.
100abe. Beginning Instruments. Two hours credit each quarter.
149a. Music Methods and Materials for Rural Teachers. Prerequisite, Music 49-149. The in-service laboratory course for teachers enrolled as elementary majors, Plan B. Four hours credit.

150-250. Special Problems in Public School Music. Prerequisites to this course are Music $50 \mathrm{a}, \mathrm{b}$, c, and student teaching. Students will be granted ample opportunity to study individual problems growing out of their student teaching experience. Four hours credit.

152abc. Harmony, Counterpoint, and Composition. Prerequisite, Music 52a, b, c. Two hours credit each quarter.

153abe. Instrumentation, Orchestration, and Composition. Prerequisite, Music 152a, b, c. Two hours credit each quarter.

154-254. Principles of Music Education. 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.

155abc. Technique and Practice of Conducting. Eight hours credit.
156-256. Psychology of Music. 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.
*Also given by correspondence.

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.

162-262. Symphonic Literature. A detailed study of the music of the symphony orchestra. Four hours credit.

170a-270a. Advanced Harmony and Form Analysis. This course deals with the many kinds of modulation and altered chords, as well as the study of the harmonic and formal aspects of musical composition. Four hours credit.

170b-270b. Form and Analysis. The ability to recognize both through hearing and score analysis of many types of musical literature two- and three-part song forms, variation forms, the various rondo forms, and the sonata allegro form. Four hours credit.

171-271. Advanced Composition and Orchestration (Summer Quarter only). Four hours credit.

172-272. Instrumental Supervision (Summer Quarter only). An analysis is made of the problems found in the instrumental field. Four hours credit.

173-273. Vocal Supervision (Summer Quarter only). This course is based upon the analysis of the professional problems of vocal teachers. Four hours credit.

174-274. Problems of Music Appreciation (Summer Quarter only). Appreciation defined, evaluation of the present approach, and construction of an original program for elementary and secondary schools. Four hours credit.

175-275. Problems in Orchestral and Choral Conducting (Summer Quarter only). 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. Four hours credit.

177-277. History of Musical Theory (Summer Quarter only). The development of musical composition is traced from the Greek modes to the present day techniques. Four hours credit.
200. Research in Music Education (Summer Quarter only). Investigation of recent research in music education; directed practice in scientific approach to problems of the students. Required of all first quarter graduate students. Four hours credit.
222. Individual Studies in Music. To provide for independent study 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 quarterhour of college credit. Two to four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
223. Comparative Voice Methods and Materials (Summer Quarter only). Four hours credit. Individual lessons required.
224. Comparative Violin Methods and Materials (Summer Quarter only). Four hours credit. Individual lessons required.
225. Comparative Piano Methods and Materials (Summer Quarter only). Four hours credit. Individual lessons required.
261. Musical Aesthetics (Summer Quarter only). Special emphasis is placed on the implication of aesthetics in teaching music. Graduate students only. Four hours credit.
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 to meet the needs of students who may have varied vocational and cultural objectives. To this end courses have been organized to provide: (1) the science education needed by prospective science teachers, (2) a desirable background of science for majors in other divisions, (3) the understanding and appreciation of science needed by students taking the liberal arts degree, (4) the requisite science training for pretechnical education in fields such as medicine and laboratory techniques, and (5) the science desired by students wishing to terminate their college work at the end of two years.

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.

## MAJOR IN SCIENCE <br> (With Teaching Certificate)

In addition to the required courses listed on pages 20-21, a student majoring in one of the Natural Sciences is required to take the courses listed in Group A for a total of 52 hours. If his major is in Biological Science he then, with the approval of his adviser, adds 24 hours from Group B. If the major is Physical Science the additional 24 hours are chosen from Group C.

Group A-Zool. 11 and 12, Bot. 21 and 22, Chem. 41, 42 and 43, Geol. 56, Phys. 61, 62 and 63, Astron. 91, and Biol. 133.

Group B-Bot. 25 and 130, Met. 62a, Sci. 110, Zool. 114, 119, and Biol. 131, 132.

Group C-Geol. 56, Phys. 64a, 64b, 64c, 66 and 68, Chem. 141, 142 and 143, and Met. 62a.

## MAJOR IN MATHEMATICS <br> (With Teaching Certificate)

In addition to the required courses listed on pages 20-21, a student majoring in Mathematics is required to take the following courses: Math. 75a, b (or Math. 78a, b and c), Math. 76, 77b, 175 and 176. With the approval of his adviser, he then adds 24 hours from the following: Math. 77a, 80, 81, 177, 177c, 182, 183 and 194.

## MINORS IN SCIENCE

A student is required to take one minor in a field different from that of his major. Prospective teachers majoring in biological or physical science are advised, for employment reasons, to minor in mathematics. One who majors in mathematics for the same reason should minor in physical or biological science.

Biological Science Minor-Zool. 11 and 12 or Bot. 21 and 22.
Physical Science Minor-Chem. 41, 42 and 43 or Phys. 61, 62 and 63.
Science Minor for Students Majoring in Other Divisions than Science: The student, with the approval of his adviser, selects 16 hours from the following courses: Zool. 11 and 12 or Bot. 21 and 22, Sci. 3b, Zool. 117, Bot. 130, Biol. 131, and Biol. 132.

Mathematics Minor-Math. 75a, 75b, and 76 or Math. 78a, b, and c, 77b, 175, and 182.

## LIBERAL ARTS MAJOR IN SCIENCE

In addition to the required courses listed on pages $20-21$, students who wish to take a liberal arts major in biological science, physical science, or mathematics should take at least 48 hours in the specific field of his choice. The courses to be taken must be selected in consultation with the student's major adviser. In addition the division offers a distributed major in the natural sciences which consists of sixty credit hours taken within this general field and a minimum of thirty-two hours in either the biological sciences or the physical sciences. The specific courses to be taken will be selected by the student in consultation with his major adviser.

The minor in the sciences to be taken by liberal arts majors should be planned in conference with the student's adviser. It consists of a minimum of twenty-four hours and should approximate the courses for minors in mathematics or for majors in fields other than the natural sciences.

## Graduate Study

Course work will be outlined by the student's major professor in accord with the requirements of the Graduate School.

## Non-Specialized Science

3a. Introduction to Physical Science. The study of important general principles in astronomy, physics, chemistry, and geology. Concepts designed to help the student to interpret the world about him. Four hours credit.

3b. Introduction to Biological Science. Major concepts dealing with the nature of life, human reproduction, heredity, and evolution are studied. Designed to help the student to successfully adjust himself to the situations of everyday living. Four hours credit.

100-200. Unit Course in Science (Summer Quarter only). Units may be given different letters and cover different materials each summer. One hour credit.
108. Science of the Out-of-Doors. Planned especially for elementary and secondary school teachers. Deals with geological features and the plant and animal life of this region. Field trips required. Four hours credit.

110-210. Conservation of Natural Resources. Designed to give students an overview of our natural resources, what is being done, and what should be done to conserve them. Field trips required. Four hours credit.

## Professionalized Science

1-101. Science in the Elementary School. Prerequisites, Science 3a and 3b. Study of objectives, materials and methods of teaching science in the grades. Four hours credit.

102a. Teaching Elementary Science in Rural Schools. Prerequisite, Science 1-101. Laboratory course for elementary education majors. Considers problem of teaching elementary science. Four hours credit.

102-202. Special problems in Teaching Elementary Science. Study of problems of teaching and associated curricular and organization problems confronted by supervisors and teachers. Four hours credit.

104-204. Teaching Sex Education in Secondary Schools (Summer Quarter only). A study of sex problems, social adjustment of students and content in sex education. Four hours credit.
105. Materials and Aids Useful in Science Teaching (Summer Quarter only). A study of visual aids, inexpensive laboratory equipment and reading materials for improving instruction. Four hours credit.
206. Improvement of Science Instruction in Secondary Schools (Summer Quarter only). Teacher's instructional problems are studied for probable solution in terms appropriate to be used in his own school. Four hours credit.
207. Learning and Curricular Studies in Science (Summer Quarter only). A study of educational research as applied to science education. Four hours credit.
222. Individual Studies in Science. A course placing special emphasis on aspects of science not included in formal courses. Well organized, typewritten reports required of the work done. Two to four hours credit for one problem.
299. Thesis. Required of all Plan A graduate students. Includes the formulation of a graduate problem, outline of the method of attack, and a written report of the study and results obtained. A maximum of twelve hours credit. *

## Astronomy

*91-191. Descriptive Astronomy. A study of space and the heavenly bodies. The student learns to recognize the planets, principal constellations, and the stars visible in this latitude. Four hours credit.
291. Advanced Astronomy (Summer Quarter only). A consideration of space and the heavenly bodies which it contains. Includes spectroscopy as applied to astronomy, star distances, classification and magnitude of stars as well as nebulae. Four hours credit.

## Biology

131-231. Evolution. Prerequisites, Zoology 11 and 12 or their equivalent. A study of the factors that have been proposed as a cause of gradual development and of the evidences that have been uncovered to support the belief in evolution. Four hours credit.

132-232. Genetics and Eugenics. A study of the fundamental laws of heredity and their application to both plants and animals and to man. The present trend of the race is emphasized. Four hours credit.
133. Integrated Science. For science majors in their senior year. Organized to integrate the student's knowledge of science and to show the application of science principles to the interpretation of life situations. Four hours credit.

## Botany

21. General Botany. A study of the lower forms of plants. Begins with the different forms of algae and includes the fungi, liverworts and mosses. Four hours credit.
22. General Botany. Prerequisite, Botany 21. Treats of the higher forms of plants from the ferns and their relatives up through the gymnosperms and the angiosperms. Evolutionary development is emphasized. Four hours credit.

25-125. Field Botany. Designed to enable students to become acquainted with plants in their native habitat. Especial emphasis placed on trees and the classification of plants. Four hours credit.

121-221. Plant Physiology. Prerequisites, Botany 21 and 22 or their equivalent. Planned to give students a functional knowledge of absorption, transpiration, the transpiration stream, food synthesis, translocation, digestion, and respiration, and the relationship of these processes to plant culture. Four hours credit.

126-226. Botanical Technique and Plant Histology. Prerequisites, Botany 21 and 22 or their equivalent. The study of plant tissues and the science of killing, staining, and making botanical material into permanent microscopic mounts. Four hours credit.

[^15]127-227. Systematic Botany..-Prerequisite, Botany 22 or its equivalent. To give the student a knowledge of the relative characteristics of the different groups of flowering plants and skill in using the manual to identify them. Four hours credit.

128-228. Plant Ecology (Summer Quarter only). Prerequisites, eight to twelve hours of general botany. To give students an understanding of plant successions resulting from the interrelation and interaction of plant life and the factors of the environment. Four hours credit.
130. General Bacteriology. Study of bacteria and molds and their effects upon health, foods and sanitation. Four hours credit.

## Chemistry

41, 42, 43. General Chemistry. The principles underlying the science of chemistry are discussed during the first quarter. Descriptive chemistry of the most important elements and their compounds make up the work of the second quarter. During the third quarter, the student is introduced to organic chemistry. Four hours credit each quarter.

141, 142. Organic Chemistry. Prerequisite, General Chemistry. The chemistry of the compounds of carbon, including both those of the aliphatic and the aromatic series are taken up. Four hours credit each quarter.
143. Organic Chemistry. Prerequisite, first two quarters of organic chemistry. This course is a continuation of Chem. 141 and 142 with a more extensive treatment of organic compounds and reaction theories. Four hours credit.
144. Qualitative Analysis. Prerequisites, General Chemistry, and a background in algebra extending through logarithms. The student is introduced to analytical theory. Four hours credit.

145, 146. Quantitative Analysis. Prerequisite, Qualitative Analysis. A discussion of quantitative procedures as well as a continued emphasis on analytical theory. The methods of volumetric and gravimetric analysis are applied to common substances in the laboratory. Four hours credit each quarter.

147-247. Biochemistry. Prerequisite, first quarter of Organic Chemistry. An introduction to the chemistry of foods, nutrition and body procecces. Four hours credit.

153-253. Chemical Research. Prerequisite, consent of the instructor. Four to eight hours credit on the undergraduate level, and four to twelve hours credit on the graduate level.

154-254. Physiological Chemistry. Prerequisites, Chemistry 41 and 42. The chemistry of food products, drugs, vitamins and hormones, together with that of digestion, absorption, assimilation and excretion. Four hours credit.
248. Survey of Organic Chemistry. Prerequisite, three quarters of Organic Chemistry. A somewhat detailed survey of the field of organic chemistry at an advanced level. Four hours credit.
249. Qualitative Organic Analysis. Prerequisite, three quarters of Organic Chemistry. The course deals with the identification of organic compounds. Four hours credit.

250, 251, 252. Physical Chemistry. Prerequisites, two quarters of Organic Chemistry, two quarters of Quantitative Analysis, Physics 63, Mathematics 78a, b, c or Mathematics 176. Opportunity is given in the laboratory to demonstrate the validity of physical laws considered in the class work. Four hours credit each quarter.
253. Advanced Inorganic Chemistry. Prerequisites, General Chemistry, Physics 268. Descriptive inorganic chemistry, based upon some understanding of atomic structure, and including a discussion of the less familiar elements, newer definitions of acids and bases, coordination compounds, radioactivity, and artificial transmutation. Four hours credit.

## Geology and Meteorology

56-156. General Geology. A course designed to develop an understanding of the surface of the earth and the processes and forces that have been active in changing it. Four hours credit.

62a-162a. Meteorology. A basic course in the study of weather and the interactions of atmospheric factors which produce it. Air masses and their relation to weather receive special emphasis. Four hours credit.
157. Historical Geology. Prerequisite, Geol. 56-156. A study of the history of the earth and its plant and animal life from the earliest times. Four hours credit.

159-259. Geology of the Rocky Mountains (Summer Quarter only). Prerequisite, consent of the instructor. Designed to give the student some proficiency and skill in recognizing and interpreting the geological structure and history of this and other areas. Four hours credit.

## Mathematics

*75ab. College Algebra. The development and extension of concepts and skills beyond those studied in high school, the practice of clear and independent thinking, with emphasis upon the understandings which lie back of algebraic processes. Four hours credit for each course.
*76. Plane Trigonometry. A study of the trigonometric functions and their application, both theoretical and practical, in the solution of the triangle with emphasis upon the use of logarithms in computation. Four hours credit.

77a. Solid Geometry. Extends the deductive methods of plane geometry to three dimensions; 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, b, 76, or 78a, b, c. Explains and applies algebraic methods in the solving of geometric problems, thus acquainting the student with a powerful method of amplifying algebra and geometry. Especially valuable as a margin of information for teachers of both algebra and geometry. Four hours credit.
*78abc. General Mathematics. Presupposes at least three years of secondary mathematics. These three courses parallel $75 \mathrm{a}, \mathrm{b}$, and 76 , but constitute a sequence of algebra, trigonometry, analytic geometry and the calculus. Four hours credit for each course.

80-180. Mathematical Instruments and Surveying. Prerequisites, Math. 75 a, b , and 76. Acquaints the student with the slide rule, the sextant, the level, and the transit. Emphasizes the use of these instruments in the solution of problems obtained from the field. Four hours credit.

81-181. Navigation. Treats the more impórtant methods of celestial navigation. Familiarizes the student with the instruments of navigation, as instruments of precision and emphasizes the application of mathematics. Four hours credit.
*175. Differential Calculus. Prerequisites, Math. 75 a, b, 76, 77b-177b, or equivalent. Presents the concept of the derivative and its importance in solving problems in the scientific field. Four hours credit.
*176. Integral Calculus. Prerequisite, Math. 175. Relates integration and differentiation; develops the formulas and skills of integration; and emphasizes the application of the definite integral to the problems of science. Four hours credit.

[^16]*177-277. Theory of Equations. Prerequisites, Math. 77b-177b, 175. Deals with functional relationships, graphic representation and solution of functions. Complex numbers, determinates and symmetric functions. Four hours credit.

177c. Analytic Geometry II. Prerequisite, Math. 77b-177b. A continuation of Analytic Geometry I emphasizing such topics as transformation of coordinates, tangents, polar coordinates, parametric equations, and Cortesian coordinates in space. Four hours credit.

182-282. Principles of Teaching Secondary Mathematics. For those who must give thought to the place and function of mathematics in the secondary school program. The course deals with instructional problems and specific difficulties which students encounter. 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 included in high school geometry. Four hours credit.
*184-284. History of Mathematics. A general view of the development and contributions of mathematics; a more detailed view of the development of arithmetic, algebra, geometry and evolution of symbolism; considerations of both applied and theoretical mathematics. Four hours credit.

285ab. Advanced Calculus. Prerequisites, Math. 175, 176. A continuation of those topics of differential and integral calculus which are not adequately treated in Math. 176. The subject matter deals with infinite series, indeterminate expressions, partial differentiation, and applications of both differentiation and integration. Four hours credit.
286. Differential Equations. Prerequisites, Math. 175, 176. Introduces the student to the extensive field of differential equations, and their application to the solution of problems in related fields of science. Four hours credit.

## Physics

61. General Physics. The first quarter of the general course of physics which treats of the laws, principles, and generalizations of mechanics and heat. Four hours credit.
62. General Physics. The second quarter of the general course in physics which treats of the principles, laws and generalizations in electricity. A continuation of Physics 61. Four hours credit.
63. General Physics. The third quarter of the general course in physics which treats of the laws, principles and generalizations contained in a study of sound, light and atomic physics. A continuation of Physics 61 and 62. Four hours credit.

64a-164a. Mechanics and Heat. Prerequisites, Physics 61, 62, and 63. The first quarter of second year advanced physics which treats of the development of the concepts of mechanics and heat as well as the mathematical interpretation of the laws and principles. Four hours credit.

64b-164b. General Electricity. Prerequisites, Physics 61, 62, and 63. This course deals with the fundamental development of the important concepts in A.C. and D.C. electricity. It furnishes the necessary background for electrical engineering. Four hours credit.

64c-164c. Sound, Light and Wave Motion. Prerequisites, Physics 61, 62, and 63. An advanced course dealing with the fundamental principles and laws of wave motions including their applications to sound and light with the emphasis placed upon the modern atomic concepts. Four hours credit.

[^17]65-165. Household Physics. A course designed to meet the needs of majors in home economics. All laws, principles and generalizations of physics are related directly to their application in the home. Four hours credit.

66-166. Radio. This is a general course in electronics and electricity as applied to the reception and transmission of radio. Stress is placed upon the applications to radio in everyday living. Four hours credit.

67-167. Elementary Photography. An elementary course designed to meet the needs of the amateur photographer and also to furnish an adequate background for more advanced work on the principles of photography. Four hours credit.
68. Elementary Electricity. A course designed for the student who needs a fundamental background in the general laws, principles and generalizations of electricity in everyday life. Four hours credit.

70-170. Physics of the Airplane (Aerodynamics). This course follows the outline of the C.A.A. for a study of the general service of aircraft and meets the needs of the specialized student who intends to become a teacher of the science of aviation or to qualify for the examination for the Private Pilots Certificate. Four hours credit.

71-171. Internal Combustion Engines. A study of the principles, structures and operation of all types of heat engines, including automobile, airplane and diesel engines and their everyday application. Four hours credit.

72-172. Navigation. This course is designed to meet the needs of the teacher of the science of aviation and to meet the C.A.A. requirements of study for those who intend to qualify for the Private Pilots Certificate. It follows the approved outline of the C.A.A. Four hours credit.

74-174. Aeronautics. A course designed to provide for instruction in the subjects of civil air regulations, general service of aircraft, navigation and meteorology. Meets the C.A.A. requirements for such a course. Four hours credit.
267. Advanced Photography. Prerequisites, Physics 63, 67-167, Chemistry 41 and 42. An advanced course on the principles of photography. Four hours credit.
268. Atomic Physics. Prerequisites, Physics 61, 62, 63; Chemistry 41, 42. This course is designed as an advanced course on modern atomic theory, atomic structure and their relationship to fundamental physical and chemical theory. Four hours credit.
269. Electro-Magnetic Radiations. Prerequisites, Physics 61, 62, 63, 64c164 c ; Chemistry 41, 42; Mathematics through calculus. A graduate course consisting of a study of all the known radiations and their properties. Emphasis is placed upon the principles of light, spectroscopy, and modern theory. Four hours credit.

## Zoology

11. General Zoology. In this course the principles of animal biology will be emphasized. The principles will be demonstrated in the laboratory by the study of type forms of invertebrate animals. Four hours credit.
12. General Zoology. A course in the anatomy and physiology of the vertebrate animals. Selected forms from the vertebrate groups will be used for laboratory study. Four hours credit.

15-115. Economic Zoology. A study of the relation of animals to man's progressive civilization with emphasis on the need for the conservation of wild life. Four hours credit.

16-116. Field Zoology. A course designed to familiarize the student with animals in their natural habitat and to enable him to identify them. Four hours credit.

17-117. Human Physiology. A course planned to help the student to understand the normal functions of the human body. The student will be encouraged to analyze the functioning of his own body and to make practical health deductions. Four hours credit.

111-211. Comparative Morphology of the Vertebrates. Prerequisites, Zoology 11 and 12 or equivalent courses. A detailed study of the systems of organs of the vertebrates. The students will be expected to make careful dissections of selected types. Four hours credit.
113. Bird Study. Classroom, museum and field studies on birds, their habits, habitats, life histories, migration activities, and their economic importance. Four hours credit.
114. Elementary Entomology. A study of the life history, habits, habitats and economic importance of the common insects of the region. Four hours credit.

118-218. Animal Histology and Microscopic Technique. The skills of killing, staining and preparing animal tissue for study is combined with the study of the types of tissues in the animal body. Four hours credit.

119-219. Vertebrate Embryology. Prerequisites, Zoology 11 and 12 or equivalent courses. A study of the embryology of the bird and the mammal designed to provide an understanding of the early development of the human body. Four or five hours credit.
220. Vertebrate Organogeny. Prerequisites, Zoology 11 and 12 and 119-219, or equivalent courses. A continuation of course 119-219 arranged to help the student to understand how the organs of the body are developed from the germ layers. 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 fúrther progress in these fields.

## MAJOR IN SOCIAL STUDIÉS (With Teaching Certificate)

A social studies major consists of sixty quarter-hours. This should include sufficient specific courses 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 the 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 the teaching he expects to do.

Students majoring in this field must complete the requirements listed on pages $20-21$. In addition, the social studies major's program should include: American History, 12 hrs.; European History, 12 hrs.; Economics, 8 hrs.; Geography, 8 hrs.; Political Science, 8 hrs.; and Sociology, 8 hrs.

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.

## MINOR IN SOCIAL STUDIES

A minor in Social Studies should consist of the following: American History, 8 hrs.; European History, 8 hrs.; Economics, 4 hrs.; Political Science, 4 hrs.; and Social Studies, 117.

## LIBERAL ARTS MAJOR IN SOCIAL STUDIES

The Division' of Social Studies offers to students desiring the liberal arts degree of Bachelor of Arts a major in economics, geography, sociology, or history. A major in one of these fields consists 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 offers a'major in Social Studies consisting of sixty hours, including a minimum of twenty-four hours in at least one of the fields represented in the Division of Social Studies. The courses for this major will be selected by the student in consultation with his major adviser.

Students majoring in this field must complete the requirements listed on pages 20-21. A minor must be completed outside the major field.

The liberal arts minor in Social Studies 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

## Professional Courses in Social Studies

113-213. Social Studies in the Elementary School. Problems of selecting and organizing content, learning activities, making use of learning materials, and devising methods of teaching unified and correlated programs. Four hours credit.

114-214. Current Attempts to Improve the Teaching of the Social Studies in Elementary Schools (Summer Quarter only). An advanced course in the teaching and supervision of the social studies in the elementary school. It will deal with the most recently developed thought and practices. Four hours credit.

115-215. Geography for the Elementary and Junior High Schools (Summer Quarter only). The selection of geography materials in the various grades with their organization, adaptation, and presentation. Four hours credit.

117-217. Teaching the Social Studies in Secondary Schools. This course deals with the selection, organization and use of materials in social studies classes in secondary schools. Four hours credit.

118-218. Improvement of Instruction in Social Studies in Secondary Schools (Summer Quarter only). Prerequisite, Ed. 151 or experience in teaching social studies in secondary schools. Trends in social studies instruction in various types of secondary schools. Four hours credit.
222. Individual Studies. Independent study, particularly in special phases of a field of specialization not provided for in formal class lectures. (Consult Graduate Bulletin for details of requirements.) 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 in Social Studies under Plan A registers for this course at least three months before his final quarter. Twelve hours credit.

## Economics

20-120. Principles of Economics. A survey of economic principles underlying the organization of modern society, with applications to outstanding economic problems. Rent, interest, wages, profits, value, prices, and money. Four hours credit.

21-121. Principles of Economics. Emphasis upon such things as taxation, international trade, protective tariffs, foreign exchange, the business cycle, competitive industry and monopoly. Four hours credit.

24-124. Contemporary Economic Problems. A survey of present economic conditions and problems, including taxation, rationing, price-fixing, consumer problems, distribution of income, and labor problems. Four hours credit.

127-227. Economic Problems of Latin America. A survey of contemporary economic policies followed in Latin America, based upon class study of industries, raw materials, agriculture, labor, supply, and trade of key countries. Four hours credit.

132-232. Labor Problems. A study of the principal problems of labor and their relationship to our entire economy. Special attention is given child labor, unemployment, labor unions, and labor legislation. Four hours credit.

133-233. Marketing. Analyzes the functions and problems involved in getting commodities from the producer to the consumer. Among the topics considered are transportation, super-markets, brands, and prices. Four hours credit.

134-234. Money and Banking. An introductory survey of our monetary and banking systems. Managed currencies, service charges, recent banking legislation, and the Federal Reserve system are among the topics considered. Four hours credit.

136-236. Personal Savings and Investments. A study of the everyday problems and interests of the investor, including home ownership, savings institutions, life insurance, mortgages, and stocks and bonds. Four hours credit.

- 139-239. Consumer Economics. An analysis of economic problems of consumers. Problems studied include installment buying, agencies offering assistance to consumers, cooperatives, and the effects of taxes and monopolies on consumers. Four hours credit.

225. Economic Planning. An interpretation of the purposes and probable effectiveness of current planning programs and proposed post-war economic plannirg movements. Four hours credit.
226. Economic Analysis of American Industries. 'A survey of the structure and characteristics of representative American industries. Problems imposed by competition and advancing technology are studied as well as types of business policy. Four hours credit.
227. Current Economic Problems. An examination of the foremost economic problems of the day. The course deals with such subjects as governmental income and expenditures, monopoly, farm problems, and inflation. Four hours credit.
228. Public Finance. A study of governmental expenditures, revenues, and financial administration. Specific topics include the property tax, the income tax, the sales tax, and the budget. Four hours credit.
229. History of Economic Thought. A survey of the development of economic ideas. Ancient and medieval economic thought, the Physiocrats, and the "American school" are some of the topics to be studied. Four hours credit.

## Geography

16-116. Geography of Map Interpretation. A course offered to acquaint the student with the interpretation of weather, topographic, geologic, and other maps used to give a background in geography. Four hours credit.

42-142. Human Geography. A study of the races and sub-races of mankind. Four hours credit.

43-143. Geography of Contemporary Europe. A topographic, climatic, racial and industrial study of Europe with the emphasis on what is happening in Europe at present. Four hours credit.

44-144. Geography of Contemporary Asia. On the basis of a physiographic study of Asia the present day economic and political aspects of that continent will be considered. Four hours credit.
-45-145. Geography of Contemporary Africa. A study of Africa of the present will be based on the unchanging climatic and physiographic factors and how the Africa of today, economically and politically, has been based on these factors. Four hours credit.

46-146. Geographical Influences in American History. The climatic and vegetative factors that run back into pre-Columbian times will be emphasized in this course. Four houirs credit.

103-203. Geography of the Tropics. Topics considered will be tropical climate, vegetation, animal life, people, agricultural resources, health, acclimatization, types of government control, sources of mechanical power and 'trade with the temperate zones. Four hours credit.

104-204. Geography of Soviet Russia. A study of the vast expanse of Russia with special emphasis upon the development of its resources. Two hours credit.

105-205. Geography of India and Burma. A study of the economic and political problems that arise out of the resources and the people of these Indian Ocean provinces. Two hours credit.

106-206. Conservation of Natural Resources. The intelligent use of our natural resources especially in terms of our future welfare. 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. Two hours credit.

111-211. Geography of Australia and New Zealand. On the background of oceanic position and climatic zones are built the plant and animal life and the culture of the aborigines. Two hours credit.

112-212. Geography of Canada. A survey of the plant and animal geographic, physiographic and geologic backgrounds of Canada. Two hours credit.

113-213. Geography of the British Isles. Climate, physiography, plant and animal life, racial geography, industries past and present, and the historical, industrial and military results of England's island situation. Two hours credit.

114-214. The Industrial Resources of Germany. A course designed to bring out how far Germany can be a self-sufficient nation. Two hours credit:

117-217. Geography of Colorado. A course to develop understandings of the relationships between the natural environment, cultural landscape and people of Colorado. Two hours credit.

118-218. The People and Resources of China. A course designed to acquaint American students with the enormous potentialities of China. Two hours credit.

119-219. Geography of Oceanic Islands. A study of the remote oceanic islands usually not studied in connection with the continents. Two hours credit.

## History

10-110. Expansion of American Democracy. American heritage and its preservation. Colonial immigration, Articles of Confederation, United States Constitution; tests of its strength; America as a world power, World Wars I-II, League of Nations, and proposals for world government. Four hours credit.

20-120. Foundations of American Nationality, 1492-1789. Discovery, exploration, colonization, struggle between French and English for the supremacy of North America, American Revolution, and adoption of our Constitution. Four hours credit.

21-121. Development of American Nationality, 1789-1865. Organization of the United States Government under the Constitution, development of parties, second war of independence, particularist movements, expansion and conflict. Four hours credit.

22-122. American Industrial Development and Internationalism, 1865 to date. Industrial development under protective tariff, rise of cities, Spanish-American War, World Wars I-II, League of Nations, and efforts made toward international good will. Four hours credit.

30-130. Modern World History, 1492-1815. Causes for the discovery of America, Commercial Revolution, expansion of Europe, Renaissance, Reformation, establishment of parliamentary government in England, American and French revolutions, and the Napoleonic era. Four hours credit.

31-131. Modern World History, 1815-1914. Important European Revolutions, unification of Italy and Germany, struggles for raw materials, markets and colonies, as well as events in China, Japan, and Africa. Four hours credit.

32-132. Modern World History, 1914 to date. Roots of World Wars I-II, League of Nations, its strengths and weaknesses, and proposals for international cooperation. Important Latin-American history is also introduced. Four hours credit.

40-140. History of Colorado. Exploration, colonization, Indian depredations and massacres, frontier living conditions, Mexican land grants in Colorado, and agricultural, industrial, and political development of the State. Offered especially for elementary majors. Two hours credit.

50-150. American Leadership. A study of political, industrial, labor, and cultural leaders will be made with an effort to determine the characteristics which have contributed to the success of each. Offered especially for elementary majors. Two hours credit.

151-251. Ancient Social History. Special attention is given to the cultures of the ancient Egyptians, Babylonians, Assyrians, Greeks, and Romans-their schools, homes, and religious institutions. Four hours credit.

153-253. Modern English History. Special emphasis will be given to the change from an absolute to a democratic form of government. Some attention will be given to English imperialism. Four hours credit.

155-255. Contemporary World History. Emphasis will be' placed upon those events, national and international, which are commanding the attention of the world when the course is given. Four hours credit.
158. Social and Industrial History of the United States, 1492 to date. The development of our industrial life under the domestic and factory systems and the effect of each upon social life and standard of living. Four hours credit.

161-261. Medieval Life and Institutions. Special emphasis will be given to the place of the Church and the Feudal System in the life of the people. Four hours credit.
252. The Westward Movement in American History, 1636-1890. The causes of western migration, Indian problems, frontier religions, industries, standards of living, and the demands made by the frontiersman upon the Federal Government. Four hours credit.
259. The Renaissance and Reformation. The main emphasis is placed upon the social, economic, and political causes of the Reformation and its effect upon, present-day churches and business life. Four hours credit.
260. The French Revolution. Emphasis will be placed upon the social, economic, and political conditions in France which caused the Revolution and the changes in France and Europe brought about by the Revolution. Four hours credit.
262. Colonial Empires of the Twentieth Century.'Special attention is given to the rise of great colonial empires, problems of imperial administration, and the aspirations of non-colonial powers. Four hours credit.
263. The American Revolution. A study of causes of trouble between England and her American colonies, and the techniques applied to establish a democratic government in America. Four hours credit.
264. The Civil War and Reconstruction. An intensive stúdy of the causes of the Civil War and the serious problems involved in reconstruction, some of which still remain unsolved. Four hours credit.
267. Latin-American History. Designed to furnish a background for understanding the political, social, economic, and cultural life of the countries south of the United States. Four hours credit.
269. History of the Far East. A study of the economic, social, educational, religious, and political life of China and Japan and the consequent effect upon the world. Four hours credit.
270. Cultural History of the United States. A survey of the cultural and intellectual history of the people of the United States and the economic and social forces which conditioned our cultural development. Four hours credit.

## Political Science

70-170. Government of the United States. Emphasis upon how the national government operates, the political machinery by which it is controlled, and the way the citizen can participate effectively in government. Four hours credit.

71-171. State Government. The organization of state government, its functioning, and how the individual can contribute to its efficiency. Also related phases of local government. Four hours credit.

72-172. Municipal Government. What the citizen should know about his local government, sources of such information, and how he can take part in government most effectively. 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. Four hours credit.

174-274. International Relations. International law, modern attempts to establish cooperation among nations, common public opinion, and formal machinery for handling international problems. Four hours credit.
275. Political Science Theory. Introduction to the principles governing the various political organizations, the theories and forms of government, and constitutions and ideals of citizenship. Four hours credit.
276. Contemporary World Government. A study of the governments of other countries, how they operate, 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, controversies over various powers of government, and sections of the Constitution that have been most widely interpreted. Four hours credit.

## Sociology

80-180. Introduction to Sociology. A survey of the major sociological concepts, including group social forces, social heritage, isolation, competition, and social change, with emphasis upon their relations to modern social life. Four hours credit.

81-181. Contemporary Social Problems. A survey of present social relationships and problems, including such things as marriage and divorce, juvenile delinquency, and the problems of racial minorities. Four hours credit.

183-283. Population Problems and Trends. A study of birth-rate and deathrate trends, in addition to qualitative aspects of population. Four hours credit.

184-284. The Urban Community. A course designed to provide an understanding of the metropolitan region as a social and cultural unity and the kinds of problems peculiar to the community. Four hours credit.

186-286. Crime and Delinquency. Emphasis is placed upon the social implications of criminal and delinquent behavior in American social life. Four hours credit.

187-287. The Rural Community. An analysis of the social effects of modern science and technology on the rural community, and the waning of the old traditional neighborhood associations. Four hours credit.

191-291. Social Psychology (See Education 191-291). Prerequisite, Ed. 25125 or its equivalent. Human behavior is studied in reference to membership in such culture groups as the family, church, state and economic organizations. Four hours credit.

192-292. Marriage and Family in Modern Social Life. Designed to furnish an understanding of the family, with changes that are revolutionizing it, and to show the cornerstone position which the family will continue to occupy. Four hours credit.

193-293. Social Values and Social Progress. An analysis of social changes and social movements, including an examination of social values, social ends, and the various theories of social progress. Four hours credit.

194-294. The World's Great Religions. A historic and comparative study of the great religions of the world. Four hours credit.
296. Modern Social Problems and the Problems of American Youth. An analysis of current social trends, directed toward a helpful understanding of pressing social problems, including those that face American youth. Four hours credit.
298. Seminar in Sociology (Summer Quarter only). Prerequisite, eight hours in sociology. A reading and discussion course in which a critical analysis is made of the methods, laws, principles, and theories of sociology. Four hours credit.

## FALL, WINTER, AND SPRING QUARTER FEES ${ }^{1}$

Required of Every Student:

Tuition






Associated Students (includes Health Fee of $\$ 2.50$ (average) .------- $\quad 7.50$
Other Required Fees Assessed under the Terms of some Registrations:
Matriculation (paid once only, first quarter, by every student who
becomes a candidate for a degree)
$\begin{array}{ccc}\text { Late Registration (charged for each separate failure to comply } \\ \text { with regulations) } & \\ 1.00\end{array}$
Special Examination (required when permission is given to take
an examination at a time other than that scheduled) $-\ldots-\quad 2.00$

Extension of Credit:

Board and Room (by installments)
(Applied for any deferments granted beyond one week from Registration Day)
Credit by Examination:

Other Special Fees:
Board and Room, college residences (range $\$ 100$ to $\$ 118$ )
Median Average
(Deposit of $\$ 10$ required for room registration)

Room in housing by private householders (range $\$ 32$ to $\$ 40$ )
Median Average.





Binding Fee for Master's Thesis or Doctoral Field Study, per copy -------- $\quad 2.00$
${ }^{1}$ Summer school tuition and fees are published in the Bulletin of the Summer School.
${ }^{2}$ As defined by the Board of Trustees. Consult Business Office for rulings on residence requirements.
${ }^{3}$ A fee covering special course and laboratory charges, library books, Student Union privileges and physical education services. Over thirty special services available to the student are supported by this fee.
${ }^{4}$ All fees are due and payable in full at registration. The extension of credit privilege is granted on application in exceptional circumstances.
${ }^{5}$ Rates vary directly with the cost of living and are subject to change on thirty days' notice prior to any quarter by action of the Board of Trustees.
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4. Carter Hall - library, audio-visual education, English, bindery.
5. Kepner Hall-laboratory schools.
6. Guggenhaim Hall-arts.
7. Garden Theater.
8. Gunter Hall-health and physical education.
9. Student Union.
10. Home Economics Practice Cottage.
11. Crabbe Hall-science, home economics, social studies.
12. Heating Plant.
13. Faculty Club Apartments.
14. Faculty Club Apartments.
15. Faculty Club.
16. President's Residence.
17. Tobey-Kendel Hall-résidence hall for women.
18. Decker Hall - residence hall for women.
19. Belford Hall - residence hall for women.
20. Gordon Hall - residence hall for women.
21. Snyder Hall - residence hall for women.
22. Sabin Hall - residence hall for women.
23. Residence of Superintendent of Buildings and Grounds.
24. Mary Griffith House - residence hall for women.
25. Margaret Bryson House--residence hall for women.
26. Hadden Hall - residence hall for men.
27. Hays Hall-residence hall for men.


## OTHER STATE INSTITUTIONS OF HIGHER LEARNING

University of Colorado Boulder
ROBERT L. STEARNS, President
Colorado Agricultural and Mechanical College Fort Collins ROY M. GREEN, President
Colorado School of Mines Golden M. F. COOLBAUGH, President
Western State CollegeGunnisonC. C. CASEY, President
Adams State College AlamosaIRA RICHARDSON, President


[^0]:    *Serving in the armed forces.

[^1]:    *Serving in the armed forces.
    $\dagger$ Deceased, February 13, 1945.
    $\ddagger$ Deceased, May 29, 1945.

[^2]:    *Serving in the armed forces.

[^3]:    *Serving in the armed forces.

[^4]:    *Serving in the armed forces.

[^5]:    *Serving in the armed forces.
    $\dagger$ Serving abroad with American Red Cross.

[^6]:    *Serving in the armed forces.
    $\dagger$ Serving in U. S. Service, Chile.

[^7]:    Advisement
    Upon receipt of a statement of the prospective student's field of interest, the Director of the Graduate School assigns him to a member of the graduate faculty, who will act as the major professor for the first quarter and with

[^8]:    *Also given by correspondence.

[^9]:    *Also given by correspondence.

[^10]:    *Also given by correspondence.

[^11]:    *Given also by correspondence.

[^12]:    *Given also by correspondence.

[^13]:    *155-255. Business Organization. This course deals with the different types of organization which have been used in the conduct of business. Four hours credit.

    170-270. Administration and Supervision of Business Education. This course deals with the problems of administrators and supervisors who are interested in business education. Four hours credit.

    171-271. Problems in Business Education. Introduction to the scientific treatment of problems in business education and a survey of prospective research problems for designated papers, and masters' theses are the chief objectives of this course. Four hours credit.

    172-272. The Business Curriculum. The business curriculum in the high school is the basic consideration in this course. Four hours credit.
    216. Secretarial Science. A general survey course in the secretarial field for graduate students only. Four hours credit.
    222. Individual Studies. This course provides an opportunity for the graduate student to engage in individual research in the field of business education. Four hours credit.
    275. Adyanced Accounting Problems. Prerequisite, at least twelve hours of college credit in accounting, or the equivalent. The course deals with advanced problems in accounting. Four hours credit.
    276. Analysis of Financial Statements. Prerequisite, at least twelve hours of college credit in accounting, or the equivalent. The analysis and interpretation of financial statements for credit, financial, and management purposes is the chief consideration in this course. Four hours credit.
    299. Master's Thesis. Graduate students who elect the thesis plan should enroll for this course during the regular school year. Twelve hours credit.

[^14]:    *Also given by correspondence.

[^15]:    *Also given by correspondence.

[^16]:    *Also given by correspondence.

[^17]:    *Also given by correspondence.

