## $B \cup L E T \mid N$

## COLORADO STATE

 COLLEGE OF EDUCATION$G \quad R \quad E \quad L \quad E \quad Y$

$B \cup L E T \mid N$

COLORADO STATE COLLEGE OF EDUCATION
$G \quad R \quad E \quad L \quad E \quad Y$

YEARBOOK NUMBER 1940-1941

Series XL

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## A Guide for the Student

The student will find in this catalog much information not contained in any of the other college publications. This should be used as your official guide.

The following index will help you to find what you want: Arts (Fine) 17, 36; (Home Arts) 18, 40; (Industrial Arts) 18, 44; Education, 18, 49; Business Education, 67; Nursing Education, 70; Health and Physical Education, 18, 74; Literature and Languages, 20, 79; Music, 21, 93; The Sciences, 22, 100; The Social Studies, 22, 112; (Economics) 114; (Geography) 116; (History) 119; (Political Science) 121; (Sociology) 122.

## TUITION AND FEES

Tuition (Out-of-state residents pay $\$ 5.00$ additional) - $\$ 22.50$
Registration Fee - . . . . - . . . . . 2.50
Book Fee - - - - - . . - . - - - 1.50
Student Union Fee - - - - - . . . . . 2.00
Associated Students Fee (average) - - - - - - 7.00
Matriculation Fee (Paid only once, by all new students) - 2.50
Late Registration - . . . . . . . . . . 1.00
SPECIAL EXAMINATIONS-Students having permission to take examinations at other than the scheduled time will pay a fee of $\$ 2.00$.

Students should allow about $\$ 87.00$ for room and board, and about $\$ 7.00$ for books. In some of the divisions will be found small fees to cover laboratory costs or for materials in lieu of textbooks.

For special fees for individual music lessons, see Music Division, Page 93.

# College Calendar 

## 1940 <br> Summer Quarter

Eight-weeks session begins June 17-Ends August 9
Six-weeks session begins July 1-Ends August 9
June 14 Friday - - Registration, graduate students, 7:00 a.m.-12:00 m.
June 15 Saturday- - - Registration, undergraduate students, 7:00 a.m.-12:00 m.
June 17 Monday - - - - - Classes begin June 29 Saturday - - - Registration, Six-weeks session July 1 Monday - - - . . . . Classes begin July 4 Thursday - - - . . . . Holiday Aug. 9 Friday - . . . . Summer sessions end

## Fall Quarter

Sept. 23 Monday - - Matriculation and Guidance Tests for Freshmen, Gunter Hall, 8:00 a.m. Registration of freshmen, Gunter Hall, 1:30 p.m.
Sept. 25 Wednesday - - Registration of upperclassmen
and new students, Gunter Hall, 8:00 a.m. All-College Assembly, Gunter Hall, 7:30 p.m.
Sept. 26 Thursday - - - - - Classes begin
Nov. 21-22 Thursday-Friday (Thanksgiving) - Holiday

Dec. 12-13 Thursday-Friday - - Final Examinations
Dec. 14 Saturday - - - Christmas vacation begins 1941
Winter Quarter
Dec. 30 Monday - - Registration of new students; Classes begin
Mar. 13-14 Thursday-Friday - . . Final Examinations
Mar. 15 Saturday - - - - Spring vacation begins

## Spring Quarter

Mar. 24 Monday - - Registration of new students; Classes begin
May 7 Wednesday - - - . . . Insignia Day
May 30 Friday (Memorial Day) - . . . - Holiday
June 1 Sunday - . . - . . . Baccalaureate
June 2 Monday - - - - . Senior Ceremonial
June 4-5 Wednesday-Thursday - - Final Examinations
June 6 Friday - . . . . . . . Commencement

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Peter Brown, A.B., A.M. . . Assistant Professor of Physical Education A.B., Colorado State College of Education; A.M., Stanford University.

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Percy Otis Clapp, A.B., A.M. . . . Professor of Physical Education A.B., University of Minnesota; A.M., New York University; Graduate Student, New York University.

[^0]James Deforest Cline, B. Mus., M. Mus. . . . Professor of Music;
Chairman of the Division of Music B.MUs., M.MUS., Eastman School of Music, University of Rochester; Student with Kuria Strong, Percy Rector Stephens, Arthur Edward Johnstone, Howard Hansen, and Eugene Goosens; Graduate Student, Columbia University.
Blanche Rumbley Collins, A.B.,A.M. . Associate Professor of Public School Music; Supervising Teacher, Ernest Horn Elementary and the College Secondary Schools Diploma in Public School Music, Cornell University; Music Certificate, University of Colorado; A.B., A.M., Colorado State College of Education.
Ambrose Owen Colvin, B.C.S., A.M., Ph.D. . . Professor of Business
Education
B.C.S., Denver University; A.M., Colorado State College of Education; Ph.D., New York University.
Nora Congdon, A.B., A.M.
Instructor in Education A.B., Wheaton College; A.M., Colorado State College of Education.

Sumner Lee Crawley, A.B., A.M., Ph.D. . . Professor of Educational Psychology A.B., Indiana University; A.M., Ph.D., Columbia University.
$\ddagger$ Helen Caldwell Davis, A.B., A.M., Ph.D. . . Professor of Elementary Education A.B., Grinnell College; A.M., University of Iowa; Ph.D., University of Chicago.
George Edward Damon, B. S. . . Instructor in College Secondary School B. S., Bemidji State Teachers College.

DONALD DECKER, B.S., A.M. . . . . Assistant Professor of Science B.S., Michigan State Normal College; A.M., Colorado State College of Education.
Jule Statton Doubenmier, A.B., A.M. . . . Assistant Professor of Physical Education; Supervising Teacher, Ernest Horn Elementary and the College Secondary Schools A.B., A.M., Colorado State College of Education.

Lon Edwards, B.ScI., A.M.
Assistant Professor of Science B. ScI., Cotner College; A.M., Colorado State College of Education.
*Richard Gordon Ellinger. A.B. . . . Associate Professor of Art A.B.; Harvard University; Diploma, Massachusetts School of Art; Student of Maurice Sterne, Jonas Lie, and Eugene Steinhof.
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George William Finley, B.S., M.S. . . . Professor of Mathematics B.S., M.S., Kansas State Agricultural College; Graduate Student, University of Chicago, Columbia University.
James Donald Finn, B.S. . . . . . . . Instructor in Education B.S., Montana State College.

Arthur Joseph Foster, A.B., A.M. . . Associate Professor of Education A.B., A.M., Colorado State College of Education; Graduate Student, Columbia University.

[^1]George Willard Frasier, A.B., A.M., Ed.M., Ph.D., Ll.D. .
$\dot{B} \dot{M} \dot{\operatorname{Bin}} \dot{\operatorname{State}} \dot{\mathrm{C}} \dot{\mathrm{A}} \dot{\operatorname{S}}$ Professor of Education , Michigan State Normal College; PH.D., Columbia University; LL.D., Colorado College; LL.D., University of Colorado.

Catherine Crates Gibert, A.B., A.M. . . . Associate Professor of Foreign Languages A.B., Ohio Wesleyan University; A.M., Ohio State University; Student, University of Dijon, University of Strasbourg; Institute de Touraine; Graduate Student, University of Pennsyluania.
Grace Godfrey, A.B. . . . . . . . . . Fourth Grade Teacher, Ernest Horn Elementary School A.B., Colorado State College of Education.

Robert Gilchrist, A.B., A.M., Ph.D. . . . . Professor of Secondary Education A.B.. A.M., Colorado State College of Education; Ph.D., New York University.
Henry Trustman Ginsburg, B.Mus. . . Assistant Professor of Music B.MUS., Denver College of Music; Student with Henry Schradieck, Sametini, Svecenski, Saslavsky, Heifetz, and Thibaud.

Eulah E. Gooden, A.B., B.S. . . . . . Instructor in Library Science A.B., Colorado State College of Education; B.S., School of Library Science, Syracuse University.

ZORA LUCIA GORDON, A.B., A.M. . . . Instructor in Library Science A.B., University of Denver; A.M., Colorado State College of Education.

Charles Albert Hales, A.B., Ph.D. . Associate Professor of Economics A.B., Randolph-Macon College; Ph.D., Johns Hopkins University.

Josephine Halverson, A.B.
Library Cataloger A.B., University of California; Certificate of Librarianship, University of California.
*Fitzhugh Lee Hambrick, A.B., A.M. . . . Associate Professor of Elementary Social Studies; Supervising Teacher, Ernest Horn Elementary School A.B., University of Oklahoma; A.M., Colorado State College of Education.

John William Hancock, Jr., A.B., A.M. . . . Professor of Physical Education; A.B., State University of Iowa; A.M., Colorado State College of Education; Graduate Student, University of Wisconsin, University of Southern California.
William Henry Hargrove, B.S., in Agri. Ed., B.S., A.M. . Professor of Rural Education B.S. in Agr. Ed., B.S., School of Education, University of Missouri; A.M., Colorado State College of Education; Graduate Student, George Peabody College for Teachers.
Ezra Clarence Harrah, A.B., A.M., Ph.D. . Professor of Zoology A.B., Southwestern College; A.M., Ph.D., University of Illinois.
lucille Harrison, Ph.B., A.M. . . .Associate Professor of Elementary
Education; Supervising Teacher, Ernest Horn Elementary School Ph.B., A.M., University of Chicago.

[^2]*Hamil ton Hatfield, A.B., B.S., A.M. . . . . . Assistant Librarian A.B., University of Nebraska; B.S., University of Denver; A.M., Colorado State College of Education.

Josephine Mary Hawes, A.B., A.M. . . Associate Professor of English A.B., A.M., Colorado State College of Education; Student, Cambridge University, England; Graduate Student, University of Colorado, Columbia University.

Arthur William Henderson, B.Mus. . . Assistant Professor of Music B.MUS., Eastman School of Music, University of Rochester; Student with Max Landow, Edgar J. Rose, Donald M. Tweedy, Melville Smith, Irvine McHose, Edward Royce, Bernard Rogers, Herbert Inch, and Harold Gleason.
Fred Louis Herman, B.S., A.M. . . Associate Professor of Physics B.S., University of Nebraska; A.M., Stanford University; Student, Sorbonne, Ecole de Cavalaire, Saumur, France.
Russell Howland, B.Mus.
Instructor in Music B.Mus., University of Illinois.

Edna Mary Hoydar, B.Mus., M.Mus. . . Assistant Professor of Public
School Music B.MUs., M.MUs., American Conservatory of Music, Chicago; Graduate Student, University of Southern California; Student of Charles LaBerge, Karleton Hackett, and Horation Cogswell.
Robert Cecil Hutchcroft, A.B., A.M., Ed.D. . . Associate Professor of Industrial Arts A.B., A.M., Colorado State College of Education; ED.D., Columbia University.
Frank Covert Jean, A.B., A.M., Ph.D. . . . Professor of Biology; Chairman of the Division of the Sciences A.B., A.M., Ph.D., University of Nebraska.

Pauline Johnson, A.B., A.M. . . . . Assistant Professor of Fine Arts A.B., University of Washington; A.M., Teachers College, Columbia University.
Phoebe Miller Kandel, R.N., B.S., A.M. . . . Professor of Nursing Education R.N., Western Reserve University School of Nursing; B.S., A.M., Teachers College, Columbia University.
Gerald Kincaid, A.B., A.M. . Instructor in the College Secondary School A.B., Eastern Washington College of Education; A.M., Colorado State College of Education.
Winfield LeRoy Knies, A.B., A.M. . . Associate Professor of Business A.B., Colorado State College of Education; A.M., University of Washington.
Helen Langworthy, A.B., A.M. . . . Assistant Professor of English;
Supervising Teacher, the College Secondary School A.B., A.M., State University of Iowa; Student, American Laboratory Theatre, New York City; Irvine Studio for the Theatre, New York City.

[^3]Elizabeth Lehr, B.S., A.M. . . . . Associate Professor of Elementary
Education; Supervising Teacher, Ernest Horn Elementary School B.S., A.M., Teachers College, Columbia University.

Leslie Dae Lindou, A.B., A.M. . . . Associate Professor of English A.B., University of Minnesota; A.M., University of Wisconsin; Graduate Student, Yale University, Toronto University.
Genevieve Lemen Lyford, B.H.S., B.S., A.M. . .Associate Professor of Elementary Education;
Supervising Teacher, Ernest Horn Elementary School B.H.S., Oregon Agricultural College; B.S., Columbia University; A.M., Colorado State College of Education.

Arthur Ernest Mallory, A.B., A.M., Ph.D. Professor of Mathematics A.B., A.M., University of Kansas; Ph.D. George Peabody College for Teachers.

John Irving Mariani, A.B., B.F.A. . . . Assistant Professor of Art A.B.,University of Nevada; B.F.A., Art Institute of Chicago.

Annie Margaret McCowen, A.B., B.S., A.M., Ph.D. . . Professor of Elementary Education A.B., Bessic Tift College; B.S., A.M., Teachers College, Columbia University; Ph.D., University of Iowa.
Paul McKee, A.B., A.M., Ph.D. . . Professor of Elementary Education A.B., Monmouth College; A.M., Ph.D., University of Iowa.

Daniel Charles McNaughton, A.B., A.M. . . . Assistant Professor of Science A.B.,Colorado State College of Agriculture and Mechanic Arts; A.M., University of Chicago.
Sarah Hale McRoberts, B.S., A.M. . . Assistant Professor of Physical Education B.S., University of Iowa; A.M., New York University; Graduate Student, Hanya Holm School of the Dance.

Carl Gustav Melander, A.B., B.Mus., M.Mus. . . Assistant Professor of Music
A.B., B.MUS., Bethany College; M.MUS., Chicago-Bush Conservatory; Student of Thure Jaderborg, Herbert Miller, Edgar Nelson, Edgar Schofield, Edgar Brazelton, Hagbard Brase, F. Melius Christiansen.

Florence Marguerite Meyer, A.B., A.M. . . Assistant Professor of English; Supervising Teacher, the College Secondary School A.B., Grinnell College; A.M., University of Chicago.

James Albert Michener, A.B., A.M. . . . . Associate Professor of Secondary Social Stūdies;
Supervising Teacher, the College Secondary School A.B., Swarthmore College; A.M., Colorado State College of Education; Research Scholar, University of St. Andrews, Scotland; Graduate Student, University of Pennsylvania, University of Virginia, Ohio State University, Harvard University.

Estell Elgar Mohr, B.S., A.M. . . Professor of Public School Music B.S., Teachers College, Columbia University; A.M., Colorado State College of Education; Graduate Student, Ohio State University, Stanford University.

Margaret Mulroney, A.B., A.M., Ph.D.
Professor of Foreign
A.B., A.M., Ph.D., University of Iowa; Student, Centro de Estudios Historicos, Madrid, Spain; Student, Alliance Francaise, Paris.
Vera Newburn, B.S., M.S. . . . . Associate Professor of Home Arts; Supervising Teacher, Ernest Horn Elementary and the College Secondary Schools B.S., Hastings College; M.S., Teachers College, Columbia University; Graduate Student, University of Nebraska.
Doris Doyle Newcomb, A.B., A.M. . . Instructor in Library Science A.B., University of Denver School of Libratianship; A.M., Colorado State College of Education.
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Charles Edmund Stewart, A.B., A.M. . . . Associate Professor of Extra-Mural Education A.B., A.M., Colorado State College of Education.

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## The College Organization

Colorado State College of Education is comprised of the General College and the Professional College.

The first two years constitute the General College, in which the curriculum deals with general cultural education.

Specific professional preparation for teaching begins in the Professional College with the junior year. At this point selection is made of students who have established an adequate background of general cultural education and who appear to have personal traits and aptitudes related to success in teaching.

An integrated three-year course is offered in the Professional College. This leads normally to the degree of Bachelor of Arts at the end of the second year, and to the Master of Arts degree upon completion of three or four quarters of graduate work.

Throughout this catalog courses numbered 1-99 are first and second-year subjects: 100-199 are third and fourth year. Those numbered 200 and above are graduate work. Senior college students shall select at least two-thirds of their courses in the senior college.

## THE GENERAL COLLEGE

The General College was organized to satisfy a demand for two years of college work following the secondary school. It has a three-fold purpose: (1) Provide the best possible preparation in general education for advanced study in the Professional College, (2) provide a terminal education for those who for various reasons will not attend college longer than two years, and (3) provide a general education for those who will transfer at the end of two years to other colleges.

## Admission

Admission to the General College is open to all graduates of accredited high schools on recommendation of the high school principal. The principal will base his recommendation on health, good character, and ability to do college work.

Entering freshmen take a battery of examinations. These are not a part of the entrance requirements, but the scores are used for the purpose of advice and guidance.

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

High school graduates whose scholastic rating places them in the lower twenty-five per cent of the class seldom do acceptable college work and therefore are not encouraged to apply for admission.

Admission will be granted to others who have not graduated from high school provided the applicant is not under twenty years of age and makes satisfactory scores in the matriculation tests and meets the other requirements relative to health, character, and ability. Such applicants should consult the registrar before taking the tests.

Every student must take a health examination once a year, given by one of the college physicians. Admission will be denied anyone having a communicable disease.

## Program of Studies

Students in the General College are not permitted to enroll for courses numbered 100 or above.

The General College offers two plans of study. These are designated as Curriculum A and B.

In Curriculum A there are no prescribed courses. The program for each student is arranged by the student in cooperation with the director of the Department of Student Personnel. Students will be admitted to Curriculum A only upon application. Enrollment in this group is limited.

Curriculum B provides basic, required, survey courses for students who plan to enter the Professional College as follows:

Freshman Year
No.
Hrs.
Science 3a, b. Introduction to Science -..-.---........- 8
Art. 20a, b, c. Art Appreciation .......................... 6
Music 1a, b, c. Music Appreciation --------------------6
Ed. 20a. Orientation to Education --.-...----- 4
Ed. 20b. Human Behavior ........---------------- 4
S. S. 41. World Geography -.---.------------------ 4

Electives .----------------------------------12

Sophomore Year
No.
Hrs.
L. L. 40a, b, c. World Literature
S. S. $60 \mathrm{a}, \mathrm{b}, \mathrm{c}$. Man in His Social World


48
The normal load of college courses for freshmen is sixteen quarter-hours. However, the load of each freshman will depend upon such factors as his record of achievement in high school, his health, his classification scores and his outside employment. The Department of Student Personnel will determine the amount of course work permitted each student.

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

In selecting electives provided above in Curriculum B, the student should plan as much as possible to take sequences of courses prerequisite to subject matter needed for his teaching fields (major and minors). Courses that are elected in the General College must also be counted toward major and minors.

Courses required in Curriculum B must be counted within the sixty-hour maximum permitted within a division except where a division permits its majors to be exempted from the basic survey courses in its own division.

Provision will also be made by which students who can demonstrate proficiency at the outset in any survey course may be exempted from the course.

Each student is required to take each quarter during his freshman and sophomore years (General College) a one-hour credit course in active physical exercise in addition to his regular course load. See pages 19 and 20 under Division of Health and Physical Education (General College) for list of such courses for both men and women.

## DIVISION OF THE ARTS

The work of the General College in the Division of the Arts is designed to give instruction in fundamentals pertaining to the respective fields. The courses presented lead to a development and understanding of the arts basic in a cultural education.

The following courses are open to students in the General College:
Fine Arts
Students who plan to major in Fine Arts in the Professional College should take 1, 2, and 11, during the freshman and sophomore years.

$$
\begin{array}{lr}
\text { No. Drawing } & \text { Hre. } \\
\text { 1. } & \text { Composition and Drawing }
\end{array}
$$

2. Composition and Drawing ..... 4
3. Introduction to Design ..... 4
4. Lettering ..... 2
5. Design in Textiles ..... 2
6. Pottery and Modeling ..... 2
Home Arts

Students who plan to major in Home Arts should take 71, 72, and 73 during their freshman and sophomore years. For other courses that may be taken in the sophomore year, see the courses for Home Arts majors on page 39.
70. Dress Appreciation .--------------------------------------------14
71. Textiles 4
4
72. Fundamentals of Clothing Construction ----------------- 4
73. Dress Design and Construction .------------------------------ 4

## Industrial Arts

Various types of work in the Industrial Arts field are offered in the General College. Students planning to major in Industrial Arts should select from the following sequences during the freshman and sophomore years:
34. Introduction to Industrial Arts ..... 2
(Required of all first and second year students majoring or minoring in Industrial Arts.)
I. 41a, b, c. Elements of Printing ..... 6
II. 46a, b, c. Bookbinding and Leathercraft ..... 6
III. $\quad 50 \mathrm{a}, \mathrm{b}, \mathrm{c}$. Woodwork ..... 6
IV. 55a, b, c. Metal Work ..... 6
V. 61a, b, c. Principles of Drafting ..... 6
DIVISION OF EDUCATION

Within the Division of Education the courses in the business skills listed below are open to students in the General College: No.

Hrs.
20. Business Skills



Credit in the above business skills is given only on demonstrated proficiency. For details see page 65.

## DIVISION OF HEALTH AND PHYSICAL EDUCATION

All men and women in the General College are required to take one activity course each quarter in residence. First year women are required to take one group sport, one individual sport, and one dancing class for one hour credit each. Second year students may take any one-hour course not previously taken. Individual gymnastics will be substituted for women for an activity course upon presentation of a request from the medical adviser of women. Excuses from any other doctor must be referred to the school physician. Women in the General College who expect to enter the Professional College and major in Health and Physical Education should not take any of the following courses: 4, 6, 8, 30.

An extensive program of intramural athletics is provided for both men and women. It has for its aim athletics for every student, and comprises an organized program that attempts to bring every student into some athletic activity each quarter. No credit is given, but awards are granted in the form of medals and trophies. Intramural athletics for women are handled through the Women's Athletic Association.

A fee is charged in all swimming classes for women to cover rental and laundering of suits.

A towel fee of $\$ 1.00$ each quarter will be charged each man student to partially cover laundry service.

A deposit shall be made on padlocks for locker use. A part of the deposit will be kept when padlock is returned to pay for rental.

Women students who plan to complete a major or minor in Health and Physical Education should take the following courses:

Freshmen
$\begin{array}{lll}\text { No. } & & \text { Hrs. } \\ \text { 54a. Freshman } & \text { Practice (Dancing) } & 4 \\ 54 \mathrm{~b} \text {. } & \text { Freshman Practice (Gymanstics and Tumbling) } & 4\end{array}$

## SOPHOMORES

56a. Sophomore Practice (Modern Dance) ---........... 4
56b. Sophomore Practice (Minor Individual Sports) .-.- 4
Men who plan to major in Health and Physical Education should take during their sophomore year the courses listed below.




59a, b, c. $\begin{gathered}\text { Techniques } \\ \text { Activities }\end{gathered}$ of Teaching Physical Education 6

## Activity Courses

Students in the General College may take any six of the following courses: Note: Activity courses (numbers 4-57, inclusive) with even numbers are for women; those with odd numbers are for men. A course with both an even and an odd number is one in which both men and women may enroll, or in which closely similar courses are offered for men and for women.

25b. Varsity Tennis ..... Hrs.
26. Tennis1
27. Wrestling ..... 1
27a. Freshman Wrestling ..... 1
27b. Varsity Wrestling ..... 1
28, 29. Golf ..... 1
30. Minor Individual Sports ..... 1
31. Swimming ..... 1
31a. Freshman Swimming ..... 1
31b. Varsity Swimming ..... 1
31 d, e. Life Saving and Water Safety (One hour each quarter) ..... 2
32a, b, c. Swimming (One hour each quarter) ..... 3
32d, e. Life Saving and Water Safety (One hour each quarter) ..... 2
33. Gymnastics ..... 1
33a. Freshman Gymnastics ..... 1
33b. Varsity Gymnastics ..... 1
34. Individual Gymnastics ..... 1
35a. Elementary Mat Work ..... 1
35b. Advanced Mat Work ..... 1
37. Double Tumbling ..... 1
43. Pyramids ..... 1
45a. Freshman Football ..... 1
45b. Varsity Football ..... 1
45c. Spring Football ..... 1
47a. Freshman Track ..... 1
47b. Varsity Track ..... 1
49. Baseball ..... 1
49a. Freshman Baseball ..... 1
49b. Varsity Baseball ..... 1
51. Fundamental Skills of Football and Basketball ..... 1
53. Fundamental Skills of Baseball and Track ..... 1

54a, b-55a, b. FRESHMAN PRACTICE. 54a-55a, Dancing. This course is open to both men and women majors in Physical Education and will present the techniques in folk dances of various countries and in tap dancing. Original dances will be required. $54 \mathrm{~b}-55 \mathrm{~b}$, Gymnastics and Tumbling. Fundamental body gymnastics will be given, especially those that will condition the body for the tumbling, which makes up one-half the course. Laboratory work required. Eight hours credit (four hours credit each quarter).

56a, b-57a, b. SOPHOMORE PRACTICE. 56a,-57a, Modern Dancing and Percussion. Modern dance techniques and a study of music form and composition in relation to the dance are included in this course. Laboratory work required. Four hours credit. $56 \mathrm{~b}-57 \mathrm{~b}$, Individual Sports. Techniques in deck tennis, badminton, ping pong, shuffleboard, archery, quoits, and bowling are given in this course. Two hours credit.

## DIVISION OF LITERATURE AND LANGUAGES

In the General College the Division of Literature and Languages offers sequences in world literature, in elementary speaking and writing, and in Spanish, French, Latin, and German, forming the foundation for more advanced work in the Professional College. Students may select from the following:

## English

No.
4a, b, c. Elementary English Composition
Hrs. 8
No.

Hrs.
5. Elementary Reading and Speaking English ............ 4

16. Voice and Diction ..... 2
18. Argumentation and Debating ..... 4
58a. Survey of English Literature ..... 4
58b. Survey of English Literature ..... 4
58c. Survey of American Literature ..... 4
62. Informal Speaking ..... 4
63. First Course in Dramatic Art ..... 4Latin
5. Cicero ..... 4
6. Vergil ..... 4
7. Vergil ..... 4French
1, 2, 3. Elementary French ..... 12
5,6,7. Intermediate French ..... 12
German
1, 2, 3. Elementary German ..... 12
5,6,7. Intermediate German ..... 12
Spanish
1, 2, 3. Elementary Spanish ..... 12
5,6,7. Intermediate Spanish ..... 12
Students expecting to major in the Division of Literature and Languagesin the Professional College must take in the sophomore year the sequenceEnglish 58a, b, and cand English 4 (unless exempt for proficiency).
Those expecting to become majors in Foreign Languages take any twelvehour sequence in Latin, French, German, or Spanish, for which they have adequate preparation.

## DIVISION OF MUSIC

The Division of Music presents a varied program for students in the General College. Those who do not plan to major in music will find individual lessons and class courses suited to their needs. Individual lessons are offered in voice, piano, violin, organ, and the brass and reed instruments, all of which may be taken with or without credit.
Students who plan to major in music in the Professional College should take the following courses in the General College:
No.

Hrs.
2a, b, c. Music Reading. Theory, and Elementary Songs
(Two hrs. each quarter) 6
The following additional courses are open to students in the General
No. Hrs.
21. Instrumental Ensemble ..... 1
22. Vocal Ensemble ..... 1
30. Voice Lessons. Individual Instruction ..... 1
31. Piano Lessons. Individual Instruction ..... 1
32. Violin or other Stringed Instrument Lessons. Individual Instruction ..... 1
33. Organ Lessons. Individual Instruction ..... 1
35. Brass and Reed Instrument Lessons. Individual Instruction ..... 1
40. Beginning Orchestra ..... 1
41. Beginning Band ..... 1
44. A Cappella Choir ..... 1
45. Piano Lessons (class) ..... 1 College:

## DIVISION OF THE SCIENCES

The General College courses in the Division of the Sciences are designed to give instruction in those aspects of this field that will contribute to a general cultural education, and which will also furnish certain fundamental skills and information preparatory for life and for more advanced courses in the Professional College.

The following additional courses are open to General College students:
Botany

Chemistry
41. General Chemistry (for students who have had no

42. General Chemistry -----------------------------------------------------14

Mathematics
75a, b. College Algebra .-------------------------------------------18


Physics
61. General College Physics (for students who have

62. General College Physics ...--------------------------------
63. General College Physics ...-------------------------------- 4

Zoology

The courses of the Division of the Social Studies in the General College are designed to give additional general education and prepare for more advanced and specialized courses in the Professional College.

The following courses are open to General College students and are arranged in sequences suitable for continuous work:

## DIVISION OF THE SOCIAL STUDIES

Economics
No. Hrs.
20a, b. Principles of Economics --------------------------------- 8
Geography
41. World Geography

4

History
50a, b, c. American History -----------------------------------12
54a, b, c. Modern European History -------------------------------------12
Political Science
70. Government of the United States ........-...------------- 4


Sociology
80. The Home and its Relationships
81. The Care and Welfare of Children ..... 4

## The Professional College

The purpose of the Professional College is to develop teachers for rural, elementary, secondary schools, and teachers colleges; teachers and supervisors for all special subjects usually found in the best public schools; nursing education, and school librarians; principals, superintendents, and educational secretaries.

Good teaching demands a thorough knowledge of subject matter, combined with understanding of the child, and the best techniques of teaching.

In the Professional College the student is afforded opportunity to observe good teaching technique and to teach under supervision.

## Admission

Admission to the General College does not guarantee admission to the Professional College.

Admission to the Professional College is granted on the joint recommendation of the Department of Student Personnel and the staff of the division in which the student elects as his major teaching field. Such recommendations will be based on character, health, personality, ability to do college work as evidenced by two years of successful work in the General College or its equivalent, the results of comprehensive examinations, and a command of fundamental processes such as speaking, writing, and reading. The student's cumulative record of his first two years in college will be an important consideration in determining his admission to the Professional College.

Students will make preliminary enrollment for laboratory school work a part of their application for admission to the Professional college.

Transfer students must submit credentials to the registrar.
A physical examination by one of the college physicians is given to each applicant for admission, and once yearly thereafter while in college. Those having communicable diseases or serious physical defects are not admitted.

## Certificates and Degrees

The Professional College offers a program of studies leading to the degrees of A.B., A.M., and Ed.D. Each degree is accompanied by a certificate to teach. The minimum residence requirement for any degree is one academic year, or three quarters.

A state non-renewable five year elementary certificate is granted by the State Superintendent of Public Instruction to applicants who have completed a total of 135 quarter hours in one or more accredited colleges above graduation from a four year high school, including thirty quarter hours in education, six of which must be in practice teaching.

## Provision for Specialization

An undergraduate student preparing himself as a teacher should first decide whether he wishes to teach in an elementary school or in a secondary school.

If one selects elementary teaching he should consult with the adviser of elementary majors concerning the curriculum prerequisite to this type of teaching. Suggestions as to the basic courses needed for elementary teaching will also be found on page 48.

If one decides he wishes to teach in one of the academic subjects commonly offered in secondary schools, or in one of the special subjects (fine arts, home arts, industrial arts, music, physical education, where preparation for both elementary and secondary work is demanded), he may elect to pursue a curriculum requiring a major and two minors, or he may select three teaching subjects each comprising a minimum of thirty-six quarter hours, or four teaching subjects each comprising a minimum of twenty-four quarter hours.

Counselors are available for both elementary and secondary majors. Details of the counseling program will be furnished by the Department of Student Personnel.

Those who elect to follow a curriculum providing for a major and two minors will be assigned an adviser in the division which they choose as a major. The amount and character of course work in the major is indicated in the printed prescription for each division. No student may exceed sixty quarter hours in his major. At least one of the two required minors must be in a subject outside the major division. Each minor must include a minimum of twenty-four quarter hours; this minimum is required to teach in secondary schools in states including Colorado that are accredited
by the North Central Association of Colleges and Secondary Schools. All courses selected for minors must have the approval of the registrar.

Those prospective secondary teachers who select three or four broad fields for specialization should consult with the registrar. He will aid such students in outlining such a curriculum.

Students should also become familiar with all requirements of admission to the Professional College (See page 23). Elective hours in the General College shall be used to meet prerequisites and beginning sequences in the fields in which the student is specializing.

Throughout his professional preparation, the student should not lose sight of opportunities to promote his individual culture through courses, reading, study, lectures, and travel.

It is desirable to participate in extra-curricular activities while in pre-service preparation, not alone for the intrinsic personal values of such participation, but also for the use of this participation subsequently in the community in which he may be employed as a teacher.

Finally, the development of a rich, many-sided personality involving the promotion of the characteristics of a scholar and a leader is essential, and every opportunity afforded should be embraced.

Students preparing to teach academic subjects in the secondary schools or special subjects in the elementary and secondary schools shall have courses in methods and materials in the fields
in which they are preparing to teach. (See Ed. 150 b-i for such courses.) Such courses are often counted as a part of the certificate requirements in education.

All men in the Professional College are advised to take Ed. 141, Administration of Village and Consolidated Schools, and Ed. 103, Boy Scout Work.

## Professional Core Subjects

Below are listed the core subjects to be taken in the Professional College. In addition to the basic courses outlined in the General College and those outlined for the student's teaching subjects, each student in the Professional College must take the pro-
fessional courses in Education and Psychology outlined below to meet the certificate requirements of the State of Colorado.
No. Hrs.
105. American Education ..... 4
$\ddagger 116$. Secondary Education ..... 4
*176. Psychology of Learning ..... 4
$\dagger$ 150. Observation and Applied Techniques of Teaching ..... 4-8
151. Student Teaching ..... 8
195. Philosophy of Education ..... 4

Minimum requirements in the education of secondary teachers have been set by the North Central Association of Colleges and Secondary Schools as follows:
I. For prospective teachers of English, mathematics, foreign languages, science, and social studies:

1. At least 24 quarter hours must be completed in a subject chosen for teaching.
2. In Science and Social Studies, 8 quarter hours must be earned in the specific subject to be taught in high school.
3. In foreign languages, 24 quarter hours must be earned in a single language.
4. The amount of credit to be earned in mathematics and foreign languages ( 24 quarter hours in each) may be reduced by 3 quarter hours for each high school unit accepted for entrance to the college, but not to exceed a total reduction of 9 quarter hours in either of the two fields.
5. Professional preparation requiring 24 hours in education.
II. For prospective teachers of other subjects such as art, music, industrial arts, physical education, and commercial education:
The same general preparation as given in I, above, is required. Students who select a major or minor in these fields will be given complete information by the Registrar's office when they enroll.
[^6]
## THE GRADUATE SCHOOL

Colorado State College of Education grants the Master of Arts degree and the Doctor of Education degree. It has offered graduate work since 1913. In fact this college was the first publicly supported institution for teacher preparation in the United States to offer advanced work beyond the bachelor's degree. Between 1914 and 1924 eighty-nine Master of Arts degrees were granted. Since 1924 the growth of the Graduate School has been phenomenal. In the summer of 1924 there were 131 students doing graduate work. This number represented 5.1 percent of the total enrollment of 2448 . In the summer of 1939 there were 1546 students enrolled for graduate work. This number represented 54 percent of the total enrollment of 2844 students. Since 1924 the college has conferred approximately 1500 Master of Arts degrees.

In 1934 the college conferred its first earned doctor's degree. To date, twenty doctorates have been granted. Last summer 108 students were enrolled for work toward the doctorate.

The Professional College is organized in seven divisions. Each division has its own graduate committee. This committee is charged with studying graduate problems in a restricted field. The chairmen of these seven graduate committees make up the Graduate Council. This council, under the chairmanship of Dr. Arthur Franklin Zimmerman, is the legislative body of the Graduate School.

The Doctor of Education degree is granted only in the Division of Education. This degree is under the control of a committee of five, of which Dr. Wallace T. Wait is chairman. The other members of the committee are Dr. Grace Wilson, Dr. O. L. Troxel, Dr. E. U. Rugg, and Dr. Zimmerman, ex-officio.

In making plans for graduate work students should write to Dr. Zimmerman about problems that involve the Master of Arts degree, to Dr. Wait about any problems that involve the Doctor of Education degree.

## The Master Of Arts Degree

The Master of Arts degree is offered in all seven divisions of the college, namely, The Arts (Fine Arts, Home Arts, Industrial Arts) ; Education (Elementary, Secondary, Educational Administration, Educational Psychology, Business Education); Health and Physical Education; Literature and Languages (English and Literature, Speech, Foreign Languages); Music; The Sciences (Biological, Physical, Mathematics) ; and the Social Studies (Geography, History, Social Studies).

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

## Plan A

The presentation of thirty-six quarter hours of graduate course work earned in three quarters in residence and twelve quarter hours of thesis credit.

## Plan B

The presentation of forty-eight quarter hours of graduate course credit earned in four quarters of residence and a final written examination.

For a complete listing of all courses and description of the same, see the Yearbook.

## Admission

Application for admission to the Graduate School should be made to the registrar. The student should fill out an application for admission at least thirty days before registration. $\bar{A}$ certified transcript of all academic credits must accompany the application for admission. This is necessary if the student desires to avoid delays at the time of registration. Blanks for admission will be furnished on request.

The holder of a bachelor's degree, or its equivalent, from a reputable college or university authorized by law to grant such a degree will be admitted to course work in the Graduate School, provided the transcripts of his college record indicate that he is able to pursue graduate work. The following criteria based on undergraduate work will be employed in determining eligibility: (1) Graduation from an approved institution; (2) acceptable scholastic average; and (3) a program showing a breadth of content in the major field.

A student will be admitted to full standing (candidate for the degree) in the Graduate School after he has been in residence a sufficient length of time to enable his instructors and the Graduate Council to judge his ability to do graduate work. This ruling applies to all graduate students regardless of the institution at which they have graduated.

## Seniors Taking Courses for Graduate Credit

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

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

No graduate credit will be allowed for any courses taken without previous arrangement with the office of the Graduate School.

No residence credit is possible for courses taken by undergraduates who lack more than six quarter hours of having completed the requirements for the bachelor's degree.

## TIme Requirements

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

The maximum time limit for completion of graduate work for the master's degree is two full calendar years for students attending during the regular college year, or six years in summer sessions. If the time is to be exceeded, any necessary adjustments must have the approval of the director of the Graduate School.

## Residence Requirements

The residence time requirements for the Master of Arts degree is three quarters in residence under Plan $A$, and four quarters in residence under Plan $B$.

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 thirty-six quarter hours of credit for Plan $A$, and not less than forty-eight quarter hours of credit for Plan B.

## REGISTRATION

Students who have applied for admission and who have forwarded their transcripts will be permitted to enroll for course work in the Graduate School.

Each student working for the master's degree consults with a major professor who aids the student in planning a unified program and who acts as the student's adviser throughout the time required for the degree. Any change of this relationship must have the approval of the director of the Graduate School.

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

Graduate students who are not candidates for a higher degree will register as unclassified. However, each student is urged to
plan a program at the beginning of his graduate experience in order that the courses in which he enrolls will not detract from the unity of his graduate work.

Former graduate students shall register directly with their major professors.

Before becoming final, registrations must have the approval of the director of the Graduate School.

## Course Load and Credit

The maximum course load for credit is twelve hours each quarter. A general grade average of 3.7 must be maintained for graduation. No graduate credit will be allowed for courses in which the grade is below C.

Graduate credit is granted only in those courses bearing a 200 or above number.

Only eight quarter hours may be earned in one-hour unit courses.

The student must have a minimum of sixty-four quarter hours of undergraduate and graduate credit in his major. Twelve hours of this is credited to a thesis under Plan A.

The student must have at least thirty hours of undergraduate and graduate professional work in education, educational psychology, and related fields, regardless of the division in which he majors.

At least one-half of the graduate credit for the master's degree must be in the field of the major.

The level of work elected by the graduate student and his standing as a candidate for degrees depends upon the extent and character of the undergraduate program. The minimum undergraduate preparation for any graduate major, except the general field of Social Studies, is twenty-four quarter hours of basic course work in the field of the major. The term "basic course work" is construed to mean work that can be used for certification under the North Central Association rules.

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

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

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

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

## Plan A in Detail

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

1. Complete forty-eight quarter hours of graduate credit, thirty-six of which must be in resident course work. The other twelve are credited to the thesis. A maximum of twelve quarter hours of course credit may be earned each quarter.
2. Register for the thesis and pay the thesis fee (\$15.00) at least three months before enrollment for final quarter of residence.
3. Plan with adviser (major professor) a unified program of course work. This adviser also acts as thesis sponsor. He approves the preliminary outline and the final draft of the thesis. The preliminary outline is subject to review and approval by the director of the Graduate School. When the latter is in doubt as to the validity of the research problem, he may refer the outline to another member of the graduate faculty for criticism and evaluation.

If the adviser and the student disagree with the evaluation, they may appeal to the Graduate Council as a whole for a final decision of the case.
4. Enroll for the required course or sequence of courses offered by the division in which his major lies. A mimeographed list of these courses will be available at the time of registration.
5. Furnish early in his graduate experience evidence that he possesses the necessary skills for writing a thesis. Examples of such skills are: a command of written English, experimental and statistical techniques, historical criticism, etc. Courses to meet any such deficiencies may be required in addition to the regular course work for the degree.
6. Present all of his written work in conformity to the standards given in the mimeographed English Style-Form Standards.
7. File signed typewritten copies of his thesis outline with the major professor and the director of the Graduate School early in his progress toward the degree.
8. Present to his adviser at least four weeks before the date for conferring degree a copy of the final draft of his thesis for examination and criticism. The final draft is subject to review and approval by the director of the Graduate School. When the latter is in doubt as to the validity of the research problem he may refer the study to another member of the graduate faculty for criticism and evalu ation. If the adviser (major professor) and the student disagree with the evaluation, they may appeal to the Graduate Council as a whole for a final decision of the case.
9. Present four brief typewritten abstracts of the thesis, three of which are to be bound with the final copies of the thesis and one to be filed with the student's records in the graduate office.
10. Deliver to the graduate office at least two weeks before the date for conferring degrees three copies of the complete thesis in final typed form, approved and signed by the major professor and ready for the approval signature of the director of the Graduate School. Three copies shall
be filed with the college business manager for binding, after the binding fee is paid to the treasurer of the college. Two bound copies, the original and first carbon, shall be deposited in the college library. The third bound copy shall be delivered to the major professor for his files.
11. Apply to the registrar for graduation the first week of the last quarter in residence in terms of the following requirements: (1) Forty-eight quarter hours of graduate credit, twelve of which will be for the thesis; (2) a grade average in course work of 3.7 ; (3) satisfactory completion of a thesis; (4) satisfaction of student teaching standards; and (5) reasonable personality and evidence of professional standards.

## Creative Work in Lieu of Thesis

In harmony with policies of many of the best institutions of higher learning in the country, the Graduate School will recognize a creative project in the field of literature, music, or the fine arts, as the equivalent of the conventional type of thesis. 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 must give a careful account of his techniques, of the materials from which his problem emerged, and an explanation of the problem's contribution to contemporary thought and life. The student is required to observe all the other provisions previously listed for thesis plan students.

## Plan B in Detail

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

1. Complete forty-eight quarter hours of resident course work. A maximum of twelve quarter hours may be earned each quarter.
2. Plan with adviser (major professor) a unified program of course work. The student shall enroll in three advanced courses (twelve quarter hours) identified by a special mark, in which written reports will be required. A student will present not more than one such report each quarter. The student, with the advice of the major pro-
fessor, shall determine the designated course from which a written report will be accepted. Typewritten copies of these reports shall be presented to the graduate office to be filed with the student's record. Each report must be filed at least one week before the end of the quarter in which the paper is written.
3. Enroll for the required course or sequence of courses offered by the division in which his major lies. A mimeographed list of such courses will be available at the time of registration.
4. Present all written work in conformity with the standards given in the mimeographed English Style-Form Standards.
5. Register for twelve hours outside of the major field if possible. However, the regulation of sixty-four hours in the major field and thirty hours in Education must be met first.
6. Pass a written examination in the content and the latest professional aspects of his major interest. The major professor will be in charge of the examination. The examination will be given on a day designated by the director of the Graduate School. All Plan B students expecting to graduate must take the examination on the day and date announced for same. The examination, after being evaluated by the major professor, must be filed with the director of the Graduate School at least ten days before the degree is to be conferred.
7. Apply for graduation to the registrar the first week of the last quarter in residence in the terms of the following requirements: (1) Forty-eight quarter hours of resident graduate credit; (2) a grade average in course work of 3.7; (3) the satisfactory completion of three advanced designated courses (twelve quarter hours) and the filing of the required typewritten reports; (4) passing a written examination in the field of his major interest; (5) satisfaction of student teaching standards; and (6) reasonable personality and evidence of professional standards.

## The Doctor Of Education Degree

Opportunity for doing work leading to the degree of Doctor of Education is offered in the Division of Education only. The work required for this degree is of two types, course work and research of a professional nature. The course work for the degree may be done only in the summer session; the professional research will be in terms of problems arising from the student's professional position.

Certain minimum quantitative requirements are established but beyond these, the qualitative requirements of scholarship, professional leadership and ability to solve professional problems by sound research techniques are of highest importance. The work for the degree represents a minimum of two years beyond the master's degree ( 96 quarter hours). Of this work, from onefourth to one-third is done in Field Study Research resulting in published reports. A minimum of 48 quarter hours of course work must be done on the campus, and all the research requirements must be met by work planned during residence study.

The student's proficiencies are determined in part by the quality of course work completed, and in part by examinations to include a preliminary battery of written qualifying tests, which normally will be administered during the first quarter of resident study. The student will also be examined orally upon the basis of each completed Field Study. Final comprehensive written examinations will be required of all students in the areas of major concentration and in the minor supporting areas of study.

The student's work will be under the direction of his Research and Examination Committee, the chairman of which will be the student's major professor. Graduation with the degree of Doctor of Education is by vote of the graduate faculty, upon recommendation of the student's major professor with the approval of the Committee on the Doctorate.

For further information, address your inquiries to Dr. W. T. Wait, Chairman of the Committee on the Doctorate.

2039,
, 204,
220,
226,
228

## The Course of Study <br> DIVISION OF THE ARTS

The Division of the Arts, consisting of Fine Arts, Home Arts, and Industrial Arts, offers instruction in both the General College and the Professional College.

The work of the Professional College in this division supplements that of the General College and offers professional courses together with more advanced general courses.

The plan of the work in the two colleges is to develop a major and a minor course within the Division of the Arts. The other minor shall be outside the Division.

## Fine Arts Major

Students wishing to major in Fine Arts in the Professional College should do superior work in Art 1, 2, and 11 as a part of their General College work. It is advised that these students also take a sequence of twelve hours in Fine Arts, Home Arts or Industrial Arts during the sophomore year.

Courses to be taken by students majoring in the Fine Arts are as follows:
Junior Year


Two to twelve hours in 133-233a, b, c, Individual Problems in Graphic and Plastic Arts, may be substituted for an equal number of the above courses. Courses substituted should have the approval of the division chairman.

## Senior Year

108-208. Plastic Design ..... 2-4
120-220. Oil Painting
120-220. Oil Painting ..... 2-4 ..... 2-4
121-221. History of Art ..... 4
128-228. The Curriculum in Art Education ..... 4
130-230 Contemporary Art ..... 2

## Fine Arts Minor

The registrar will furnish students who wish to minor in Fine Arts with a list of courses. All courses selected for minors must have his approval.

## Graduate Study

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

## Description of Courses

1. DRAWING. The foundation course in drawing. Designed to develop the student's power in graphic expression. Attention is given to plan and procedure in drawing, aims and objectives, analysis of the problem of form, analysis of modes of representation, essentials of perspective. Work is done in a variety of media. Four hours credit.

2-102. COMPOSITION AND DRAWING. Prerequisite, Art 1 or equivalent. The purpose is to develop power in drawing and in the use of compositional principles. In working out problems, line quality and meaning of line directions, and dark and light relations are considered. These structural attributes are used both in their two dimensional design relations and in the building of plastic or three dimensional form. Four hours credit.

3-103. INTRODUCTION TO PAINTING. Prerequisite, Art 1 or equivalent. A course in painting for beginning students. The purpose is to gain freedom of expression in both water color and oil media and to develop understanding of compositional relationships in painting with color. Two or four hours credit.

7-107. GENERAL CRAFTS. For students relatively inexperienced in the crafts. The purpose is to become acquainted with various materials, processes and equipment and to develop feeling for design and color relationships through simple experiences in general crafts. Two or four hours credit.

11-111. INTRODUCTION TO DESIGN. Progressively planned problems interspersed with lectures, demonstrations, discussions. The student becomes aware of the basic elements of design, develops an emotional response to their relationships, becomes increasingly aware of the concept of unity and learns the application of principles of organization. The relation of function, structure and materials in relation to the final form is emphasized.

13-113. LETTERING. The student learns the basic letter forms as well as many useful variants. Emphasis is placed upon lay-out, design, and organization of every lettering problem. The course includes work in manuscript, show card, and poster composition. Two hours credit.

14-114. DESIGN IN TEXTILES. A study of art structure in historic woven and printed textiles. Experience in designing, stitchery, tie dyeing, batik, block printing and free brush are presented through the study of color, and basic principles of design. Two hours credit.

17-117. POTTERY AND MODELING. The principles of design in mass, volume, and decoration. The course offers opportunities for experience in the coil and slab method, turning on the potter's wheel, glazing, casting, and firing. Two or fout houts credit.

18-118. PUPPETRY. A study of the various types of puppets and marionettes. This includes the writing of story, stage design, and characterization. The student analyzes the types of construction to fit the interest and abilities of the kindergarten and other school levels. Two hours credit.

20a, b, c. ART APPRECIATION. The course provides opportunity and guidance for the student in discovering his own potentialities through art experiences in drawing, painting, modeling, pottery, and the general crafts such as leather, metal, weaving, textiles, and wood. Two hours credit each quarter.

24-124. ART IN THE ELEMENTARY SCHOOL. Presents methods of teaching art to elementary and rural majors. Gives experience in art expression
and the use of art elements and principles as a basis for the creative approach. Organization of units of work including drawing, painting, design, color, modeling, block printing, lettering and the mural, as they relate to the integrated school program. Four hours credit.

102a-202a. ADVANCED COMPOSITION. Prerequisites, Art 1 and 2. Composition and Drawing. Structural principles practiced in advanced problems of three dimensional thythms, such as poising form in space through the understanding and use of the focal plane, and the structural use of color in three dimensions. Mural painting given if desired. Two or four hours credit.
¥03a-203a. WATER COLOR PAINTING. Prerequisite, Art 1, 2, 3 or equivalent. The aim of the course is to give the student a technical command of the medium; principles of color in the interpretation of plastic form; to develop individual expression in creative painting; and to acquire a professional approach and teaching power in the medium. Two or four hours credit.
\#IT-204. FIGURE AND COMPOSITION. Prerequisite Art 1, 102 or equivalent. Organic inner construction of the figure and special emphasis on modern theories of organization and picture building are stressed. Students' professional reading from modern sources on creative expression in art and the philosophy of art education is discussed in class. Subject matter from life experiences is integrated into compositions. Students choose different media. Course may be continued for two or four hours additional credit as 104a-204a. Fout hours credit.

105-205. COLOR THEORY AND COMPOSITION. An extensive study of the field of color as one of the major design elements. The student learns to think constructively about color relationships and develops understanding of organizational principles pertinent to the color unit. Four hours credit.

108-208. 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.

109-209. PRINT MAKING (Summer Quarter only). A study of print processes: etching, dry-point, lithograph, stencil, woodcut, linoleum block, monoprint. Experience is offered in the making of prints, and the adaptation of print making to secondary school uses. Two or four hours credit.

112-212. PROBLEMS IN DESIGN. Prerequisite, Art 11-111 or equivalent. This course provides opportunity for individual growth in solving design problems in areas of student's choice. The student learns to organize the elements of design in diverse materials, first as abstract factors in the design unit, later as applied to functioning forms serving human need. Advanced projects are organized in terms of students' abilities. Four hours credit.

115-215. DESIGN FOR THE STAGE (See also L. 8 L. 115-215). A study of the art of theater from the designer's viewpoint. Practical experience in working out of the art problems involved in production. Four hours credit.

116-216. CRAFT PROCESSES AND DESIGN. The purpose of this course is to develop a professional viewpoint for teaching the crafts and understanding harmonious relationships of design and construction in artistic products. The best literature of the subject is studied and interpreted in terms of modern educational theory. The student has creative experience in loom weaving, leather craft, simple wood and metal problems, plastics, block printing and other crafts. Two or four hours credit.
-220. OIL PAINTING. Prerequisite, Art 1, 2 or equivalent. The purposes of this course are to develop the student's individual power of expression in the fundamentals of good painting; to give the student a vital interest in creative art through power gained in the use of the oil medium and to acquaint the student with viewpoints of the different schools in painting. This course may include advanced painting projects in figure composition, portrait, landscape or mural decorations. May be continued for two or four hours additional credit as 120a-220a. Two or four hours credit.

121-221. HISTORY OF ART. Designed to give a background of knowledge of the world's art and its development from the beginning of history, and to increase the student's appreciation and understanding of the different kinds of art. The content includes growth of the great schools and their influences, study of important masters and their work as an index to the time in which they lived, and study of the crafts and minor arts in relation to the progress of civilization. Four hours credit.

123-223. ART IN THE INTEGRATED PROGRAM. The aims of the course are: (1) To analyze the activities of the child on different levels with a view to discovering opportunities through which he may experience art in life functions; (2) to find ways of teacher guidance in art that are within the freely selected purposes of the learner; (3) To select, analyze and organize examples of architecture, painting, sculpture, crafts and art in the industries for study in connection with units of work in other school activities; (4) To select and study the art and literature which is best suited to the child's interests and capacities on the various school levels. Four hours credit.
-226. ART EDUCATION IN THE SCHOOLS. Art education for teachers, supervisors and administrators. Development of an art philosophy, based upon an understanding of the relationship of art education to general education and a study of contemporary points of view in art education and their social significance. A study of the creative approach in art and its relation to child personality development. Analysis of the community background-its social, economic, industrial and physical features as a source of art material. Members of the class may do concentrated work on problems concerning a particular need in their own situations. Four hours credit.

127-227. TEACHING ARTCRAFTS IN THE ELEMENTARY AND SECONDARY SCHOOLS. Consideration of the industrial needs of the child from the first grade through junior high school. A study of art in the industries as it is concerned with food, clothing, shelter, records, utensils, tools, and machines. Crafts are demonstrated and executed for the purpose of clarifying the learning. Included are problems in clay, weaving, textiles, pacier mache, toymaking, booklet making, and expression through miscellaneous crafts material. Four hours credit.
-228. THE CURRICULUM IN ART EDUCATION. A review of the best literature on the content and organization of the curriculum in general education and a study of the more recent professional literature in art education. The student will experience curriculum building, development of significant units for teaching art, analysis and evaluation of courses of study, and examination of available tests in the arts. Four hours credit.

130-230. CONTEMPORARY ART. The art of today as a social and aesthetic expression of contemporary life. A study of the status and trends in this field; analysis of the works of the creative leaders in design, painting, sculptare, architecture, and the minor arts. A review of great artists and art developmints from the Renaissance through the 19th century, forms a background for interpretation of modern art. Two hours credit.

133a, b, c-233a, b, c. INDIVIDUAL PROBLEMS IN GRAPHIC AND PLASTIC ARTS. Prerequisite: Permission of the instructor. A student in the Professional College may pursue creative work according to his individual needs through a sequence up to three quarters for a maximum of twelve hours credit. These courses may be substituted for required courses in art. The student may continue his study of drawing, composition, design, and color; paint in oil, water color, or work in other media according to his needs and interests. Two or four hours credit each quatter.

200b. THE PLACE OF THE ARTS IN GENERAL EDUCATION. The chief purpose is to show the interrelationship of all the arts and their place in the educational program. Problems which bring out the common ground upon which the industrial, fine and home arts are built are considered. The aim is to build a sound philosophy in the arts; to direct research in various areas of the field according to student needs in the solution of problems confronting teachers, supervisors and administrators; and to develop concepts with modern approaches to progressive teaching in the arts. Four hours credit.
217. CERAMICS. Prerequisite, 17-117. Presentation of the concepts of design in modeling small sculpture and pottery through historical research. Four hours credit.
222. INDIVIDUAL STUDIES IN ART 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 courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
299. THESIS. Thesis course required of all Plan A students. Twelve hours credit.

## Home Arts Major

Students wishing to major in Home Arts in the Professional College should take the following courses:
Sophomore Year
No. Hrs.

1. SCI. 41-42. General Chemistry ..... 8
II. ARTS (Fine Arts) 11. Introduction to Design ..... 4
2. Design in Textiles ..... 2
III. Arts (Home Arts) 70. Dress Appreciation ..... 4
3. Textiles ..... 4
4. Fundamentals of Clothing Construction ..... 4
5. Dress Design and Construction ..... 4

The major in Home Arts in the Professional College should include the following:

Junior Year
No. Hrs.
I. SCl

30-130. General Bacteriology
4
47-147. Household Chemistry ...--------------- 4
165. Household Physics ------------------- 4
II. Arts (Home Arts)

175-275. The House and its Decoration----- 4
79a-179a. Cookery and Table Service .-------- 4
79b-179b. Cookery and Table Service --------- 4
78-178. Elementary Nutrition -.------------------ 4
90a-190a. Household Management and $\begin{gathered}\text { Economics }\end{gathered}$
90b-190b. Household Management (Practice)

2 or 4
III. S.S

80-180. The Home and its
Relationships
81-181. The Care and Welfare of
Children 4
105-205. Color Theory and Composition-- 4
ED.
150c. Observation and Methods for Home Arts Majors 6
Students who must have Smith-Hughes certificates should transfer to Colorado State College at Ft. Collins for the senior year.

## Senior Year

I. Arts (Home Arts)


## Home Arts Minor

The registrar will furnish students who wish to minor in Home Arts with a list of courses. All courses selected for minors must have his approval.

## Graduate Study

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

## Description of Courses

70-170. DRESS APPRECIATION. A study will be made of personality types, physical types, economic and social requirements, health and comfort standards, and good grooming as they affect the choice of colors, lines, and textures that determine suitable and becoming dress for individuals. The class is given opportunity to visit shops, see fashion displays, try on various types of dresses, various colors and fabrics. Advanced students are required to present written illustrative work on a professional level for some suistable topic. Four hours credit.

71-171. TEXTILES. The purpose of this course is to develop a real appreciation of the nature and limitations of commonly used fabrics, the effect that various weaves have on the design and wearing qualities of goods; the effects of reagents, heat, light, and friction on commonly used materials. Four hours credit.

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COLORADO STATE COLLEGE OF EDUCATION
72-172. FUNDAMENTALS OF CLOTHING CONSTRUCTION This course is the first college sewing course. It includes the remodeling of a garment of good fabric, instruction in the care and operation of the sewing machine and all of the attachments, the study of the use of the commercial pattern and design and construction of a dress of simple lines, suitable for college. Four hours credit.

73-173. DRESS DESIGN AND CONSTRUCTION. This course is planned to develop the ability to work with fabrics and create from them attraclive costumes. The student will select and make an appropriate dress for afternoon, street, and sport wear. Four hours credit.

78-178. ELEMENTARY NUTRITION. The purpose is to enable students to select food suited to their needs, in the light of later knowledge of nutrition and physical fitness. Four hours credit.

79a-179a. COOKERY AND TABLE SERVICE. Students are given opportunity to select, prepare, and serve breakfasts and lunches suited to people of moderate means. A study of the fundamentals of nutrition, meal planning, marketing, cooking, and table service. A special study involving research on the problems of production, marketing, nutritive values, cookery and table service of some specific food is required of each student. Five days a week. Four hours credit.

79b-179b. COOKERY AND TABLE SERVICE. A continuation of 79a-179a. A brief review of fundamentals previously presented. The same type of class organization is used. During laboratory practice of meal service, emphasis is given to principles of cooking involved in more difficult food preparation. More elaborate and formal types of table service are practiced. A special study involving research similar to that in 79a-179a is required. Five days a week. Four hours credit.

90a-190a. HOUSEHOLD MANAGEMENT AND ECONOMICS. Home-making as a business, with a plan, is studied. Scheduling work, keeping records of expenditures, and time studies with revisions and recommendations are included. Personal allowances and their educational value are a part of this study. The family as a cooperating group tries to get its money's worth by studying markets, advertising, labels, and various systems in vogue. Four hours credit.

90b. HOUSEHOLD MANAGEMENT. Practice. This course will be taken in the Practice Cottage on the campus, and will include the managerial, physical, and social problems any well-managed home requires. Five days a week. Two or four hours credit.

174: APPLIED DESIGN. The purpose of this course is to provide opportunity for students to learn fine needlecraft as applied to household linens or children's clothes. Two hours credit.

175-275. THE HOUSE AND ITS DECORATION. This course is planned to aid students in recognizing suitable furnishings for homes of various types. Opportunity is given to visit many homes, and also to attend lectures by experienced decorators in home furnishing departments of large Denver stores. Advanced students prepare illustrative materials with extensive research on types of architecture, furniture, and fabrics suited to certain historical periods in house furnishing. Four hours credit.

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182-282. DIETETICS. The purpose of the course is to prepare students in nursing education for the work in the hospital. The course includes review and interpretations of the literature of this field, emphasizing recent advances. The fundamental principles of human nutrition as applied to the feeding of experimental animals will be developed as individual research problems. Materials and methods of teaching nutrition in high school will be presented. Dietaries for families of various income levels are planned. Four days a week, one double laboratory. Four hours credit.

185-285. EXPERIMENTAL COOKERY. This course provides opportunity for the advanced student to determine accurately many useful facts, not only as relates to combinations of foods in recipes, but effects of temperatures, time, and different manipulations on finished products. New commercial products are tested and compared with those already in use. Careful records are kept of all experiments, and conclusions are drawn. One hour lecture, three hours laboratory. Two hours credit.

186-286. INSTITUTIONAL COOKERY. The purpose of this course is to prepare the students for such work as dormitory kitchens or hospital kitchens require. The laboratory will be the dormitory kitchens. One hour lecture, six hours laboratory. Four hours credit.

187-287. INSTITUTIONAL ECONOMICS. The course offers opportunity to study the organization, management, furnishing, and equipment of such places as clubs, dormitories, and fraternity houses. This course can include the purchase of foods in quantity if desired. Two or four hours credit.

188-288. COSTUME DESIGN. With a knowledge of evaluating color, line, and fabrics, as taught in previous courses, students should be able in this course to design dresses of artistic merit, using fabrics that require skill in handling. The advanced students do research work in either historic costume or in the field of advanced textiles. Four hours credit.
191. METHODS IN THE HOME ARTS. This course is organized for Home Arts minors. A study is made of the organization of home arts in public schools with special emphasis upon objectives, curricula, courses of study, methods of instruction and measurement. Opportunity is given for observation in the high school home arts classes. Two hours credit.

200c. TEACHING PROBLEMS IN HOME ARTS. (Summer Quarter only). Taught by staff members in succession. This course is planned to give the teacher of home arts an opportunity to become familiar with modern methods and trends in home arts education. Teaching problems of the individual teacher will be studied and assistance given in working out practical solutions. Two hours credit.
222. INDIVIDUAL STUDIES IN HOME ARTS. The purpose of this course is to provide for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
271. ADVANCED TEXTILES (Summer Quarter only). This course is planned to encourage students in the study of recent textile developments. If the

# Ind Arts Courses to bear grad numbers on d $236,239,240,243,244,249,251$ $252,256,260,262,264,266 a b$ ci, $268 a 6$. 

economics of textiles are studied, one of the five chief fibers will be chosen, as the field is too broad to include all. Four hours credit.
299. THESIS. Thesis course required of all Plan A students. Twelve hours credit.

## Industrial Arts Major


#### Abstract

Superintendents are each year tending to employ teachers who can direct a variety of activities as compared to the specialist in one type of work in demand a few years ago. Industrial arts in most schools is a phase of general rather than vocational education and demands a broad background on the part of the teacher. This background may be appreciably strengthened with minors or course work in fine arts or the physical sciences. In the industrial arts, classes are offered in five areas: woodworking, drafting, printing, bookbinding and leathercraft, and metalwork. A-sequence-of-six-hours_should-be-setected-intwo of these areas.


In addition to three sequence courses, Arts $7-107$, Genera i ${ }^{\text {Crafts, }}$, and Arts 11-111, Introduction to Design, should also be taken by students who plan to becomedmajors in the department.

In order that each student may become proficient in several types of work the following courses, offered in the junior and senior years, are suggested.


Credit for 112, 113, and 117 together with that of the General Crafts and Introduction to Design applies toward a minor in fine arts, which is recommended wherever possible. This permits all work in design and allied courses to be applied toward this minor. A minor of twenty-four hours outside the Division of the Arts is required.

In addition to the courses listed above, the student should select two types of work in Industrial Arts and carry enough courses in them to develop a high degree of proficiency. H. 8 P. E. 50, First Aid, and Ed. 3-103, Boy Scout Work, should be taken by all majors in Industrial Arts.

## Industrial Arts Minor

The registrar will furnish students who wish to minor in Industrial Arts with a list of courses. All courses selected for minors must have his approval.

## Graduate Study

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

## Description of Courses

34. INTRODUCTION TO INDUSTRIAL ARTS. A course to enable students to better understand the nature and extent of the industrial arts field. Problems that will occur in the preparation for teaching and later in actual teaching situations are presented. Required of all freshman majors in Industrial Arts the first quarter of residence. Two hours credit.

41a, b, c-14la, b, c. ELEMENTS OF PRINTING. Course a is elementary, b intermediate, c advanced. Offering practical experience with the fundmental operations used in a school print shop, as the student carries pieces of printing through the various technical stages from type composition, proofreading, make-up, lock-up, to presswork. The course gives information as to tools, machines and materials in a school print shop, the place of printing in community life, the relationship between printing and the other subjects of the curriculum. It offers opportunity for practical self-expression by the student. Two hours credit each quarter.

46a, b, c-146a, b, c. BOOKBINDING AND LEATHERCRAFT. Course a is elementary, b intermediate, c advanced. These courses offer an apportunity to develop skills and processes in bookbinding and leathercraft. Problems applicable to the elementary school, junior high, and senior righ school are considered along with the use of many materials. Possibilities of constructing hand equipment and making tools with minimum amount of cost are studied. Two or four hours credit each quarter.
$50 \mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}-150 \mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}$. WOODWORK. Course a is elementary, b intermediate, $c$ advanced, $d$ machine. An opportunity to develop skills in bench woodwork is offered as well as to acquaint the student with the care and use of hand woodworking tools. A study of woods, materials, and supplies that are applicable to school shops. Processes and techniques in machine woorworking along with the selection of machines in terms of different teaching levels are presented. Two or four hours credit each quarter.

54a, b-154a, b. WORKSHOP IN INDUSTRIAL ARTS FOR ELEMENTARY SCHOOL TEACHERS. An opportunity to develop skill and understanding of how to work creatively with few tools and inexpensive matrials. Crates, boxes, tin cans, leather scraps and other materials easy to obtain are used. Methods of adapting the work to the elementary school classroom or to the small rural school are studied. Two or four hours credit.

55a, b, c, d-155a, b, c, d. METALWORK. Course a is Sheet Metal, b Ornamental Ironwork, c Art Metal, d General Metal. Opportunity is provided for the designing and construction of simple practical projects. The course is presented in four quarters: (a) The fundamental processes of sheet metal work including hems, lock joints, riveted seams, double seaming, hinge joints, wired edge, sweated joints, and beading; (b) the essential processes of ornamental iron work including cutting, filling, flaring, peening, riveting, and types of bending and twisting; (c) the processes of art metal including the possibilities and limitations in the use of copper, brass, bronze, pewter, aluminum, and nickel silver; and (d) instruction in the fields of bench metal, metal spinning, forge practice, casting, metal lathe, and welding. Two or four hours credit.

61a, b, c, d-161a, b, c, d. PRINCIPLES OF DRAFTING. Course a is Introductory Drafting, b Pictorial Drafting, $c$ Elementary Architectual Drafting, and d Machine and Development Drafting. Instruction will be given in reading and interpreting, as well as expression in this graphic language. The course is presented in a sequence of four quarters: (a) Problems in geometric constructions, orthographic projection, working drawings, section views, and auxiliary projections; (b) oblique, cabinet, isometric, and perspective drawing, applicadion of dimetric and trimetric methods of pictorial drawing, and the making of

tracings and blueprints; (c) interpretation and construction of floor plans, alevations, vertical sections, and landscape plans; and (d) a consideration of the field of machine drafting. Pattern development by means of parallel line, radial, and triangulation methods. Two or four hours credit each quarter.

63-163. GENERAL SHOP ELECTRICITY. A course covering the elementary principles of electricity that are applicable to projects on the junior and senior high school level and an opportunity to construct projects that use these principles. Methods of organizing a unit of electricity for the general shop or as a club activity will be considered along with a selection of materials and supplies needed for such a program. Two or four hours credit.

135-235. FOUNDATIONS OF INDUSTRIAL ARTS. A study of the origins and the development of the arts. Early movements toward industrial arts, organizations, leaders, schools, philosophies and their influences are considered. The historical and educational background of present day industrial arts. Four hours credit.
236. PRINCIPLES OF GENERAL SHOP ORGANIZATION (Summer Quarter only). This course deals with the purposes and philosophy underlying the organization of general shops. Methods of organization, the equipment problem, the teacher problem, and various teaching techniques are considered in terms of each individual's teaching situation. Problems of shop accounting, teaching aids, evaluation, and other shop problems will be considered. Four hours credit.

137-237. ORGANIZATION OF INDUSTRIAL ARTS. A course planned to consider various teaching problems in the industrial arts field. How to purchase equipment, materials, and supplies are considered. Shop accounting, budgeting, and problems of evaluation are presented. How to organize lesson plans in terms of each area of the arts will be considered. Four hours credit.

138-238. CURRENT THEORY AND PRACTICE IN INDUSTRIAL ARTS. Current controversial issues that confront the teacher of the arts and with which he must immediately become concerned are studied. Problems of standardization, measurement and evaluation, laboratory organization, administrarive and community attitudes, the "frill" controversy, correlation with other areas and the place of the arts in general education are presented. New experimints in the organization and teaching of industrial arts and issues affecting present practice are considered. Four hours credit.
-239. DEVELOPMENT OF SHOP PROBLEMS AND INSTRUCTION AIDS IN INDUSTRIAL ARTS (Summer Quarter only). This course deals with the advantages and disadvantages of the use of instruction, job, operatimon, and information sheets in the shop. The value of such units and the techniques used in their construction will be considered. The use of movies, film strips, and slides will be discussed. How to make and use graphs, wall charts, job analysis sheets, planning sheets, models, and other visual aids. Four hours credit.
-240. COURSE ORGANIZATION IN INDUSTRIAL ARTS (Summer Quarter only). The philosophy and criteria underlying the organization of a course of study in industrial arts education are presented. The prosedares and techniques by which such courses are developed and the problems that must be met in order to organize such courses are studied. Each student develops a course of study in the area in which he is most interested. Four hours credit.

142a, b, c. ADVANCED THEORY AND PRACTICE OF TYPOGRAPHIC DESIGN. Prerequisite 41-141 or equivalent. An advanced course that treats printing from the standpoint of design, techniques, tools, and mater-

# See p.142 

THE COURSE OF STUDY
ials involved in printing. It offers the student opportunity to do creative work out and beyond the ordinary run of commercial printing. Two hours credit each quarter.
-243. TEACHING TECHNIQUES AND COURSE ORGANZATION IN PRINTING AND THE GRAPHIC ARTS (Summer Quarter only). This course offers opportunity for first hand contact with tools, techniques, and materials used in a school print shop. It deals with the historical development of printing and the graphic arts and their place in the cultural background of our society; the objectives of printing in the school curriculum; printing in industry; art in printing; course content and organization; shop planning, equipment and management. Four hours credit.

The 244. PROBLEMS OF DESIGN IN PRINTING AND THE GRAPHIC ARTS (Summer Quarter only). Prerequisite 143-243. This course presents a study of design, its development, theory, forms, trends and changes, and the methods by which it functions in the various fields of the graphic arts. It offers methods and aids for teachers who have the problems of helping students to apply design and do creative work in the printing fields. A study is made of problems and projects arising out of the interests of pupils and the life of the school. Opportunity is offered for individual creative work. Four hours credit.

Effs 248. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN BOOKBINDING. A study of objectives, equipment, materials and supplies, teaching techniques, and methods of relating the bindery to the library and the classroom. Problems of keeping records are considered along with methods of shop accounting in the bindery. A course of study to meet individual requirements is developed. Four hours credit.
-249. ORGANIZATION OF AUTO MECHANICS AND DRIVER EDUCATION COURSES FOR THE SECONDARY SCHOOLS (Summer Quarter only). Objectives, course content and teaching techniques in driver ducation and automobile courses are discussed and evaluated. An analysis of present practices in safety education and the school's responsibility for such programs is made. An opportunity to do laboratory work on the automobile is offered. Four hours credit.

551-251. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN WOODWORKING. A study of woodworking processes and techniques. Courses of study are analyzed and a comparison is made with current practices in teaching woodworking. Teaching techniques for all phases of woodworking are presented along with an evaluation of each in terms of different school levels. This evaluation leads to the construction of a course in some phase of woodworking to meet individual requirements. Four hours credit.
\&发裂-252. PROBLEMS IN WOODWORKING (Summer Quarter only). Prerequisite 151-251 or equivalent. A study of the problems the specialized teacher of woodworking in secondary schools must meet. The selection of tools and equipment needed for woodworking will be made along with a study of materials and supplies that are most applicable for school shops. Four hours credit.

153a, b. WOODTURNING. Prerequisite $50 \mathrm{a}-150 \mathrm{a}$ or equivalent. A sequence in woodturning, to develop the techniques and processes, and the care and use of woodturning tools and equipment. The use of the lathe to supplemont regular shop teaching as an aid for making tools is presented. Two or four hours credit each quarter.

154c-254c. ORGANIZING WORKSHOP PROBLEMS FOR THE RURAL AND ELEMENTARY SCHOOL. Prerequisite 154a or equivalent. A continuation of 154 a with special emphasis on purpose, teaching methods,


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problems of finance, working under regular classroom conditions, course organization and integration with other subject matter fields. Two or four hours credit.

E-256. ADVANCED ART METAL (Summer Quarter only). Pererequisite 155 c or equivalent. Processes additional to those presented in $55 \mathrm{~b}-155 \mathrm{~b}$ include etching, chasing, enameling, bezel making, and stone setting. Coin silver, sterling silver, and gold may be used in addition to the metals introduced in the beginning course. Teaching problems in the field of art metal will be discussed. Two or four hours credit.
-259. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN METALS (Summer Quarter only): A study of objectives, course content, and the problems in methods of teaching in all phases of metal working in an industrial arts program. The industrial, social, and economic significance of metals is discussed. A study of the various types of metal shop organization will be made. Four hours credit.
tfe260. PROBLEMS OF THE METAL SHOP (Summer Quarter only). Prerequisite 159-259 or equivalent. Special tools and equipment to be used for metal classes will be planned. Various problems in the field of metal work will be considered including records, evaluations, equipment, materials, visual aids, class demonstrations, and teaching procedures. Methods of organizing courses either from a unit or general shop basis will be discussed. Four hours credit.
-262. PROBLEMS IN DRAFTING AND PLANNING (Summer Quarter only). Problems in the organization of a functional drafting and planming program to meet the demands of the general education emphasis in industrial arts. Objectives, course content, and teaching procedures to make such a program workable are discussed. Four hours credit.
264. INDUSTRIAL ARTS DESIGN. Prerequisite twenty-four hours of industrial arts work in two or more areas. A study of the principles of design and their relation to the problems that confront the industrial arts teacher. Problems of design are considered in terms of materials, tools, and processes, and are applied to each student's major field of emphasis. An opportunity is offered for students to work out methods of teaching and applying design in the industrial arts field. Four hours credit.

165-265. PROBLEMS IN ALABASTER TURNING ÁND SCULP. TURE (Summer Quarter only). The, source, cost and possibilities of alabaster as a material for the arts program will be/presdnted/Dtmonstrations showing how alabaster may be turned, carved, drilled, sawed, filed, polished, and colored will be given. The use /of inexpelsivid equip heft with be demonstrated and instruction will be given in the making of special tools and equipmint for this work f Two or four/ hours credit.
167. WOODFINISHING AND UPHOLSTERING. A course dealing with the many techniques and processes in woodfinishing and upholstering. A study of all kinds of finishes along with the many methods of refinishing, is made. Many types of upholstery are considered and a selection of woodfinishing and upholstery materials and supplies is listed. Two or four hours credit.

Quarter only). Prerequisite 161 c or equivalent. Architectural planning as it applies to the home and the function of the architect in the building of a home will be presented. Schoolhouse planning, laws, standards, and the computation of costs will be offered school administrators as well as teachers of industrial arts. The objectives, course, content, and methods of teaching architecture in the secondary school will be considered. Two or four hours credit.

200a. INTRODUCTION TO GRADUATE STUDY IN INDUSTRIAL ARTS (Summer Quarter only). A study of the literature, research and current concepts of the arts. Critical analysis of objectives, methods, and course organization. Criteria for the selection of graduăte work in industrial arts for subsequent quarters. A brief presentation of methods of research and a study of research techniques. Required of all graduate majors in industrial arts the first quarter in residence. Four hours credit.
201. SEMINAR IN INDUSTRIAL ARTS. An opportunity for all students doing independent research to report and receive criticism on their studies. Each student is expected to have a problem in which he is vitally interested and discussion centers around these and closely related problems. Four hours credit.
222. INDIVIDUAL STUDIES IN INDUSTRIAL ARTS. The purpose of this course is to provide for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
299. THESIS. Thesis course required of all Plan A students. Twelve hours credit.

## DIVISION OF EDUCATION

The Division of Education offers curricula in Education, Business Education, and Nursing Education.

In addition to four and five-year curricula in Business Education and Nursing Education, the division provides a four-year course for majors in elementary and secondary education and graduate work for superintendents of schools, for elementary and high school principals, and for supervisors of elementary and secondary schools.

## Elementary Major

Students who expect to prepare for teaching in the elementary schools should utilize the elective work in the freshman and sophomore years in the General College to obtain subject matter courses appropriate as background for teaching the various subjects taught in the elementary schools. In selecting these courses the adviser of elementary majors should be consulted.

Elementary majors will find it valuable to learn to play simple accompaniments on the piano. The Division of Music has arranged for group instruction in piano for a small quarterly fee.

Courses for students majoring in Elementary Education are as follows:
Junior Year
ART
No. Hrs.
Mus.
H. 8 P. E.

24-124. Art in the Elementary School ---.... 4
49-149. Music in the Elementary School- 4
102-202. Problems in School Health Education

Lit. 8 LANG.

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\begin{aligned}
& \text { No. Hrs. }
\end{aligned}
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> 21-121. Literature in the Elementary School 4
> 1a-101a. Science in the Elementary School.- 4

ED.
ED.
110-210. Improvement of Instruction in Reading and Literature 4
111-211. Improvement of Instruction in Language, Spelling, and Writing 4
ED. ED. 113-213. Improvement of Instruction in

112-212. Improvement of Instruction in Arithmetic 4 Social Studies 4
The student and his adviser shall select the geography, sociology, history, and science courses that best supplement the work the student has already had in these fields.

## Elementary Minor

The registrar will furnish students who wish to minor in Elementary Education with a list of courses. All courses selected for minors must have his approval.

## Graduate Study

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

## Secondary Major

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

## Graduate Majors in Administration and Supervision

Majors on the graduate level only are offered for students interested in preparing themselves as school superintendents and elementary and high school supervisors and principals. Course work will be outlined by the major professor.

## Cooperative Curriculum for School Librarians

Colorado State College of Education has arranged with the School of Librarianship of the University of Denver for a joint curriculum on the undergraduate level. Students enrolled at Greeley who plan to take this program should take the General College curriculum and in addition should complete twentyfour hours in each of two teaching minors. Courses in the two minors should be arranged with the college librarian. During the junior year 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 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 college library also appoints graduates of the School of Librarianship of the University of Denver as graduate library interns. Those interested in this internship should write the librarian of the Colorado State College of Education.

## Description of Courses

20a. ORIENTATION TO EDUCATION. This guidance course is designed to acquaint the entering student with two main aspects of the educational profession. The first phase of this course deals with the various problems within his career as a student. Effective techniques of study, planning his work programs, acquaintanceship with the various facilities and equipment of the college are some of the orientative fields brought to the undergraduate student. The second part of the course is directed toward the understanding and appreciation of the school as an institution, and of the community as an educational agency. Four hours credit.

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

25-125. GENERAL PSYCHOLOGY. This course introduces the student to the fundamental characteristics of human behavior. Emphasis is placed upon methods and results which allow human behavior to be understood without recourse to superstition and prejudice. Open to those students whose course schedule suggests a general introduction to psychology but who are not eligible for enrollment in Education 20b.

26a-126a. CAMP FIRE GIRLS' LEADERSHIP. Preparation for leadership in leisure-time activities for girls. The course is designed for teachers interested in sponsoring extra-curricular activities for girls. The course leads to the National Camp Fire Girls' certificate for leadership in Camp Fire Girls' work. A desirable elective for women. Two hours credit.

26b-126b. ELEMENTS OF BOY SCOUT LEADERSHIP. This course is designed to give students taking it a general knowledge of the aims and content of the Boy Scout program, with emphasis on the methods that can be used to teach the program to boys. It is intended to give the prospective scoutmaster a logical viewpoint of scouting and a systematic basis upon which he may build his future activities with boys. Two hours credit.
*30-130. RURAL EDUCATION. A course that aims to introduce the student to those problems in rural education that make teaching in rural schools of all classes peculiar and difficult. It deals with those particular problems of organization and management of school and community relationships, the selection, organization and adaptations of curriculum materials that are peculiar to the multiple-grade situations common to the small type school. Four hours credit.

32-132 INDIVIDUALIZATION OF INSTRUCTION. This course attempts to answer the question: "What is individualization?", "How it came to be?", and "How to individualize". It considers the techniques of individualization and their adaptations to rural and village school situations. Four hours credit.

[^7]33-133. TEACHING THE SOCIAL (RURAL) STUDIES. This course is designed to deal with the organization and the adaptation of an integrated social studies program for rural and village schools. It deals with organization of rural schools and with selection and organization of subject matter in the social studies to increase the size of classes, decrease the number of classes, and increase the time allotted to classes. Four hours credit.

[^8]50a-150a. OBSERVATION AND APPLIED TECHNIQUES OF TEACHING IN THE ELEMENTARY SCHOOLS. The immediate aim of this course is to prepare the student to engage successfully in student teaching. Content of the course consists of: Study of the purposes and organization of elementary school work; study of the learning problems found in all phases of elementary school work; scheduled daily observations of and participation in elementary school children's work; and, study of the factors contributing to successful teaching. The course is organized so that students spend six hours weekly in scheduled observation and participation in the grade in the Ernest Horn Elementary School in which the greatest interest of each lies, four hours weekly in class study and discussion of learning problems involved in the different subject matter fields, and one hour weekly (Tuesday, 4:00 p.m.) in conference with the staff member in whose grade he is observing and participating. During the quarter the student receives and prepares for the specific student teaching assignment in an affiliated public school for the next ensuing quarter. Students enrolling in this course should have completed Ed. 20a and b, or Ed. 30-130. Eight hours credit.

51-151. STUDENT TEACHING. The purpose of this course is to enable the student to develop, through actual teaching under close supervision. that teaching ability which justifies his being recommended for certification in the state of Colorado. The course is required of all students completing work for the Bachelor of Arts degree and of those graduate students without previous student teaching or public school experience. Students who are preparing for teaching in the elementary schools complete this requirement by a daily half-day assignment for one quarter in one of the affiliated public schools. Other students will have student teaching experience both in the campus laboratory school and in an affiliated school. Prerequisites for assignment to student teaching are: Satisfactory achievement in the required observation and technique course, a general scholastic average equivalent to that required for graduation, a three-point average in the teaching field undertaken, and those personal qualifictions necessary for admission to the Professional College. The total credit earned should not exceed sixteen quarter hours. Four, eight, or twelve hours credit.

100-200. UNIT COURSES IN EDUCATION. For a number of summers, particularly since the summer term has been divided into two-week, sixweek, and eight week sessions, short courses of two weeks duration, usually covering one unit of a larger quarter course, have been offered. The title of each specific unit implies the purpose and content of the course. One hour credit.
105. AMERICAN EDUCATION. The first professional course that aims to introduce the student to the study of education and to orient him in the field of teaching, preparing him for the more specialized courses that follow in junior, senior, and graduate years. Topics covered include: Objectives of education; techniques of educational thinking; characteristics and trends in the American school system; the program and materials of instruction; and prob-
lems of teachers such as teacher growth, recreation, professional ethics, teachers' professional organizations, community participation of teachers, school law, rewards and opportunities in teaching, and tenure and retirement of teachers. (This course should be taken before or with Ed. 116 or 176 a or b.) Four hours credit.

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

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

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

108c-208c. EDUCATION AGAINST PROPAGANDA (Summer Quarter only). This course is designed to study critically the types and devices of propaganda in war and peace, and the relationships between propaganda and modern education. One to four hours credit.

110-210. IMPROVEMENT OF INSTRUCTION IN READING AND LITERATURE IN THE ELEMENTARY SCHOOLS. Prerequisite, Ed. 150 or 151, or teaching experience. The purpose of this course is to acquaint the student with the objectives, materials, and methods of effective teaching of reading. The course covers the four large divisions of an adequate reading program: (1) basal reading, (2) work type reading, (3) literature, (4) oral reading. For each of these four divisions the following major problems are considered: (1) the selection of what to teach, (2) the grade placement of content, (3) methods and materials to be used in the classroom, (4) means of determining pupil achievement. Activities involve lectures, discussions, group work, observations, and building of individual programs. Four hours credit.

110a-210a. READING IN THE PRIMARY GRADES (Summer Quarter only). The implied aims of the content of this course are to: Evaluate the importance of reading past and present; present theories concerning the nature of reading and the psychological principles involved; outline the curriculum for the teaching of reading; give the student an understanding of the technique and skills involved in the teaching of reading of various types, for various purposes; acquaint the student with the latest materials for use in the instructional and testing programs and to evaluate those materials; acquaint the sudent wih the problems that are involved in programs of remedial teaching in reading; and, present the most important research studies in all phases of the program. Three or four hours credit.

110b-210b. IMPROVEMENT OF INSTRUCTION IN READING IN INTERMEDIATE GRADES (Summer Quarter only). This course is for teachers of intermediate grade work. Its purpose is to help them to attack more effectively the problems of teaching children of those grades to read efficiently. The topics emphasized are: Definition of reading; the reading activities these
children do and should engage in; the problems of enabling children to understand what they read; developing desirable reading ability in study situations; developing adequate skill in oral reading; using reading as a leisure activity; diagnosis of reading difficulties; providing remedial instruction; and, measuring progress and achievement in reading. Four hours credit.

110c-210c. A LABORATORY COURSE IN REMEDIAL READING (Observation in reading clinic to be arranged). This course, for elementary and secondary school teachers, is designed to deal with classroom methods of diagnosing and teaching children with reading difficulties. The lectures cover the following topics: Personality and its effect on learning to read; a complete reading program for the poor reader; the thinking side of reading; the mechanics of reading; the testing program; remedial reading in the content field; and, recreatory reading. The lectures are supplemented by demonstration lessons with groups of children in the reading clinic. Four hours credit.

110f-210f. A COURSE TO IMPROVE THE READING-THINKING ABILITIES OF STUDENTS. The purposes of this course are, first, to improve the student's own reading abilities, and second, to help students to understand the reading process as an aid in learning. In this course attention is given, first, to an analysis of the student's own reading abilities; second, to a self-orientation to the material to be read; third, to vocabulary building; fourth, to the improvement in ability to see relationship between ideas, to draw inferences, to make interpretations, to generalize, to find the main idea and thus, to organizing what is read. Four hours credit.

## 111-211. IMPROVEMENT OF INSTRUCTION IN LANGUAGE IN

 THE ELEMENTARY SCHOOL. Prerequisite, Ed. 150 or 151 , or teaching experience. The purpose of this course is to acquaint the student with the objectives, materials, and methods of effective teaching of language. The course covers oral composition, written composition, spelling, and writing. For each of these fields attention is directed at the selection of what to teach; the grade placement of content; methods and materials to be used in the classroom; and means of determining pupil achievement. Class activities involve discussions, lectures, demonstrations, and building of lessons or units of work. Four hours credit.111c-211c. LANGUAGE IN THE PRIMARY GRADES (Summer Quarter only). The course aims to give the student an understanding of the nature of language and the history of its development; outline the problems of importance in the teaching of the language arts; acquaint the student with the curricula in language, spelling, and writing in the primary grades; acquaint the student with the techniques involved in the teaching of the language arts in the primary field; present the available materials of instruction in these fields of teaching and to evaluate them; aid the student in the solution of his own and local problems in the teaching of the language arts; and, present the most important research studies in all phases of the program. Three or four hours credit.

112-212. IMPROVEMENT OF INSTRUCTION IN ARITHMETIC IN THE ELEMENTARY SCHOOL. Prerequisites, Ed. 150 or 151 , or teaching experience. The purpose of this course is to acquaint the student with the objectives, materials, and methods of effective teaching of arithmetic from the kindergarten through the sixth grade. The course deals with the selection of what is to be taught, the grade placement of this content, methods and materials to be used in the classroom, and means of measuring pupil achievement. Class activities involve lectures, discussions, observations, group work, and construction of lessons or units of work. Four hours credit.

112d-212d. DEVELOPMENT OF ARITHMETIC CONCEPTS FOR YOUNG CHILDREN (Summer Quarter only). This course presents, for study and discussion, means of developing the meanings of numbers and the simple processes in arithmetic. Three hours credit.

113-213. IMPROVEMENT OF INSTRUCTION IN THE SOCIAL STUDIES IN THE ELEMENTARY SCHOOLS. Prerequisites, Ed. 150 or 151, or teaching experience. The objective of this course is to acquaint the student with the aims, selection, and organization of content, and practical methods of teaching of unified and correlated types of programs. Direct attention is given to the problems of discovering and increasing, or to creating, children's interests in social studies; to exploring and utilizing their abilities in study; and to providing opportunities for them to use what they learn. Individualized study procedures, effective use of textbooks, teaching aids, learning activities, essential reading and language skills, the citizenship program, examinations and tests, and the use of visual aids are minor topics that are considered in relation to the major problems of the course. Four hours credit.

114-214. READING READINESS (Summer Quarter only). This course deals with the readiness phase of reading at all educational levels. The major topics covered are: (1) the nature of reading; (2) the instructional program in reading readiness for the preparatory period; (3) the testing program for determining readiness to begin reading; (4) the remedial program for pupils not ready to begin reading at a certain age level; (5) the nature of readiness to read at all other educational levels; (6) the instructional program in reading readiness at levels beyond the preparatory period; and (7) the necessity of a readiness program in the teaching of the content fields. Four hours credit.
*115-215. VOCATIONAL GUIDANCE (Summer Quarter only). The purpose of this course is to survey current practices and critical interpretations of recent literature in the field. Four hours credit.
*116-216. SECONDARY EDUCATION. Prerequisites, Ed. 20 or 105. The purpose of this introductory course in secondary education is to direct the student in the development of a broad, general understanding of: (1) why we have secondary schools; (2) how the secondary school has come to be what it is; (3) how it is going to do what it is supposed to do; (4) how we can tell if it is doing what it is supposed to do; and (5) what it takes to be a successful teacher in the secondary school. Mimeographed syllabus materials, no basic text, extensive bibliographies especially emphasizing periodical literature. Fout houts credit.

116bc-216bc. IMPROVEMENT OF READING INSTRUCTION IN THE SECONDARY SCHOOL. The purpose of this course is to help secondary school teachers improve the reading and study habits of their pupils. The major topics are: The reading activities engaged in by secondary school pupils; the degree of reading ability to be expected at the close of secondary school work; measurement of achievement and progress; peculiar reading difficulties presented by subject matter in the different areas; particular points of instructional emphasis in reading in the secondary school; diagnosis and remedial reading instruction; and preparation and use of reading materials. Four hours credit.

117-217. EXTRA-CURRICULAR ACTIVITIES AND GUIDANCE. Prerequisite, Ed. 105. The purposes of this course are to give teachers an acquaintance with the philosophy of outside-the-class activities and to make them critical of their aims and their proper place in the educational program. Topics covered include school councils and government, athletics, debating, literary and

[^9]social clubs, the school newspaper and magazine, musical and dramatic activities, and civic clubs and projects that relate to pupil particiption; the purposes and values of such activities in forming proper habits, attitudes, and ideals. Four hours credit.

118a. FUNDAMENTALS OF GUIDANCE. This course, offered in the spring quarter, is primarily, though not exclusively, for seniors who are to participate in the program of freshman counseling the following year. An interview with members of the staff of the Department of Student Personnel must precede registration in this course. The objectives of the courses are: To develop understanding of some of the basic principles of guidance; to develop an understanding of the purposes of a guidance program in high school and college; to develop an understanding of some of the basic principles of work with individuals; to study the needs of freshman students on this campus; and, to plan ways in which student counselors of freshmen most adequately function in the guidance program. Four hours credit.

118 b and c . APPLICATIONS OF GUIDANCE (Fall and Winter Quarters). The students in this course are those juniors and seniors who are participating actively in the freshman guidance program of the college. Students who are selected as freshman counselors are expected to enroll for Ed. 118 b in the fall quarter and for Ed. 118c in the winter quarter. Each student is allocated eight or ten freshmen, grouped wherever possible on the basis of like interests. A faculty adviser is assigned to work with each counselor-freshman group. Throughout the fall quarter of the freshman year these counselors work closely with their freshmen, gradually withdrawing from active counseling during the winter quarter as the freshmen make their academic and social adjustments. Class periods are primarily for discussion of general problems met within the counseling field work. The student counselors closely cooperate with the faculty advisers and with the staff of the Department of Student Personnel in helping the freshman student orientate himself to his college. Two hours credit each quarter.

## 120. INDIVIDUAL EDUCATIONAL RESEARCH FOR SENIOR

 COLLEGE STUDENTS. Registration is permitted only after conference with the chairman of the division. The purpose of this course is to provide for independent study, particularly concerning special phases of professional education not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the chairman of the division. Two or four hours credit for one problem; a maximum of eight hours on the undergraduate level is permitted.*127-227. TEACHERS' CLASSROOM TESTS. The objectives of this course are to give the student adequate training: in the construction, administration and scoring of classroom tests; the interpretation and use of scores; the selection of the best types of tests; the translation of scores into marks; and, the evaluation of marking systems. Four hours credit.

127a-227a. IMPROVING THE MARKING SYSTEM (Summer Quarter only). This is a unit course designed to aid students to improve the grading systems in schools. One hour credit.

127b-227b. CONSTRUCTION AND USE OF ACHIEVEMENT TESTS. (Summer Quarter 1940, only). This is a unit course, the purpose
being to help students construct and use various types of achievement tests. One hour credit.

128a-228a. MENTAL HYGIENE. Prerequisite, Ed. 20 b or its equivalent. An additional course in psychology is required for graduate credit. This is a general, non-technical course designed to give an understanding of the principles of mentally healthy living and the application of such principles. The content of the course includes such topics as the meaning of mental health; the origin and development of mental conflict; mental health hazards peculiar to different stages of development; the relationship of mental hygiene to religious education and sex education; and mental health needs in a changing society. Four hours credit.

128b-228b. PROBLEM CHILDREN IN SCHOOL (Summer Quarter only). Prerequisite, teaching experience and Ed 20b; an additional course in psychology is prerequisite for graduate credit. This course is designed to equip the teacher and administrator to deal appropriately with mental health problems of school children with particular reference to the so-called "problem child". Attention is given to such topics as the mental health of the child as a major emphasis in school; the role of the teacher, curriculum, administration, and school philosophy in determining the mental health of the pupils; securing and interpreting diagnostic data; and development and use of remedial measures that fall within the scope of the teacher's control. Four hours credit.

128c-228c. IMPROVING TEACHER PERSONALITY. Prerequisite, Ed. 20 b or its equivalent; an additional course in psychology is prerequisite for graduate credit. The course is designed to give an understanding and control of the several factors involved in personality development, with special reference to the social and professional demands made upon a teacher. This course includes such topics as: The nature of the wholesome adult personality; analysis and diagnosis of adult personality; the concept of "pattern" in personality; typical ways of changing personality "pattern"; professional mental health hazards in the school and in the community; and, the effects of teaching personality impact upon pupil personality development. Four hours credit.
*129a-229a. EDUCATIONAL MEASUREMENTS IN THE ELEMENTARY GRADES AND JUNIOR HIGH SCHOOL (Summer Quarter only). The purpose of this course is to acquaint the students with the available standardized tests below the high school level. The various types of tests and the specific functions of each, the evaluation of standardized tests, their administration, and the interpretation of the results are among the topics dealt with. Four hours credit.

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

140-240. PARENT EDUCATION. The purpose of this course is to acquaint teachers with the important, parent-home-school relationships in the educational process. The course deals with the philosophy of parent-teacher 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. Since this course is intended for those relatively inex-

[^10]perienced in the field, most of the practical examples will be drawn from the small school systems and applied to the administration of village and consolidated systems. Men undergraduate majors in other divisions are advised to take this course. Students with administrative experience should take Ed. 142-242, 143-243, or 144-244. Four hours credit.

141b-241b. ADMINISTRATION FOR TEACHERS (Summer Quarter only). A course designed to equip the classroom teacher with a basic knowledge of how a public school is administered, with emphasis constantly on the teachers' problems. Four hours credit.

142-242. SCHOOL ADMINISTRATION (First Course). Prerequisites, twelve quarter hours of Education, experience, and senior or graduate classification. The purpose of this course is to give students technical preparation for the school superintendency. Topics to be given special consideration are: Federal relations to education; the state as the fundamental educational unit; local units for school control; duties and powers of the school board; duties and powers of the superintendent; the administration of teacher personnel. (Administration majors may earn up to twenty hours in this field by taking Ed. 142-242, 143-243, 144-244, 147-247, 149-249.) Four hours credit.

143-243. SCHOOL ADMINISTRATION (Second Course). Prerequisites, twelve quarter hours in Education, experience, and senior or graduate classification. This course aims to contribute to technical preparation for the school superintendency. Topics include: The school census, attendance, pupil accounting records and reports; business administration; preparation and use of the budget; cost accounting and fiscal control; indebtedness, short time borrowing, and bonds. Four hours credit.

144-244. SCHOOL ADMINISTRATION (Third Course). Prerequisites, twelve quarter hours in Education, experience, and senior or graduate classification. Designed for technical preparation for school superintendents. This course will consider selection of school sites; planning buildings, architectural and educational features of school building; school building management, maintenance and operation; the purchasing and use of school supplies and equipment; auxiliary agencies. Four hours credit.

145-245. TECHNIQUE OF MAKING THE SCHOOL CURRICULUM. The purposes of this course are first, to appraise past and present theories and practices of curriculum making; second, to present a modern functional philosophy of curriculum making; and, third, to survey briefly the applications of this functional theory to the major areas of experience including the fundamentals, health, economic life, home and family life, civic education, leisure and recreation and creative living, and individual or personality development. In terms of the above purposes, the course attempts to show how the school curriculum has developed, and to set up modern values and criteria for the selection of what to teach. Opportunity is given each student to explore in some detail some aspect of one of the above areas in the form of a detailed illustrative curriculum unit. (This is the first of three courses in the curriculum field: 145-245, 146-246, 147-247.) Four hours credit.

146-246. ADVANCED CURRICULUM CONSTRUCTION. The aim of this course is to provide guidance for detailed consideration of what to teach in the major areas of experience which include health, economic life, home and family life, civic education, leisure and recreation and individual or personality development. The reconstruction of materials in the fields is considered in similar ways to those developed in the courses in the elementary supervision subjects such as Ed. 110-210, Ed. 111-211, and Ed. 112-212, and thus supplements curriculum theory and practice in areas other than the latter. As in Ed. 145-245, each student works out his suggested curriculum program in one of the curriculum
areas selected by him for special study. (Ed. 145-245 is not a prerequisite for this course, the second in the curriculum series.) Four hours credit.

147-247. EDUCATIONAL SOCIOLOGY (Formerly 148-248, NonSchool Education). This course is the third in the curriculum sequence. It attempts to survey and appraise the implications of outside-the-school agencies such as associational influences-one's friends and neighbors, customs, social control, vocational education, parent education, youth problems, creative education, libraries, motion pictures, museums, political parties, the press, the radio, and the like. Evaluation of their educative or mis-educative trends is made. Emphasis is placed on the correlation of school and non-school experience. Four hours credit.

150 b to k . OBSERVATION AND APPLIED TECHNIQUES OF TEACHING IN THE SECONDARY SCHOOL. The immediate aim of this course is to prepare the student for successful student teaching at the secondary school level in a particular subject matter area. The course enables the student to extend his understanding through (a) scheduled observation and participation, and (b) conferences and discussion of the major learning problems met in a given phase of work. The general problems of learning given particular emphasis are (a) individual differences observed among the pupils and their significance in organizing and directing the learning, (b) use of pupil interest, (c) analysis and evaluation of pupil achievement, (d) discipline problems, (e) pupil reaction to different learning situations, (f) personal and professional factors contributing to teaching success, (g) the teacher's relation to pupils, coworkers, and community, (h) the teacher's professional growth, and (i) the organization of materials for teaching purposes.

These are considered particularly with reference to the subject matter area in which the student is planning to undertake student teaching. A section of this course is provided for each subject matter area in which a major is offered, with particular emphasis upon the learning problems peculiar to that area.

The student should complete either Education 20b or Education 105 before undertaking this course and either have completed or be enrolled in Education 116.

150b. Fine and Industrial Arts. The curriculum, the materials, and equipment essential for an effective program. Fine arts majors enroll for eight hours credit in the quarter immediately preceding student teaching; industrial arts majors enroll for eight hours credit concurrently with student teaching. Daily class meetings.

150c. Home Arts. Application of modern educational principles to the teaching of home arts; the home arts curriculum in the small high school. Five one-hour class meetings and two onehour conferences weekly. Six hours credit.
150d. Business Education. See B. E. 152 Eight hours credit; four hours for minors.

150e. Health and Physical Education. Women majors preparing for work chiefly in the elementary schools will enroll for Education 150a, (See H. छ P. E. 137a). Eight hours credit. All other physical education majors will enroll for Education 150 e, (See H. \& P. E. 137b). Four hours credit, daily class meetings.

150f. English and Speech. See L. © L. 126 a and b. Eight hours credit.

150 g. Foreign Languages. See L. छ L. 131. Eight hours credit in two quarters.

150h. Music. See Music 103 and 106. Eight hours credit in two quarters.
150i. Science; Nursing Education. See Science 103. Eight hours credit.

150j. Mathematics. See Science 182, 183. Eight hours credit in two quarters.

150k. Social Studies. See S. S. 117. Eight houts ctedit.
152-252. STUDENT SUPERVISION. The purpose of this course is to enable students to obtain, under close guidance, actual experience in supervising student teachers. The types of experience they get are: Learning what to look for in observing student teachers; teaching for the student teacher; directing the student teacher in assembling and organizing teaching materials; conducting conferences successfully with student teachers; and, evaluating the work of student teachers. Students admitted to this course must have had public school experience, be distinctly successful in the particular area in which they are supervising student teachers, and be preparing for positions in which this type of experience is desirable. Four hours credit.
158. ADVANCED OBSERVATION-STUDENT TEACHING. Intended for elementary education majors having had public school experience who wish to observe and analyze the procedure employed in the Ernest Horn Elementary School as a means of improving their own teaching ability. The students observe under direction in the elementary school grades and in class discussion analyze and evaluate that which they have observed. Attention is also given to the possibilities of adapting the procedure observed to public school conditions. Particular points considered are: Factors in the physical environment influencing the children's learning; development of study habits; use of children's interests in organizing the learning. Each student selects a specific problem of special interest to him for intensive study and oral report. Four hours credit.

162-262. CREATIVE EDUCATION (Summer Quarter only). This course is designed to appraise the place and contribution of the recognition of children's interests in education. Four houts credit.


#### Abstract

163a-263a. ORGANIZATION AND ADMINISTRATION OF THE ELEMENTARY SCHOOL. Desirable prerequisites: previous experience or one or more of the basic courses in elementary education-110-210, 111-211, 112212, 113-213. The aim of this course is to provide the principal, or teacher who may be interested in preparation for a principalship, with the results of recent research and practice in the field of elementary school administration and supervision of instruction. The content of the course includes: Schoolcommunity relationships; objectives and functions of an elementary school; course of study and its relation to the objectives; administration of the school plant; plan of organization in the school; pupil accounting; welfare problems of elementary children; supervision and improvement of instruction; the elementary school teacher; the elementary school principal; co-curricular activities; and some new technics applied to elementary education and solution of practical problems. Two. or four hours credit.


163b-263b. NEW TECHNIQUES APPLIED TO ELEMENTARY EDUCATION. Desirable prerequisite, some elementary school experience as teacher, supervisor or principal. The course is designed to provide elementary school people with some knowledge of ways in which a variety of new general techniques in the field of education can be applied in the elementary school field.

The course includes such topics as: The "maturation" thesis; visual aids in the elementary school; excursions and school journeys; radio in the elementary school; safety education; use of library resources in the community; health practices; auditorium work; civic activities for elementary school children, etc. Four hours credit.

165-265. JUNIOR-SENIOR HIGH SCHOOL ADMINISTRATION AND SUPERVISION. Prerequisite, Ed. 116-216, or its equivalent, is recommended. The course is designed to further the effectiveness of secondary school administrators and supervisors, to give prospective secondary school administrators and supervisors an opportunity to prepare for their positions, and, to make it possible for secondary school teachers to develop a better understanding of the problems that demand cooperative attack in a school which is democratically administered. The problems to be attacked are determined by the group. Individual, small group, and entire class activities are utilized. Two or four hours credit.

167-267. RECONSTRUCTING SECONDARY EDUCATION (Summer Quarter only). Desirable prerequisite, Ed. 116-216, or equivalent. This course is concerned with the various innovations and experiments in curriculum and instruction in progressive secondary schools. The same objectives as listed for Ed. 116-216 might be restated as basic objectives running through the whole sequence of courses Ed. 116-216, Ed. 167-267, and Ed. 169-269. In addition to the objectives of Ed. 116-216, the course is concerned with the development of an understanding of the modern philosophy of secondary education and the implications of this philosophy to the total field of secondary education and especially the major teaching field of the student for the purpose of stimulating and promoting the improvement of public school practices. On the basis of a preliminary study of the modern philosophy and psychology the group organizes in committees representing major problems-evaluation, social studies, improving the small school, etc. Four hours credit.

168-268. THE SMALL HIGH SCHOOL. (Summer Quarter only). This course attempts to adapt the basic principles of secondary education to very small high schools. Emphasis is consistently directed to those problems that are intimately associated with these smaller-sized educational units. Three to four hours credit.

169-269. CURRICULUM AND INSTRUCTIONAL EXPERIMENTATION IN THE SECONDARY SCHOOL (Summer Quarter only). Desirable prerequisite, Ed. 167-267. This course is concerned with the application of the newer philosophy of secondary education to the Secondary School of Colorado State College of Education. The course attempts to provide experiences that students may duplicate in public school practice in the promotion of a cooperative attack on the improvement of secondary education. Four hours credit.

171-271. TECHNIQUES OF ADULT EDUCATION (Summer Quarter only). The purpose of this course is to familiarize school administrators and teachers with the need for meeting an expanding educational program as the school faces the problem of the education of adults. This course will emphasize the development of the adult education movement in this country, the psychology and philosophy of adult education and methods and techniques in practical application. Four hours credit.

175-275. APPLIED GENERAL STATISTICS. The purpose of this course is to acquaint the prospective teacher with the meaning of the common statistical terms, and to train him in the use of those concepts applicable to ordinary classroom teaching. Among the topics presented are the collection and classification of data, the use and interpretation of the results of tests and
measurements and the meaning and use of measures of central tendency, variability and relationship. Four hours credit.

175a-275a. STATISTICAL METHODS FOR RESEARCH. Prerequisite, Ed. 175-275. The purpose of this course is to familiarize the student with the statistical techniques applicable to administrative and research work in education. Consideration is given to the calculation, interpretation and application of the measures of reliability and validity, of coefficients of correlation, regression equations, etc. Four hours credit.
*176a-276a. PSYCHOLOGY OF LEARNING FOR ELEMENTARY TEACHERS. Prerequisite, Ed. 20b, or equivalent. The purpose of this course is to assist prospective teachers in understanding and controlling the behavior of elementary school children. Part one of this course deals with the development of children particularly during the elementary school years. Problems of growth, health, interests and incentives, emotional stress, intelligence, and the formation of social attitudes are discussed. Part two considers learning in school with special emphasis on the nature of learning, factors influencing improvement, measurement of achievement, transfer of training, and the development of a wholesome personality. Four hours credit.

176b-276b. PSYCHOLOGY FOR SECONDARY SCHOOL TEACH$E R S$. The first part of this course deals with learning as a process of organizing experiences. The psychological activities of understanding, expressing, thinking, appreciating, and transferring are treated as they are related to the subject matter interests of the individual members of the class. The second part of the course deals with the nature of the secondary school pupil with special attention given to the problems of the adolescent's interests, capacities, and outlook on life. The attempt is made to understand the adolescent's behavior as a resultant of the variety of social and physiological forces acting upon him. Four hours credit.

177a-277a. CHILD PSYCHOLOGY (Summer Quarter only). Prerequisite, Ed. 25-125, or Ed. 20b, or the equivalent. The aim of this course is to promote understanding of problems and methods of child psychology; origins of child behavior; principles of learning; behavior of infants; growth of bodily size; development of physical and motor capacities; language; development of mental functions; growth of intelligence; emotional behavior and its problems; childhood motivation; social development; character and religion; personality traits and their development; personality adjustments and the organization of traits; and, guidance and control of child behavior. Four hours credit.

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

179-279. THE DEVELOPMENT OF AMERICAN PSYCHOLOGY. Prerequisite for this course should be an introductory course in general phychology, or its equivalent. The general purpose of the course is built around the desire to observe in contemporary psychologies not only the traces of earlier schools of thought, but also to discover in their sequential appearance consistent patterns of philosophical growth. Using an historical approach, various schools of psychology are studied starting with the introspectionism of E. B. Titchner. The Functionalists, Dynamic or Stimulus-Response Psychologies, Behaviorism and John B. Watson, American versions of Gestalt Psychology and a final cross-

[^11]section of the psychological field of today are the topics met with in the last two-thirds of the course. Four hours credit.

182-282. REFERENCE WORKS AND THE USE OF BIBLIOGRAPHICAL TOOLS (Summer Quarter only). A study of the nature and use of bibliographical tools including general reference books, indices, periodicals, and government documents. The course aims to introduce students to available reference tools and to show, by practical application, how and when the tools can be best used. An attempt is also made to aid teachers in the selection and purchase of reference materials for their own school situation. Three or four hours credit.

184-284. SELECTION, ORGANIZATION, AND ADMINISTRATION OF MATERIALS FOR THE SMALL SCHOOL LIBRARY (Summer Quarter only). The purpose of the course is to aid teachers to organize libraries in small schools. The course is an introduction to the principles of maintaining and administering the school library. Essentials in the selection of materials for the various grade levels, simple classification and cataloging of those materials, principles in the planning of the library room, and simple circulation procedures are considered. Fout hours credit.
188. GUIDANCE IN VOLUNTARY READING. This course is designed to stimulate extensive reading. Various subjects and types of books and magazines are covered. The requirements are that one book must be explored for at least two hours each week for each hour of credit, or four books per week for four hours credit. Short, but critically written reports of books read are also required and a synthesis of the student's reading at the end of the course is also demanded. Two and four hours credit.

190-290. THE TEACHERS COLLEGE AND THE PROFESSIONAL EDUCATION OF TEACHERS (Summer Quarter only). Designed for students interested in positions in normal schools and teachers colleges. Deals with general administration and control; executive officers and their duties; the teaching staff and its qualifications and duties; selection, admission, and supervision and control of students; records and reports; placement; finance in teachers colleges, budgets, costs, sources of revenue; curriculum; educational research, and relationships with other educational institutions. Two hours credit.

192-292. STUDENT TEACHING AND THE PROFESSIONAL EDUCATION OF TEACHERS (Summer Quarter only). The immediate purpose of this course is to present the important problems of student teaching and the different procedures used in solving these problems. The topics considered in the course are: The function of observation, participation and student teaching in the preparation of teachers; the organization and administration of student teaching; relative values of campus laboratory schools and public schools for student teaching; the qualification of students enrolling in student teaching courses; techniques employed in supervising student teachers, as the conference, demonstration lesson; evaluation of student teachers; and, qualifications of supervising teacher. Four hours credit.
*195-295. PHILOSOPHY OF EDUCATION. Prerequisites, Ed. 105, 116, and 176. The purpose of this course is to develop a real understanding of certain meanings, concepts, principles, and relationships peculiar to this area of knowledge. The content of this course includes such problems as the meaning of education, educational aims and values, democracy and education, the development of ideals, the nature of thinking, method and subject matter. Open only to seniors and graduate students. Four hours credit.

[^12]*195a-295a. FOUNDATIONS OF MODERN EDUCATION (Summer Quarter only). Prerequisites, Ed. 105 and 176. This course is designed to study important historical and philosophical backgrounds for the interpretation of present day educational issues. An analysis is made of the evolution of the major educational theories and their influence on changing practices. Four hours credit.

196-296. HISTORY OF PHILOSOPHY. Prerequisites, Ed. 105, 116, 176 and 195. This course includes a study of the three types of philosophynaturalism, idealism, and pragmatism. As representative of naturalism, a brief study is made of Bacon and Spencer; among the idealists, Plato, Aristotle, Rousseau, Kant, Fichte, Hegel, Royce, and Gentile; among the pragmatists, James, Dewey, and Bode. Four hours credit.

197-297. CONCEPTIONS OF MIND IN EDUCATIONAL THEORY. Prerequisites, Ed. 105, 116, 176, and 195. The purpose of this course is to show that our conception of the nature of the mind determines in part the aims of education; furthermore, it traces the historical development of three major conceptions of mind and the relation of each of the aims of education. Fout hours credit.
200. INTRODUCTION TO EDUCATIONAL LITERATURE AND EXPERIMENTATION. This course is designed to give an overview of recent educational research with emphasis upon interpretation, evaluation, and use of research rather than upon the techniques of research. Illustrative material will be drawn from several areas of educational specialization. Each student is expected to become acquainted with the literature of the field of education as a whole but will have opportunity to do most of the work with the reports of research within the area of his special interest. Four hours credit.

215a. STUDENT PERSONNEL AND EDUCATIONAL GUIDANCE (Summer Quarter only). A comprehensive course that includes the history, principles and techniques of guidance; personnel' organization; the subject matter of guidance including an emphasis upon the knowledge and use of important and valid research in understanding human behavior; cumulative records, and other topics. Four hours credit.
222. INDIVIDUAL STUDIES IN 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 courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.

225-325. SURVEY OF CONTEMPORARY PSYCHOLOGICAL PROBLEMS (Summer Quarter only). The purpose of this course is to acquaint the student with the contemporary status of some of the persistent problems in the study of human behavior. The naturalistic and organismic developments permit a re-evaluation of such fields of psychological investigation as intelligence, physiology of the so-called mental processes, learning, thinking, and personality. Four hours credit.
264. ELEMENTARY SUPERVISION FOR SCHOOL ADMINISTRATORS (Summer Quarter only). The purpose of this course is to acquaint the superintendent or principal with that minimum information relative to actual classroom teaching in the elementary school that is needed by him in order to engage in the supervision of instruction. The fields covered usually include reading, social studies, language and arithmetic. In each of these fields the problems of selecting what to teach, grade placement, methods and materials, and testing are considered. The course covers instructional problems from the kindergarten through the sixth grade. Four hours credit.

278-378. SOCIAL SIGNIFICANCES OF THE LEARNING PROCESS (Summer Quarter only). Instead of dealing with the learning process from the mental analysis approach, this course proposes to observe learning in its social setting. Factors which influence effective learning, interpretations of the learning process from the field approach, and a critical evaluation of so-called laws of learning are some of the topics studied. Four hours credit.
279. METHODS OF INVESTIGATION IN EDUCATION (Summer Quarter only). Prerequisite, Ed. 175-275. The aim is to develop understanding of and some skill in good methods and techniques in setting up and carrying through to completion educational research projects. The activities of the course consist in a consideration of the logical application of intelligence to the solution of educational problems, by the method of reflective thinking, and illustrations of this process through the analysis of research reports using accepted methods of investigation and by work with practicums as time permits. Four hours credit.

291a, b, c. SEMINAR IN HIGHER EDUCATION. The purposes of this course are orientation and study of the problems of higher education. Three main types of problems are considered: Personnel and guidance, curriculum, and, instruction. Two hours credit each quarter for three quarters.
299. THESIS. Thesis course required of all Plan A students. Twelve hours credit.

322a. RESEARCH PRELIMINARY TO FIELD STUDY NO. 1. Required of candidates for the Doctor of Education Degree in their first residence summer quarter, preparatory to research for Field Study No. 1.

322b. RESEARCH PRELIMINARY TO FIELD STUDY NO. 2. Required of candidates for the Doctor of Education Degree preparatory to research for Field Study No. 2.

322c. RESEARCH PRELIMINARY TO FIELD STUDY NO. 3. Required of candidates for the Doctor of Education Degree preparatory to research for Field Study No. 3.

323 a, b, c. GRADUATE RESEARCH CREDIT FOR FIELD STUDY NO. 1. Each course four hours-maximum twelve hours for Field Study No. 1.

This graduate research credit is offered for fall, winter, and spring quarters respectively. For example, 323 a , fall quarter, four hours; 323 b , winter quarter, four hours; and 323 c , spring quarter, four hours.

For the second and third studies the credit is offered in the same way.
$324 \mathrm{a}, \mathrm{b}, \mathrm{c}$. GRADUATE RESEARCH CREDIT FOR FIELD STUDY NO. 2. Each course four hours-maximum twelve hours for Field Stury No. 2.
$325 \mathrm{a}, \mathrm{b}, \mathrm{c}$. GRADUATE RESEARCH CREDIT FOR FIELD STUDY NO. 3. Each course four hours-maximum twelve hours for Field Study No. 3.
342. SCHOOL ADMINISTRATION (Fourth Course). (Summer Quarter only). Prerequisites, twelve quarter hours in education, experience, and senior or graduate classification. The purpose of this course is to consider the problems of general school law applicable in typical states; court decisions relative to schools, public relations and school publicity. Four hours credit.
343. SCHOOL ADMINISTRATION (Fifth Course). This course is designed to acquaint school administrators with special types of activities with which they must be familiar, such as adult education; federally supported courses in agriculture, home economics and vocational education; art, music; and industrial arts education; methods of dealing with handicapped children; organization of school libraries; and other specialized fields. Four hours credit.
350. READING COURSES PRELIMINARY TO FINAL WRITTEN EXAMINATIONS FOR THE DOCTOR'S DEGREE. Each four hours credit.

The doctor's candidate during the final summer of residence and immediately prior to candidacy for the degree of Doctor of Education takes appropriate reading courses in the three fields he has selected for his final written examinations. The numbers and courses are:
(a) Ed. 350a-Administration
(b) Ed. 350 b-Curriculum.
(c) Ed. 350 c-Educational Psychology
(d) Ed. 350d-Elementary Education
(e) Ed. 350 --Guidance and Personnel
(f) Ed. 350 f-Higher Education
(g) Ed. 350 g -Philosophy of Education
(h) Ed. 350 h-Secondary Education

## Business Education

Teachers of the business subjects in secondary schools, junior colleges, and other institutions where business education is included in the curriculum must teach either or both technical and non-technical business subjects. The technical business subjects include accounting, shorthand, typewriting, office machines and equipment, and retail selling. The non-technical business subjects are business law, business organization, consumer economics, introduction to business, junior business training, and similar subjects. In order to meet the common certification requirements students who desire to major in this field of teaching shall take the following courses:

Accounting: Hrs.

Secretarial:

Non-Technical:
B. E. 31-131, 41-141, 154-254, and 172-272.................. 16


Majors in business must either have two minors outside the Division of Education or one minor in Elementary Education and one minor outside the Division of Education.

Students may be certified as educational secretaries by meeting the requirements listed above and by using the free elective hours for advanced secretarial courses and others recommended by the business education staff.

## Business Education Minor

The registrar will furnish students who wish to minor in Business Education with a list of courses. All courses selected for minors must have his approval.

## GRADUATE STUDY

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

## Description of Courses

12-112. ADVANCED SHORTHAND TRANSCRIPTION. Prerequisite, the ability to take dictation at the rate of sixty words a minute and typewrite at the rate of forty words a minute with a high degree of accuracy. This course deals with the problems of transcription-letter form, punctuation, spelling, and division of words. It offers practice in taking dictation at speeds ranging from sixty words a minute at the beginning of the course to one hundred twenty words a minute at the end of the course. Four hours credit.

13-113. SECRETARIAL PRACTICE. Prerequisite, 12-112 or the equivalent. Students taking this course will be required to take dictation at one hundred words a minute, and a minimum of one hundred twenty words a minute will be required at the end of the course. The principal emphasis will be placed on transcription practice, correspondence forms, special arrangements of typed material, and the development of secretarial duties and traits. Provision is made for actual stenographic experience in the various college offices. Four hours credit.

14-114. ADVANCED SECRETARIAL PRACTICE. Prerequisite, 13-113 or the equivalent. Attention will be given to speed in taking shorthand dictation, advanced secretarial duties and traits, business reports, filing, special office equipment, and other secretarial duties. Provision is made for actual stenographic experience in the various college offices. Four hours credit.


#### Abstract

*20. PROFICIENCY IN THE BUSINESS SKILLS. ${ }^{1}$ Business teachers are generally required to be certified to teach one or more of the following skill subjects: (a) bookkeeping, (b) Gregg shorthand, (c) handwriting, and (d) typewriting. Students are given an opportunity to establish credit for each of these subjects by a proficiency examination. The credits given are as follows: bookkeeping, eight hours; shorthand, eight hours; handwriting, two hours; and typewriting, four hours.

22-122. PARTNERSHIP ACCOUNTING. Prerequisite, 20a or the equivalent. This course aims to develop the basic principles of accounting. Some of the topics included in the course are the balance sheet; the profit and loss statement; the work sheet; inventories, accruals, and deferred items; bad debts; depreciation, obsolescence, and depletion; commercial papers; controlling accounts; petty cash accounts; and partnership records. Four hours credit.


[^13]23-123. CORPORATION ACCOUNTING. Prerequisite 22-122 or the equivalent. The main topics treated include the formation of corporations; corporation books and records; opening the books of a corporation; accounts peculiar to the corporation; reserves and funds; bonds; manufacturing accounts and statements; the voucher system of record keeping; and the analysis and interpretation of financial statements. Four hours credit.
*31-131. BUSINESS LAW. A beginning course dealing with contracts and negotiable instruments. Contracts are examined under the following divisions: formation, interpretation, operation, and discharge. In negotiable instruments the nature and requisites of checks, notes, drafts, and bonds are studied. Practice is given in the drawing of various legal papers. The aim and purposes of this course include presentation of the principles of business relationships and the applications to simple business transactions. Four hours credit.
37. BUSINESS ARITHMETIC. A study and review of common and decimal fractions, interest, trade and cash discount, percentage, taxes, and insurance. A great deal of rapid drill work on the simple arithmetic processes is given. The aim of this course is to develop essential skills in the usages of business. Four hours credit.

41-141. INTRODUCTION TO BUSINESS. This course offers an opportunity to study and keep in touch with modern developments and changes in the nature, structure, and methods of business. The social-economic aspects of business are emphasized throughout the course. The main topics covered are: The history of business; finance and accounting; personnel administration; production; marketing; organization; law, the government and business. Four hours credit.
152. IMPROVEMENT OF INSTRUCTION IN THE BUSINESS SUBJECTS. (See Ed. 150d.) The teaching of such business subjects as shorthand, typewriting, bookkeeping, introduction to business, consumer economics, advertising and retail selling will receive special attention in this course. It is offered every quarter. An eight hour course for business majors, it is also offered as a four hour course for business minors. Four and eight hours credit.

153-253. TEACHING THE BUSINESS SUBJECTS. Short methods courses are offered in the summer school only in each of the following subjects: (a) consumer economics; (b) cooperative courses in retailing; (c) introduction to business; (d) Gregg shorthand; (e) typewriting; and (f) office appliances. Two hours credit.

154-254. CONSUMER BUSINESS MANAGEMENT. This course is designed to give the student insight into consumer education. The course is divided into four main divisions of content material: Business-economic problems of young people; business-economic problems of the family; businesseconomic problems of the community of particular interest to the consumer; business-economic problems of government, local, state, and national that affect the direct interest of the consumer. The general topics treated include the following: Sources of income; expenditures; buying and spending; sources of reliable information; levels, norms, and standards of living in America; insurance; home ownership; investments; banking; consumer credit; consumer co-operatives; markets; public schools; public services; taxes; government buying; government expenditures; laws affecting the consumer; and government agencies that serve the consumer. Four hours credit.
*155-255. BUSINESS ORGANIZATION. This course attempts to give the student a better understanding of the different types of business organization. By dealing with such topics as the individual proprietorship; the partnership;

[^14]the corporation; the combination movement; gentlemen's agreements and pools; the trust; the holding company; mergers and consolidations; other forms of combination; trade associations and cooperatives; combinations and the law; anti-trust laws and their enforcement. Four hours credit.

156-256. RETAIL MERCHANDISING. The main objective of this course is to give the student practice in retail merchandising. The student will be required to spend fifty hours in a retail store during the quarter in which the course is taken. It is understood that the store work will be done by the student without pay but in some cases merchants prefer to pay students for their services. The main topics included in the content material of the course are: Store organization; personnel relationships; customer demand; buying; receiving; marking; stock control; expense control; sales promotion; retail advertising; retail salesmanship; and credits, collections, and adjustments. Four hours credit.
*157-257. PRINCIPLES OF INSURANCE. The purpose of this course is to give the student understanding of general principles of insurance. Some of the topics included in the course are essentials of insurance; kinds of risk bearers; the nature and uses of life insurance; premiums, reserves, and dividends; special benefits; the standard fire insurance policy; fire insurance rates and reserves; accident and health insurance; automobile insurance; employers' liability and compensation insurance; public liability and property liability insurance; burglary, theft, robbery, and plate glass insurance. Four hours credit.
160. OFFICE EQUIPMENT AND MANAGEMENT. Prerequisite, 20d or the equivalent. This course gives practice in the care and operation of the following office machines: Barrett, Burroughs, Monroe, and Sundstrand calculators; recording, transcribing, and record shaving units of the dictaphone; hectograph, mimeograph, mimeoscope, multigraph, and New Process duplicators; Bump paper fasteners, gum tape machine, numbering machine, paper cutter, and stapling machines and eyeleters; and typewriters. Practice in alphabetic, numeric, subject, and geographic filing is given. Ideals of accuracy, responsibility, dependability, courtesy, judgment, initiative, neatness, honesty, industry, and punctuality are cultivated. Four hours credit.

170-270. ADMINISTRATION AND SUPERVISION OF BUSINESS EDUCATION. The direct aims of the course are suggested by the following topics dealt with: The present status of administration and supervision in business education; the duties and functions of administration; the duties and functions of supervision; common problems of administration and supervision; cooperation with business concerns; the establishment of desirable relationships between the school and the business employers; placement and follow-up of graduates; vocational information and guidance; tests, measurements, and examinations; value and uses of the National Clerical Ability Tests; professional responsibilities and relationships. Four hours credit.

171-271. PROBLEMS IN BUSINESS EDUCATION. The aims of the course are to give the student an opportunity to research a problem of special interest; to introduce the research method of solving significant problems; to suggest a suitable problem for further research which may culminate in a thesis report; to give experience and practice in the writing of short research reports; to encouage the development of interest in professional reading; to make a general survey of current problems in the field of business education. Four hours credit.

172-272. THE SECONDARY SCHOOL BUSINESS CURRICULUM. Concerned with study of the current philosophy of secondary business education; the analysis of current cirricula and courses of study; the preparation of a modern program of subjects for a small high school operating under hypothetical conditions; the selection of textbooks for particular courses; the selection of supplementary materials; visual aids, equipment, and supplies; the analysis of the aims and activities of professional organizations in business education. The main topics treated are suggested by the outline of aims listed above. The library research method of study is required and the regular class period will be devoted to introductory discussions of the principal topics included in the course. Four hours credit.

181-281. SOCIAL SECURITY AND PAYROLL ACCOUNTING. Prerequisite, 22-122 or the equivalent. The purpose of this course is to present the general principles of timekeeping, payroll accounting, personnel records, and social security record keeping. The main topics are requisites of social security records; state and federal reports; personnel records; timekeeping; payroll records; computing the employers' tax; a payroll system for small concerns; the voucher check payroll system; special machines and equipment; employers' reserve accounts; and benefits and claims. Four hours credit.
205. COST ACCOUNTING. Prerequisite, 23-123 or the equivalent. The purpose of this course is to present the principles of cost accounting as it is used in business. Some of the main topics treated are the functions of cost finding; elements of cost; methods of distributing indirect expenses; compiling cost data; devising a cost system; special books and forms; comparative statements; and uses of standard costs. Four hours credit.
222. INDIVIDUAL STUDIES ON BUSINESS 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 courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study, and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
299. THESIS. For graduate students who elect the thesis plan. Twelve hours credit.

## Nursing Education

The courses in Nursing Education aim to prepare registered nurses, after the completion of the curriculum in this field, to return to nursing schools to improve nursing and health services. The Bachelor of Arts degree is conferred on students who complete the requirements below. Approximately forty-eight hours of credit may be allowed for the basic school of nursing credentials on this degree.

Marked deficiencies in the student's previous work must be removed. Nurses may, however, register for college work before removing clinical nursing deficiencies.

For the Bachelor of Arts degree in nursing education students shall meet the requirements of the General College and of the Professional College or their
equivalent. For students without the school of nursing credentials the usual requirements of the basic survey courses in the General College must be met. Other courses prerequisite to entrance into school of nursing will be outlined by the adviser in nursing education.

For students who enter the college with school of nursing credentials the following requirements will be accepted in lieu of the survey courses in the General College: four hours of art appreciation; four hours of music appreciation; Science 12, 41, 42; Social Studies $60 \mathrm{a}, \mathrm{b}, \mathrm{c}$; Literature and Language 40 $\mathrm{a}, \mathrm{b}, \mathrm{c}$; and, three hours of active physical activities.

To complete needed course work for this degree those with school of nursing credentials should also take three other courses in science including biology, chemistry, and physics, at least twelve more hours in social studies selected from courses in economics, geography, history, political science, and sociology, and Health and Physical Education 102 and 103.

To meet the Professional College requirements, students will take Ed. 116, Ed. 125 or 128a, Ed. 150 i, Ed. 151, Ed. 176a or 176b, Ed. 177a or 177 b, and Ed. 195, and the following nursing education courses: 100, 101, 102, 103, and 110 or 111. The student teaching requirement will be worked out in an approved school of nursing in Denver with which the college makes the arrangement.

Adjustments will be made by the adviser in nursing education for qualified persons with school of nursing credentials who require adaptation to meet specialized preparation for technical positions in the field.

## GRADUATE WORK

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

## Description of Courses

100. HISTORY OF NURSING. Consideration in this course will be given to the origins of nursing with special emphasis on the development of nursing and nursing education in the United States to the present day. Four hours credit.
101. FUNDAMENTALS OF HEALTH EDUCATION. This course is developed for nurses and teachers so that they may learn the scope of public health education, the policies of official and non-official agencies both in urban and rural communities. A study of the history, characteristics and trends of modern health activities, the present status of the control and prevention of communicable diseases; discussion of sanitation, housing, water, food and milk supply; industrial hygiene and publicity. Lectures, projects, and reports will be the basis for a few field observations, when practical, conferences and discussions. Four hours credit.
102. THE CURRICULUM AND PRINCIPLES OF TEACHING APPLIED TO NURSING EDUCATION. Prerequisite, Ed. 176 b . The purpose of this course is to develop in all nurse-teachers an understanding of the "National Curriculum Guide" for Schools of Nursing, enabling them to plan, revise, and administer the educational program. A study of the "Curriculum Guide"' will be made to analyze the philosophy and aims of nursing education, arrangement and sequence of subject matter, sources and techniques used in selecting curriculum material, the construction of units of teaching, planning of lessons, laboratory
demonstrations, observations and evaluations of methods of teaching nursing procedures and basic subjects done by master teachers in selected schools of nursing, together with measuring the outcomes of the educational program. Four hours credit.
103. WARD MANAGEMENT AND WARD TEACHING. For head nurses and supervisors who wish guidance in applying principles of scientific management and teaching to the ward situation. A study of factors influencing management as hospital construction, income, health insurance and approving agencies. Personnel management includes criteria of good nursing, principles of guidance and the planning and evolution of the activities and relationships of the ward personnel. Principles of teaching and effective use of methods and teaching aids are considered in planning a ward teaching program. Class activities include lectures, student reports, panel discussions, and group and individual conferences.

104-204. HOSPITAL ECONOMICS. A study of trends in economics as they affect hospital administration, nursing service and interdepartmental relationships. The principles of economics are applied to the use of power, heat, light and electric equipment; buying, replacement, and care of supplies; interior decoration of hospital rooms in relation to ease of care.

## 107-207. TEACHING OF THE NURSING ARTS. Prerequisites, Ed.

 150b, 176b: Nurs. Ed. 101, 102, and 103. For those who are preparing to teach Nursing Arts I, Nursing Arts II and the Clinical Nursing in the classroom and hospital wards. A study of the Nursing Arts according to the "National Curriculum Guide for Schools of Nursing," from the standpoint of aims, integration of the basic sciences with the nursing procedures, selection and organization of content, methods of teaching nursing procedures, supervision and evaluation of nursing practice, the cooperation of the nursing arts instructor with the science teachers, supervisors and head nurses in integrating the school program. Emphasis will be placed on the scientific principles and methods in determining standards for nursing practice, analyzing, comparing and reconstructing procedures. Opportunity will be provided to observe teaching of Nursing Arts and Clinical Nursing in selected schools of nursing. Four hours credit.110. TRENDS IN NURSING EDUCATION. For all nurses engaged in teaching in schools of nursing and the many other phases of nursing in the community. A survey of the changes in general education, science, and economics that influence the constant changes in nursing, Education and nursing service. This includes a consideration of the fields of nursing positions, nursing associations, registration, legislation and publications. Attention is given to the international aspect of nursing education and nursing service. Lectures, readings, projects and when practical attendance at state and national meetings to hear and meet leading personalities who influence changes. Four hours credit.

111-211. GUIDANCE IN NURSING EDUCATION. Prerequisites, Ed. 176b, 102, 103, and 110. For all nurses who are guiding undergraduate student nurses, graduate nurses, and other types of personnel both in the nursing school and hospital ward services. A study of personnel guidance, history and techniques that may influence faculty improvement. Lectures, readings, group projects and discussions. Four houts credit.

150-250. SCHOOL HEALTH EDUCATION. This course is for all nurses and teachers who wish to understand the principles of health education in the schools and community and their function in coordinating a bealth program. An historical survey of health education will be made with a view of noting the trends and future developments. The principles of health education, and objectives applied to selection and gradation of materials, methods of teaching, planning of health programs and evaluation of outcomes. The functions of the health worker such as nurses, teachers and doctors in coordinating all aspects of health environ-
ment. A study of community resources and their relationship to school health, including legal aspects. Lectures, class discussions, reports, experience in testing vision and hearing, construction of a health unit and planning a health program for a specific situation. Four hours credit.
151. STUDENT TEACHING. Prerequisites, Ed. 176b; Nurse Ed. 102, and 103. The laboratory course required of all undergraduate students who are enrolled in work leading to a certificate of Bachelor of Arts degree. Registered nurses who have had teaching experience in nursing schools may receive credit upon recommendation of the director of nursing and other teacher associates of the school in which the classes were conducted. For those who need the student teaching, arrangements are made with a Denver school of nursing, usually for the entire winter quarter. The student has a forty-four hour week, distributed between classroom teaching, either in the Nursing Arts or Science, bedside teaching to integrate the classroom learnings and nursing practice, and preparation for the classes. Observations of class work of other teachers in the nursing school, preparation of lesson plans and the teaching are directed by the director of the nursing school, her teaching staff and the head of nursing education at the college. Eight hours credit.

157-257. SUPERVISION IN NURSING AND CASE STUDY. Prerequisites, Ed. 176b; Nurs. Ed. 102, 103, and 110. For faculty of the nursing school and hospital nursing staff who share in clinical teaching, supervision of instruction and the writing of case (patient) studies. A study of the general principles, organization, preparation and administration of supervision with special attention being given to clinical content of the various services, the problems confronting a supervisor who carries the dual function of teaching and supervision, and the staff education program to make for effective administration and instruction; a study of the criteria for writing and evaluating case (patient) studies. Lectures, projects in the way of time-studies, conference plans, and criteria; research problems studies in other hospitals; conferences and, when practical, observations of supervision at nursing schools. Four hours credit.

158-258. STATE SUPERVISION OF NURSING EDUCATION. (Summer Quarter only). Prerequisites, Ed. 176b; Nurs., Ed. 102, 103, 110, and 157. For directors of nursing, superintendents of nursing services and others who wish to be informed of the standards and practices in use in accrediting schools of nursing. A study of the laws, the organization and duties of examining boards, the schedules for the evaluation and accreditation of nursing schools, registration and reciprocity for license to practice nursing. Lectures, comparative studies of State Laws controlling nursing practice, and when practical, an address by or visit to the State Supervisor of Nursing Education office where graphs may be studied. Four hours credit.

160-260. ADMINISTRATION IN SCHOOLS OF NURSING (Summer Quarter only). Prerequisites, Ed. 176b; Nurs. Ed. 101, 102, 103, 111, and 157. For directors of nursing, superintendents of nursing and hospital services who need help with the professional administration of the educational administration of the nursing school and the professional administration of the hospital nursing service. A study of the National Curriculum Guide for Schools of Nursing as to organization of the school, support, control, cost of nursing school and nursing service; the personnel-number, qualifications, selection, duties, responsibilities, tenure, staff education and promotion; school buildings, classrooms and equipment; educational program, administration and supervision of nursing, school budgets and accreditation. Lectures, projects, comparative studies of schools of nursing, some excursions to hospitals, schools of nursing, and public health organizations will provide the basis for conferences and discussions. Four hours credit.

## DIVISION OF HEALTH AND PHYSICAL EDUCATION

The work of the Professional College in this division supplements that of the General College and affords professional preparation for the majors and minors in Health and Physical Education.

A bachelor's and master's degree may be obtained by both men and women in the Division of Physical Education, selection of the subject matter to be chosen from both the men's and women's divisions with the approval of the major professor.

Undergraduates majoring in Health and Physical Education must have the approval of the divisional staff. Approval will be based on the student's teaching possibilities, success in physical education work taken in the General College, tests for Professional College, and health.

Women majoring in Health and Physical Education shall, before entering the Professional College, have credit in or be able to pass an examination in the following Health and Physical Education courses: 16; 18; 20; 22; 26; $32 \mathrm{a}, \mathrm{b}, \mathrm{c} ; 54 \mathrm{a}, \mathrm{b} ; 56 \mathrm{a}, \mathrm{b}$. Participation in many of the above activities can be had through membership in the Women's Athletic Association.

Each woman majoring in this division is required to be a member of the dance group for one year. She may be a member longer if she desires.

It is recommended that every woman majoring in Health and Physical Education pass a piano playing test of third grade level before graduating from the division, as superintendents often make it a requirement in employing teachers.

Men majoring in Health and Physical Education should complete the following physical education courses during their freshman and sophomore years: 33, $35 \mathrm{a}, 43,55 \mathrm{a}, \mathrm{b}, 59 \mathrm{a}, \mathrm{b}, \mathrm{c}$.

Men majors are expected to take part in football, basketball, and track as a member of either intramural, freshman or varsity teams and have sufficient ability in swimming to pass the elementary swimming test.

Men students majoring in Health and Physical Education are advised to minor in academic subjects, one of which should be science, unless special permission is granted by the adviser.

Major (FOR WOMEN) Junior Year

No.

Hrs.
H. \& P. E.

$$
\text { 60-160. First Aid } 2
$$

120a, b. Anatomy
129a, b, c. Teaching of Sports for Women ..... 6
137a, b. Presentation of Materials in
Physical Education ..... 6
Sci. 117. Human Physiology ..... 4

## Senior Year



The registrar will furnish students who wish to minor in Health and Physical Education with a list of courses. All courses selected for minors must have his approval.

## Graduate Study

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

## Description of Courses

Note: The activity courses in the Division of Health and Physical Education are numbered between 4 and 57, inclusive. See pages 19 and 20 in the General College section for complete listing of these courses, with appropriate numbers for men and women.

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

59 a, b, c. TECHNIQUE OF TEACHING PHYSICAL EDUCATION ACTIVITIES. Instruction is given to men who are majors or minors in physical education in a variety of activities usable for physical education and recreation during the fall, winter, and spring: 59a-Fall, activities include soccer, speedball, touch football, and six-man football; 59 b -Winter, activities include fencing, swimming, wrestling, boxing, badminton; and, 59 c -Spring, activities include archery, fly casting, golf, tennis, paddle tennis, aerial darts, tether ball, Deubrachio, and fencing. Six hours credit. (Two hours credit each quarter.)

60-160. FIRST AID. The course emphasizes the prevention, diagnosis, and treatment of the common accidents seen in daily life. Study is made of what to do in emergencies and the factors which demand a physician's care. Simple bandaging, the making and application of splints for fractures, and the use of tourniquets are considered. Two hours credit.

102-202. PROBLEMS IN SCHOOL HEALTH EDUCATION. A philosophy for health teaching and the presentation of criteria for judging materials and methods of health teaching are included in this course. Opportunity will be given to each student to construct a teaching program to meet the needs of his situation. Two hours credit.

103-203. SOCIAL HYGIENE. A consideration of the hygienic implications of those social contacts that are particularly influenced by sex. Four hours credit.

120a, b. APPLIED ANATOMY. The study of structure in the systems of the human body, including skeletal, digestive, circulatory, respiratory, reproductive, nervous, excretory, endocrine, and in brief fashion, the muscular. Six hours credit; four in 120a and two in 120b. Should be taken in a, b order.

125-225. PHYSIOLOGY OF EXERCISE (Summer Quarter only). Prerequisite. Science 117. Effects of muscular activities in the various organs and systems of the body; what is meant by training; the interrelation of exercise and fatigue; changes in altitude and effect upon individuals; application of these principles to the problems of teaching in physical education activities. Four hours credit.
$129 \mathrm{a} . \mathrm{b}$. TEACHING OF SPORTS FOR WOMEN. A consideration of basic techniques of ten sports emphasizing teaching procedures. Participation in the sports: officiating in actual games; and construction of unit plans. The sports presented in 129a are hockey, soccer, speedball, volleyball, basketball and swimming. Laboratory required. Four hours credit. In 129b, baseball, track, tennis, archery. Two hours credit.

132-232. THE KINESIOLOGY OF INDIVIDUAL GYMNASTICS. Prerequisite, $120 \mathrm{a}, \mathrm{b}$. The science of muscle action in relation to postural defects and their treatment, the organization of corrective work for various age levels; methods of giving postural examinations. Laboratory work required. Four hours credit.

135-235. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION. The history presented in this course is for the purpose of giving a background of knowledge essential to the understanding of physical education today. The principles of physical education will be presented in the light of laws of biology, physiology, psychology, and sociology. A comparison of the formal and natural physical education programs will be included in the light of their aims, objectives, results, and value in accordance with the modern philosophy of education. Four hours credit.

137a, b. PRESENTATION OF MATERIALS IN PHYSICAL EDUCATION. Physical education activities for children of elementary and secondary levels will be discussed and practiced. A study of psychological and physiological
needs of the children at various age levels. Program planning and physical education teaching techniques will be included. 137a (See Ed. 150a) considers materials for the elementary level. Fout hours credit. 137b (See Ed. 150e) considers materials for the secondary level. Two hours credit.

138-238. SOCIOLOGY OF PLAY (Summer Quarter only). Prerequisite, 172-272. The extent, need, and functions of play, the sociological theories of play, the nature of play, the development of the play movement, qualifications and development of play leaders, and recent trends in the play movement. Four hours credit.

140-240. CURRICULUM MAKING IN PHYSICAL EDUCATION (Summer Quarter only). This course will include principles involved in curriculum making; an appreciation of the wide scope of the physical education field; the necessity of a comprehensive curriculum; and the formulation of a progressively graded curriculum. Four hours credit.

141-241. ADMINISTRATION OF PHYSICAL EDUCATION. This course deals with the policies in the organizations of a program of physical education, considering such items as legal aspects, time schedule, classification of children, handicapped children, equipment in the physical education plant, locker rooms, and gymnasium costumes. Four hours credit.

142-242. SUPERVISION OF PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL (Summer Quarter only). Desirable prerequisite, 137a. Topics discussed are position of suprevisor of physical education in the administrative organization of a school system; unified course of study in physical education; difficulties recognized by elementary school home room teachers who have responsibility for teaching physical education; devices for improving their work in physical education; and a correlation of physical education activities with projects undertaken in home room. Two hours credit.
155. MODERN DANCE TECHNIQUE (Summer Quarter only). Includes basic work in techniques and rhythms of the modern dance and the fundamentals of composition. Laboratory work required. Four hours credit.

156-256. USE OF PERCUSSIONS AND MUSIC IN THE 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.

161a. COACHING OF FOOTBALL AND BASKETBALL. Prerequisite: P. E. 51 or membership on freshman or varsity squad in each sport. This course includes study of the sport techniques, rules, strategy, teaching procedures. offensive and defensive formations, safety procedures, training regulations, and reading material in the field. Four hours credit.

161b. COACHING OF BASEBALL AND TRACK. Prerequisite, P. E. 53 or membership on freshman or varsity squad. Topics for study include application of the rules, instruction in techniques, qualifications of the player, safety procedures, and experience or organizing and officiating at a track and field meet. Four hours credit.

170-270. ADMINISTRATION OF.ATHLETICS IN SCHOOLS AND COLLEGES. An advanced course for physical education teachers and coaches, covering the problems of function, organization, relationships, procedures and policies of athletics. Special study of acute problems in the field of athletics administration. Four hours credit.

171-271. SAFETY EDUCATION IN THE PHYSICAL EDUCATION PROGRAM (Summer Quarter only). This course emphasizes the need for safety in the teaching of all physical education activities. It covers procedures
on the playground in terms of apparatus, and space requirements necessary for group activities; use of safety patrol units; precautions in regard to facilities and equipment; procedure in case of accidents, including immediate actions, reports, and follow-up responsibilities; and the legal aspects of school accidents. Two hours credit.

172-272. RECREATIONAL LEADERSHIP. A discussion of the school's recreation program in regard to noon hours, school parties, co-recreational activities, and parent-teacher groups; the coordination of the present and possible community recreational facilities and leadership; types of programs for various groups in relation to age, interests, etc.; budget needs for specific projects. Four hours credit.
180. ATHLETIC TRAINING. To give the prospective coach a knowledge of the prevention, diagnosis, and treatment of the usual injuries incurred in athletics; of the inactive phases of training, such as diet, sleep and habits; of the technique and application of massage; of the common bandages; of the use of tape for protection and support; and of the bridge theory of padding for the typical injuries. Two periods. Two hours credit.
210. CAMPING (Summer Quarter only). Topics discussed include trends in camping, the layout of organized camps, camp organization, camp and the courts, youth hostels, overnight hikes, the camp program, and waterfront safety. Two hours credit.
212. TESTS AND MEASUREMENTS. Topics discussed include: tests of strength, tests of general motor capacity and general motor ability, tests of endurance, tests of special abilities, testing and measuring in the health field, methods of test construction, and the use of tests in classification. Four hours credit.
222. INDIVIDUAL STUDIES IN HEALTH AND PHYSICAL EDU. CATION. The purpose of this course is to provide for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.

250a, b. MATERIALS IN PHYSICAL EDUCATION (Summer Quarter only). Thorough study of content within the present-day course of study, including fields of story plays, creative rhythms, singing games, folk dance, group games, team games, individual activities, and social dancing. Provision will be made for participation in these activities and for leadership in an individual's new areas. 250a includes activities of the elementary school. Two hours credit. 250b includes activities of the secondary school. Two hours credit.
255. ADVANCED TECHNIQUE AND COMPOSITION IN THE 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. Laboratory work required. Four hours credit.
260. WATER SAFETY (Summer Quarter only). Combines a study of the teaching of swimming with training in life saving techniques. Confi-dence-building, analyses of the major swimming strokes, use of music, control of sanitation, water pageants, and games and water sports will be included in the first study; the philosophy underlying recommended methods of life saving, equipment necessary, and a full analysis of life saving techniques will be included in the second area. Laboratory work required. Two hours credit.
273. ORGANIZATION AND ADMINISTRATION OF RECREATION (Summer Quarter only). This course includes making budgets, necessary facilities and equipment, efficient records, actual visits to recreational projects and reports on these supervisory visits. Fout hours credit.
299. THESIS. Required of all Plan A students. Twelve hours credit.

# DIVISION OF LITERATURE AND LANGUAGES 

(Speech, Dramatics, Written English, Literature, Latin, and Modern Foreign Languages.)

The Division of Literature and Languages provides courses in the English language, in English literature, in speech, in dramatics, in Latin and in the three modern foreign languages-French, Spanish, and German. The amount of work in these courses is sufficient to provide the information and the cultural background that an English or language teacher needs in any kind of school. It provides also the specific and extended studies that the English or foreign language teacher will need for his or her work in the elementary school, the secondary school, the junior college, or the college of education.

## English Major

An English teacher in a small high school usually teaches composition, literature, and speech, as well as classes in one or two fields outside English. The English major should therefore be prepared to teach the several phases of these that appear in secondary school curricula. These are: American literature, English literature, elementary speaking and writing, and remedial reading. The English teacher usually has charge of one or more of the extra curricular activi-ties-the school newspaper, school plays, debates, and public speaking. Since the English teacher is often called upon to take a class or two in Latin, Spanish, French, the English major in college should be proficient in Latin or one modern foreign language. It is strongly recommended that an English major should have a 24 -hour minor in one language. The other minor must be outside the division.

As in all other divisions, the maximum for which credit may be gained in the major is sixty hours.

Proficiencies in the Use of English. Every prospective Literature and Languages major must establish proof of proficiency in the use of English in speaking, writing, and oral and silent reading before being admitted to the Professional College. This may be done by taking proficiency examinations, or by taking English 4, 5, and 7, or as many of these as are required to overcome the deficiency.

An English major takes the following basic courses in addition to L. § L. 4, 5, or 7 , if not exempted from the latter on the basis of proficiency:

No.

Hrs.

58 a. b. c. Survey of English and American Literature.------- 12
63 -163. First Course

63-163. First Course in Dramatic Art.-..-----------------------12

111. The English Language for Teachers ------------------------- 4
126. Literature for Secondary Schools,
or
125. Problems of Speech and Dramatics for Secondary Schools 4
164. An Introduction to the Science of Speech ------------------14

Elective literature courses sufficient to make a total of 48 to 60 hours.

## English Minor

The registrar will furnish students who wish to minor in English with a list of courses. All courses selected for minors must have his approval.

## Graduate Study

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

## Description of Courses

## English and Literature

4a, b, c. ELEMENTARY ENGLISH COMPOSITION. These courses are designed to furnish the basic needs for correct, acceptable usage and form in writing, and to give practice in the exercise of this skill. Open to English majors and all others who are deficient in writing or who need or wish directed practice. Twelve hours credit. (English majors may not exceed eight.)
7. IMPROVEMENT IN SILENT READING. The purpose of this course is to aid students in the improvement of their silent reading. All the recently discovered means of increasing speed and comprehension in silent reading are used, and tests made from time to time to determine what progress is being made by each individual. The work is largely with individuals. Four hours credit.

21-121. LITERATURE FOR ELEMENTARY CHILDREN. Required of Elementary majors. A survey of children's literature appropriate for use in grades three to six inclusive; the consideration of interests and abilities governing the choice of literature in these grades; wide reading of recent children's literature using the library in the Ernest Horn Elementary School as a laboratory. No textbook required. Four hours credit.

40a. WORLD LITERATURE TO THE EIGHTEENTH CENTURY, $A . D$. World Literature is offered as a contribution to the culture of young people. It is believed that the educated man or woman is one who has made many contacts with the arts and the intellectual achievements of the race. Teachers should be aware of the experiences of the human race that have brought it through its evolution and to its present state. Those intellectual and emotional experiences are largely recorded in the literature of the world. Students often discover that many of the problems of the present were thought through in the distant past. A textbook is used as an orderly guide through the course. Four hours credit.

40b. WORLD LITERATURE FROM 1700 TO 1925. The task of covering the literature of the world from the earliest times down to the present, even in a broad, popular first view is too vast for a single college quarter. English 40 a and 40 b are but two parts of a single course. The division is made at the end of the seventeenth century because of the belief of the instructors that the interests of modern young people will be more in the recent than in the remote centuries. Four hours credit.

41-141. CONTEMPORARY WORLD LITERATURE. The purpose of English 41-141 is to build upon the foundation of knowledge laid in English 40 a and 40 b and to examine the books and periodicals of the world of today. The procedure in English 41 is different from that of 40 a and 40 b . No textbook is used. The student is required to do a certain amount of reading, but the kind of reading is his own choice. To assist him in making his choice a mimeographed list of five or six hundred books is given him. He may choose from that list or select books outside it. Oral and written reactions are made by the students. Four hours credit.

58a-158a. SURVEY OF ENGLISH LITERATURE, 700-1744. A comprehensive reading course dealing with the beginnings of English literature and following its development through the early poetic and prose forms to the more definite expression of these in the early seventeenth century. Four hours credit.

58b-158b. SURVEY OF ENGLISH LITERATURE, 1744-1935. The same plan as that indicated for 58a. Four hours credit.
*58c-158c. SURVEY OF AMERICAN LITERATURE. A course in American literature following the plan of the survey courses in English literature. The work is professionalized by the consideration of the selection of material for the schools. Four hours credit.
100. JOURNALISM AND THE SCHOOL NEWSPAPER. Instruction in organizing and managing the school newspaper. This is a practical course covering all phases of the work involved in the preparation and publication of such papers. The course is in no way a preparation for professional journalism. Four hours credit.
110. ADVANCED COMPOSITION. Designed to give individual practice in writing, including practice for improvement in technique, form, and content. Four hours credit.
*111-211. THE ENGLISH LANGUAGE. This is a non-technical study of the English language from the teacher's point of view. The first half of the quarter is used in a study of the principles of general language, the history of the English language and the patterns it has followed in its evolution from its Anglo-Saxon stage to its modern form. The second half deals with usage and grammar, with children's errors, the psychology of language teaching, and the studies that have been made of language problems in the schools. Fout hours credit.
125. PROBLEMS OF SPEECH AND DRAMATICS FOR THE SECONDARY SCHOOL. This course is designed to meet the problems of teaching speech in high school, and to methods used in creative and formal dramatics, and discussion. Four hours credit.
*126-226. TEACHING ENGLISH IN SECONDARY SCHOOLS (See Ed. 150 f ). The purpose of the course is to inquire into the practices current in teaching English in secondary schools, to evaluate them and to find out what
may be done to improve them. It aims also to examine the materials used in high schools and the methods employed in presenting them. Principles for the selection of literature for senior bigh school pupils considered critically; illustrative studies in the treatment of selective pieces; study of types of composition work for high schools. Four hours credit.
*131-231. THE SHORT STORY. The study of typical modern short stories to observe the technical methods of modern short story writers and the interpretations of our present-day life embodied in this form of literature. Four hours credit.
*132-232. THE DEVELOPMENT OF THE NOVEL. A survey of significant novels from the eighteenth century to the present designed to acquaint the student with changes in the novel form and with its growth in content. A specified number of novels, with considerable latitude in choice, are read and reported on. The lectures emphasize not only the social background, but the different manner of attack of the individual novelist and the consistent attempt to widen the scope of the novel in the range of its subject matter and in the effectiveness of its technical construction. Four hours credit.

133-233. THE CONTEMPORARY NOVEL. An appreciation course. Representative novels of the twentieth century are read and discussed. Papers and oral reports are given. The novel is used as a vehicle of expression of presentday viewpoint, as well as of literary art. Four hours credit.

133a-233a. GREAT NOVELS OF THE TWENTIETH CENTURY (Summer Quarter only). Discussion of great books-great by reason of content or of form-that have enlarged the scope and importance of the novel since 1900 to the present. Eight novels will be intensively studied in class. Four hours credit.

134-234. THE STUDY OF MODERN DRAMA. An appreciation course in the reading and class discussion of plays that best represent the thoughtcurrents, and the dramatic structure of our time. Four hours credit.

139-239. THE FORMS AND MEANINGS OF POETRY. A critical study of the forms and content of some of the greatest poetry written through the centuries, with a special reference to the poets of the twentieth century. Significant ideas and movements of our day as reflected in current poems are discussed, verse structure noted and a general evaluation of merit attempted. Four hours credit.

140-240. NINETEENTH CENTURY AND CONTEMPORARY POETRY. A study of the major English poets of the nineteenth century from Wordsworth through Swinburne, including the background of social and political changes that influenced their work. A brief study of contemporary poets is made at the end of the course for summation and contrast. Four hours credit.
*144-244. WORLD LITERATURE (From the beginnings in Egypt to the 18th century, A. D.). The aim of the two courses, English 144-244 and English 145-245, is the same as for English 40a and 40b. These are senior and graduate courses offered only in summer quarters in alternate years. English 144 will be given in even years, English 145 in the odd. One extended, and scholarly term paper is required of each graduate student. Four hours credit.
*145-245. WORLD LITERATURE (From 1800-1925.). (Summer Quarter Senior and Graduate Course. Given in 1941 and subsequent old-numbered years). The objectives and methods of presentation are similar to those described under English 144-244. Four hours credit.

[^15]146-246. NINETEENTH CENTURY PROSE. A critical reading and discussion of the serious prose writings, chiefly essays and criticism, of the leaders of thought of the earlier Georgian and the Victorian period. Contrasts and comparisons with present day critics and conditions are made. Four hours credit.

155a-255a. SHAKESPEARE'S EARLIER WORK. The aims of the two courses on Shakespeare are to give students a general knowledge of his various types of plays and to develop an appreciation and critical judgment of the best in the field of literature through understanding more fully the highest standards of drama and poetry as represented by Shakespeare. The first course is a study of the comedies, tragedies and histories of Shakespeare's earlier periods, and of his narrative poems, and his sonnets. Four hours credit.
*155b-255b. SHAKESPEARE'S LATER WORK. This course is a continuation of English 155a-255a. It includes the reading and discussion of Shakespeare's greatest tragedies and final plays, a summation of his life and times together with an evaluation of his work as dramatist and poet, as that evaluation is made by some of the leading critics, from Ben Jonson and Dryden to Bradley and Dover Wilson. Four hours credit.

155c-255c. ELIZABETHAN DRAMA (1585-1642). It is the purpose of the course to make the student aware of the great dramatic literature of the Elizabethan period overshadowed by the name of Shakespeare. Some knowledge of Elizabethan stage conditions and of the acting companies is given, and the changes in dramatic form are stressed; but a special emphasis is placed upon the changing themes and subjects as a reflection of the life of the time. Extensive reading and intensive study of plays are supplemented by lectures on the background and on the literary qualities of the dramatists. Four hours credit.

189-289. TEACHING THE BIBLE AS LITERATURE. The purpose of this course is to develop an appreciation of the Bible as literature. No attempt is made to study this literature intensively, but rather to come into an appreciation of its literary value through the study of the folklore, the short stories, the poetry, the biography, and the prophetic writings of both the Old and the New Testaments. The text of the course is the Bible, preferably The Bible Designed to be Read As Living Literature, edited by Ernest Sutherland Bates. Readings in numerous books are assigned. Four hours credit.
200. GRADUATE SEMINAR IN LITERATURE AND LANGUAGES (Spring and Summer Quarters only). A basic course in methods of graduate study and research in the fields of literature and languages. Required of all candidates for the master's degree in the Division of Literature and Languages. Four hours credit.
212. OLD ENGLISH. A beginning course in Anglo-Saxon grammar and vocabulary and the reading of important documents from the period (Alfred's Translations, Charters and Historical Documents, Anglo-Saxon poetry, etc.). The purpose is to acquaint the student not only with the range of writings in Anglo-Saxon, but to provide a background for the problems of contemporary grammar. Four hours credit.
213. CHAUCER AND MIDDLE ENGLISH. It is the purpose of the course (1) to acquaint the student with the writings of Goeffrey Chaucer, (2) to study Middle English as a transition from the complicated Anglo-Saxon to the speech of today, and (3) to relate the literary and linguistic to the historical background. The course consists, for the most part, in a reading of the principal works of Chaucer (Cantebury Tales, Troilus and Cressida, etc.). Lectures supplement discussion of the text. Four hours credit.
222. INDIVIDUAL STUDIES IN ENGLISH. The purpose of this course is to provide for independent study, particularly in special phases of a

[^16]field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem. A maximum of eight hours credit toward the master's degree is permitted.
248. THE ROMANTIC MOVEMENT IN LITERATURE. A study of this movement throughout Europe, its sources and development from the historical background of the revolutionary thought leading to the American and French Revolutions to their effect upon the writers and statesmen of that period and the present one. A specialized study for senior and graduate English majors, tracing the development of the romantic movement in continental and British literature. Four hours credit.
299. THESIS. Twelve hours maximum credit.

## Speech and Dramatics

5. READING AND SPEAKING ENGLISH. The purpose of this course is to aid those students who find difficulty in expressing themselves in speaking or in reading meaningfully. The activities of the class hour include projects designed to give the student ease, poise, flexibility in use of body and voice and a knowledge of and increased skill in such fundamentals of oral reading as correct emphasis, correct grouping, good articulation and enunciation. Offered each quarter during the regular year. Four hours credit.

13-113. STORY TELLING. Through the project approach the principles of the art of story telling are applied through class and laboratory practice. Attention is given to the arrangement and selection of stories and current books for the several school levels. Four hours credit.

16-116. VOICE AND DICTION. This course is arranged to take care of the individual differences of each student with regard to voice difficulties. Students wishing to make transcripts of their voices will be charged a nominal fee for records. Two or four hours credit.
18. ARGUMENTATION AND DEBATING. The course is designed to acquaint the student with the principles of argumentation and their application in speech situations. Stress is laid on the analysis of a proposition, on the determination of issues, on evidence, on methods of reasoning, and on methods of refutation. Students will be grouped into teams for debating practice. The course will be especially helpful to English majors and minors who may be called on to direct debating activities in high school. Four hours credit.

62-162. INFORMAL SPEAKING. The purpose of this course is to give classroom experience to those students who wish to learn and master the principles governing the speaking to groups of people. Members of the class give at least seven prepared extemporaneous talks designed to inform, to stimulate, to persuade, or to entertain the audience. Students are required to read published speeches to study the principles used in those compositions. Four hours credit.

63-163. FIRST COURSE IN DRAMATIC ART. This course embraces all the basic principles of dramatic art and is organized for those students who feel the need of greater bodily freedom. Pantomimes, scenes from plays, and one-act plays are participated in by the student. Four hours credit.

112-212. CREATIVE DRAMATICS. A lecture and laboratory course, designed for elementary and secondary school teachers. The course deals with the contribution of creative dramatics to education on the elementary and secondary school levels, the selection of materials, and the demonstration of procedure which are best adapted to work in children's dramatics. Four hours credit.

114-214. THE ART OF, DIRECTING PLAYS. Prerequisites, L. छ L. 63. A lecture and laboratory course designed primarily for teachers and students who intend to engage in the work of play production in the schools. This advanced course carries through the actual preparation of several plays, from the casting and directing, to make-up and presentation. Choice of materials for amateur theatricals is also considered. Four hours credit.

114 a, b, c-214 a, b, c. DIRECTING IN THE LITTLE THEATRE (Laboratory Method). It is the actual directing and stage management through the production of a public performance. Offered to advanced students who have completed 114 or 115 or equivalent. Two to four hours ctedit in one quatter; eight hours maximum for several quarters.

115-215. ELEMENTARY SCENE DESIGN AND STAGECRAFT (See also Fine Arts 115-215). A technical course in lighting, costuming, and scenery construction to clarify problems of the director. Laboratory attendance is required. Four hours credit.

117-217. ORAL INTERPRETATION FOR SECONDARY SCHOOL TEACHERS. An approach to the forms of oral reading and interpretation of literature is given, and participation by the student is required. Technique used in directing high school students toward presentation of festival reading and contest materials (declamatory) are explained. Four hours credit.

118-218. DISCUSSION TECHNIQUES. This course is designed to give the student the principles and practice of organizing, conducting, and participating in the various forms of group discussion, which are an important part of the programs of educational, religious, and community organizations. The students will plan and conduct examples of the forum, the symposium, the round table, and the panel. Attention will be directed not only to the form of the technique used but the proper speech skills for effective discussion. Four hours credit.

120-220. CHORAL READING. Procedure and techniques of training the speaking choir with emphasis on choice of materials. A public performance will close the class work. Two hours credit.

150-250. SPEECH EDUCATION IN ELEMENTARY AND SECONDARY SCHOOLS (Summer Quarter only). The course is designed to acquaint the student with the philosophies, movements, practices, and problems in speech education. Topics studied in this survey include the relationship of speech to other language instruction in the grades, the integration of speech education with social studies and English, the special problems of the speech defective, the extra-curricular programs for gifted students, and the building of a speech curriculum. Four hours credit.

152-252. PUBLIC SPEAKING FOR TEACHERS AND ADMINISTRATORS (Summer Quarter only). A practical course in public speaking designed to meet the professional speaking needs of teachers and executives. The emphasis is on platform work applying the principles of sound speech construction and audience psychology. Four hours credit.
164. AN INTRODUCTION TO THE SCIENCE OF SPEECH. A general survey of phonetics, voice science, and speech pathology intended to acquaint the prospective teacher with the fields covered in order that he may have a basis for considering the speech problems presented by his students. In addition to lectures and discussions of library reading, full use is made of recordings, demonstrations and case studies. Stress is laid on the educational applications of material covered in the course. Four hours credit.

165-265. THE CORRECTION OF SPEECH DISORDERS (Summer Quarter only). A lecture-discussion-demonstration course designed to give the student a knowledge of the manifestations and causes of disorders of speech and the re-education procedures to be followed. Students registered for this course will be required to devote at least thirty minutes each afternoon to work in the speech clinic where they will be given practical laboratory experience in the diagnosis and treatment of speech difficulties, the collection of remedial materials, and the maintenance of a clinical record. Four hours credit.

170-270. THE PSYCHOLOGY OF SPEECH (Alternate Summer Quarters only). A course intended primarily for teachers of language, with special application to problems of speech. The class will study and discuss such topics as the nature and origin of speech; the basic psychological aspects of speech, including the relationships of speech to emotion, learning, meaning, and thought; the development of speech and language in the child; personality and speech. Four hours credit.
222. INDIVIDUAL STUDIES IN SPEECH AND DRAMATICS. The purpose of this course is to provide for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
299. THESIS. Twelve hours maximum credit.

## Foreign Language Major

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

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

A Foreign Language major must have forty-eight hours of work in foreign languages.

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

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

|  | No. |  |
| :---: | :---: | :---: |
| Latin | 105-205. | Cicero's Essays |
|  | 106-206. | Pliny |
|  | 107-207. | Horace |
| French | 105-205. | Survey of French Literature |
|  | 106-206. | Survey of French Literature -- |
|  | 107-207. | Survey of French Literature |
|  | 108-208. | French Civilization |
| SPANISH | 105-205. | Romantic Drama |
|  | 106-206. | Modern Drama |
|  | 107-207. | Modern Spanish Novel |
|  | 108-208. | Modern Poetry and Essay--- |
|  | 109-209. | Spanish Civilization |
|  | 110-210. | Spanish Conversation |
| L. 8 L. | 131-231. | The Teaching of Romance |
|  |  | Languages |
| French | 125-225. | Eighteenth Century French |
|  |  | Literature --- |
|  | 126-226. | French Romanticism |
|  | 127-227. | Twentieth Century French Literature |
| SPANISH | 125-225. | Don Quijote |
|  | 126-226. | Classical Drama |
|  | 127-227. | Classical Prose and Poetry -- |
| L. 8 L . | 222. | Individual Studies in Foreign |
|  |  | Languages - |

## Foreign Language Minor

The registrar will furnish students who wish to minor in Foreign Languages with a list of courses. All courses selected for minors must have his approval.

## Graduate Study

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

## Description of Courses

## French

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

105-205. A SURVEY OF FRENCH LITERATURE. Prerequisite, two years of college French or the equivalent. (a) Modernized and abbreviated versions of the outstanding works of early French literature are read and discussed. One play each of Corneille of Racine and of Moliere is read as well as some biographical material about the authors and historical material on their times. Reading in French, questions and answers on the text in French, critical discussion in English. Offered in alternate years. Four hours credit.

106-206. A SURVEY OF FRENCH LITERATURE. (b) A study of French literature from about 1700-1870. Procedure and prerequisite the same as in French 105-205. Offered in alternate years. Four hours credit.

107-207. A SURVEY OF FRENCH LITERATURE. (c) Extensive reading in the novel, drama, and short story since 1870. Procedure and prerequisite the same as in French 105-205. Offered in alternate 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. Each student chooses one phase of French civilization, writes a paper on it, and makes an oral report toward the end of the course. Offered on request. Four hours credit.

125-225. EIGHTEENTH CENTURY FRENCH LITERATURE. Prerequisite, three years of college French or its equivalent. Selections from Voltaire and Rousseau read for class discussion, and other Eighteenth century writers read and reported on individually. Questions and answers on text in French. Discussion of literary merit in English. Offered on request. Four hours credit.

126-226. FRENCH ROMANTICISM. A study of the Romantic writers in France with relation to the movement elsewhere in Europe. Emphasis on Hugo and Musset. Procedure and prerequisite same as in 125-225. Offered on request. Four hours credit.

127-227. TWENTIETH CENTURY FRENCH LITERATURE. Lectures on the novelists, dramatists, and short story writers of this century with
extensive readings and reports by the class. Prerequisite, same as for French 125-225. Offered on request. Four hours credit.

160-260. FRENCH LITERATURE IN ENGLISH TRANSLATION (Summer Quarter only). Lectures on the most important French writers. Outside readings with reports. No knowledge of French required. Four hours credit.

## German

1, 2. ELEMENTARY GERMAN. The first year's work aims to give the students an accurate pronunciation, to enable them to read directly, without mental translation, to use and understand simple spoken German, and to gain some knowledge and appreciation of German culture. Pronunciation is stressed in the first quarter, to form correct habits. The essentials of grammar are taught through exercises in reading, writing and speaking, and the close relation of German and English grammar is constantly brought out. Four hours credit each quarter.
3. ELEMENTARY GERMAN. In this quarter the class is divided to accommodate two distinct demands. One group continues with literary German, using a text with varied material-poems, sketches, plays and short stories, such as Roeseler and Ber's Altes und Neues. This is supplemented by conversation and composition based on the reading. The other group begins the study of scientific German, using such a text as Vail's Scientific German, Koischwitz' Introduction to Scientific German, or Sokol and Nye's Beruhmte Forscher und ihre Beitrage. Four hours credit.
5. INTERMEDIATE GERMAN. A review of grammar, taking up in greater detail the grammatical principles learned the first year and familiarizing the student with numerous idioms. There is constant practice in imitative composition based on cultural material. In addition, in order to allow no interruption in reading habits, each student is required to do individual reading of easy fiction outside of class, and to write a report of this in German. Four hours credit.
6. INTERMEDIATE GERMAN. German history, of special interest at the present time, is studied through some text such as Jockers' Die Deutschen, ihr Werden und Wesen, Friederich's Kurze Geschichte des deutschen Volkes, or Jordan's Deutsche Kulturgeschichte. As this course is intended primarily as a background for the further study of German literature, emphasis is on the cultural development rather than on strictly political history. Appropriate readings, chiefly in verse inspired by the different events and periods, accompany the historical study. Four houts credit.
7. INTERMEDIATE GERMAN. Schiller's Wilhelm Tell is studied as a representative drama of Germany's greatest literary period. This work is supplemented by reading calculated to increase interest in the Swiss contribution to German culture. In addition to reports from Friederich's Die Schweiz, each student reads and reports upon some work of fiction by a Swiss author, Gotthelf, Keller, Meyer, or Zahn. Fóur hours credit.

## Italian

1,2,3. ELEMENTARY ITALIAN. As this class is likely to be composed largely of music majors, the course is especially designed to fit their needs. Pronunciation is much stressed; the peculiarities of Italian orthography are taught with much drill in dictation and in oral reading. Phonograph records are used, and the class learns to sing simple popular songs such as those in the
collection Le piu belle canzoni italiane. Elementary grammar exercises, simple reading and vocabulary building complete the course, with emphasis on musical terms. In addition to the material found in such readers as Nel paese del sole and L'Italia nel passato e nel presente, sight-reading is provided by passages from opera libretti. Proverbs and verses are committed to memory. In the third quarter a simple play is read such as Goldoni's La Locandiera or a short novel such as Farina's Fra le Corde d' un Contrabasso. Twelve hours credit.

## Latin

*5. INTERMEDIATE LATIN. Prerequisite, one year of Latin in college or two in high school. The course begins with a thorough grammar review, using Bennett's Latin Grammar with constant grammatical analysis of the reading text-Nepos' Lives or a work of similar intermediate grade. The student must become fairly familiar with the geography of the ancient world, and must understand all historical allusions occurring in the text. He is also required to do outside reading of some piece of historical fiction dealing with Greek or Roman times. Four hours credit.
*6-7. INTERMEDIATE LATIN: VERGIL. The class reads the first six books of Vergil's Aeneid, introduced by a discussion of the author's life and times and the circumstances which gave rise to the writing of a patriotic epic. Classical mythology is studied throughout the course, particularly the legends of the Trojan War. The student must be able to read the dactylic hexameter smoothly and easily, with due attention to metrical licenses and irregularities. The class studies Vergil's vocabulary, his figures of speech and stylistic devices, and notes the difference between the language of poetry, with its archaisms and popular forms, and the language of prose. The student must be familiar with the geographical background, and with the historical as well as mythological references. Vergil's influence upon medieval thought and upon later poets is brought out. Eight hours credit.
105. ADVANCED LATIN: CICERO. Two representative essays of Cicero are studied, such as De Senectute and De Amicitia. The course acquaints the student with Cicero as a private citizen, a philosopher and man of letters in contrast to the better known figure of statesman and orator. The reading affords an opportunity to examine the principles of Stoic philosophy and of the Greek and Roman view of life. Supplementary reading is required in Hamilton's The Roman Way and The Greek Way. Four hours credit.
106. ADVANCED LATIN: PLINY THE YOUNGER. Selected Letters of Pliny are read, revealing to the student an interesting personality and an important period of history. The study includes comparison of the Latin of the Silver Age with that of the Golden Age and comparison of Pliny with other great letter-writers of world literature. Four hours credit.
107. ADVANCED LATIN: HORACE. The class reads selected odes and epodes of Horace. The course acquaints the student with one of the most genial and versatile writers in Latin literature, and serves as an introduction to the study of Latin lyric poetry. The student must master the three commonest verse-forms, the Alcaic strophe, the Sapphic strophe, and the Asclepiadean verse. Stanzas chosen by the students are memorized. The Epicurean philosophy of Horace is contrasted with the modified Stoicism of Cicero. Four hours credit.

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## Spanish

1,2,3. ELEMENTARY SPANISH. Study of pronunciation, principles of grammar, and practice in reading. Students are expected to be able to read simple Spanish with ease by the end of the year, to understand from hearing, and to express simple concepts in Spanish in speech and in writing. Credit is not given until the three quarters are completed. Four hours credit each quarter.
5. INTERMEDIATE SPANISH. Prerequisite, two years of high school or one year of college Spanish. This course aims to fix the principles of grammar thoroughly in the minds of the students by means of a review of grammar including extensive composition. Some practice is given in speaking. Four hours credit.
6. INTERMEDIATE SPANISH. Prerequisite, two years of high school or one year of college Spanish. While primarily a reading course, there is considerable emphasis on grammatical principles and on conversation. The texts read are Emilio y los Detectives and Julio Camba's La Rana Viajera. Four hours credit.
7. INTERMEDIATE SPANISH. A continuation of Spanish 6 with the same procedures and prerequisites. The texts used are Alarcon's El Final de Norma and one other novel. Four hours credit.
75. SPANISH READING (Summer Quarter only). Prerequisite, a minimum of one year of college Spanish. A course designed to fit the reading abilities of the various members. The class meets two days a week for intensive reading. Extensive outside reading is reported on in conferences. Opportunity is given for speaking Spanish in class. Four hours credit.

105-205. SPANISH: ROMANTIC DRAMA. Prerequisite, two years of college Spanish, or the equivalent. The Romantic movement in Spain, its causes, its exponents and their works are studied. Three plays are read in class. and reports are made by students on additional romantic plays read outside of class. An attempt is made to increase the students' Spanish vocabulary, to improve their pronunciation by oral reading, to increase their ability to express themselves in Spanish, as well as to give them a knowledge and appreciation of the literature of the second third of the nineteenth century. Four hours credit.

106-206. MODERN SPANISH DRAM"A. A study of the "Generation of ' 98 '" and their transition to the less emotional type of theater, as personified by Benavente, and to the poetic type as represented by Marquina. Plays by these authors are read in class, together with Martinez Sierra's Sueno de una Noche de Agosto. Reports on outside readings. Procedures and prerequisites similar to those of 105-205. Four hours credit.

107-207. THE MODERN SPANISH NOVEL. Prerequisite the same as for $105-205$. A study of the novel beginning with the costrubrista movement. More emphasis is placed on extensive individual reading which is reported on in writing. Lectures on the modern Spanish novelists two days each week. Four hours credit.

108-208. MODERN POETRY AND ESSAY. The modernist movement in Spanish poetry as exemplified by Ruben Daio's works. Metrical principles are studied, and an attempt is made to give students an appreciation of the technical as well as the literary merit of Spanish poetry. Selections from

Unamuno provide the basis for a study of the philosophical essay. Students should have at least two years of college Spanish before enrolling for this course. Four hours credit.

109-209. SPANISH CIVILIZATION. Lectures in English designed to give students and prospective teachers of Spanish some knowledge of the history, government, art, educational system, social structure, etc., of Spain. Each student chooses one phase of Spanish civilization, writes a paper on it, and makes an oral report toward the end of the course. No knowledge of Spanish is necessary for this course. Offered in alternate years. Four hours credit.

110-210. SPANISH CONVERSATION. Prerequisite, at least two years of college Spanish or the equivalent. Exposition, narration, description, and debates are used as bases for conversation. Lists of words and expressions for special subjects are given. Offered on request. Two hours credit.

125-225. DON QUIJOTE. Prerequisite, three years of college Spanish. Readings from the Quijote, a study of the life of Cervantes, and the reading of one of his Novelas Ejemplares. Conversation based on the texts. Offered on request. Four hours credit.

126-226. CLASSICAL DRAMA. Prerequisite, three years of college Spanish. A study of the theatre in Spain under Philip III and Philip IV. Discussion of Culteranismo and Conceptismo and their effect on Spanish literature. Plays by Alarcon, Lope de Vega, and Calderon are read in class, and books in English on the literary background of the period are read outside. Four hours credit.

127-227. CLASSICAL PROSE AND POETRY. Prerequisite, three years of college Spanish. A stury of the non-dramatic poetry of the Golden Age beginning with Garcilaso de la Vega and continuing through Fray Luis de Leon, Quevedo, and Gongora, with special attention to prosody. The beginnings of the picaresque novel, as exemplified by Lazarillo de Tormes are also studied. Four hours credit.

131-231. THE TEACHING OF FOREIGN LANGUAGES (See Ed. 150 g ). The purpose of this course is to give consideration to those problems which are of particular concern in the teaching of French, Spanish, and Latin in secondary schools. Included in the course are functions and values of language study; courses of study; organization of materials; conventional and progressive methods; illustrative materials, selection of texts; testing. Four hours credit.
222. INDIVIDUAL STUDIES IN FOREIGN LANGUAGE. The purpose of this course is to provide for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or fout hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
299. THE PREPARATION OF A THESIS IN FOREIGN LANGUAGES. Foreign Language majors studying under Plan A meet with their major professor as often as necessary to select and develop a subject for a thesis. Twelve hours credit in three quarters.

## DIVISION OF MUSIC

The Division of Music provides opportunities for cultural and professional experience in the field of music education. Instruction includes musical theory, musical history and appreciation, music education, and an opportunity to study and participate in the various phases of musical performance.

Admission to the Professional College as a music major is open to students who:

1. Have completed satisfactorily the work of the General College.
2. Show evidence of satisfactory musical aptitude.
3. Have completed six hours of individual instruction in playing or singing, or its equivalent (To be determined by proficiency).
4. Have completed satisfactorily Music 1a, b, c and Music 2a, b, c or their equivalent.

All music majors are required to be affiliated with a major musical organization each term. The organizations regularly approved for this purpose are: Band, orchestra, a cappella choir, instrumental and vocal ensemble, and mixed chorus.

In addition to the above, the Division of Music reserves the right to pass upon other musical activities to fulfill this purpose.

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.

## MUSIC FEES

1. $\$ 15.00$ a quarter for individual lessons in voice, piano, organ and strings, and $\$ 12.00$ for brass and woodwind instruments for all students in the General College and students in the Professional College who are not music majors, but who are regularly enrolled at the Colorado State College of Education or affiliated schools.
2. $\$ 10.00$ a quarter laboratory fee for all music majors in the Professional College. This fee provides for all individual instruction requirements in applied music.
3. $\$ 18.00$ a quarter for individual lessons in voice, piano, organ, and strings and $\$ 15.00$ for woodwind and brass for those not regularly enrolled as students at Colorado State College of Education or its affiliated schools.
4. $\$ 4.00$ a quarter piano rental fee; $\$ 3.00$ a quarter rental fee for orchestra or band instruments, and $\$ 9.00$ for organ rental. (The above prices are for lessons taken for an entire quarter. If lessons are taken for a shorter period there will be a charge of $\$ 2.00$ each for lessons for voice, piano, organ, and strings; and $\$ 1.50$ each for lessons taken in other instruments.)

Note: All quarterly fees shall be paid before the close of permanent registration.

## Major

All music majors shall meet the following requirements:

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

All music majors who have been admitted to the Professional College shall take individual lessons on a musical instrument or in voice each quarter. The type of instruction needed by the individual student is to be determined by agreement between the director and the students. When a music major shall study both an instrument and voice, or more than one instrument in a given quarter, no extra fee will be charged. Credit toward graduation in this type of work shall not exceed twelve quarter hours for music majors and six quarter hours for music minors.

In addition to the provisions for individual instruction for music majors and minors, instruction of this type is open to other college students and to members of the local community. Instruction is offered in voice, piano, pipe organ, string instruments, brass and woodwind instruments.

Students who plan to major in the Division of Music in the Professional College shall take the following courses in addition to the core subjects listed on page 26.
No. Hrs.
2a, b, c. Music Reading, Theory and Elementary Songs (2 hours each quarter) ..... 6
100a, b, c. Beginning Orchestral Instruments and Materials ( 2 hours each quarter) ..... 6
52a, b, c. Beginning Harmony and Advanced Music reading (2 hours credit each quarter) ..... 6
103. Music Methods in Elementary School. ..... 4
104. Instrumental and Vocal Materials ..... 2
106. Music Methods in Secondary School ..... 4
152a, b, c. Harmony, Counterpoint, and Composition (2 hours each quarter) ..... 6
153a, b. Instrumentation, Orchestration and Composition ( 2 hours each quarter) ..... 4
155. Technique and Practice of Conducting ..... 2
158. History of Ancient and Medieval Music ..... 4
159. Modern Composers ..... 4
Music Courses ..... 48
Individual Instruction ..... 12
Total ..... 60

## Minor

The registrar will furnish students who wish to minor in Music with a list of courses. All courses selected for minors must have his approval.

## Graduate Study

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

## Description of Courses

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

2a, b, c. MUSIC READING, THEORY, AND ELEMENTARY SONGS. Objectives: To acquaint the student with the skills that are requisite to success in music reading; to develop these skills; to acquaint the student with sight-reading and rote materials used in the elementary school; to develop in each student the ability to use his own voice; to serve as an introduction to and preparation for Music 52a, b, c and $152 \mathrm{a}, \mathrm{b}, \mathrm{c}$. A year's course meeting four days a week each quarter. The student is taught songs that will be useful in student teaching and later professional work. Two hours credit each quarter.

21-121. INSTRUMENTAL ENSEMBLE. Classes in woodwind quintet, string quartet, string trio, brass ensemble, and other small instrumental groups are available for students who wish training in ensemble playing. This course is designed to prepare students for instrumental group instruction in the field of public school music. One hour credit.

22-122. VOCAL ENSEMBLE. Vocal trios, quartets, and other small groups receive training in this course for satisfactory public performance, with a view towards being of service in the community. One hour credit.

30-130. INDIVIDUAL INSTRUCTION IN VOICE. For all those interested in correct tone production, refined diction, and intelligent interpretation of songs of classical and modern composers. The purpose of this course is to experience and understand the correct use of the singing and speaking voice. Special emphasis is placed on building useful song repertoire, coaching in performance, and diagnosing vocal difficulties. One hour credit.

31-131. INDIVIDUAL INSTRUCTION IN PIANO. Instruction is offered to both beginners and advanced students, using the standard technical works of Czerny, Clementi, as well as compositions of Bach, Beethoven, Schumann, Chopin, Debussy, and other ciassical, romantic and modern composers. Emphasis is also placed on keyboard harmony and accompanying. One hour credit.

32-132. INDIVIDU AL INSTRUCTION IN VIOLIN (or other stringed instruments). In addition to violin instruction, lessons are provided in cello, string bass, and viola. Opportunities are also provided for individual and class instruction in other stringed instruments. One hout credit.

33-133. INDIVIDUAL INSTRUCTION IN ORGAN. Instruction is given in pipe organ and Hammond organ to those students who have had enough piano instruction to be able to play Bach two-part inventions satisfactorily. One hour credit.

35-135. INDIVIDUAL INSTRUCTION IN BRASS AND REED INSTRUMENTS. Lessons are provided in brass and reed instruments of the band and orchestra for students who wish to become proficient in teaching and performance. One hour credit.

40-140. BEGINNING ORCHESTRA. This organization is devoted to those who play instruments in the less advanced stage. Music suitable to the students' ability is chosen. All are welcome who desire to perfect themselves in orchestral playing, and who enjoy this activity. One hour credit.

41-141. BEGINNING BAND. This course is designed for those who like to play band instruments and who wish to improve their performing ability. As advancement is made it is hoped that a keener appreciation for music will be developed. One hour credit.

42-142. COLLEGE ORCHESTRA. The symphony orchestra is available for those who wish an outlet for their previous study. Students will be provided with a first hand knowledge of the great orchestral works by classical, romantic and modern composers. This organization is open to all who show sufficient qualifications, determined by an audition with the director. One hour credit.

43-143. CONCERT BAND. Students are trained to play the finest band literature, and practice in public performance is obtained through various concerts by this organization during the year. Membership is by tryout. One hour credit.

44-144. A CAPPELLA CHOIR. All students are eligible to membership in this organization with the approval of the director. The finest sacred and secular music is sung, and for those who are interested in vocal work it is hoped that this experience will lead to better choir organization and directing in school and community. One hour credit.

45-145. PIANO CLASS LESSONS. Opportunities are offered for class piano instruction. This course provides actual experience in class piano procedures, using the piano and individual practice key-boards. This course aims to provide experience in both group performance and class teaching procedures. One hour credit.

46-146. PIANO CLASS METHODS. A modern course of study in piano pedagogy, presented in successive units, which include the song approach, technical problems, harmonic analysis, sight reading, ear training, creative expression, and materials as applied to the teaching of class piano. Two hours credit.

47-147. LABORATORY BAND AND ORCHESTRA. Maintained for those who have just begun to play band and orchestral instruments, and for those who wish to examine materials suitable for all classes of school bands and orchestras. One hour credit.

48a. b-148a, b. MUSIC FUNDAMENTALS FOR ELEMENTARY TEACHERS. A two quarter sequence in music for elementary majors. Specific objectives are: Acquiring skill in the reading of music, training the ear to a more accurate discrimination of pitch, music-writing from dictation, and active experience in rhythm. A musical background is built through the study of key signatures, scale formations, musical terms and symbols, and a simple knowledge of the composers and of vocal and instrumental forms. Four hours credit each quarter.

49-149. MUSIC METHODS AND MATERIALS FOR ELEMEN. TARY TEACHERS. Prerequisite, Music 48a, b-148a, b. A course for rural and elementary teachers specificially designed to give a practical working knowledge of music in all elementary grades. The following topics are stressed: Proper use of the child voice; selection and teaching of the rote song with suggested materials; presenting the various rhythms to children and organization of the thythm band; music appreciation with the phonograph and by other means;
and creative music writing. A knowledge of school music material is given as is a knowledge of further experience in music reading and ear training. Four hours credit.

52a, b, c. BEGINNING HARMONY AND ADVANCED MUSIC READING. Formerly Music 102a, b, c Prerequisite, Music 2a, b, c. A year's course meeting two days a week. Objectives are to create an interest and some skill in the structure and movement of chords, beginning with relationships of tones as intervals and triads, through 7 th, 9 th, 11 th, and 13 th chords. Procedures consist of class work in hearing, writing, singing and spelling intervals and chords; harmonic analysis, using examples from classical, romantic and modern music; and harmonization of melodies, including chords of three and four voices. Emphasis is placed on keyboard work and correct manuscript writing. Two hours credit each quarter.

100a, b, c. BEGINNING ORCHESTRAL INSTRUMENTS AND MATERIALS. Objectives: to provide an opportunity for gaining a working knowledge of band and orchestra instruments; to develop a broader knowledge of available instrumental materials for solo and group combinations. Procedure: Instrumental combinations are studied and rehearsed in small groups. Instruments not available among students will be demonstrated by qualified visiting instructors. Considerable time will be devoted to discussion of such problems as instrumental music libraries, publishing firms, new materials, and instrumental group organization and maintainance in public schools. Materials will be studied and performed in class. Two hours credit each quarter.
103. (See Ed. 150h). MUSIC METHODS AND OBSERVATION IN THE ELEMENTARY SCHOOL (for Music Majors and Minors). The purpose of this course is to deal with methods, observation, and participation in teaching music in the elementary school. The topics studied are: Classroom procedures, pupil differences in music, singing and music reading program, musical listening program, creative music, and the rhythmic program. Six hours credit.
104. INSTRUMENTAL AND VOCAL MATERIALS. Designed to provide opportunity for a study of instrumental and vocal music for all combinations of instrumental and vocal ensembles. Usable music for all occasions, and instrumental and vocal problems are discussed. Two hours credit.
106. (See Ed. 150h.) MUSIC METHODS AND OBSERVATION IN THE SECONDARY SCHOOL (for Music Majors and Minors). The following topics are studied: The adolescent in music, the choral program, the instrumental program, the music listening program, operettas, festivals and clinics. The course aims to acquaint the student with problems of the adolescent in music, the development of choral, instrumental, and listening programs in the secondary school; to acquaint students with problems involved in the selection and production of an operetta; to acquaint students with the advantages of participation in festivals and clinics. Six houts credit.

152a, b, c. HARMONY, COUNTERPOINT, AND COMPOSITION. Prerequisite, Music 52a, b, c. A practical course in polyphonic composition, including advanced harmonic principles, the working rules of counterpoint, and beginning composition. This course is designed for the serious student of music as well as those interested in theoretical musical structure. Procedures include the teaching of the development of medieval two-part music through the more complicated three and four-part voice forms, florid counterpoint, and the writing of canon and fugue in three and four parts. The course also serves as an introduction to instrumentation and arranging. Two hours credit each quatter.

153a, b. INSTRUMENTATION, ORCHESTRATION, AND COMPOSITION. Prerequisite, Music 152a, b, c. Two quarter course meeting two days a week. The student learns transposition for all instruments, the pitch range for all instruments, and discovers how to obtain tonal balance and orchestral color. Two hours credit each quarter.

154-254. PRINCIPLES OF MUSIC EDUCATION (Offered Summer 1941). 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.
155. TECHNIQUE AND PRACTICE OF CONDUCTING. To acquaint and prepare prospective teachers with techniques and practice in conducting bands, orchestras, and other musical ensembles. Actual experience is obtained through group and individual instruction. Music in all forms is studied with special reference to the director's problems. Two hours credit.

156-256. PSYCHOLOGY OF MUSIC. Objectives: To furnish students with the knowledge and techniques necessary for the measurement of musical capacity, and to develop an understanding of the psychology of musical performance, composition, and listening. The subjects included in this course are measurements of musical talent, tests and measurements in music, and the psychology of musical performance. Four hours credit.

157-257. THE PHYSICS OF MUSICAL INSTRUMENTS. The objectives of this course are to develop an understanding of the physical principles involved in the production of music. Two hours credit.
*158. HISTORY OF ANCIENT AND MEDIEVAL MUSIC. A cultural course which deals with the development of ancient and medieval music and musicians up to and including Beethoven, through the presentation of music of various composers. This course leads to a greater appreciation of music and definitely adds to life's enjoyment. Four hours credit.
*159. MODERN COMPOSERS. A continuation of Music 158. The lives and music of the great masters since Beethoven will be studied. Through the aid of the phonograph the student will become acquainted with the different styles of these composers' compositions. Four hours credit.

161-261. MUSICAL AESTHETICS (Summer Quarter only). A study of the aesthetics of Dewey, Puffer, Parker, Bell, Santayana, et. al. Special emphasis is placed on the implication of aesthetics in the teaching of music. Graduate students only. Four hours credit.

162-262. SYMPHONIC LITERATURE. Formerly "Advanced Music Literature." A detailed study of the music of the symphony orchestra, based mainly on recordings made by the world's leading orchestras, as an opportunity for music students to become familiar with the larger works of the masters. Four hours credit.

170-270. ADVANCED HARMONY AND FORM ANALYSIS (Summer Quarter only). A thorough knowledge of harmonic and formal aspects of musical composition is of great value to the music teacher who must make new musical arrangements for school groups, and is necessary as a basis for creative work in music. This course deals with the many types of modulation and altered chords, as well as the study of the harmonic and formal aspects of musical composition. Four hours credit.

171-271. ADVANCED COMPOSITION AND ORCHESTRATION (Summer Quarter only). This course offers an opportunity to advanced students to continue individual projects in composing and arranging under guidance, thus their musical worthiness may be enhanced. Four hours credit.

172-272. INSTRUMENTAL SUPERVISION (Summer Quarter only). An analysis is made of the problems found in the instrumental field such as: balanced instrumentation, the marching band, pre-band instruments, sectional rehearsals, beginning instrumental classes, competitive festivals, program building, and advertising the music program in the community. Four hours credit.

173-273. VOCAL SUPERVISION (Summer Quarter only). This course is based upon an analysis of the professional problems of vocal teachers. Its aims are to analyze the problems found in vocal supervision, to acquaint the student with vocal materials, and to develop in each student the ability to evaluate these materials. Four hours credit.

174-274. PROBLEMS OF MUSIC APPRECIATION (Summer quarter only). Appreciation defined, evaluation of the present approach, construction of an original program for elementary and secondary schools. Four hours credit.

175-275. PROBLEMS IN ORCHESTRAL AND CHORAL CONDUCTING (Summer Quarter only). The development of fluency in conducting is an essential in the successful training of musical organizations in the school program. The problems that are found in instrumental and choral conducting will be studied. An opportunity will be given to practice the art of conducting under expert supervision. Four hours credit.

176-276. SURVEY OF MUSIC IN AMERICA (Summer Quarter only). A study of the growth of music education, musical composition, and public performance in terms of educational and cultural movements to the end that a broader understanding of the musical development of America may be attained. Four hours credit.

177-277. HISTORY OF MUSICAL THEORY (Summer Quarter only). The development of the theoretical study of musical composition is traced from the Greek modes to the present day techniques. This background is helpful in the understanding of present day practices. Four hours credit.
200. RESEARCH IN MUSIC EDUCATION (Summer Quarter only). Investigation of recent research in music education and related fields; directed practice in the scholarly and scientific approach to problems of the students' interests. Required of all first quarter graduate students. Four hours credit.
222. INDIVIDUAL STUDIES IN MUSIC. The purpose of this course is to provide for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
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 work of the Professional College in the Division of the Sciences supplements that of the General College. The advanced courses are designed for prospective teachers in the fields of physical and biological sciences and mathematics.

Students planning to major in the Division of the Sciences should have $\geqslant$ strong interest in science, and should show considerable ability in science courses taken in the General College.

In view of the number of courses needed for a major in science, it is advisable to begin the major in the sophomore year.

## Major

Students who wish to major in biological and physical sciences should select the following courses:

## GROUP I <br> Biological and Physical Sciences






103. The Teaching of Science in Secondary Schools ---------18


Students who wish to major in mathematics should select the following courses:

## GROUP II <br> Mathematics

| $\begin{gathered} \text { No. } \\ 75 \mathrm{a}, \mathrm{~b}^{2} . \\ 76 . \end{gathered}$ | College Algebra ${ }^{1}$ $\qquad$ Hrs. <br> Trigonometry $\qquad$ |
| :---: | :---: |
| $78 \mathrm{a}, \mathrm{b}, \mathrm{c}^{4}$. | or |
| 91-191. | Descriptive Astronomy |
| 112-212. | Improvement of Instruction in Arithmetic .-............ 4 |
| $77 \mathrm{~b}-177 \mathrm{~b}$. | Analytic Geometry |
| 175. | Differential Calculus |
| 176. | Integral Calculus |
| 182. | Algebra for Teachers |
| 183. |  |

## Science Minor

The registrar will furnish students who wish to minor in science with a list of courses. All courses selected for minors must have this approval.

[^18]
## Graduate Study

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

## Description of Courses

## Non-Specialized Science

3a and 3 b . INTRODUCTION TO SCIENCE. The purposes of these two courses are to introduce the student to the major concepts of physical and biological science, to develop scientific attitudes and scientific thinking in respect to his life problems, and to contribute to the development of his comprehensive picture of the universe in which he lives. The courses serve as an overview of science for the student planning to major in science, and as a cultural and informational background for the student who will major in fields other than science.

Science 3a. INTRODUCTION TO PHYSICAL SCIENCE. The work of the course includes the study of important general concepts in fields of astronomy, physics, chemistry, meteorology and geology, the study of the problem solving method, representative applications of physical science to everyday life, and the nature of man's physical universe. Four hours credit.

Science 3b. INTRODUCTION TO BIOLOGICAL SCIENCE. A continuation of Science 3a. The course involves the study of important general concepts concerning the origin of life, the nature and functioning of plant and animal bodies, ecology, evolution, heredity, diet, vitamins, hormones, resistance to disease, the improvement of plants and animals through the application of genetic laws; and the nature of man's biological environment, together with a further study of the scientific method of problem solving. Four hours credit.

100-200. UNIT COURSE IN SCIENCE (Summer Quarter only). Units given different letters each summer. One hour credit.
108. SCIENCE OF THE OUT-OF-DOORS (Summer Quarter only). Five hours class; field trips to the plains and the mountains arranged. This course is designed especially for elementary and secondary school teachers. Its purpose is to acquaint them with the less complex geological aspects of the Greeley region and to enable teachers to see how topography, geological features, character of soil, rainfall and other factors determine the nature of the plant and animal life in any locality. Principles are dealt with in the classroom sessions and then the students are taken to the field to see and to become acquainted with the manner in which these principles interact to affect the geology and the plant and animal life of the region. Four hours credit.

## Professonalized Science

1a-101a. SCIENCE IN THE ELEMENTARY SCHOOL. This course is intended for students who have not had Science 3a, 3b, or their equivalent. The content is selected to answer children's questions on plants, animals, weather, astronomy, geology, magnetism, electricity, light and sound. Four hours credit.

1b-101b. THE TEACHING OF SCIENCE IN THE ELEMENTARY SCHOOL. Prerequisite, Science 3a and 3b, or their equivalents. The purposes of this course are to help prospective teachers develop the philosophy, content and method of teaching science to children. Methods of developing units in the different areas of science, directing children's activities in the solution of their problems and evaluating outcomes are discussed. An attempt is made to acquaint
students with the most recent curricula, elementary science literature and other source materials. Observation of elementary science classes is part of the program. Four hours credit.

102-202. SPECIAL PROBLEMS IN TEACHING SCIENCE IN THE ELEMENTARY GRADES. Prerequisite, $1 \mathrm{~b}-101 \mathrm{~b}$, or its equivalent. The course is intended for teachers, supervisors or other students who have special problems in the teaching of elementary science. It deals with the objectives, criteria for selection of content, methods of teaching and evaluating the science curriculum. The research that has been done in teaching elementary science is examined and discussed. Four hours credit.
103. THE TEACHING OF SCIENCE IN SECONDARY SCHOOLS (See Ed. 150 j ). Prerequisite, Ed. 116. The purpose of the course is to introduce the pre-service teacher to the duties, responsibilities, and problems of science teachers in secondary schools. The course includes the development of a philosophy for teaching science that conforms with modern progressive educational philosophy, the selection of objectives, the technique for developing an integrated science curriculum and the selection of classroom materials. The techniques which are discussed in class are demonstrated in the college secondary schools. Opportunities for observation in public schools are afforded. The class meets two hours daily and is combined with S. S. 117. Eight hours credit.

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

105-205. MATERIALS AND AIDS USEFUL IN SCIENCE TEACHING (Summer Quarter only). Prerequisite, General Biology or eight hours of physics or chemistry. This course is designed to acquaint the student with many novel, inexpensive materials and devices, and how to make and use them in the classroom. The class will study home made lantern slides; simple laboratory equipment; reading materials; sources of visual aids; and commercial exhibits, to determine how they can be used in science classes to help improve instruction. Four hours credit.

## Special Graduate Courses

200. INVESTIGATION IN THE FIELD OF TEACHING SCIENCE. This is not a course in the techniques of research, but rather is an attempt to coordinate the intellectual materials of science; acquaint the student with the meaning of "science"; stimulate the student and help him formulate an appreciative attitude toward science and the scientific method; and, help the student understand something of the nature and the characteristics of research. Four hours credit.
201. IMPROVEMENT OF SCIENCE INSTRUCTION IN THE SECONDARY SCHOOL (Summer Quarter only). Prerequisite, Ed. 116, or its equivalent. In this course, teachers are encouraged to bring their specific instructional problems for study and probable solution. Problems suggestive of the kind which the teacher may work on are: What units can I organize for the science courses which I teach? How can pupils' learning be evaluated? How can instructional materials be organized for classroom use? What are the newer practices in science teaching? The teacher is expected to use the results of his
work in the course in his own school. Several instructors are available so that individual guidance may be given. From time to time, the group will discuss the relationship of the science program to the whole secondary school curriculum, so that the teacher may critically evaluate instruction in light of the purposes and trends of secondary education. The course may be substituted for 103 Summer Quarter. Four hours credit.
202. LEARNING AND CURRICULAR STUDIES IN SCIENCE (Summer Quarter only). This course is designed primarily to teach the techniques of educational research as they apply to science education. Sufficient educational statistics for reading and interpreting educational research will be included in the course. The class will make a critical analysis of some of the better research in the field of science education. The findings will also be discussed as they apply to classroom problems. Four hours credit.
203. JUNIOR COLLEGE SURVEY COURSES IN SCIENCE (Summer Quarter only). A course designed to acquaint college teachers with the science survey movement in the United States and the educational needs that such courses are planned to meet. The problem method of instruction is emphasized and in this connection the characteristics of a good instructional problem are considered together with appropriate activities for its solution. Methods of testing also receive some attention. Four hours credit.
204. INDIVIDUAL STUDIES IN SCIENCE. The purpose of this course is to provide for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
205. THESIS (Required of all Plan A students). This course is designed to enable the Plan A student to complete his research and thesis requirements for the master's degree in the biological, the mathematical, and the physical sciences. Twelve hours credit.

## Astronomy

*91-191. DESCRIPTIVE ASTRONOMY. The primary purpose of the course is to acquaint the student with the heavens as they can be viewed on any clear night. He learns to know and identify the planets, the constellations and the principal stars to be seen in this latitude. Four hours class work and observations as desired. Four hours credit.
291. ADVANCED ASTRONOMY (Summer Quarter only). This course carries the student through the ordinary topics of the preceding course and on into more advanced work. It includes besides the ordinary topics of astronomy a study of the spectroscope, distances to the stars, classifications of the stars, the determination of magnitudes, variable stars, binaries, and the nebulae. Four hours credit.

## Biology

131-231. EVOLUTION. Prerequisites, Zoology 11, 12, and 119, or equivalent. A study of the factors and evidences that indicate that gradual de-

[^19]velopment has taken place. Considerable time will be given to a study and discussion of the theories that have been proposed to explain evolution and to those that have been given to disprove the theory. Students will be expected to do extended readings and written reports. Four hours credit.

132-232. GENETICS AND EUGENICS. A study of the fundamental principles of heredity. In addition to the Mendelian laws more recent discoveries in this field such as imperfect dominance, multiple factors, sex determination, lethal factors, and mutations are considered. The relative forces of heredity and environment are discussed. On the eugenic side the inheritance of natural abilities and capacities are noted and special attention is given to the differential birthrate, the present eugenic trend of the American people, how to eliminate the defective strains of germplasm, and suggested measures to preserve the superior strains. It is also of especial value to teachers in that it enables them to understand the basic factors underlying individual differences and the relationship of heredity and environment in the development of the individual. Four hours credit.

## Botany

21. GENERAL BOTANY. The purpose of this course is to give the student a clear idea of the lower plant groups and their relation to sanitation, water supply, crop production and disease control, together with an understanding of the evolutionary processes involved in their development. The type forms studied are representatives of the Thallophytes and Bryophytes, including the algae, bacteria, molds, yeasts, rusts and smuts of cereals, liverworts, and mosses. The course is taught by the problem method, and specimens are collected, grown and studied in the laboratory in the process of solving the problems. Four hours class: three hours laboratory. Four hours credit.
22. GENERAL BOTANY. Prerequisite, Botany 21. The purpose of the course is to give the student an appreciation of the relationship of the higher plants to industry, commerce, food supply, shelter, clothing, range and water shed management, and soil conservation. Representative types of the Pteridophytes and Spermatophytes are studied, including ferns, club mosses, conifers, and flowering plants. Evolutionary development and economic importance are emphasized. The problem method is used as in the previous course. Four hours class; three hours laboratory. Four hours credit.

25-125. FIELD BOTANY. The purpose of this course is to enable students to become acquainted with plants in their natural habitats. Emphasis is placed upon classification. An attempt is made to so familiarize students with the use of botanical manuals that they may be able to classify the flowering plants native to this and other regions. Possible evolutionary development is considered and the orders and prominent families are arranged graphically. Designed especially for teachers who wish to become acquainted with the flora of this region. Four hours credit.

121-221. PLANT PHYSIOLOGY. Prerequisites, Botany 21 and 22 or their equivalent. The course is designed to give the student a working knowledge of such physiological functions of plants as absorption, transpiration, the transpiration stream, translocation, photosynthesis, fat and protein synthesis, digestion and respiration, and to enable him to see the relation of these processes to gardening, flower culture and field crop production. Four hours class; four hours laboratory. Four hours credit.

126-226. BOTANICAL TECHNIQUE AND PLANT HISTOLOGY. Prerequisite, Botany 21 and 22 or their equivalent. The science of killing, staining, and making botanical material into permanent slides is combined with the study of plant tissues. The tissues are studied as to origin, differentiation,
and organization. Instruction in freehand methods is followed by a study of the paraffin method of preparing sections. Three hours class; five hours laboratory. Offered 1940 and alternate years. Four hours credit.

127-227. SYSTEMATIC BOTANY. Prerequisite, Botany 22 or its equivalent. This work is carried on in the laboratory and field. Its purpose is to give the student a knowledge of the characteristics and relations of the different groups of flowering plants. It enables the student to use the botanical manual with ease and to classify plants with considerable facility. Three hours class; four hours laboratory and field. Four hours credit.

128-228. PLANT ECOLOGY (Summer Quarter only). Prerequisites, eight to twelve hours of general botany. The purpose of this course is to give teachers of the biological sciences an adequate understanding of the interrelation and interaction of plant life and the factors of the environment. Plant succession including both the hydrosere and the xerosere is stressed. The different plant formations represented in the changing elevations from plains to mountain summit are also studied. Five hours class; four to six hours field work. Four hours credit.
130. GENERAL BACTERIOLOGY. The major emphasis in instruction is placed on the social and economic implications of bacteriology. The course includes a study of the effects of bacteria, yeasts and molds on the personal health of the individual, on the methods of caring for and handling of foods, on methods of sanitation and in certain industrial processes. The problem solving approach is used in the class whereby the student obtains information through the use of the laboratory and community resources, organizes the data and formulates essential meanings relative to the unit problem. Four hours classwork; three hours laboratory. Four hours credit.

## Chemistry

41. GENERAL CHEMISTRY. The purpose of this course is to make the student acquainted with the natural laws and fundamental principles underlying chemical changes. Some of the elements and compounds, such as are found in foods, clothing, shelter, air, water and commercial substances pertaining to human welfare are considered. The cause, the nature and the effects of some of the most common chemical changes are discussed. Laboratory exercises are designed to help the student to gain a deeper insight into the principles of chemistry. Three hours class; four hours of laboratory work. Four hours credit.
42. GENERAL CHEMISTRY. This course is a continuation of Chemistry 41 , and carries the student farther into the study of the elements, their compounds, and the fundamental principles involved in the useful reactions occurring among them. Three hours class, four hours laboratory. Four hours credit.
43. QUALITATIVE CHEMISTRY. Prerequisite, Chemistry 41 and 42. This course aims to make the student acquainted with the sources, preparation and properties of the most common and useful metals. Tests for metals in their most commonly occurring compounds are included. The simple reactions involved in these tests, some practice in a scheme for finding metals and nonmetals in unknown solutions, constitute the understandings and skills to be developed. Two hours class; five hours laboratory. Four hours credit.

47-147. HOUSEHOLD CHEMISTRY. This course aims to acquaint the student with the fundamental and practical chemistry needed in ordinary household procedures, such as the chemistry involved in preventing and extinguishing fire, obtaining and purifying drinking water, waste disposal, cleaning and polishing, removing stains, the chemistry of textiles and dyes. The chemistry involved in obtaining and preparing foods, the value of foods of different classes
in the diet, the sources and values of the vitamins, the secretion and functions of hormones, the chemistry of some of the most common drugs and toilet preparations are also given consideration. Three hours recitation; four hours laboratory. Four hours credit.
141. ORGANIC CHEMISTRY (Offered even years only). Prerequisite, Chemistry 41 and 42. A course designed to give the student a knowledge of the carbon compounds of the aliphatic or chain series as they are related to life and human welfare. The aliphatic hydrocarbons and their halogen, oxygen, sulfur, and phosphorous derivatives are studied. A study is made of such methods of preparation and properties as bring out fundamental principles involved in practical applications in human welfare. The laboratory work is devoted to the preparation and properties of some familiar compounds; and the qualitative analysis of some organic substances. Three hours class; four hours laboratory. Four hours credit.
142. ORGANIC CHEMISTRY. Prerequisite, Chemistry 41, 42, and 141. The objectives and the plan of this course are same as in 141 excepting this goes into the aromatic or ring series of compounds. Three hours class; four hours laboratory. Four hours credit.

143-243. SYSTEMATIC QUALITATIVE CHEMISTRY (Offered odd years only). Prerequisite, Chemistry 41, 42, and 43. The purpose of this course is to enable the student to find the metals and non-metals that may be in substances of any kind of form. Graduate students work on complex mixtures such as ores and soils. Two hours class; five hours laboratory. Four hours credit.

144-244. QUANTITATIVE ANALYSIS. Prerequisite, Chemistry 41, 42, and 43. The purpose of this course is to get the student acquainted with methods of finding quantitative relationships as they exist among the elements, and to apply these methods in practical determination of amounts of useful substances in complex mixtures. Gravimetric and volumetric methods are used. Graduate students work on complex mixtures. One hour class; six hours laboratory. Four, six or eight hours credit.

151-251. PHYSIOLOGICAL CHEMISTRY (Offered odd years following Organic Chemistry). Prerequisite, Chemistry 41 and 42 . A course designed to acquaint the student with the chemistry involved in the natural production of food products, artificial foods and drugs, vitamins and hormones, and what they have to do with metabolism, the chemistry of blood and the circulatory processes, secretions and waste products of the body, the chemistry of food preparation, digestion, absorption and assimulation are also studied. Three hours class; four hours laboratory. Four hours credit.

153-253. CHEMISTRY FOR THE CONSUMER (Summer Quarter only). Prerequisite, eight to twelve hours of general chemistry. This course is designed to enable students to relate more closely their high school chemistry work to the problems of everyday life. Such topics as foods, cosmetics, drugs, detergents and textiles are studied. Technics for testing and judging the quality and value of these household necessities are worked out in order that the individual who takes the course may be a better informed and more economical consumer. Four to six hours laboratory. Four hours credit.

## Geology and Meteorology

56-156. GENERAL GEOLOGY. The basic course in Geology. The purpose of this course is to develop an understanding of the surface of the earth together with the forces and processes that have changed and are modifying it. A broad outline of the geologic history of north central Colorado is developed through observed evidence, reading and scientific tbinking. Four hours credit.
157. HISTORICAL GEOLOGY. Prerequisite, Science 56-156. The aim of this study is the development and application of principles that result in an acceptable history of the earth with its plant and animal life from earliest times to the present. Field trips, museum materials, and readings are used as a basis for scientific reasoning. Special attention is given to the local area. Time must be reserved for excursions. Four hours credit.
158. METEOROLOGY. The basic course in the study of weather. This course aims to develop an understanding of the elements and forces together with the interaction of the forces that cause weather changes. Local observations of temperature, wind, clouds, atmosphere pressure, snow, rain, hail, storms, frost, are interpreted in terms of local factors and atmospheric conditions over broad areas. The characteristics of different types of air masses and their zones or lines of contact are stressed. Observations, maps, charts, and reading serve as a basis for scientific reasoning. Four hours credit.

159-259. GEOLOGY OF THE ROCKY MOUNTAINS (Summer Quarter only). Prerequisite, consent of the instructor. This course has as its function the development of skill in discovering and applying principles in interpreting the structure, land forms and geologic history of a local area, particularly the front range of the Colorado Rockies and adjacent foothills and plains. The study of this area through directed observation, reading and scientific thinking constitute the experiences of the students. Individual studies are encouraged. Field trips are required. Four hours credit.

## Mathematics

*75 a, b. COLLEGE ALGEBRA. This course is designed to clear up the student's understanding of the meanings of algebra and to perfect his skill in the field, as well as to extend his knowledge to subjects beyond those studied in high school. He uses his algebra as a means of practicing clear, independent thinking. He learns to look for the reasons that lie back of the processes as well as to master the skills involved in them. Four hours credit for each course.
*76. TRIGONOMETRY. The aim of this course is to cover the ordinary topics of plane trigonometry. It presents a clear understanding of the trigonometric functions of angles and their relationships and uses. Careful attention is given to the methods and limitations of computation with approximate numbers. Meanings and understandings receive first consideration. Four hours credit.

77 a . SOLID GEOMETRY. The aim here is to extend the methods of plane geometry to the field of three dimensions. It helps to fix in the mind of the student the values and methods of the kind of logical thinking required in geometry, shows the many applications for solid geometry to life problems, and lays the foundations for more advanced work in the field of three dimensions. Four hours credit.
*77b-177b. ANALYTIC GEOMETRY. Prerequisite, Math. 76 or 76a. The aim of the course is to develop analytic methods of attack. The course deals with geometrical problems from the analytic viewpoint. It shows the value and the power of the analytic method as compared with the regular geometrical method. It is especially valuable for prospective teachers of both algebra and geometry. Four hours credit.
*78 a, b, c. GENERAL MATHEMATICS. These three courses present as a unit, rather, than as separate subjects, materials from algebra, trigonometry and the elements of analytics and the calculus. Like the other courses in this field they emphasize meanings and understandings rather than mere mechanical manipulations. Four hours credit for each course.

[^20]80-180. MATHEMATICAL INSTRUMENTS AND SURVEYING. The aim of this course is to teach the use of the slide rule, the sextant, the transit, the level. The course takes up a study of the instruments used and the solution of problems obtained from field work. It shows how such work can be used to enrich mathematics on the secondary level. Four hours credit.
*175. DIFFERENTIAL CALCULUS. Prerequisites. Math. 75 and 76, or 78 and 81 . The purpose of this course is to teach the fundamental concept of differentiation and its place in the solution of problems in mathematics and in related fields. The course is taught from the viewpoint of meanings and understandings rather than from that of mere mechanical manipulations. Four hours credit.
*176. INTEGRAL CALCULUS. Prerequisite, Math. 75 and 76, or 78, or 81 and 175. The aim of this course is to carry the student into the field of integration as it is related to differentiation and to the solutions of problems both practical and theoretical. Again, the student is taught meanings rather than processes. Four hours credit.
*177-277. THEORY OF EQUATIONS. Prerequisites, Math. 75 and 76 , or 78 and 81. The aim here is to deal with the study of functions and graphs, complex, number, the solutions of higher degree equations, determinants, the solutions of the cubic and quartic equations, and the symmetric functions. Four hours credit.

181-281. THE MATHEMATICS OF THE JUNIOR HIGH SCHOOL. (See Ed. 150 j ). This course is designed to help prospective teachers to solve in the best possible way the leading problems that face every teacher of mathematics on the junior high school level. It considers improvement of the curriculum, methods of instruction, evaluating the outcomes, selecting objectives, and ways of making the subjects presented more understandable and interesting. Four hours credit.
*182. ALGEBRA FOR TEACHERS (See Ed. 150j). This course is designed to give the prospective algebra teacher a real understanding of the nature and use of algebra. It emphasizes the reasons for the processes of algebra rather than mere manipulations of symbols. It sets forth the ways in which algebra can be made understandable, interesting, and useful to students in the secondary schools. Four hours credit.
*183. GEOMETRY FOR TEACHERS. A course in plane geometry, reaching into the field of college geometry, well in advance of the material the student proposes to teach; the content modified by the fact that the student is to teach high school mathematics. The course is designed to refresh the student's mind with regard to elementary principles and processes, and to give him a much broader and deeper conception of those principles and a much more facile mastery of those processes. Four houts credit.
*184-284. HISTORY OF MATHEMATICS. The aim of this course is to give the student an appreciation of the development of mathematics since its earliest beginnings and its place in the world today. It presents many of the interesting incidents in the history of the subject and makes these available for use in teaching elementary branches in the field. Four hours credit.

187-287. INTEGRATED MATHEMATICS. Prerequisites, Math. 76. 78, 81, 175, or 176. The course is intended to give the student a comprehensive and unified view of the whole field of college mathematics. It redevelops the principles of the various subjects and shows their real meanings and interrelationships. It is especially valuable for graudate students who are working under Plan B. Four hours credit.

[^21]285 a, b. ADVANCED CALCULUS. Prerequisites, Math. 75, 76, or $78,81,175,176$. The aim of this course is to present those topics of differential and integral calculus which are not covered in Math. 175 and 176. It carries the student into a study of infinite series, construction of tables, indeterminate expressions, partial differentiation, the use of tables of integration, and numerous applications of both differentiation and integration. Four hours credit, each.
286. DIFFERENTIAL EQUATIONS. Prerequisites, Math. 75, 76, 78, 81, 175, 176. The purpose of the course is to give the student an introduction to the extensive field of differential equations and their applications to the solutions of problems in mathematics and in related fields. Four hours credit.

## Physics

61. GENERAL PHYSICS. This course is designed to teach the fundamental principles and generalizations of mechanics and heat. These principles and generalizations are taught from the standpoints of both theory and practice. Stress is placed on the solution of everyday problems. Those problems dealing with the mechanics of bodies, their motions and properties, are solved. The subject of heat is also approached from the point of view of the application of theoretical considerations in order to acquaint the students with both aspects of the subject. Three hours lecture, four hours laboratory per week. Four hours credit.
62. GENERAL PHYSICS. A continuation of course 61. In this second quarter those principles and generalizations of heat and electricity are taught with the view to the theory involved and its application to the solution of everyday problems. Heat is taken up insofar as it is the result of electricity and from its production by the various forms of energy. Electricity is approached from the static through current electricity. Numerous problems are included to illustrate and to stress the important principles and generalizations. Three hours lecture, four hours laboratory per week. Four hours credit.
63. GENERAL PHYSICS. A continuation of courses 61 and 62. This quarter's work is in the fields of sound, radiant energy and the modern concepts in physics. The material covered centers itself about the important principles and generalizations which makes these subjects meaningful. Numerous demonstrations show the principles involved. Many problems are given to show the application of the principles to real situations. Three hours lecture, four bours laboratory per week. Four hours credit.

64a-164a. MECHANICS AND HEAT. Prerequisite, Physics 61, 62, and 63. The first quarter of the second year of college physics deals with the more specialized applications of the principles and generalizations of mechanics and heat. A good knowledge of mathematics is of utmost importance. The specialized principles are approached from the standpoint of problem solving and application. Four hours lecture, and three hours laboratory per week. Four hours credit.

64b-164b. GENERAL ELECTRICITY. Prerequisites, Physics 61, 62, and 63. Electricity is one of the important branches of physics which is having an increasing breadth of application. This course is specialized and those principles and generalizations are stressed which will emphasize these. An attempt is made to give the student both theoretical and practical training in static electricity, magnetism, direct current electricity and alternating currents. Four hours lecture, three hours laboratory per week. Four hours credit.

64c-164c. SOUND AND LIGHT. Prerequisites, Physics 61, 62 and 63. This course deals with the more technical aspects of sound and acoustics as well as those of light. An attempt is made to teach the most important general-
izations and principles of these subjects and their applications. A thorough study of sound enables one to specialize in sound and acoustics or to delve deeply into a study of physical optics. Ample opportunity is afforded the student to do individual work and to become familiar with the experimental technique in these subjects. Four hours lecture and three hours laboratory per week. Four hours credit.

65-165. HOUSEHOLD PHYSICS. A course in physics which is designed to teach those principles and generalizations in physics which one will encounter about the home. This course is for those students whose major interest is in home economics. It is as nearly a non-technical course in physics as is possible. Home appliances and their principles of operation are studied as well as the systems about the home which depend upon physical principles for their operation. Four hours lecture, three hours laboratory per week. Four hours credit.

66-166. RADIO TRANSMISSION AND RECEPTION. Prerequisite, Physics 61, 62, and 63. The purposes of this course are to teach the fundamental principles of the radio as we know them today and to give the student a practical training in the application of these principles. The use of alternating currents and the properties of these circuits is studied and related to the radio. Audio amplification systems, broadcasting principles and practices are taken up in as much detail as is possible. The course closes with study of television and telephoto systems. Four hours lecture, three hours laboratory per week. Four hours credit.

70-170. PHYSICS OF THE AUTOMOBILE AND OF THE AIRPLANE. The important principles upon which these two modes of transportation depend are thoroughly discussed and practical application is made to the machine in question. The automobile is studied from the standpoint of construction and principles of operation. A critical analysis of all of the machines is made for sturdiness and safety. The airplane is studied from the point of view of aerodynamics. The theory of flight, aircraft types, aircraft structures, motor structures, motor types and the principles of the instruments and their use are included in the latter part of the course. Four hours lecture, two hours laboratory. Four hours credit.

167-267. ADVANCED PHOTOGRAPHY. Prerequisites, Chemistry 41, 42, Physics 63. Photography has become one of our most valuable tools. This course concerns itself with a study of the fundamental principles involved in photography from the standpoint of both physics and chemistry. While an extended knowledge of physics and chemistry is not essential, it will be found very helpful. A study is made of cameras and their optical systems, emulsions, their characteristics and manufacture, color photography, printing and enlarging, copying and lantern slide work. Three hours lecture, four hours laboratory per week. Four hours credit.

168-268. MODERN PHYSICS. Prerequisites, Physics 61, 62 and 63. The newer principles in the whole field of physics are developed (in this course) and the reasons for the modern views of these principles are given. The subject matter is developed in the order in which it has evolved. The theories of light, origin of the spectrum, older atomic models, newer atomic models, relativity, $x$-rays, spectra and crystal structure and cosmics rays are among the many subjects covered during the course. Four hours lecture. Fout hours credit.

169-269. X-RAYS, COSMIC RAYS AND ULTRA VIOLET RADIATIONS. Prerequisite, Physics $61,62,63,64 c-164 \mathrm{c}$, and Chemistry 41 and 42. This is primarily a graduate course. Students intending to take this course should have a knowledge of the calculus and a good training in physics. X-rays are studied with a view to the important principles involved and their relation to
the modern use of these rays. The cosmic rays are studied from the beginnings of their discovery up to the present. The apparatus used in the detection of cosmic rays, the phenomena associated with them and the present theories of their origin are discussed. In the ultra violet region studies are made in the same way as with x-rays. Special emphasis is placed upon the biological effects of the ultra violet as well as the theories of production and use. Four hours lecture, three hours laboratory per week. Four hours credit.

## Zoology

11. GENERAL ZOOLOGY. A beginning course in zoology in which the principles of animal biology will be emphasized. The problem method of approach is used. The problems of this course will be formulated from the following topics. The nature and organization of protoplasm, cell division, the processes of maturation and fertilization and their relation to heredity; the production of a complex animal from a single cell; the principles underlying evolution, the origin of adaptations, and the transmission of characteristics from parent to offspring. In the laboratory students will study type materials that illustrate the subjects discussed in class. Four hours credit.
12. GENERAL ZOOLOGY. Prerequisite, Science 11. A continuation of Science 11. The emphasis in this course will be placed on the anatomy and physiology of the vertebrate animals from a comparative evolutionary point of view. The systems of organs will furnish the problems for study. In the laboratory the students will study the fish, the frog, and the foetal pig. Four hours credit.

15-115. ECONOMIC ZOOLOGY. Prerequisites, Science 11 and 12, or equivalent. The purpose of this course is to enable the student to appreciate the value of animals to man's progress in civilization and the need for conservation of wild life. Problems will be formulated from the following topics: The interrelation of plants and animals, how animals live, the relation of animals to crop production, how animals are related to human diseases, the importance of the balance in nature, laws, regulations, and organizations for the promotion of conservation. Four hours credit.

16-116. FIELD ZOOLOGY. Prerequisites, Science 11 and 12 , or equivalent. A course designed to acquaint the student with the animals in their natural habitat and to learn to identify them. The student will be encouraged in collecting animals and in the means of identification. Additional problems will be found in the factors that form a suitable habitat and those that limit production. Four hours ctedit.
113. BIRD STUDY. A course planned to acquaint the student with the abundant bird life of the region and to develop an appreciation of their value to man. The subject matter will be selected from the structural adaptations that fit birds for their environment and show their relation to other vertebrates; food and feeding habits, habitats; life histories; seasonal distribution; migrational activities; the importance of protection and the economic importance of birds to man. Considerable time will be spent in the field in identifying the more common species. Four hours credit.
114. ELEMENTARY ENTOMOLOGY. A study of the more common insects of the community intended to enable the student to understand and appreciate insect life and its economic importance. Methods of collecting, mounting, and preparing insect material for study will be given attention. In this course students will have an opportunity to become familiar with the insect inhabitants of the region and to prepare a reference collection of the more common species. Field study will provide an opportunity for the student to become familiar with the habitat and life histories of this important group of animals. Four hours credit.
117. HUMAN PHYSIOLOGY. Prerequisites, Science 11 and 12, or equivalent. The purpose of this course is to enable the student to interpret the normal functions of the human body and to be able to understand behavior as the result of physiological function. A study of the functions of the major systems of organs of the human body will serve as the basis for interpretations. As much as is possible the student will be encouraged to analyze the functions of his own body and to make practical applications therefrom. In the laboratory experiments will be formulated to demonstrate human functions when possible. Four hours credit.

118-218. ANIMAL HISTOLOGY AND MICROSCOPIC TECHNIQUE. Prerequisite, Science 11 and 12, or equivalent. The purpose of this course is to give the student a knowledge of how the body of the complex animal is composed and an understanding of the differentiation that has taken place in the cells that compose the tissues. Opportunity will be given to prepare tissues for microscope study and, if the student desires, he may prepare material for use in the teaching of science in the high school. Four hours credit.

119-219. VERTEBRATE EMBRYOLOGY. Prerequisites, Science 11 and 12, or equivalent. This course is designed to give the student an understanding of the development of the human body from a single cell and an appreciation of the changes attendant to parenthood. The study will begin with the production of germ cells and followed by the study of maturation, fertilization, cleavage and the formation of the germ layers. In the laboratory the student will study material selected to show the various steps in the process. Fout hours credit.

120-220. VERTEBRATE ORGANOGENY. Prerequisite, Science 11, 12 and 120-220, or equivalent. A continuation of Vertebrate Embryology with the purpose of enabling the student to understand how the organs of the body develop from the germ layers. In the laboratory the student will be directed to see the origin of the principal organs of the body as they begin their development in the chick and the pig. Four hours credit.
211. COMPARATIVE MORPHOLOGY OF THE VERTEBRATES. Prerequisites, Science 11, 12 and eight hours of embryology, or equivalent. The purpose of this course is to provide a more complete understanding of vertebrate anatomy than can be obtained from elementary courses. The student is encouraged to make a detailed study of the systems of organs of the major groups of the vertebrates from 2 comparative viewpoint. In the laboratory the student will be supplied with specimens of the dog-fish, shark, necturus, and the cat on which careful dissections and comparsions may be made. Four hours credit.

## DIVISION OF THE SOCIAL STUDIES

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

Students wishing to major in this division in addition to meeting the core requirements on page 26 and the standards provided for entrance into the Professional College may be required to pass a qualifying examination in selected phases of the field. Such examination will not be required of students whose record in the General College shows seriousness of purpose and evident capacity to do professional work.

## Major

This will include sufficient specific course work to cover twelve quarter hours in each of the social studies usually found in public high schools that carry a full year of secondary school credit and eight quarter-hours in such studies that usually are offered for half a year in the secondary schools. All such courses should be selected in closely related sequences. Suggested courses that will meet these requirements are :

| No. |  |
| :---: | :---: |
| 50a, b, c-150a, b, c. | Europan History |
| 117. | Teaching of the Social Studies |
| 20a, b-120a, b. | Principles of Economics |
| 44a, b-144a, b. | Regional Geography |
| 170. | Government of the United States.- |
| 171. | State Government |
| 82-182. | Introduction to Sociology |
| 191. | Human Personality |

In addition, each student is expected to plan his program to include two teaching minors of twenty-four hours outside the Social Studies Division.

Men are advised to elect at least one course in School Administration.

## Minor

The registrar will furnish students who wish to minor in Social Studies with a list of courses. All courses selected for minors must have his approval.

## Graduate Study

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

# Description of Courses 

## General

60a, b, c. MAN IN HIS SOCIAL WORLD. One objective of this course is to give students workable understandings of the diversity and the complexity of human relationships in present-day social life and another is to develop in students attitudes of interest, concern, understanding, and openmindedness toward the problems and the issues in modern social living. Emphasis is placed upon the important problems and issues that have a bearing upon such major social institutions as family, industry, and government. Required of all sophomores. Four hours credit each quarter.

## Professional

113-213. THE IMPROVEMENT OF INSTRUCTION IN THE SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. The objective of this course is to acquaint the student with the aims, selection, and organization of content, and the practical methods of teaching unified and correlated types of programs. Direct attention is given to the problems of discovering and increasing or creating children's interests in the social studies; of exploring and utilizing their abilities in study; and of providing opportunities for them to use what they learn. Four hours credit. OF THE SOCIAL STUDIES IN ELEMENTARY SCHOOLS. (Summer, 1940). This is an advanced course in the teaching and the supervision of the social studies in the elementary school. Its purpose is to acquaint the student with the most recently developed thought and practices relative to the aims and the content of the social studies program in the public schools. Four hours credit.
117. THE TEACHING OF THE SOCIAL STUDIES IN SECONDARY SCHOOLS (See Ed. 150k). This course is designed to introduce students to the problems of the social studies teacher in secondary schools and to develop techniques for use in meeting these problems. The course combines classroom work with observation of students in the secondary school and deals with the relation of social studies objectives to the objectives of education as well as the selection, organization and use of materials. Four hours credit.

## 118-218. CURRENT MOVEMENTS TO IMPROVE INSTRUCTION

 IN THE SOCIAL STUDIES IN THE SECONDARY SCHOOL. (Summer Quarter, 1940). Teachers will be given an opportunity to evaluate recent attempts to improve instruction in the social studies in the public high schools. There will be a consideration of trends in social studies teaching as well as a study of recent developments in various types of schools. Teachers may secure individual help on problems connected with social studies teaching in their own schools. Four hours ctedit.222. INDIVIDUAL STUDIES. The purpose of this course is to provide for independent study, particularly in special phases of a field of specialization not provided for in formal class courses. Qualified students who can outline a definite problem to be undertaken are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well organized and a well written paper similar in form and style to designated courses for Plan B for the master's degree must be filed before credit is given, one with the instructor who directs the individual study and one with the director of the Graduate School. Two or four hours credit for one problem; a maximum of eight hours credit toward the master's degree is permitted.
223. THESIS. Each graduate student working for a master's degree under Plan $A$ registers for this thesis course at least three months before the final quarter of course work. Twelve hours credit.

## ECONOMICS

*20a, b-120a, b. PRINCIPLES OF ECONOMICS. The aim of this general introductory course is to survey the fundamental economic principles underlying the organization of modern society, with applications to the outstanding economic problems of the present day. The first quarter (a) will deal with such subjects as rent, interest, wages, profits, value, prices, and money and banking. The second quarter (b) will take up such subjects as taxation, public finance, monopoly, foreign trade, labor problems, and proposed changes in the economic system. Four hours credit each quarter.

125-225. ECONOMIC PLANNING. The aim of this course is to treat in a practical, objective manner the recent applications of governmental organization to economic activities in both the United States and other countries. Some of the topics treated will be control of the trade cycles, remedies for unemployment, prevention of floods and soil erosion, effective use of water and other natural resources, and the development of new industries. Four hours credit.

[^22]125a-225a. BUSINESS ANALYSIS OF AMERICAN INDUSTRIES. A survey course examining the structure and economic characteristics of representative American industries. The background of each industry is studied to indicate problems imposed by competition, advancing technology, changing markets, governmental control, and financial and cyclical developments. Attention is given to the role assumed by business administrators. Reference is made to contemporary personalities and companies to illustrate types of management influence and business policy.

130-230. CURRENT ECONOMIC PROBLEMS. The purpose of this course is to examine the foremost economic problems of the day. The course deals with such current subjects as governmental income and expenditures, production and price control, interest rates and their effects on insurance and other investments, monopoly, foreign trade, and unemployment. Four hours credit.

132-232. LABOR PROBLEMS. The purpose of this course is to show how labor problems react on our entire economy. The problems resulting from modern industrial activity, such as child labor, industrial accidents, and unemployment, will be studied. Among other elements to be considered are wage theories, A. F. of L. and C. I. O. Four hours credit.

133-233. MARKETING. The aim of this course is to analyze the functions and problems involved in getting commodities from the producer to the consumer. Among the topics considered are transportation, department stores, mail-order houses, chain stores, super-markets, the marketing of raw materials, storage, market finance, brands, prices, cooperatives, and governmental laws affecting marketing. Four hours credit.

134-234. MONEY AND BANKING. This course is an introductory survey of our monetary and banking system. The different kinds of money, managed currencies, governmental banking, the Federal Deposit Insurance Corporation, service charges (as the charge for checking accounts), recent banking legislation, and proposed monetary and banking reforms are among the topics to be discussed. The Federal Reserve System will be studied with particular emphasis upon credit control. Four hours credit.

135-235. SOCIAL AND ECONOMIC HISTORY OF THE UNITED STATES. The purposes of this course are not only to depict the industrial and financial development of the United States, but also to show the way in which social life as a whole is influenced by the economic motive. Among the topics treated are commerce, tariff, agriculture, slavery, finances and banking, labor, and the development of large corporations and monopolies. Four hours credit.

136-236. PERSONAL SAVINGS AND INVESTMENTS. The object of this course is to study the everyday problems and interests of the investor. Home ownership, savings and savings institutions, life insurance, individual credit and its legitimate uses, real estate mortgages, and other financial problems are some of the topcis to be considered. Particular emphasis is laid upon investments in stocks and bonds. Four hours credit.

137-237. PUBLIC FINANCE. The intent of this course is to study the expenditures, the revenues, and the financial administration of governments. Specific topics discussed include public ownership and control of industry (as the post office, TVA, water supply, and electric light and power industry), fees, licenses, the property tax, the income tax, the sales tax, govermental borrowing and indebtedness, and the budget. Four hours credit.

138-238. HISTORY OF ECONOMIC THOUGHT. The purpose of this course is to give an account of the development of economic ideas. Ancient and medieval economic thought, the Physiocrats, the "Classical School", the "American School", and the early Socialists are some of the topics to be studied. Four hours credit.
*139-239. CONSUMER ECONOMICS. This course aims to investigate the economic problems of the consumer. Such specific consumer problems as the standard of living, the distribution of income, advertising, aggressive salesmanship, agencies offering assistance to consumers, installment buying, the effects of taxes, the costs of borrowing, from the point of view of the consumer. Four
hours credit. hours credit.

## GEOGRAPHY

*40-140. GEOGRAPHIC PATTERNS OF THE WORLD. The aim of this course is the development of geographic principles and their application to an understanding of a broad view of the world as the home of man. This includes a determination of relationships between the physiographic, mineral, climatic, vegetative, and cultural patterns of the world; the division of the world into climatic types; and an analysis of the effects of peoples of different cultures upon each climatic region. Four hours credit.
41. WORLD GEOGRAPHY. This course acquaints the student in his first year with many different parts of the world on which the instructor may give him first-hand information. It encourages in the student an interest in traveling and seeing the world first hand. To such students as desire to go abroad or visit our continent, the instructor gladly furnishes advice, steamship guides, etc. Four hours credit.
4.2-142. HUMAN GEOGRAPHY. A study of the various primary races of mankind, the sub-races of these primary races, and the maxious primary races Problems arising out of race , differences and their geographical distribution will be discussed. "Pseudo races"' based on language classification and their effect upon international politics will be taken up. Four hours credit.

43-143. GEOGRAPHY OF CONTEMPORARY EUROPE. The physiography, geology, climatology, and shape of the continent will be the basis of discussion. Contemporary Europe is the result of the blending of geographic and historic factors. The background of history necessary to understand present national units will be treated. In so far as it is possible, the course will include incidents that come up from day to day. Four hours credit.

44a-144a. REGIONAL GEOGRAPHY OF THE NEW WORLD. A study of the geography of the Western Hemisphere with emphasis on South America and Mexico. The purpose of this course is to develop understandings of the relationships between the natural environment, cultural landscape, and peoples of the area together with the ability to utilize these understandings in problem solving. Current problems of the day are emphasized. The regionalplanning point of view is encouraged. Four hours credit.

44b-144b. REGIONAL GEOGRAPHY OF THE OLD WORLD. A study of the geography of the Eastern Hemisphere with emphasis on selected parts of Europe, China, Japan, and India. This course is designed to develop understandings of the relationships between the natural environment, cultural landscape and peoples of these continents together with the ability to utilize the understandings in problem solving. Current problems of the day are emphasized. The regional planning point of view is encouraged. Four hours credit.

[^23][^24]of the rivers in early American exploration, (e) Appalachian Barrier, (f) environment beyond the Appalachians, (g) the geography of the Louisiana Purchase, (h) the Geography of the War of 1812, (i) the Westward spread of population, (j) growth of the United States to a Continental and World Power. Four houts credit.

103-203. GEOGRAPHY OF THE TROPICS. Topics considered in this course will be: (a) climate of the tropcis, (b) types of vegetation, (c) animal life, (d) people, (e) field crop resources, (f) cultivated trees, (g) health and sanitation, (h) acclimatization, (i) types of government control, ( j ) source of mechanical power, and ( k ) trade with the temperate zones. Four hours credit.

104-204. GEOGRAPHY OF FOODS. Topics considered are: (a) foods of savage peoples, (b) foods of the American Indian, (c) foods America gave the world, (d) the sources of our grain foods and their spread from the countries of their origin, (e) origin of cultivated plants, (f) food prejudices and their role in foods, (g) religious taboos, and (h) methods of preservation of foods. Four hours credit.

105a-205a. GEOGRAPHY OF CONTEMPORARY SOUTH AMERICA. The topics considered are: (a) the Andes, (b) the Brazilian Highlands, (c) the Amazon, (d) Orinoco, (e) La Plata, (f) climatic factors in South America, (g) vegetation zones of South America, (h) the Indians of South America, (i) the modern nationality problems of South America, ( j ) the effect of the European War on South America, (k) trade and cultural relations between United States and South America. Four hours credit.

106-206. CONSERVATION OF NATURAL RESOURCES. This course is designed to develop understandings of the problems, techniques, and policies involved in the conservation and intelligent use of our natural resources especially in terms of the general welfare. The resources studied include soil, timber, minerals, water, and scenic features. Reading materials, field trips, pictures, and maps provide data for reasoning and discussion. Four hours credit.

107-207. SOCIAL GEOGRAPHY OF THE SOUTH. The content of this course stresses first the climate, geology, and resultant economic resources as well as economic limitations of the South. On these is built the economic and social patterns that have evolved. The negro problem will be discussed. The evolution of the South and southern life through new crops and through the introduction of manufacturing based on the power resources of the region will be taken up in detail. Two hours credit.

108-208. GEOGRAPHY OF THE BRITISH ISLES. The content of this course stresses the climate, physiography, geologic development, plant and animal life; racial geography; industries past and present; and historical and military results of England's island situation. The effect of the Industrial Revolution upon the people of the British Isles will be stressed. The economic results of England's location in the center of the land hemisphere of the globe will be considered. Four hours credit.

109-209. GEOGRAPHY OF CANADA. This course first treats the physiographic and geologic backgrounds of Canadian geography; then the plant and animal geography are considered. The Indians of Canada are discussed briefly and then the various white elements of the population-French Canadians, American loyalists, Scotch, German, and the East European elements. Canada's oriental population on the Pacific Coast is discussed. The agricultural, mining, and other industries will be considered in detail. Four hours credit.

110-210. GEOGRAPHY OF THE AMERICAN INDIAN. The various Indian groupings from an environmental standpoint are considered in both North
and South America: (a) the totem pole Indians; (b) birch bark culture; (c) Mound Builders; (d) broad leaf forest culture; (e) Cliff Dweller-Pueblo culture and the other cultures that reflect the effect of his immediate environment upon the past culture of the Indian are treated in some considerable detail. Four hours credit.

111-211. THE GEOGRAPHY OF AUSTRALIA AND NEW ZEALAND. The oceanic position and climatic zones of both of these islands are treated at the beginning of the course. On this background is built the plant and animal life and the life of the aboriginal inhabitants. The social and economic reaction of the European settlers to their new surroundings will be stressed. Two hours credit.

## 115-215. GEOGRAPHY FOR THE ELEMENTARY AND JUNIOR

 HIGH SCHOOLS (Summer Quarter only). This course will include the selection, organization, adaptation, and techniques of presenting geography materials in the grades where the subject is most frequently taught. The work will be highly practical and will be based upon experience under good public school conditions. Teachers will be given an opportunity to study material that they can use directly in their own work. Four hours credit.> 141-241. WORLD GEOGRAPHY. An advanced consideration of the following topics: Newfoundland, Canada, Alaska, Mexico, West Indies, South America, Western Europe, Danubian Lands, Egypt, India, Dutch East Indies, Philippines, China and Japan, South Seas and Australia. These various places will be considered from the standpoint of variation in habits and customs from region to region. Extensive library readings. Four houts credit.

142-242. RACIAL GEOGRAPHY. This course attempts to study the great races of mankind and the sub-races and to make them clear to the student by means of living examples and pictures. The chief aim of this course is to turn out students to whom the racial types will have certain basic mental characteristics and aptitudes which the investigator must take into consideration. Four hours credit.

144d-244d. GEOGRAPHY OF THE PRESENT WORLD WAR (Summer Quarter only). This course is organized and adapted to the needs of the present. It will include a study of the geography of the great nations now at war; those that are most likely to be drawn into the war in the near future, the problems of supplies, natural resources, raw materials, trade areas, minorities, and other items that will affect the war immediately and must be considered in the reconstruction after the war. Four hours credit.

145-245. REGIONAL GEOGRAPHY OF THE UNITED STATES. This is an intensive study of the geographic regions of the United States and their places in the national socio-economic patterns. The course has as its function the development of the relationships between the natural environment, cultural landscape, and peoples, and the application of these understandings to the discovery and solution of the social-economic-land use problems. State and regional planning points of view are encouraged. Four hours credit.

147-247. GEOGRAPHY OF COLORADO. The purpose of this course is to develop understandings of the relationships between the natural environment, cultural landscape, and peoples of the state of Colorado and to apply these understandings in evaluating the limitations and possibilities of the physical, cultural, and human resources in contributing to the general welfare of the people. The state and regional planning points of view are emphasized. Four hours credit.

## History

*50a, b, c-150a, b, c. AMERICAN HISTORY. The aim of this course is to teach the most important social, economic, and political events in American history, and to indicate some of the unsolved problems that face the United States at present. The division by quarters is (a) 1492-1789, (b) 1789-1865, (c) 1865-1940. It is desirable that this course be taken in consecutive quarters throughout the year, but each quarter may be taken separately. Text, lectures, discussions, and term paper. Four hours credit each quarter.
*54a, b, c-154a, b, c. MODERN EUROPEAN HISTORY. The aim of this course is to teach the most important facts concerning the social, political, economic, educational, and religious institutions in Europe, and to indicate possible ways for better cooperation between Europe and America. The division by quarters is (a) Early Modern Europe, 1500-1815; (b) Modern Europe, 1815-1914; and (c) Recent European History, 1914-1940. It is desirable that this course be taken consecutively throughout the year, but each quarter may be taken separately. Text, lectures, discussions, and term paper. Four hours credit each quarter.

150c-250c. RECENT AMERICAN HISTORY. The aim of this course is to meet the needs of senior and graduate students who wish to make a careful study of American problems since the Civil War. Extensive use will be made of library materials. Lectures, discussions, and term paper. Four hours credit.

151-251. ANCIENT SOCIAL HISTORY. A survey of the development of society among ancient peoples. Special attention given to houses, temples, religious ideas, clothing, social customs, slavery, the position of women, general social life of the early Roman Empire, and some of the causes of national decay. This course deals especially with concrete materials that high school instructors find most difficult to teach in the courses in ancient and world history. Fout hours credit.
*152-252. WESTERN AMERICAN HISTORY. The aim of this course is to teach the conditions that have led to westward migration, the hardships connected with frontier life, and the benefits that our nation has derived as a result of the westward movement. Text, lectures, discussions, and term paper. Four hours credit.
*152a-252a. HISTORY OF COLORADO AND THE TRANSMISSISSIPPI WEST. The aim of this course is to teach the different types of frontiers and the manner in which each has reacted upon the federal government. Extensive use will be made of library materials. Lectures, discussions, and term paper. Four hours credit.

153-253. ENGLISH HISTORY. This course is designed especially to meet the needs of majors in English and provide a background for general cultural purposes. The personal element will be emphasized. Enough political history will be included to give an adequate setting to those great reforms in government and custom and the crises in empire that have been the direct or indirect inspiration of the great permanent blocks of English literature. Text book, library readings, bibliographies, and reports. Four hours credit.

155-255. CONTEMPORARY WORLD HISTORY-ROOTS OF THE PRESENT WORLD WAR (Summer Quarter only). An advanced course in contemprorary affairs. Emphasis will be placed upon those events, national and international, that have been commanding the attention of the world at the time the course is given. Each topic will be studied in terms of the experience of nations in recent years. Four houts credit.

[^25]*158. SOCIAL AND INDUSTRIAL HISTORY OF THE UNITED STATES. The aim of this course is to teach the development of our industrial system from the home-made products of the colonial period to the present-day factory system, and the effects of each industrial change upon the standard of living. The course covers the period from 1492 to 1940. Text, lectures, discussions, and term paper. Four hours credit.

159-259. THE REFORMATION. The aim of this course is to give the student an accurate picture of the social, economic, and political causes of one of the most illuminating and significant periods in modern history. The origins of most of the controversial questions still acute among the modern churches are explained. Some attention is given to the Renaissance movement. Text, lectures, discussions, and term reports. Four hours credit.

160-260. MEDIEVAL LIFE AND INSTITUTIONS. This course attempts to explain that period in man's development that has been regarded as static and dark, but which in reality was an age of progress and light. Particular emphasis will be placed on such institutions as feudalism, manorialism, monasticism, universities, and cities. Extensive use will be made of source materials. A term report based on sources is required. Four hours credit.

161-261. THE REVOLUTIONARY ERA IN EUROPE. The RevoIutionary epoch in European history has affected every country in the Western World. The causes and the results of the most important movements in this revolutionary epoch. The aim of this course will be to show the effects of these movements upon political theory and practice within the democratic states of the world. Reading in the sources as well as a text and term report will be required. Four hours credit.

162-262. COLONIAL EMPIRES OF THE TWENTIETH CENTURY. This course will present the story of the rise of the great colonial empires of our day. Particular attention will be given to the problems of imperial administration, to race equality, and to the aspirations of non-colonial powers. Lectures, discussions, and extensive readings in source materials. Four hours credit.

163-263. THE AMERICAN REVOLUTION. This course is designed to give experience in the independent development of the history of a limited period. Intensive use of original and secondary materials. Topics developed: re-lationship-governmental, social, economic, and political-between the American colonies and the British government; development of self-government; judicial procedure and control of colonial legislation; commercial legislation affecting the colonies; the issue of representation and taxation; repressive measures; organization of colonial opposition; outbreak of hostilities; loyalists and their treatment; independence. Library readings, lectures, discussions, extensive use of notes. Four hours credit.

164-264. SLAVERY, SECESSION, CIVIL WAR, AND RECONSTRUCTION. An intensive library course covering the period from 18501870 with major emphasis on the period before 1861. Much practice will be given in the detailed use of source materials. Techniques of good graduate study will be inculcated. Four hours Credit.

165-265. HISTORY OF THE INDUSTRIAL REVOLUTION. The historic beginnings of machine-industry and the factory are studied in the light of the great changes that were taking place in the eighteenth century in agriculture, commerce, and transportation. Special attention is given to the immediate political and social consequences of these changes. Four hours credit.

[^26]*167-267. LATIN-AMERICAN HISTORY. A course designed to furnish a background for understanding the political, social, economic, and to some extent the cultural life of the republics to the south of the United States. Attention will be given to the Monroe Doctrine, Pan-Americanism, and Hispanism. Four hours credit.

168-268. HISTORY OF THE FAR EAST. The aim of this course is to enable students to understand the problems of the Far East. The economic, social, educational, and political reforms in China and Japan will be emphasized, special attention being given to how these changes have affected other nations. Extensive use will be made of library materials, lectures, discussions. reports, and term papers. Four hours credit.
266. THE LITERATURE OF AMERICAN HISTORY. A survey of the materials available for the study of American history; the chief collections of source materials; the more important general accounts; biography; bibliographical aids; special local histories; textbooks and their authors; and the selection of a good working library. Designed to give students an extensive working knowledge of the available literature of the field. Two hours credit.

## Political Science

*70-170. GOVERNMENT OF THE UNITED STATES. The object of this course is to give the students a working knowledge of our national government. The emphasis will be upon how the national government operates, the political machinery by which it is controlled, and the way the average citizen may participate most effectively in his government. Attention will be given to materials and techniques of study. Textbook, library readings, reports, discussions, current politics. Four hours credit.
*71-171. STATE GOVERNMENT. This is a continuation of course 70-170. It will include problems of state and local financing, taxation, budgets, and how laws are enforced. Particular study will be made of the forces that direct state and local policy. An effort will be made to develop a permanent interest in state government, how it operates, and how the citizen can contribute to its efficiency. Textbook, lectures, library readings, study of current reports, current politics. Four hours credit.

72-172. MUNICIPAL GOVERNMENT. A continuation of the preceding courses. It will include the factors affecting the growth of urban areas, the nature of municipal government, and a detailed study of some of the most effective and successful city governments. Emphasis will be placed on what the average citizen should know about his local government, how he can get such information, and how he can participate in local government most effectively. Textbook, lectures, library readings, visits to municipal plants, direct contact with city officers, reports, and discussions. Four hours credit.

[^27][^28]174-274. INTERNATIONAL RELATIONS. This course is designed to impart a working knowledge of the principles, practices, ethics, and consequences of international relations. The course will include the principles of international law as they have been embodied in the common practices of nations in the past, included in treaties or applied by courts; study of the modern attempts to establish cooperation among nations; common public opinion; and formal machinery for handling common international problems. Text, extensive library readings, lectures, discussions, and reports. Four hours credit.

176-276. CONTEMPORARY WORLD GOVERNMENTS. This course takes up especially the new governments of Europe-Russia, Poland, Germany, and Italy. It also includes the democratic governments of England, France and the Scandinavian countries. The object will be to describe how they work, the changes that have been introduced, and their efforts to deal with social, economic and international problems. Four hours credit.

177-277. THE CONSTITUTION AND ITS INTERPRETATION. This course will include a study of the constitution and its development, the machinery for interpretation, the relation of the courts to the process, sections of the constitution that have been most widely interpreted, periodic controversies over various powers of government, the recent controversies and how they were solved. The scope of this course will include an understanding of acute constitutional problems current in American politics. Four hours credit.
275. POLITICAL SCIENCE THEORY. The object of this course is to develop a working knowledge of types of government as they have evolved and the underlying theories of the various forms. It will include an introduction to the principles governing the various political organizations; the theories and forms of government; and constitutions and ideals of citizenship. Fout hours credit.

## Sociology

80-180. THE HOME AND HOUSING PROBLEMS. The purpose of this course is to teach the relationship of the housing problem to the welfare of the home. The course includes a brief history of human habitations, and the sources of later-date houses with their cost, construction, and management. The recent government housing policies are studied in the light of what Europe has already accomplished in municipal and government housing. Four hours credit.

81-181. CHILD CARE AND CHILD WELFARE. The purpose of this course is to study the child as an integrated personality as well as the agencies that further this integration. This study includes physical growth, nutrition, hygiene, and emotional and social development as affected by the home and other agencies. Four hours credit.
*82-182. INTRODUCTION TO SOCIOLOGY. One of the major objectives of this course is to give students a workable understanding of the major sociological concepts including group, social forces, social heritage, isolation, contact, interaction, competition, conflict, accommodation, assimilation, social change, social control, and social progress, with emphasis upon their relations to modern social life. Four hours credit.

183-283. POPULATION PROBLEMS AND TRENDS. The purpose of this course is to give students an understanding of birth-rate and death-rate trends, the differential rates of increase, and the qualitative aspects in population stocks through a detailed analysis of the growth, the composition, and the distribution of population. Four hours credit.

184-284. THE URBAN COMMUNITY. An aim of this course is to give students an understanding of (1) the metropolitan region as a social and cultural unity and (2) the many kinds of problems and issues peculiar to the super-urban community through an analytical study of the conditions, the elements, and the trends of urbanization. Four hours credit.

186-286. CRIME AND DELINQUENCY. An important aim of this course is to give students a precise understanding of the social implications of criminal and delinquent behavior in American social life. A detailed and critical analysis is made of such behavior from the standpoints of social causes and social effects. And, too, attention is given to penal practices and the administration of criminal justice. Four hours credit.

187-287. THE RURAL COMMUNITY. This course has as one of its fundamental purposes developing in students an alert and constructive interest in the rural community as a unit for better social organization. The impact of modern science and technology and the waning of the old traditional neighborhood associations are examples of powerful forces and deep-seated changes that have come to rural life within a generation. An analysis is made of these forces and changes together with their social effects, and rural-life trends are defined and interpreted. Four hours credit.

## 188-288. MODERN SOCIAL PROBLEMS AND THE PROBLEMS

 OF AMERICAN YOUTH. One purpose of this course is to develop in students an awareness of current social trends; another is to enable students to arrive at helpful understandings of pressing social problems; another is to give students a precise knowledge of the variety of problems that face America's youth in present-day social living; and still a fourth is to make students acquainted with an extensive body of descriptive and factual materials that explain the operations of the social agencies involved in the problems. Fout hours credit.190-290. SOCIAL CHANGE AND SOCIAL EVOLUTION. An outstanding objective of this course is to give students an understanding of the operation of such sociological processes as social invention and social diffusion in the development of culture. Consideration is given to the methods and the means by which the further development of culture may be hastened and directed. Attention is also given to the historical aspects of social change, the various deterministic theories, such concepts as static society and dynamic society, and the several processes of change. Four hours credit.

[^29][^30]193-293. SOCIAL VALUES AND SOCIAL PROGRESS. An important purpose of this course is to develop in students an effective awareness of social changes and social movements; a second important purpose of the course is to make students critically analytical of social values, social movements, social ends, and the various theories of social progress; and a third important purpose of the course is to make it possible for each student to work out his own criteria of social progress. Emphasis is given to the principle of social amelioration. Attention is given to the various theories of social progress. Four hours credit.

194a-294a. LIFE PROBLEMS ON THE GREAT PLAINS AND IN THE ROCKY MOUNTAIN AREA (Summer Quarter only). Of the several objectives of this course, one is to give students a workable understanding of the social problems of several typical communities through living in them. The course is a six-weeks field course in which students actually live in such communities as mining, irrigated farming, cattle ranching, and dry-land farming, including the dust bowl. Through observations, interviews, and analyses, under the constant guidance and leadership of a director, the students make an intensive and exhaustive study of the important social problems found in the communities. Library materials are available on the trips. There are lectures and discussions around evening campfires. Nine hours credit.
295. SEMINAR IN SOCIOLOGY (Summer Quarter only). Prerequisite, eight hours in sociology. This is a reading and discussion course which carries forward a critical study (1) of the important trends in social theory, (2) of the development of sociological thought, and (3) of the emergence of sociology to the status of a science. An analysis is made of the methods, laws, principles, and theories of sociology. Attention is given to Comte, Spencer, Ward, Gumplowicz, Novicow, Durkheim, Tarde, La Play, Simmel, Pareto, Tylor, Giddings, Mead, Cooley, Summer, Thomas, and others. Four hours credit.

# Academic Regulations 

## Admission

Blank forms for use in making application for admission are in the hands of the high school principals, from whom they may be obtained by prospective students. They may also be obtained by mail from the registrar's office. All applications for admission should be sent to the registrar not later than June 30; 1940. Applicants who are uncertain about enrollments should have their records sent to the college not later than September 10, 1940.

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

## GENERAL COLLEGE

Students seeking admission to the General College should consult admission regulations as found in the General College section of this Yearbook. Page 15.

## PROFESSIONAL COLLEGE

Students seeking admission to the Professional College should consult admission regulations as found in the Professional College section of this Yearbook. Page 23.

## Guidance Examinations

The college offers three kinds of guidance examinations: matriculation, placement, and sophomore.

The matriculation examinations consist of a battery of standardized tests, the results of which are used by the college in its counseling program. These examinations are taken as a part
of the official enrollment procedure. The placement examinations are tests in the different college courses. The results are used in determining the question of exemption of students from taking certain courses; to determine whether credit may be received for courses taken in an unapproved institution of higher learning; and to determine credit for work done outside of class. Students will not receive credit for more than twelve quarter hours in any one division or more than a total of eighteen hours toward graduation. The sophomore examination is a battery of comprehensive tests in the fields of English and literature, the social studies, the general sciences, mathematics, and the fine arts. The results are used for guidance purposes, especially to aid in determining whether a student may enter the Professional College. All of these examinations, excepting the placement examinations, shall be taken by all undergraduate students.

## Admission By Cumulative Record

The information supplied by adequately maintained cumulative student records will be carefully considered in connection with any application for admission. Such records are desired whenever they are available and in the case of specially recommended candidates, may, at the discretion of the Committee on Admissions, be accepted in lieu of formal entrance examinations. To be considered for this purpose such record should (1) cover at least the three most recent years of the candidate's school life; (2) provide information concerning the candidate's intellectual capacity, physical and mental health, personal characteristics, habits, attitudes, interests, and talents; (3) contain a complete summary of the applicant's official record of final school grades and of the results of any examinations taken under the auspices of a competent examining agency; (4) include the accurate record of the results of comparable (objective) measures of intellectual capacity and of achievement in all important subjects studied. Data obtained from all tests should be interpreted, whenever possible, in authenticated comparable terms, such as well established public school percentiles or official (Educational Records Bureau) independent school percentiles.

The Committee on Admissions will be glad to examine cumulative records at the end of the junior year (11th grade) of the secondary school course of any candidate who wishes an early decision with regard to the probability of his admission to the college after the completion of his preparatory work.

## Quarterly Program

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

The normal load for General College students is seventeen quarter-hours, including a physical exercise course carrying a credit of one quarter-hour. The normal load for all other students is sixteen quarter-hours. During the first quarter, the students whose scores on the matriculation tests are above the ninetieth percentile point for college students may apply for permission to carry the equivalent of one four-hour course beyond the normal load; the student whose score is between the eightieth and ninetieth percentile points inclusive may be permitted to carry two quarterhours beyond the normal load. During subsequent quarters a student whose grade average is 4 (b) or above will be permitted to carry two to four quarter-hours above the normal load. The student whose average falls below 2.5 will be restricted to two to four quarter-hours below the normal load. The load of any student may be reduced on account of such factors as ill health and employment. In general, if it is necessary for a student to be occupied three or four hours a day in renumerative employment, a reduction of at least one course should be made in his scholastic load.

## Physical Exercise Requirement

A physical exercise course is required of all freshmen and sophomores unless physical disability is certified by the college physician. No credit will be allowed in the Professional College for physical exercise.

## The Grading System

A Indicates superior work
$B$ indicates work above average
C indicates average work
D indicates work below average, but passing
F indicates failure
"Inc." Incomplete

## "W" Withdrawn

"WF" failing at time of withdrawal
" S " Satisfactory, used in place of the grade letters to indicate acceptable work in student teaching, applied music, and appreciation courses, and certain activity courses in Physical Education.

A course marked "Inc." shall be made up in the next succeeding quarter, if credit is to be recorded. In the case of summer school students who do not attend during the regular year, an "Incomplete" shall be made up before the end of the following summer quarter.

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

## Grade Evaluation

Each of the letters of the marking system has a numerical value. The letter A has a value of 5 points; $B$ a value of 4 ; $C$ of 3: D of 2; and F 1. If all of a student's marks were C's they would have a numerical value of 3 . If one-half of his marks were C's and the other half D's, the numerical value of all his marks would be 2.5 . The general average numerical value of a student's marks shall be 2.5 or more to permit him to do student teaching as well as to receive a degree or a certificate to teach.

## Academic Requirements

Students matriculated in the General College will be expected to maintain a general scholarship average above the current minimum rating of 2.3 . Those matriculating in the Professional College will be expected to maintain a general scholarship average above the current minimum rating of 2.5 .

It is the usual policy of the administration to judge as equipped to carry on college work only those students who demonstrate ability to keep their general scholarship averages above the minimum ratings as stated. Particularly will two successive school quarters below the minimum acceptable rating be viewed as basis for recommending withdrawal from the college.

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

Students failing to maintain a 2.5 grade average will not be permitted to engage in varsity athletics, dramatics, and debate.

How to determine the student's average:

| S.S. 180 | 4 hrs | grade $\mathrm{B}=1$ | 16 |  |
| :---: | :---: | :---: | :---: | :---: |
| Sci. 101 | 4 hrs | grade $C=1$ | 12 |  |
| Lit. $\mathcal{O}$ Lang. 58 | 4 hrs | grade $A=2$ | 20 | The total is 60 |
| Educ. 105 | 4 hrs | grade $\mathrm{D}=$ | 8 | divided by 17 |
| H. © P. E. 4 | 1 hr | grade $B=$ | 4 | the result is 3.53 |
|  | 7 hrs |  | 60 |  |

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

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

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

## Graduation Requirements

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

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

At least three quarters before graduation all undergraduate students shall request in writing a statement of remaining requirements for any certificate or degree.

Application for any degree must be made to the registrar at the beginning of the last quarter's work. Applications filed after that date will be subject to a charge of $\$ 2.00$.

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

## 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 laboratory work is offered in three school units. The Ernest Horn Elementary and the College Secondary Schools form one of these. The Ernest Horn Elementary School is comprised of pre-school and the first six grades. The College Secondary School is a six-year unit. The other two units are public school systems affiliated with the college for student teaching purposes: The Big Bend school, eight miles south of Greeley; the Gilcrest school, eleven miles south.

Proficiency is the basis for determining the amount of student teaching to be completed. All students preparing for teaching at the secondary school level or in art, music, and physical education will have student teaching experience in both the campus laboratory school and in one of the affiliated schools. The requirement for the assignment in the affiliated schools may be waived in case the student has had public school experience.

All assignments for student teaching are made with the approval of the director of student teaching. Students offering advanced standing from other institutions must make arrangements regarding student teaching with the director of student teaching immediately upon matriculation.

No student who cannot qualify for admission to the Professional College is eligible for student teaching.

Mature students who submit required evidence of at least three years satisfactory experience may substitute advanced elective courses to be taken in residence on the approval of the director of student teaching. Formal application for such adjustment must be made with the director of student teaching prior to the quarter of graduation. Factors considered in granting such exemption are quality of teaching experience, type of school in which the experience was obtained, scholarship standing, and performance on the matriculation tests.

# General Information 

## History

Colorado State College of Education has served the state and nation fifty years. The year 1940 marks the Golden Anniversary.

On April 1, 1889, the bill establishing the college was signed, and early in the year 1890 the college began to function. The cornerstone of the first building was laid June 13, 1890.

## The Campus

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

Greeley is located midway between Denver and Cheyenne52 miles each way. While located on the Union Pacific Railway, Greeley is a common railroad point, and can be reached easily on tickets issued by all trunk lines. It is also located on main national and state through highways, both east and west and north and south. It is at the crossroads of the Rocky Mountain region. The elevation of Greeley is 4,648 feet.

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

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

## Government

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

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

## Educational Standards

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

## Scholarships

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

## GENERAL COLLEGE SCHOLARSHIPS

Two classes of awards are available for students entering college for the first time. Joint Honor scholarships are given to high school graduates each year by the six Colorado state institutions of higher learning. These awards are usually presented by the high school authorities at the time of graduation. Colorado State College of Education is glad to honor such awards under the conditions stated on the certificate of scholarship.

Colorado State College of Education will also remit tuition (Waiver of Tuition) for a limited number of students interested in teaching as a profession who might not qualify for the Joint Honor scholarship plan: Graduates of out-of-state high schools
and of non-accredited high schools are eligible for this award. In each case candidates must be formally recommended by a committee of the high school faculty and passed upon by the Scholarship Committee at the college.

The above awards are not negotiable and are not valid during the summer quarter. While these awards cover the cost of tuition, they do not include the accessory college fees.

Each scholarship or Waiver of Tuition is awarded for one year only. To keep the scholarship in force during the freshman year the student must maintain at least the average grade of his class. He must be in the upper twenty-five per cent of the freshman class to be awarded the scholarship for the sophomore year, and must rank in the upper twenty-five per cent of his class during each term of his sophomore year to retain the scholarship for that year. The Waiver of Tuition also conforms to the other regulations which govern the award of the Joint Honor scholarships.

## PROFESSIONAL COLLEGE SCHOLARSHIPS

Forty scholarships are established in the Professional College each year. These scholarships are to be awarded on the basis of behavior description, grade average, scores made on entrance tests, tests for vocational interests, and other evaluations which may be available and deemed advisable by the committee. The scholarships are valid for two years but may be revoked if the student fails to maintain an average of 3.75 or upon recommendation to the committee by the chairman of the student's major division if professional attitude and conduct on the part of the recipient is deemed to be of an unsatisfactory nature.

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

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

## Finances

It is strongly advised that students be fully aware of the economic responsibility associated with the acquisition of a college
education. By observing the tuitional costs and fees associated with enrollment, by further estimating personal expenses related to necessary replacement of wearing apparel, coupled with customary social and personal expenditures, the student should be able to budget his finances. Living accommodations vary, but dormitory rates assure a student of clean and healthful room and board. Haphazard and unplanned meals may permit an immediate economy which in the long run exacts a heavy expenditure in terms of health. The student may find an approved list of private homes and eating establishments, as well as complete information pertaining to dormitory accommodations, in the Department of Student Personnel (Cranford Hall). Help will also be given to those students who wish advice on budgeting their expenses.

Numerous loan funds aggregating more than $\$ 28,000$ are used to help worthy students. Applications for loans may be made to the Scholarships and Loans Committee.

## Student Personnel

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

## HEALTH SERVICES

Unusual health services are offered to students of Colorado State College of Education. Upon payment of the Associated Student activity fee each quarter, not only is attendance at the many college activities assured, but costs of many services of an intrinsic value far beyond the initial outlay are cared for.

Complete physical examinations are given to both men and women upon admission to the college, and annually thereafter. Furthermore, care and attention to temporary illnesses are included. Students may call upon any practicing physician and surgeon in the city of Greeley for unlimited office calls, and up to fifteen house calls. A dispensary is maintained as part of the Department of Student Personnel, with a graduate nurse in attendance at all times during the college day. Practicing physicians are also available here at specified hours of the day. Each student
is entitled to ten days free hospitalization during the school year. Beyond the ten-day limit a flat rate of only $\$ 2.50$ will be charged. Hospital services may include x-ray service, appendectomy, and tonsilectomy if the attending physician recommends that such be necessary for the student's good health while in school. It is fully recognized that good health is a necessary accessory to successful college work.

## LIVING ACCOMMODATIONS AND REGULATIONS

The college feels that its responsibility does not end when the student leaves the classroom, but that if he is to develop into a good teacher and citizen in his community, he must live in wholesome and attractive surroundings during his stay on the campus. For that reason, the college has provided residence halls and approved houses. All students are required to live in the residence halls or in the approved houses. Any exceptions must be made by the director of off-campus housing.

Parents and students should visit the Housing Desk in the Department of Student Personnel before obtaining residence for the school year. This is desirable in order that students may be protected from unreasonable rates, and poor living conditions, and also from becoming misinformed about living regulations.

## Residence Halls for Women

The six residence halls provide comfortable living quarters under most ideal conditions for two hundred and seventy women students. All students in the six halls eat their meals in the beautiful dining rooms in Tobey-Kendel Hall. Everything in these residence halls is planned to contribute to a wholesome, happy college life.

These halls will accommodate upper-class girls, as well as the freshman girls, who are required to live there. Because of the fine adjustment to college life that is possible through participating in the activities of the residence halls the administration believes that there is great value in having all freshman girls live in these halls.

An infirmary is provided in the Margaret Snyder Hall, with a nurse and attendant on full-time duty. Here the health of the girls living in the residence halls is carefully checked and medical attention given in cases of emergency and minor illness.

In order that the atmosphere of real home life may be achieved, fine and understanding faculty members live in the
halls and act as social directors. In each hall, too, reside junior and senior students who act as assistant directors.

The price for room and board ranges from $\$ 86.00$ to $\$ 99.00$ for the twelve weeks of the fall quarter and from $\$ 81.00$ to $\$ 94.00$ for the eleven weeks of the winter and spring quarters. The difference in price depends upon the location and size of the room. Because of commodity price fluctuations, the college reserves the right to adjust these prices at the beginning of any quarter. An advance deposit of $\$ 10.00$ is required to hold a room. This will apply on the room rent.

Freshmen are urged to make reservations, if possible, by September 10 th. Reservations for rooms should be sent to the director of the residence halls. Checks should be made payable to Colorado State College of Education.

The residence halls will be open for occupancy on Sunday, September 22. The first meal in Tobey-Kendel will be served Monday morning, September 23.

The students furnish their own bedding and towels. There should be at least two pairs of sheets, $72^{\prime \prime} \times 108^{\prime \prime}$ in size, for a single bed, one quilted mattress pad $36^{\prime \prime} \times 76^{\prime \prime}$, three pillow cases of $42^{\prime \prime}$ tubing, and whatever blankets and other bedding the student needs. In addition to these the student may bring her own sofa cushions, pictures, and other articles for decoration and personal comfort. The college will furnish bedding for $\$ 4.00$ extra each quarter. This includes all of the bedding and laundering of the linen each week.

## Residence Halls for Men

The two men's residence halls, Hays and Hadden, provide fine living conditions for sixty-nine men. The rooms are double, each with adjoining study room. Both halls have attractively furnished lounges and parlors, and in Hays Hall there is a dining hall where the men in both halls are served well balanced meals. The rates for board and room vary from $\$ 82.50$ to $\$ 90.00$ a quarter. Because of commodity price fluctuations, the college reserves the right to adjust these prices at the beginning of any quarter. A deposit of $\$ 10.00$ is required to hold a room. This may be applied on the room rent.

Students may furnish their own bedding and towels. There should be at least two pairs of sheets $72^{\prime \prime} \times 108^{\prime \prime}$ in size, for a single bed; three pillow cases of $42^{\prime \prime}$ tubing; one quilted mattress pad $36^{\prime \prime} \times 76^{\prime \prime}$, and whatever other bedding the students desire.

Students furnishing their own bedding will pay a $\$ 1.00$ laundry fee quarterly. The college will furnish bedding for $\$ 4.00$ extra each quarter.

More detailed information such as floor plans, application for reservations, etc., may be obtained by writing to the Department of Public Relations for a special bulletin on Residence Halls.

## Off-Campus Housing

The proper housing of students has been the increasing concern of the college year by year, until we can now offer our students homes where their physical, social, and educational welfare are the hourly concern of intelligent, responsible homemakers. Such services cannot be offered students at less than an average of $\$ 10.00$ a month. These householders are in close touch with the college, and are cooperating with us in every way.

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

Generally speaking, students are not permitted to do light housekeeping. However, under special circumstances the director of off-campus housing will make exceptions.

## STUDENT SOCIAL STANDARDS

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

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

In order that health, scholarship, and social poise be maintained, the Standards Committee, composed of both students and faculty representatives, makes the following regulations:

Quiet hours are to be observed in the houses from 8:00 A.M. to 12:00 noon; from 1:00 to 4:00 P.M., and after 8:00 o'clock in the evening on school days. The house should be quiet on week-end nights by 11:30. Freshmen girls are to be in their place
of residence on Monday, Tuesday, Wednesday, and Thursday evenings by $9: 30$ o'clock, and on Sunday by 10:30 P.M. All women students are to be at home by 1:00 on Friday and Saturday nights and on nights preceding a vacation; all upperclass women are to be in by 10:30 on all nights preceding a school day.

## Student Organizations

Student participation both in government and in extracurricular activities is encouraged through a number of organizations.

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

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

## Athletics

The athletic activities of the college are governed by a Board of Athletic Control on which both students and faculty are represented. Contests, both intercollegiate conferences, intra-mural, and interfraternity are systematically carried on in football, basketball, baseball, field and track, wrestling, swimming, gymnastics, tennis, and cross country running. Gunter Hall of Helath, the large modern and thoroughly equipped gymnasium, and Jackson athletic 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 participation in athletic sports suitable for women, including swimming, basketball, softball, volleyball, tennis, track and field, archery, and fencing.

## Dramatics

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

## Forensics

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

## Publications

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

## Religious Activities

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

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

## Musical Organizations

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

## Extension Classes

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

## Correspondence Study

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

## Limitations of Extension Credit

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

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

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

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

## Placement Bureau

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

## Honorary Fraternities and Sororities

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

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

Sigma Pi Lamda, 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 honory 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.

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# OTHER COLORADO STATE INSTITUTIONS OF HIGHER LEARNING 

University of Colorado
Robert L. Stearns, Ptesident
Colorado State College of Agriculture and Mechanic Arts Fort Collins Chas. A. Lory, President
School of Mines GoldenM. F. Coolbaugh, President
Western State College

$\qquad$
Gunnison
Chas. C. Casey, President
Adams State Teachers College.... Alamosa Ira Richardson, President



[^0]:    *On leave, Fall, Winter and Spring Quarters, 1940-41.
    OOn leave, Summer Quarter, 1940 .

[^1]:    $\ddagger$ On leave, Winter and Spring Quarters, 1941.
    *On leave, Fall, Winter and Spring Quarters, 1940-41.

[^2]:    *On leave, Fall, Winter and Spring Quarters, 1940-41.

[^3]:    *On leave, Fall, Winter and Spring Quarters, 1940-41.

[^4]:    *On leave, Fall, Winter and Spring Quarters, 1940-41.
    $\$$ On leave, Spring Quarter, 1941.

[^5]:    Estelle Stinchfield, B.F.A., A.M. . . . Assistant Professor of Art B.F.A., University of Denver; A.M., Colorado State College of Education; Special Diploma in Fine Arts, Teachers College, Columbia University; Student Academie Montparnasse; Andre Lhote Critic, Paris. Percival Tudor-Hart, London.
    Sylvester Roy Toussaint, A.B., A.M., Ph.D. . . Professor of Speech A.B., Ripon College; A.M., University of Michigan; PH.D., University of Wisconsin.
    Oliver Leonard Troxel, B.S., A.M., Ph.D. . Professor of Education; Chairman of the Division of Health and Physical Education B.S.,North Central College (Illinois) ; A.M., PH.D., University of Minnesota.
    Floss Ann Turner, Ph.B., A.M. . . Associate Professor of Elementary Education; Supervising Teacher, Ernest Horn Elementary School Ph.B., University of Chicago; A.M.. Teachers College, Columbia University; Graduate Student, Stanford University.
    Glen Corbin Turner, A.B., M.B.A. . . . . . Professor of Business Administration A.B.,Pomona College; M.B.A., Harvard University.

    Edward von den Steinen, M.D. . . . Professor of Physical Education M.D., Western Reserve University; Diploma, Springfield College; Graduate Student, Harvard University; Post Graduate, Chicago Polyclinic.
    Wallace Theodore Wait, B.S., A.M., Ph.D. . . . . Professor of Educational Psychology B.S., Whitworth College; A.M., Ph.D., University of Washington.

    Douclass Sharp Ward, A.B., A.M. . Assistant Professor of Secondary Social Studies; Supervising Teacher, the College Secondary School A.B., Drake University; A.M., Chicago University; Graduate Student, University of Southern California.
    Lee Roy West, B.S., A.M. . . . . Associate Professor of Geography B.S., Southwestern State Teachers College (Oklahoma); A.M., George Peabody College for Teachers; Graduate Student, Teachers College, Columbia University.
    Edith Gale Weibking, A.B., A.M . . Associate Professor of Home Arts A.B., A.M., Colorado State College of Education.

    Grace Hannah Wilson, A.B., A.M., Ph.D. . . Professor of Education A.B., Colorado College; A.M., Ph.D., Columbia University.
    $\dagger$ William Lawrence Wrinkle, A.B., A.M., Ph.D. . . . Professor of Secondary Education A.B., A.M., Colorado State College of Education; Ph.D., New York University.
    Helena Zahnen, A.B., A.M. . . . . Assistant Professor of Foreign Languages; Supervising Teacher, the College Secondary School A.B., University of Colorado; A.M., Teachers College, Columbia University; Student. Universidad Nacional, Mexico.
    Arthur Franklin Zimmerman, A.B., B.D., A.M., Ph.D. . . Professor of History A.B., McKendree College; B.D., Drew Theological Seminary; A.M., Teachers College, Columbia University; Ph.D., University of Illinois.

[^6]:    $\ddagger$ Required only of students preparing to teach in secondary schools.
    *Students preparing to teach in the elementary school, take 176 a , those preparing to teach in the secondary school, take 176 b .
    †Observation in the elementary schools, 8 hours; observation in the secondary schools, 4 hours.

[^7]:    *Given also by Extension.

[^8]:    *34-134. A STUDY OF RURAL SOCIETY. The purpose of this course is to supply a knowledge of the importance of rural America in the national life, of the rural heritage of that life, and of rural-urban relationships. It furnishes, if not techniques, at least clues for the understanding of places where the teacher works and lives, and of the backgrounds of associates and friends. Four hours credit.

[^9]:    *Given also by Extension.

[^10]:    "Given also by Extension.

[^11]:    *Given aloo by Extension.

[^12]:    *Given also by Extension.

[^13]:    *Given also by Extension.
    ${ }^{1}$ A fee of $\$ 1.50$ is charged for each course in which typewriters, calculating machines, and other special office equipment are used.

[^14]:    ${ }^{c}$ Given also by Extension.

[^15]:    *Given also by Extension.

[^16]:    *Given also by Extension.

[^17]:    *Given also by Extension.

[^18]:    ${ }^{1}$ College Algebra (Science 75a and b) and Trigonometry (Science 76) must be taken by students who wish to take advanced courses in physics.
    ${ }^{2} \mathrm{~A}$ student who selects the mathematics group should select the sequence Science $75 \mathrm{a}, \mathrm{b}$, and 76, if he has had only one year of high school algebra. He should select the sequence Science 78a, b, $c$ if he has had one and one-half years or more.

[^19]:    *Given also by Extension.

[^20]:    Given also by Extension.

[^21]:    *Given also by Extension.

[^22]:    *Given also by Extension.

[^23]:    *46-146. GEOGRAPHICAL INFLUENCES IN AMERICAN HIS. TORY. The topics considered will be: (a) Newfoundland, (b) French Canada, (c) the Atlantic States of Europe four hundred years ago, (d) the position

[^24]:    -Given also by Extension.

[^25]:    *Given also by Extension.

[^26]:    "Given also by Extension.

[^27]:    *173-273. HISTORY OF THE FOREIGN POLICY OF THE UNITED STATES. This course aims to give the student a continuous conception of the evolution of our foreign policies and the problems out of which they have arisen. Some of the chief topics: origin of foreign policies; development of the Monroe Doctrine: leadership in the practice of peaceful settlement of international questions; diplomatic problems of the Caribbean and the Pacific; and attitudes toward and policies followed in the later programs of international conferences, organizations, and intervention in world affairs. Text, lectures, library readings, discussions, and written reports. Four hours credit.

[^28]:    *Given almo by Extension.

[^29]:    *191-291. HUMAN PERSONALITY. One purpose of this course is to give students an understanding of the social origin of human personality and another is to have them know the responsibility of society in the development of such kinds of social living as will better enable human beings to achieve for themselves a socially adequate personality. Attention is given to the origin and the importance of attitudes, values, interests, desires, and wishes as well as the influences of group life and group culture in the development of human personality. Consideration is given to the contributions of Thomas, Faris, Mead, Dewey, Cooley, and others. Fout hours ctedit.

    192-292. MARRIAGE AND FAMILY IN MODERN SOCIAL LIFE. One aim of this course is to furnish students with a well-rounded, comprehensive, and unified understanding of the nature of the family as it is set in present-day American social life; another is to give students a precise understanding of the deepseated changes that are revolutionizing the family and making it a different institution; and still a third is to have students know clearly and unmistakably the cornestone position which the family as an institution will continue to occupy in the social organization as it has done throughout historic time. A careful examination is made of courtship and marriage. Fout hours credit.

[^30]:    *Given also by Extension.

