Colorado State College of Education at Greeley

## Bulletin

## $\frac{1947}{1948}$

YEARBOOK NUMBER

# Colorado State College of Education at Greeley 

## Bulletin



Yearbook<br>Number

## COLORADO STATE COLLEGE OF EDUCATION BULLETIN

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## College Calendar

## 1947 <br> Fall Quarter

| Scpt. | $18-20$ |
| :--- | ---: |
| Sept. | 22 |
| Sept. | 23 |
| Sept. | 24 |
| Oct. | $27-31$ |
| Nov. | $27-28$ |
| Dec. | $11-12$ |
| Dec. | 13 |

1948

## Winter Quarter

| Dec. | 29 |
| :--- | ---: |
| Dec. | 30 |
| Feb. | $2-6$ |
| March | $11-12$ |
| March | 13 |

## Spring Quarter



## Summer Session



# Officers of Administration 

Harry V. Kepner, Sc.D., Ed.D.<br>President of the Board of Trustees

George Willard Frasier, Ph.D., Ll.D.<br>President of the College

Winfield Dockery Armentrout, Ed.D., LL.D.<br>Vice-President of the College

## Board of Trustees

(Appointed by the Governor of the State of Colorado)


The figures in parentheses show the date of first appointment.

## Officers of the Board of Trustees



[^0]
## Directors of Administrative Departments

Winfield Dockery Armentrout, Ed.D. - - - - - - Instruction<br>Sumner Lee Crawley, Ph.D. - - - - - - - Student Personnel<br>Oliver Leonard Troxel, Ph.D. - - - . - - - Public Relations<br>Glen Corbin Turner, M.B.A. - - - - - Business and Finance

## Other Officers of Administration

Grace Hannah Wilson, Ph.D. - - - - - - Dean of Women
Arthur Franklin Zimmerman, Ph.D. - Director of the Graduate 'School William L. Wrinkle, Ph.D. - Director of the College Secondary School Helen C. Davis, Ph.D. - Director of, the Ernest Horn Elementaty School Paul Gordon McKee, Ph.D. - - - Director of Elementary Education William Robert Ross, Ph.D. - Superintendent of Buildings and Grounds Roy Moffat Carson, A.B. - - . . . - . - . . - Registrar

## Division Chairmen

Kenneth Frederick Perry, Ph.D. - - - - - Division of the Arts Earle Underwood Rugg, Ph.D. - . . - - Division of Education
Lonis C. Butler, Ed.D. - - - - . - . - . Division of Health
Neal Miller Cross, Ed.D. - - - - - Division of the Humanities
James Deforest Cline, D.Mus. - - . . - - - Division of Music
John Darrell Barnard, Ph.D. - - - . - Division of the Sciences
Leslie Day Zeleny, Ph.D. - - - - Division of the Social Studies

## Instructional Staff

Winfield Dockery Armentrout, A.B., Missouri Valley College; A.M., Columbia University; Ed.D., Harvard University; LL.D., Missouri Valley College; Graduate Student, Ohio State University.<br>Professor of Education<br>Lois Gabel Armstrong, A.B., East Central State College, Oklahoma; A.M., Colorado State College of Education; Graduate Student, University of Arkansas; University of Chicago.

Assistant Professor of Elementary Education
Clarence Theodore Babi, A.B., A.M., Colorado State College of Education; Graduate Student, Pennsylvania State College.

Associate Professor of Industrial Arts
Grace Mae Baker, B.Art Ed., Chicago Art Institute; B.S., A.M., Columbia University.

Professor Emeritus of Art
George Alexander Barker, B.S., M.S., University of Chicago; Sc.D., Colorado State College of Education.

Professor Emeritus of Geography
John Darrell Barnard, A.B., A.M., Colorado State College of Education; Ph.D., New York University.

Professor of Biology
Samuel Clay Bedinger, A.B., A.M., Colorado State College of Education. Assistant Professor of Business Education

Ralph Thomas Bishop, A.B., Colorado State College of Education; A.M., Stanford University.

Professor of Industrial Arts
Margaret Ernestine Bottinelli, R.N., Saint Joseph's Hospital, Denver; A.B., A.M., Colorado State College of Education.

Assistant Professor of Health Education
Bette Virginia Brown, B.E., Western State Teachers College, Illinois; A.M., Colorado State College of Education.

Instructor in Physical Education

Margaret Elizabeth Bryson, A.B., University of Texas; A.M., Colorado State College of Education; M.D., University of Colorado; Graduate Student, Columbia University.

Professor Emeritus of Health Education
LONIS CONNER BUTLER, A.B., A.M., Colorado State College of Education; Ed.D., New York University.

Professor of Physical Education
Elizabeth Carney, A.B., A.M., Colorado State College of Education; Graduate Student, University of Minnesota.

Associate Professor of English
Supervisory Teacher, College Secondary School
Albert Frank Carter, A.B., Colorado State College of Education; M.S., State Normal School, Pennsylvania; Graduate Student, University of Chicago.

Professor Emeritus of Library Administration
Eugene Shaw Carter, A.B., A.M., Colorado State College of Education.
Assistant Professor of Industrial Arts
*Jean Cave, B.S., Fort Hays Kansas State College; A.M., Columbia University; Student, Niels Bukh's School of Gymnastics, Ollerup, Denmark; Murray School of Dance, New York City; Graduate Student, New York University.

Professor of Physical Education
John Elbert Chadwick, A.B., A.M., Colorado State College of Education; Ph.D., New York University; Student at Syracuse University with Iliff Garrison, Harry L. Vibbard, Dr. William Berwald, and Dr. Adolf Frey; Premier Prix d'Orgue under Charles Marie Widor and Henri Libert at Fontainebleau, France.

Professor of Music
James Deforest Cline, B.Mus., M.Mus., Eastman School of Music, University of Rochester; D.Mus., Colorado State College of Education; Student with Kuria Strong, Percy Rector Stephens, Arthur Edward Johnstone, Howard Hansen, and Eugene Goosens.

Professor of Music
Ambrose Owen Colvin, B.C.S., University of Denver; A.M., Colorado State College of Education; Ph.D., New York University; Graduate Student, University of California.

Professor Emeritus of Business Education
*On leave Fall, Winter, and Spring Quarters.

Nora Alvina Congdon, A.B., Wheaton College, Illinois; A.M., Ph.D., Coiorado State College of Education; Graduate Student, Colorado Agricultural and Mechanical College.

Assistant Professor of Education

Sumner Lee Crawley, A.B., Indiana University; A.M., Ph.D., Columbia University.

Professor of Educational Psychology
Ethan Allen Cross, A.B., University of Illinois; A.M., University of Chicago; Ph.D., Columbia University; Litt.D., University of Colorado; L.H.D., Colorado State College of Education.

Professor Emeritus of English
Neal Miller Cross, A.B., A.M., Colorado State College of Education; Ed.D., Stanford University.

Professor of English
George Edward Damon, B.Ed., State Teachers College, Bemidji, Minnesota; A.M., Colorado State College of Education; Graduate Student, University of North Dakota.

Assistant Professor of Business Education
Supervisory Teacher, College Secondary School
Helen Caldwell Davis, A.B., Grinnell College; A.M., State University of Iowa; Ph.D., University of Chicago.

Professor of Elementary Education
Donald Decker, B.S., Michigan State Normal College; A.M., Colorado State College of Education; Ph.D., Columbia University.

Associate Professor of Science
Supervisory Teacher, College Secondary School

Oliver Morton Dickerson, A.B., A.M., Ph.D., University of Illinois; Graduate Student, Harvard University.

Professor Emeritus of History and Political Science
Jule Statton Doubenmier, A.B., A.M., Colorado State College of Education; Graduate Student, University of Southern California.

Professor of Physical Education
Supervisory Teacher, Ernest Horn Elementary and College Secondary Schools

Frances Dougherty, A.B., A.M., Colorado State College of Education.
Assistant Professor of Physical Education
William Lewis Dunn, A.B., University of Illinois; Ph.D., University of Wisconsin.

Professor of Chemistry
*Richard Gordon Ellinger, A.B., Harvard University; A.M., Colorado State College of Education; Diploma, Massachusetts School of Art; Student of Maurice Sterne, Jonas Lie and Eugene Steinhof; Graduate Student, Harvard University.

Professor of Art
Wilma Rose Farrar, A.B., Colorado State College of Education; A.M., Columbia University.

Instructor of Business Education
George William Finley, B.S., M.S., Kansas State College of Agriculture and Applied Science; Graduate Student, University of Chicago, Columbia University.

Professor Emeritus of Mathematics
*James Donald Finn, B.S., Montana State College; A.M., Colorado State College of Education; Graduate Student, Ohio State University, University of Wisconsin, University of Minnesota.

Assistant Professor of Education
Rhoda Jane Foss, B.S., University of Colorado; M.S., Colorado Agricultural and Mechanical College.

Assistant Professor of Home Economics
George Willard Frasier, A.B., Ed.M., Michigan State Normal College; A.M., Stanford University; Ph.D., Columbia University; LL.D., Colorado College; LL.D. University of Colorado.

Professor of Education
George Gailia Gates, A.B., William Jewell College; A.M., University of Missouri; Graduate Student, Stanford University.

Associate Professor of English
Samuel Gerald Gates, A.B., A.M., Colorado State College of Education; Graduate Student, University of Denver.

Assistant Professor of Social Studies
Supervisory Teacher, College Secondary School
*On leave Fall, Winter, and Spring Quarters.

Catherine Crates Gibert, A.B., Ohio Wesleyan University; A.M., Ohio State University; Student, University of Dijon, University of Strasbourg, Institut de Touraine; Graduate Student, University of Pennsylvania, McGill University, University of Wisconsin.

Professor of Foreign Languages
Henry Trustman Ginsburg, B.Mus., Denver College of Music; A.B., A.M., Colorado State College of Education; Student with Henry Schradieck, Leon Sametini, Louis Svecenski, Alexander Saslavsky, and Franz Kneisel.

## Professor of Music

**Harley Fremont Glidden, B.S., Buena Vista College, Iowa; A.M., State University of Iowa; Graduate Student, University of Nebraska, Iowa State College of Agriculture and Mechanic Arts.

Associate Professor of Science
Rupert M. Goodbrod, A.B., University of Nebraska; A.M., Columbia University; Student with Herbert Schmidt, Guy Maier, Earnst Hutcheson, Alton Jones, Percy Grainger, and Mrs. Marjorie McKown; Graduate Student, Juilliard School of Music.

Assistant Professor of Music
**FitZhugh Lee Hambrick, A.B., University of Oklahoma; A.M., Colorado State College of Education; Graduate Student, Stanford University.

Professor of Elementary Education
John William Hancock, A.B., State University of Iowa; A.M., Colorado State College of Education; Graduate Student, University of Southern California, University of Wisconsin.

Professor of Physical Education
Kenneth J. Hansen, A.B., A.M., University of Washington; Ed.D., Columbia University.

Professor of Business Education
William Henry Hargrove, B.S., University of Missouri; A.M., Colorado State College of Education; Graduate Student, George Peabody College for Teachers.

Professor Emeritus of Rural Education
Ezra Clarence Harrah, B.S., Southwestern College, Kansas: A.M., Ph.D., University of Illinois.

Professor of Zoology
**On leave Fall Quarter.

*M. LUCILe Harrison, Ph.B., A.M., University of Chicago.<br>Associate Professor of Elementary Education<br>Supervisory Teacher, Ernest Horn Elementary School

William Frederick Hartman, A.B., Nebraska State College; A.M., Colorado State College of Education; Graduate Student, Northwestern University. Assistant Professor of English

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

Jacob Daniel Heilman, A.B., Muhlenberg College, Pennsylvania; Ph.D. University of Pennsylvania.

Professor Emeritus of Educational Psychology
Fred Louis Herman, B.S., University of Nebraska; A.M., Stanford University; Student, Sorbonne, Paris, France; Ecole de Cavalerie, Saumur, France: Graduate Student, Stanford University.

Professor of Physics
Norman Richard HolZaephal, B.S., University of Michigan; Graduate Student, University of Wisconsin, Colorado State College of Education.

Instructor in Physical Education
Edna Mary Hoydar, B.Mus., M.Mus., American Conservatory of Music, Chicago; Student of Charles LaBerge, Karleton Hackett, and Horatio Cogswell; Graduate Student, University of Southern California, Columbia University.

Assistant Professor of Public School Music
**CECIL Robert Hutchcroft, A:B., A.M., Colorado State College of Education; Ed.D., Columbia University.

Professor of Industrial Arts
Rita J. Hutcherson, A.B., Culver-Stockton College, Missouri; A.M., State
University of Iowa; Netzorg School of Piano, Yale University School of Music; Northwestern University School of Music.

Assistant Professor of Music
Frank Covert Jean, A.B., A.M.. Ph.D., University of Nebraska; Sc.D., Colorado State College of Education.

Professor Emeritus of Biology

[^1]Elizabeth Hays Kendel, A.B., Colorado State College of Education; Graduate Student, Columbia University.

Associate Professor Emeritus of Mathematics
Ralph Roy King, A.B., A.M., Colorado State College of Education.
Assistant Professot of Music
WINFIELD LEROY KNIEs, A.B., Colorado State College of Education; M.B.A., University of Washington.

Associate Professor of Business Education
Helen Langworthy, A.B., A.M., State University of Iowa; Student, American Laboratory Theater, New York City; Theodora Irvine Studio for the Theater, New York City; Dramatic Workshop of the New School for Social Research, New York City; Graduate Student, State University of Iowa.

Professor of Speech
Rose Aileen Leacock, B.S., A.M., George Peabody College for Teachers; Graduate Student, University of Chicago, Columbia University.

Assistant Professor of Art
$\dagger$ EliZabeth Lehr, B.S., A.M., Columbia University.
Associate Professor of Elementary Education
Supervisory Teacher, Ernest Horn Elementary School
Leslie DAE Lindou, A.B., University of Minnesota; A.M., University of Wisconsin; Graduate Student, University of Toronto, Yale University.

Professor of English
Genevieve Lemen Lyford, B.S., Columbia University; A.M., Colorado State College of Education; Graduate Student, Columbia University.

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

Professor of Mathematics
John Irving Mariani, A.B., University of Nevada; B.F.A., Chicago Art Institute; A.M., Colorado State College of Education.

Associate Professor of Att
Annie Margaret McCowen, A.B., Bessie Tift College, Georgia; B. S., A.M., Columbia University; Ph.D., State University of Iowa.

Professor of Elementary Education
$\dagger$ On leave Summer, Fall, and Winter Quarters.

Fred Lester McCune, A.B., A.M., Colorado State College of Education.
Assistant Professor of Mathematics
Supervisory Teacher, College Secondary School
Jean Murley Mcinnes, A.B., Monmouth College, Illinois; A.M., University of Wisconsin.

Assistant Professor of Speech
Paul Gordon McKee, A.B., Monmouth College, Illinois; A.M., Ph.D., State University of Iowa.

Professor of Elementary Education
Carl Gustav Melander, A.B., B.Mus., Bethany College, Kansas; M.Mus., Chicago Conservatory; Student of Thure Jaderborg, Herbert Miller, Edgar Nelson, Edgar Schofield, Edgar Brazelton, Hagbard Brase, F. Melius Christiansen.

Associate Professor of Music
Donald George Merriman, B.P.E., American College of Physical Education; A.B., A.M., Colorado State College of Education.

Assistant Professor of Physical Education
Florence Marguerite Meyer, A.B., Grinnell College; A.M., University of Chicago.

Assistant Professor of English
Supervisory Teacher, College Secondary School
**Estell Elgar Mohr, B.S., Columbia University; A.M., Colorado State College of Education; Graduate Student, Ohio State University; Ed.D., Stanford University.

Professor of Public School Music
Margaret Lois Mulroney, A.B., A.M., Ph.D., State University of Iowa; Student, Centro de Estudios Historicos, Madrid, Spain; Alliance Francaise, Paris.

Professor of Foreign Languages
Louise Adelaide Neal, A.B., Friends University, Wichita, Kansas; A.M., University of Colorado.

Assistant Professor of Elementary Science
Vera Lanore Newburn, B.S., Hastings College, Nebraska; M.S., Columbia University; Graduate Student, Columbia University, University of Minnesota, University of Nebraska.

Professor of Home Economics

**On leave Fall Quarter.

Evelyn Newman, Ph.B., Ph.M., University of Chicago; Ph.D., Trinity College, University of Dublin; Graduate Student, University of Geneva, Oxford University.

Professor Emeritus of English
Howard Daniel Ninemires, A.B., A.M., Colorado State College of Education; Graduate Student, New York University.

Assistant Professor of Education
Dale O. Patterson, A.B., A.M., Colorado State College of Education; Ph.D., University of Minnesota.

Professor of Education
Ora Brooks Peake, A.B., A.M., Ph.D., University of Michigan; Graduate Student, University of Chicago. Professor of History

Kenneth Frederick Perry; A.B., A.M., Colorado State College of Education; Ph.D., Columbia University. Professor of Industrial Arts

Lester Henry Phillips, A.B., Olivet College; A.M., Ph.D., University of Michigan.

Professor of Political Science
Pauline Craig Pogue, A.B., A.M., Colorado State College of Education; Graduate Student, Columbia University.

Associate Professor of History
Supervisory Teacher, College Secondary School
William Webster Rasor, A.B., A.M., Colorado State College of Education.
Assistant Professor of Science
Supervisory Teàcher, College Secondary School
LUCY Lynde Rosenquist, Ph.B., University of Chicago; A.M., Columbia University; Graduate Student, Columbia University.

Associate Professor of Elementary Education
Supervisory Teacher, Ernest Horn Elementary School
William Robert Ross, B.S., M.S., Colorado Agricultural and Mechanical College; Ph.D., Colorado State College of Education; Graduate Student, Columbia University.

Professor of Education
Margaret Moore Roudebush, A.B., Mississippi State College for Women; Ph.B., M.S., University of Chicago; Graduate Student, Bryn Mawr College, University of Mississippi.

Professor Emeritus of Home Economics

Dorothy Roukema, A.B., A.M., Colorado State College of Education.
Assistant Professor of Elementary Education
Earle Underwood Rugg, A.B., A.M., University of Illinois; Ph.D., Columbia University; Graduate Student, University of Chicago.

Professor of Education
Otto William Schaefer, M.S., Colorado Agricultural and Mechanical College.

Professor Emeritus of Industrial Arts
Edith Marie Selberg, A.B., A.M., Colorado State College of Education; Graduate Student, University of Chicago.

Associate Professor of Biology
Ella May Small, A.B., Texas Woman's College; A.M., Texas State College for Women; Graduate Student, State University of Iowa.

Assistant Professor of Physical Education.
Frances Tobey, A.B., Colorado State College of Education; A.M., Columbia
University; Graduate Student, University of Oxford, University of Cambridge, England.

Professor Emeritus of English
Sylvester Roy Toussaint, A.B., Ripon College, Wisconsin; A.M., University of Michigan; Ph.D., University of Wisconsin.

Professor of Speech
Oliver Leonard Troxel, B.S., North Central College, Illinois; A.M., Ph.D., University of Minnesota.

Professor of Education
Floss Ann Turner, Ph.B., University of Chicago; A.M., Columbia University; Graduate Student, Stanford University.

Associate Professor of Elementary Education Supervisory Teacher, Ernest Horn Elementary School

Glen Corbin Turner, A.B., Pomona College; M.B.A., Harvard University ; Graduate Student, Claremont Graduate School, Harvard University.

Professor of Business Administration

[^2]Edward von den Steinen, M.D., Western Reserve University.
Professor Emeritus of Health Education
**Wallace Theodore Wait, B.S., Whitworth College, Washington; A.M. Ph.D., University of Washington.

Professor of Educational Psychology
Roland Cornell Waterman, B.S., New York State Teachers College; A.M., Columbia University.

Assistant Professor of Business Education
John S. Welling, B.S., Union College; A.M., Columbia University; Ed.D., New York University.

Professor of Social Studies
Lee Roy West, B.S., Southwestern Institute of Technology, Oklahoma; A.M., George Peabody College for Teachers; Graduate Student, George Peabody College for Teachers, Columbia University.

Professor of Geography
Joseph Louis Wetzels, A.B., Conservatory of Music, Verviers; M.Mus., Premier Prix Royal Conservatory of Liegè; Student with A. Massau, Jacques Gaillard, and Sylvain Dupuis.

Instructor of Music
Frederick Lamson Whitney, Ph.B., Ed.B., A.M., University of Chicago; Ph.D., University of Minnesota.

Professor Emeritus of Education
Edith Gale Wiebking, A.B., A.M., Colorado State College of Education.
Professor of Home Economics
Grace Hannah Wilson, A.B., Colorado College; A.M., Ph.D., Columbia University; Graduate Student, Harvard University, Union Theological Seminary.

Professor of Education
Welby Burdette Wolfe, A.B., A.M., Colorado State College of Education.
Assistant Professor of Art
William Lawrence Wrinkle, A.B., A.M., Colorado State College of Education; Ph.D., New York University.

Professor of Secondary Education

[^3]Helene Katherine Zahnen, A.B., University of Colorado; A.M., Columbia
University; Graduate Student, Universidad Nacional, Mexico, University of Colorado.

Associate Professor of Foreign Languages
Supervisory Teacher, College Secondary School
Leslie Day Zeleny, B.S., University of Minnesota; A.M., Columbia University; Ph.D., University of Minnesota.

Professor of Sociology
Arthur Franklin Zimmerman, A.B., McKendree College, Illinois; A.M., Columbia University; B.D., Drew University; Ph.D., University of Illinois. Professor of History

## Library Staff

Josephine Helen Halverson, A.B., and Certificate of Librarianship, University of California; A.M., Colorado State College of Education.

College Librarian and Assistant Professor of Library Science
Olive Finette Ballou, A.B., A.M., Colorado State College of Education; Certificate of Librarianship, Úniversity of Denver.

Cataloger
IRENE ENGLE Bogan, A.B., Drake University; B.S. in Library Science, University of Illinois.

Cataloger and Reference Assistant
*WAyne Robert Campbell, A.B., Colorado College; B.S. in Library Science, University of Denver; A.M., University of Colorado.

Acquisitions Assistant and Instructor of Library Usage
Margaret Marie Porter, A.B., A.M., Colorado State College of Education; Certificate of Librarianship, University of Denver.

Laboratory Schoot Librarian
Virginia Gertrude Smith, A.B., University of Nebraska; B.S. in Library Science, Columbia University; Graduate Student, McGill University, Colorado State College of Education.

Reference Assistant
*On leave Fall, Winter, and Spring Quarters.

## Functions of the College

The primary purpose of Colorado State College of Education is to prepare teachers and administrators for many kinds of educational positions. The administration and faculty expect each student to maintain a high standard of scholarship and professional development, and to be thoroughly prepared at the time of his graduation.

## Undergraduate Program

1. Bachelor of Arts (A.B.) degree with a teaching certificate. The courses required for this degree prepare teachers and administrators for many types of educational positions. A life certificate to teach in Colorado accompanies the degree.
2. Bachelor of Arts (A.B.) degree in liberal arts. This degree does not carry a teaching certificate.
3. Bachelor of Music (B.M.) degree. The courses offered for this degree are designed for professional and cultural attainments.

## Graduate Program

1. Master of Arts (A.M.) degree. This degree is offered in each of the seven divisions of the College. A life certificate to teach in Colorado accompanies the degree.
2. Ádvanced Graduate Diploma of Specialization. This diploma is granted for one year of special work beyond the Master of Arts degree.
3. Doctor of Education (Ed.D.) degree. This degree is offered in the Division of Education. It is based upon advanced study, successful experience, and research.

# Academic Information 

## Accreditation

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

## Quarter System

The school year is divided into three quarters: Fall, Winter, and Spring. Each of these quarters has approximately twelve weeks. The Summer Session is composed of three parts: Pre-Session of two weeks, Regular Session of eight weeks, and Post-Session of two weeks.

## Quarter Hour

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

## Course Numbers

The course numbers are divided into five groups. They are:
(a) 1 to 99 are primarily for first and second year students;
(b) 100 to 199 are primarily for third and fourth year students;
(c) 200 to 299 are primarily for fourth year and graduate students;
(d) 300 to 399 are primarily for graduate students;
(e) 400 to 499 are primarily for candidates for the doctorate.

## Transcripts

Regularly matriculated students may receive the first transcript of their class records from the College without charge. Additional transcripts are one dollar each, payable in advance.

## Education of War Service Personnel

Ex-service men and women are eligible for tuition and subsistence under the G. I. Bill of Rights. Application form 7-1950 may be obtained from the nearest Veterans' Administration office or the Veterans' Counseling Office, Department of Student Personnel of the College. All veterans entering under this program should have a Certificate of Eligibility or, if a transfer student, Supplementary Certificate of Eligibility which will be presented at the time of registration.

## Proficiency Examinations

Proficiency examinations in certain subjects may be taken to determine whether or not the student may be excused from certain courses, or to determine whether credit may be granted for work done in educational centers other than accredited colleges.

## Course Load

The normal course load for a quarter is 16 quarter hours of academic credit. This does not include the physical activity courses required in the freshman and sophomore years. A maximum of 20 hours may be taken by students who have a college scholastic average of " $B$ " or better. Extra hours for other students who have good records, but below " B ", will be considered individually.

High scores in matriculation examinations and a superior scholastic average in high school or college are required for permission to take extra hours the first quarter in residence.

## Grading System

Alphabetical grades are used. " $A$ " indicates superior work; " B " indicates work above average; " C " indicates average work; " D " indicates work below average, but passing; " F " indicates failure. Other marks used are: "Inc." incomplete; "W" approved withdrawal; "TF" unapproved withdrawal; "WF" failing at withdrawal; "IF" condition not removed; " S " satisfactory; "U" unsatisfactory. An "Inc." must be removed before the end of the succeeding quarter in residence to yield credit. Graduating students must remove an "Inc." before the middle of the succeeding quarter.

## How to Compute Grade Averages

Each of the letters of the marking system has a numerical value. The letter " $A$ " has a value of five points; " $B$ " a value of four points; "C" a value of three points; "D" a value of two points; and " $F$ " a value of one point. 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 balf "D's", the numerical value of his marks would be 2.5 .

## Scholastic Average

Regularly enrolled students are expected to maintain a scholastic average above 2.3 throughout the freshman and sophomore years, and an average above 2.5 for the junior and senior years. A minimum grade average of 2.5 is required for graduation.

## Absences

Absences without acceptable excuses are not permitted. Anticipated and emergency absences will be cleared through the Department of Student Personnel. Both tardiness and absences are dealt with by the individual instructor on the assumption that each student is expected to do the full work of the class.

## Probationary Status

A student whose quarterly scholastic average is below the established minimum may be placed on probationary status for the succeeding quarter. A student whose scholastic average is below the minimum for two successive quarters may be advised to withdraw from the College.

## Withdrawal from Class

No withdrawals from class are permitted during the last two weeks of a quarter. When a student registers for a class, he is considered to be a member of that class. If he withdraws, he must have the approval of the Department of Student Personnel.

## Final Examinations

A final examination in each class is to be taken by the student on the dates officially announced.

# Undergraduate Program 

## Admission

Application for admission to the Undergraduate Program, which includes the freshman, sophomore, junior, and senior years, may be made on the basis of one of the following ways:

Graduation From An Accredited High School. Graduates of unaccredited high schools will be considered individually. High school records should be sent to the College as soon as possible, showing graduation from high school.

By Taking A Series of Matriculation Examinations. The prospective student must make scores which meet the standards set by the Admissions Committee. Psychological, achievement, and English tests are used.

Advanced StȦnding From Other Colleges or Universities. Transfer students will file with the Registrar, before their enrollment, official transcripts of all college and university work taken at other institutions. Transfer students will be classified by the Registrar and the chairman of the student's major division.

## Matriculation Requirements

All undergraduate students enrolled for five hours or more - must complete the following requirements during their first quarter's enrollment within the regular school year: (1) pay the matriculation fee; (2) complete the standardized tests (English, psychological, and achievement, which are used for student advise-
ment and placement) ; (3) take health examinations; (4) have photograph taken for official files; (5) file with the College a complete transcript of previous high school or college records.

## Entrance Blanks and Instructions

Graduates of Colorado high schools may obtain "Application for Admission" blanks from their high school principals or superintendents.

New first-year out-of-state students should request "Application for Admission" blanks from the College Registrar.

All students who have completed any part of a college program at some institution other than Colorado State College of Education are classified as transfer students and must apply directly to the Registrar for admission.

If an applicant's past academic record is considered inadequate, the Committee on Admissions reserves the right to reject the student's application, or may admit the student on probation for one quarter only. Further enrollment beyond the probationary period will be granted only upon evidence of satisfactory college achievement.

All applicants must have good health, character, and ability to do college work.

## Guidance Examinations

The College provides a testing program and counseling service for each student so that full recognition may be given to general learning capacity, achievement, and to individual differences in social and intellectual maturity. Each student is required to take groups of these tests as a part of his matriculation into the College. The results obtained from these tests become a part of the guidance material.

## Faculty Advisers

A first-year student is assigned to a faculty adviser who helps the student to plan his program of study. An upper-class student is advised by a faculty member of the student's major division.

## Health Examinations

Health examinations are given at the beginning of a student's first quarter in residence, and at other specified times. The examinations are conducted in the Health Office in the Department of Student Personnel by college-employed physicians.

## Photographs

A College photographer will take pictures of all new students during the first week of registration and matriculation. These pictures are for official files. The cost of the photographs is included in the College Service Fee. Students who do not have their photographs taken at the appointed time will furnish two portrait type photographs of approximately $21 / 4 \times 21 / 2$ inches in dimension.

## Eligibility

Students who do not maintain acceptable grade averages will not be permitted to participate in varsity athletics, dramatics, debate, and other extra-curricular activities of the College.

## Graduation Requirements

## BACHELOR OF ARTS DEGREE (With Teaching Certificate)

The Bachelor of Arts degree with teaching certificate may be taken in one of the following fields: Fine Arts, Industrial Arts, Dietetics, Home Economics, Business Education, Elementary Education, Physical Education for Men, Physical Education for Women, English, Foreign Language, Speech and Drama, Music, Science, Mathematics, and Social Studies.

## PLANS OF STUDY

A student may choose one of three plans of study to obtain the Bachelor of Arts degree with teaching certificate. They are: (a) Major and Minor Plan; (b) General Secondary (Distributive) Major; (c) Elementary Education Major.

## Major and Minor Plan

In this plan of study, a major is earned in a field of specialization. A minor and sufficient electives are required to provide a broad and thorough educational background.

## PROGRAM

(a) Common Courses listed on Page 29.
(b) Major courses required in field of specialization and not to exceed 72 hours.
(c) One or two minors with a minimum of 24 hours each outside the field of specialization. The number of minors depends upon the field in which the major is taken. Methods courses are not included in the requirements for the minor.
(d) Sufficient electives to complete 192 hours of academic credit.
(e) Six hours of physical exercise, three hours in the freshman year and three hours in the sophomore year.

## General Secondary (Distributive) Major

Students who take the General Secondary (Distributive) Major prepare to teach several different high school subjects by taking their course work in three or four subject matter fields.

## PROGRAM

(a) Common Courses listed on Page 29.
(b) Minimum of 36 hours in each of three subject matter fields, (or) minimum of 24 hours in each of four subject matter fields.
(c) Sufficient electives to complete 192 hours of academic credit.
(d) Six hours of physical exercise, three hours in the freshman year and three hours in the sophomore year.

## Elementary Education Major

The Elementary Education Major prepares students to teach in the elementary school. Students who complete this major carry on a program of study in various subject matter fields as well as in the education courses required for this major.

## PROGRAM

(a) Common Courses listed on Page 29.
(b) Major courses listed on Page 60, plus adequate preparation in content courses recommended by the student's adviser.
(c) Sufficient electives to complete 192 hours of academic credit.
(d) Six hours of physical exercise, three hours in the freshman year and three hours in the sophomore year.

## BACHELOR OF ARTS DEGREE

(Liberal Arts)
The curriculum leading to the Bachelor of Arts degree in liberal arts is similar to programs offered in liberal arts colleges. Courses in education are not required for the degree.

Fields in which the degree may be taken are: Fine Arts, Home Economics, or a combination of the two; Physical Sciences, Biological Sciences, Mathematics, or a combination; History, or a combination of Geography, Sociology, Economics; Humanities, English, Speech and Drama, Foreign Languages, or a combination; Nursing; and Business Education.

## Major and Minor Plan

This degree is offered only in a Major and Minor plan of study. The major is earned in a field of specialization. A minor, outside of the field of specialization, and sufficient electives are required to provide a broad and thorough educational background.

## PROGRAM

(a) Common Courses listed on Page 30:
(b) Major courses required in field of specialization not to exceed 72 hours.
(c) A minor with a minimum of 24 hours outside. the major.
(d) Sufficient electives to complete 192 hours of . academic credit.
(e) Six hours of physical exercise, three hours in the freshman year and three hours in the sophomore year.

## Common Courses

## BACHELOR OF ARTS DEGREẸ <br> (With Teaching Certificate)

The Common Courses listed here are required of all students who are studying for a Bachelor of Arts degree with teaching certificate. Additional requirements are given on Pages 26 and 27, and in the section titled, Description of Courses.


## Common Courses

 BACHELOR OF ARTS DEGREE(Liberal Arts)
The Common Courses listed here are required of all students who are studying for a Bachelor of Arts degree in liberal arts. The courses will be taken in the freshman and sophomore years.

COURSE NUMBER COURSE TITLE HOURS CREDIT


## Student Teaching

Student teaching assignments are made in the Ernest Horn Elementary and College High School, campus laboratory schools, and in cooperating public schools in the state. There are three phases in the program: (a) the study of teaching methods and procedures; (b) observation and directed participation; (c) teaching.

All assignments for student teaching are made with the approval of either the Director of the Ernest Horn Elementary School or the Director of College High School. Before assignments are made, students must have the health, personal characteristics, and the professional attitudes considered essential for successful teaching, and must have completed the prerequisite courses in methods and observation.

A student who submits required evidence of at least three years of satisfactory teaching experience and experience in the field of his major may obtain exemption from student teaching. Exemptions are based on quality of teaching experience, kind of school in which experience was obtained, and scholastic standing.

## Graduate Program

Colorado State College of Education offers graduate study leading to the degrees of Master of Arts and Doctor of Education. It also provides an academic recognition beyond the master's degree in the form of an Advanced Graduate Diploma of Specialization. Graduate study was first offered during the summer session of 1913, and the first master's degree was conferred in June, 1914. In 1929 the Board of Trustees authorized the college to provide a program leading to the doctor's degree. The First Advanced Graduate Diploma of Specialization was conferred in 1946.

## Organization

Each of the instructional divisions of the college has a graduate committee. The chairmen of these seven graduate committees comprise the Graduate Council, which is the legislative body of the Graduate School.

## Objective

Colorado State College of Education is primarily an institution for the preparation of teachers. In accord with this fundamental objective, the Graduate School grants the teaching degrees of Master of Arts and Doctor of Education. Before receiving either of the degrees the student should be able (a) to identify problems, (b) to organize and evaluate evidence, and (c) to formulate and defend definite conclusions. To achieve these objectives the Graduate School expects each student to show at his graduation special competence (a) in one or more areas of knowledge (the major and minors) and (b) in independent work (field studies, theses, written reports).

## General Requirements

All graduate students admitted to candidacy for a degree after June 1, 1947, are subject to the regulations given in this section.' Students who have not exceeded the time limits and who have been admitted to candidacy prior to June 1, 1947, will follow the rules in force at the time of their admission to candidacy.

## Admission

All students interested in graduate courses should file with the Director of the Graduate School certified transcripts of all previous academic credits at least thirty days before registration.

Application blanks for admission to graduate courses applicable to the degrees of Master of Arts and Doctor of Education and the Advanced Graduate Diploma of Specialization will be provided by the Director of the Graduate School upon request.

Admission to graduate courses does not imply acceptance as a candidate for a degree. For a statement of the requirements for candidacy see the detailed rules governing the granting of each graduate degree or diploma.

For admission to graduate courses applicable to the degree of Master of Arts, the student must hold a baccalaureate degree from an accredited college or university authorized by law to grant such a degree, and must show evidence on his undergraduate transcript of ability to pursue graduate study. The minimum undergraduate preparation for the degree of Master of Arts is twenty-four quarter hours of basic course credit in the field of the graduate major.

For admission to graduate courses applicable to the Advanced Diploma of Specialization, the student must possess the master's degree from an acceptable graduate school, apply for admission, and present transcripts of all previous academic credits.

For admission to graduate courses applicable to the degree of Doctor of Education, the student must possess the master's degree from an acceptable graduate school, apply for admission, and present transcripts of all previous academic credits. If these records do not show high quality of past academic achievement, the applicant may be denied admission. Sixty-four quarter hours in the fields of Education and Psychology are prerequisites for admission to courses applicable to the doctor's degree. All students enrolled in courses leading to the doctor's degree are admitted as unclassified graduate students until the Graduate Council is able to determine their qualifications for admission to candidacy for the degree.

## Registration

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

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

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

A former graduate student will register directly with his major professor.

All registrations are subject to approval by the Director of the Graduate School.

## Student Responsibility

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

## The "300" Course Requirement

In the first quarter in residence all graduate students are required to register for the " 300 " course, "Introduction to Graduate Study." In this course standards for graduate study, research methods, evaluation of printed research, bibliographical tools and other items will be emphasized.

## English Style-Form Standards

The student's written material, which is to be filed with the Director of the Graduate School, must conform with the "English Style-Form Standards." This bulletin is available for purchase in the college bookstore.

## Course Load and Credit

The maximum course load for credit applicable to a degree is twelve quarter hours in the eight weeks summer session and sixteen quarter hours during the regular academic year. A general grade average of at least 3.7 must be maintained for graduation. In the computation of this average a mark of " A " counts 5, " $B$ " counts 4 , and " $C$ " counts 3 . No graduate credit will be allowed for courses in which the grade is below " C ".

Courses bearing catalog numbers of 00 or above carry graduate credit.

Only eight quarter hours earned in one-hour unit courses may be applied toward any graduate degree or diploma.

Under certain circumstances and with the approval of the major professor, students may offer not more than eight quarter hours in courses numbered 322, Individual Studies. A typewritten copy of the report in each Individual Studies course shall be filed with the Director of the Graduate School. Individual Studies 322 will not be counted toward meeting the requirement of one-third of the graduate credit which must be in courses open only to graduate students.

Graduate credit is not given for any courses taken by correspondence.

## Courses for Seniors

Senior students, who are within eight quarter hours of having completed the requirements for the bachelor's degree may, in their last quarter or summer session of undergraduate study, register for graduate courses and receive graduate credit for them. In all cases the student's course load will be limited and previous arrangements for admission to the Graduate School must be made with the Director of the Graduate School.

## Master of Arts Degree

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

## Admission to Candidacy

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

## Time Requirements

The minimum time requirement for any degree in the college is one academic year or thirty-two weeks.

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

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

## Transfer of Credit

In some cases, but only after the student has been admitted to candidacy for the degree of Master of Arts, there may be a transfer of a small amount of graduate credit earned in an accredited college or university regularly granting the master's de-
gree. Such transfer of credits may reduce load, but it will not reduce the residence requirements of the Graduate School, i. e., four full summer sessions or their equivalent (thirty-two weeks). All transfer of graduate credit is made only upon the authorization of the Director of the Graduate School and upon the written petition of the student. All transferred credit must have been earned within the time limits prescribed for the master's degree. Graduate credit is not transferable if earned in off-campus classes or in courses classified as "extension."

## Thesis for the Degree

It shall be the prerogative of the major professor in consultation with the Director of the Graduate School to approve those students who may write a thesis as a partial fulfillment of the requirements for the degree. Such approval will be given after the student has completed at least twelve hours of course credit of which the " 300 " course will represent four hours.

## Minimum Requirements for the Major

For the degree of Master of Arts, the student must have a minimum of sixty-four quarter hours of graduate and undergraduate credit in the major field. At least one-half of the graduate credit for the degree of Master of Arts must be in the field of the major.

Wherever possible within the framework of the above rules, the student majoring in content fields may be required by the Director of the Graduate School to enroll for courses in education or psychology which emphasize contemporary trends in those areas; on the other hand, students majoring in education and psychology may be required by the Director of the Graduate School to enroll in graduate courses in content fields outside the graduate major.

## Professional Requirements

All students receiving a graduate degree or diploma of specialization from Colorado State College of Education must have at least thirty quarter hours of undergraduate and graduate credit in education, educational psychology, and related fields regardless of the division in which they major.

## Detailed Requirements for the Degree <br> (For Students in the Regular Academic Year)*

All the general requirements for a graduate degree that have heretofore been mentioned apply to the master's degree. In addition, the graduate student in the regular year shall:

1. Earn forty-eight quarter hours of graduate credit, onethird of which shall be in courses in the student's major open only to graduate students. (Courses numbued 300 a above)
2. Plan with the major professor a unified program which will contain, in the first quarter in residence, the required " 300 " course, one graduate course taught by the major professor, and eight hours of other graduate course credit. In subsequent quárters the student will include in his course programs twelve quarter hours of credit in courses in the major open only to graduate students.
3. If approved for thesis, register for four hours of thesis credit (course 399) in each of the second and third quarters. Registration for theses in absentia will not be permitted. Acceptance of the invitation to present a thesis must be made by the student during the second quarter in residence, and a typewritten outline of the proposed study approved by the major professor and the Director of the Graduate School must be filed in the office of the Graduate School not later than the end of the third week of the second quarter. Other rules governing the thesis are:
(a) It shall conform to the standards given in the "English Style-Form Standards."
(b) It shall be presented to the major professor by the end of the sixth week of the third quarter.
(c) At least two weeks before the end of the quarter in which he expects to graduate, the student will present to the Director of the Graduate School three copies of the thesis in final typed form, approved and signed by the major professor and ready for the director's approval and signature. After being signed and bound, three copies of the thesis become the property of the
*Students attending the Summer Sessions only should consult the Graduate Bulletin.
college. The original ribbon copy and the first carbon copy are filed in the college library; the third copy is delivered to the student's major professor. A charge of $\$ 2.00$ per copy is made for binding.
(d) Each bound copy of the thesis must contain an abstract of the study; in addition, an extra copy of the abstract shall be filed with the student's record in the office of the Graduate School.
4. If not writing a thesis, file in the office of the Graduate School three typewritten reports presented as partial requirements of the courses in the major open only to graduate students.
5. Pass a written comprehensive examination in the major field. The major professor will be in charge of the examination and will announce the time it is to be given. The student's examination paper evaluated by the major professor shall be filed in the office of the Graduate School at least ten days before the end of the last quarter in residence.
6. Apply for a list of graduation requirements not later than the final week of the second quarter in residence.

## Creative Project in Lieu of a Thesis

In harmony with the policies of many of the best institutions of higher learning, the Graduate School will recognize a creative project in the fields of Literature, Fine Arts, and Music as the equivalent of the conventional type of thesis for the degree of Master of Arts. The student may attempt this type of research only after he has successfully completed the course "Introduction to Graduate Study" and has satisfied his major professor that he has reached graduate level in creative ability. Upon the completion of the project, the student shall submit a detailed explanation in the usual written form of the thesis report. In this explanation the student shall give a careful account of his techniques, of the materials from which his problem emerged, and an explanation of the problem's contribution to contemporary thought and life; the mere presentation of the creative project itself is not sufficient. The student is required to observe all the other provisions previously listed for those master's candidates who are writing theses.

Advanced Graduate Diploma
The earning of this diploma does not include the restrictions involved in the longer program leading to the doctor's degree. The objective of the Graduate School in offering this diploma is to give the student the opportunity for professionalized specialization in certain of the subject matter areas in the elementary and secondary school and in other phases of education. The student earns thirty-six hours of resident graduate course credit above the master's degree. At least one-half of this required credit must be in the area of specialization.

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

The Graduate School offers to a limited number of qualified students the opportunity of earning the degree of Doctor of Education (Ed.D.).

Course Program
Each student selects an area of specialization (major) in the field of Education, and a supporting area (minor) in Education. Normally, the two field studies will be in the area of the student's major.

In the first summer session in residence all students enrolled for courses leading to the doctor's degree must enroll for the course "Introduction to Graduate Study"|unless they have already had its equivalent on the graduate level.
write this cone -39in Eughish usage teat anis an objective test ns Education and psychology will be required. all new sherdents are required to take these two tests regardless or whetter the ry are require o to enroll for \&d $40 \%$.

One-third of the work applicable to the doctor's degree must be in courses open only to graduate students. Registration for field studies is not included in this requirement.

A maximum of twenty-four quarter hours of graduate course credit may be required by the Director of the Graduate School in areas outside the field of Education. A statement of these requirements will be made by the Director of the Graduate School after a conference with the student.

Majors may be taken in Educational Administration, Educatonal Psychology, Elementary Education, or Secondary Education.

Minors may be earned in all of the fields in which the major is offered and in Curriculum, Philosophy of Education, Personnel and Guidance. Personnel and Guidance cannot be used as a minor for majors in Educational Psychology.

Upon petition to the Director of the Graduate School, the student may plan a general program in Education in which he will select three areas in Education and Psychology instead of a major and minor.

## Candidacy for the Degree

To be eligible for formal admission to candidacy for the de. gree of Doctor of Education, the student shall have earned at least twenty-four quarter hours of resident graduate course credit, shall have passed satisfactorily the Preliminary Oral Examination, shall have completed Field Study Number 1, shall have satisfactorily defended this Field Study in an oral examination, and shall have completed all matriculation requirements. As a part of the mariculation requirements the Graduate Council may require the student to furnish records of acceptable scores on standardized intelligence tests.

Admission to candidacy will be based upon the evidence available: (1) from staff members with whom the student has studied on this campus; (2) from the official transcripts concerning the type and quality of the student's accomplishments in other institutons; (3) from the results of the Preliminary Oral Examination; and (4) from the results of the examination on Field Study Numbet 1. Admission to candidacy will be by action of the Graduate Council upon recommendation of the student's major professor.


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## Time and Residence Requirements

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

The residence time requirement for the degree of Doctor of Education is six full summer sessions, or their equivalent. Registrations in the pre- or post-sessions will be counted as meeting this residence time requirement only when the student is enrolled in the regular summer session either immediately preceding the post-session or immediately following the pre-session.

## Transfer of Credit

Transfer of credit to the extent of twelve quarter hours may be granted toward the doctorate, but in no case will this transfer of credit reduce the residence requirements below six full summer sessions, or their equivalent. Transfer of credit does not take place until the student has been admitted to candidacy for the degree and then only upon the authorization of the Director of the Graduate School. Any such transfer of credits will be subject to the following rules: (1) that it may be made an integral part of the student's total plan; (2) that it is of excellent quality; (3) that it was earned on the campus of an institution offering the doctor's degree and approved by the Association-of American Universities; (4) that it was earned within five years preceding the date of the student's admission to candidacy for the doctor's degree at Colorado State College of Education.

## Advisement

Upon receipt of a statement of the prospective student's field of interest, the Director of the Graduate School assigns him to a member of the graduate faculty, who will act as the major professor for the first quarter and with whom the student will register. This assignment will become permanent automatically unless the major professor, or the student, makes a written request for a change.

## Responsibility of the Major Professor

It shall be the responsibility of the major professor to advise the student as to the course program in the major and minors, the field studies, and the examinations.

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

## Specific Requirements

In addition to all the general requirements for a doctor's degree heretofore mentioned the student shall:

1. Earn ninety-six quarter hours of graduate credit beyond the master's degree.
2. Be in residence on the campus of Colorado State College of Education at least six full summer sessions, or their equivalent.
3. Present two field studies of a practical nature, for each of which the student will receive twelve quarter hours of credit. The student registers for these field studies during the regular academic year. The preliminary outlines for these studies are prepared under the supervision of the major professor and a research committee of three appointed for each study by the Director of the Graduate School. The student will register for the preliminary outline as a part of his regular summer session load. No registrations in absentia, or in pre- or post-sessions, will be permitted.

Prior to the end of the sixth week of the quarter, the student presents the detailed outline to this committee for criticism and suggestions. When the committee has approved the outline, the student prepares five copies-one copy for each member of his committee, one for the files of the Graduate School, and one for the student himself. It is the duty of the major professor to obtain the required signatures. No student may register for the outline of his second field study until he has been admitted to candidacy for the doctor's degree, except by permission of the Director of the Graduate School together with the written recommendation of the major professor.
4. Pass satisfactorily the following examinations in addition to the usual course examinations:
(a) Preliminary Oral Examination in the General Fields of Education and Psychology. Normally, this examination will take place in the second summer session. It is the duty of the student to present a written request to the office of the Graduate School for the examination. This request must first be approved by the
major professor before being presented. The Director of the Graduate School will set the time for the examination and will appoint an examining committee, one member of which will be selected from outside the Division of Education,
(b) Oral Examinations in Defense of the Field Studies. When a student has satisfied his research committee that he has completed a field study in a satisfactory manner and in accord with the "English Style-Form Standards" of the college, he shall defend his research in an oral examination before a committee composed of: (1) his research committee and (2) at least one representative of the graduate faculty who is not a member of the Division of Education. The field study shall be complete in every detail and ready for the final typewritten copies to be made before the student or the major professor may ask the Director of the Graduate School to set the date for the oral examination.
(c) Comprehensive Written Examinations. These will be given in the final quarter of residence and will test the student's comprehension of the materials in his major and minor areas. The major professor will be in charge of the examinations. He will prepare and evaluate the examination in the student's major, and will have other members of the graduate faculty prepare and evaluate the examination covering the minors. The examination papers after being evaluated shall be filed with the student's records in the office of the Graduate School.

- 5. Pay $\$ 27$ for the publication of each field study. The field study is microfilmed and a 1500 -word abstract of the study is lithoprinted. For the purpose of publication the student files in the office of the Graduate School an extra copy of the abstract of each study. This abstract cannot be more than 1500 words and must include a vita. It is in addition to the copies of the abstract which are bound with the typewritten copies of the field studies. The student receives 150 copies of the lithoprinted abstract and a copy of the annual volume of all abstracts submitted during the year.

6. Pay $\$ 2$ per copy for the binding of each field study. At least three copies of each field study, including an abstract in each study, are required to be bound. These copies become the property of the college. After being bound, the original ribbon copy and the first carbon copy are filed in the college library, while the third copy is delivered to the student's major professor.

# Description of Courses 

## Division of the Arts

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

## FINE ARTS <br> Bachelor of Arts Degree <br> (With Teaching Certificate)

MAJOR
The following program is required: (A) Common Courses listed on Page 29; (B) F. A. 1, 2, 4, 6, 8. (or 17), 11, 13, 103a (or 103b), 116, 123, 124, 205, 221, 230; (C) Twenty hours of electives in Fine Arts, 12 of which will be in one of these fields: drawing and painting, modeling and sculpture, crafts, design, or commercial art; (D) Students preparing to teach in elementary schools should substitute F. A. 127 for F. A. 123; (E) One minor outside the division; (F) Electives outside the division to complete requirements for graduation. Programs will be planned with the student's adviser.

## MINOR

Courses required are: F. A. 1, 11, 13, 17, 103a, 116, 124. A course in the history of art is advised.

## Bachelor of Arts Degree (Liberal Arts)

## MAJOR

The following program is required: (A) Common Courses listed on Page 30; (B) Seventy-two hours in Fine Arts; (C) At least one minor outside the division; (D) Electives outside the division to complete requirements for graduation. Programs will be planned with the student's adviser.

## MINOR

Courses required are: F. A. 1, 11, 13, 17, 103a, 116, 124.

## ' GRADUATE STUDY

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

## Description of Courses

1. DRAWING. Four hours credit.

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

Prerequisite, F. A. 1 or the equivalent. The technical_problems of pictorial composition involving the organization of all the visual elements. The course is recommended to precede the courses in painting.
4. FIGURE CONSTRUCTION. Four hours credit.

Prerequisite, F. A. 1 or the equivalent. The study of the human figure, its essential anatomy and construction. The figure as an important motif in design and composition. Study from life.
6. INTRODUCTION TO ART EDUCATION. Four houts credit.

Prospective art teachers are introduced to the problems of art education, philosophy, and child psychology so that they may work more purposefully throughout the period of their professional preparation.
8. MODELING AND CARVING. Two or four hours credit.

Creative design in the field of small sculpture. Modeling for terracotta, various techniques. Sculpture with and without armature, plaster casts. carving in plaster, stone and wood. This course may be continued for four hours as F. A. 8a.
11. INTRODUCTION TO DESIGN. Four hours credit.

A study of the basic elements of design and the techniques of organization. Creative projects in abstract and applied fields.
13. LETTERING. Two hours credit.

The basic letter forms and useful variants. A study of layout and design. The course includes work in manuscript, showcard, and poster.
14. DESIGN IN TEXTILES. Two hours credit.

Prerequisite, F. A. 11. Practical experience in designing textiles and a variety of media including blockprint, stencil, stitchery, batik, and silkscreen.
17. POTTERY. Two or four hours credit.

Creative experience in the design and construction of pottery. Various methods are studied. Glazing, casting, firing.
20. ART APPRECIATION. Four hours credit.

Opportunity and guidance are offered to the student who wishes to discover his own potentialities in creative art experiences in drawing, painting, modeling, pottery, and the crafts.

103a. INTRODUCTION TO WATERCOLOR PAINTING. Four houts credit.
Prerequisite, F. A. 1 or the equivalent.
103b. INTRODUCTION TO OIL PAINTING. Four hours credit. Prerequisite, F. A. 1 or the equivalent.
110. COMMERCIAL DESIGN AND ILLUSTRATION. Four hours credit. Prerequisite, F. A. 1 and 4. Procedures and techniques of modern commercial art.
116. CRAFTS PROCESSES AND DESIGN. Two or fout hours credit. Prerequisite, F. A. 11. Creative experience in a variety of crafts including leather craft, simple woodwork and metalcraft, plastics, and others.
118. PUPPETRY. Two hours credit.

Design and construction of puppets and marionettes adapted to the interests and abilities of the various grade levels. Practical experience in puppet play production.
119. POSTER AND DISPLAY. Four hours credit.

Prerequisite, F. A. 13. Advanced poster techniques, including stencil and airbrush. Principles of display applied to organization of exhibit material and modern window setting.
123. ART IN THE SECONDARY SCHOOL. Four hours credit.

Methods of teaching art at the junior high and high school levels. A study of the relation of art activities to the school program.
124. ART IN THE ELEMENTARY SCHOOL. Fout hours credit.

Methods of teaching art at elementary school levels. Organization of work units and practical creative experience in a wide variety of media.
127. ART CRAFTS IN THE ELEMENTARY SCHOOL. Four hours credit. Prerequisite for majors, F. A. 124. Practical creative experience in a variety of crafts suitable for the elementary school classroom. Includes clay, weaving, papier mache, toy making, puppets, and cardboard and paper construction.
129. FASHION DRAWING. Four hours credit.

Prerequisite, F. A. 1 and 4. A course in the techniques of costume and fashion illustration. Work in various media pertinent to the processes of reproduction used in newspaper and magazine advertising.
132. CARTOON AND CARICATURE. Two hours credit.

Prerequisites, F. A. 1 and 4. The cartoon figure in commercial art. Principles, techniques, and construction. Pen and ink.
$135 \mathrm{a}, \mathrm{b}, \mathrm{c}$. LIFE CLASS. Two hours credit each quatter.
Opportunity to draw from the human figure.
136. TECHNIQUES AND MATERIAL. Fout houts ctedit.

The use of wash, oil, Wolfe crayon, watercolor, gouache, pen and ink, and other media in relation to the processes of reproduction in magazine, newspaper, and book illustration.
140. PROBLEMS IN COMMERCIAL DESIGN. Four hours credit. A general study of the forms of commercial design and illustration with specific emphasis upon merchandising and advertising media.
202. ADVANCED COMPOSITION. Fout hours credit.

Prerequisites, F. A. 1 and 2. Advanced problems in pictorial and graphic composition.
203. WATERCOLOR PAINTING. Four hours credit.

Prerequisites, F. A. 1, 2, and 103a, or the equivalent. This course seeks to develop individual expression in creative painting and technical mastery of the medium.
204. FIGURE AND COMPOSITION. Fout hours credit.

Prerequisites, F. A. 2 and 4, or the equivalent. An advanced study of the human figure in composition. Creative work in a variety of media.
205. COLOR THEORY. Four hours credit.

Prerequisite, F. A. 11. An extensive study of the field of color as one of the major design elements.
209. PRINT MAKING. Four hours credit.

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.
212. PROBLEMS IN DESIGN. Four hours credit.

Prerequisite, F. A. 11 or the equivalent. A study of the techniques of organization of the design variables. Opportunity for individual growth in solving design problems in areas of student's choice.
215. SCENE DESIGN AND STAGECRAFT. Four hours credit.
(See also Speech 114). A study of the art of the theater from the designer's point of view. Practical experience in working out the art problems involved in production.
216 g . WEAVING. Four hours credit.
A study of the problems and processes of weaving. Experience in the threading and weaving on a variety of two-and four-harness looms, making a warp, and the selection of threads.
220. OIL PAINTING. Fout hours credit.

Prerequisites, F. A. 1, 2, 103b, or the equivalent. This course seeks to develop individual expression in creative painting, and technical mastery of the medium.
221. ART HISTORY I. Four hours credit.

A study of the development of art from prehistoric time to and including the Gothic Age.
230. ART HISTORY II. Four hours credit.

A study of the development of art from the Renaissance to the present day.

233a, b, c. INDIVIDUAL PROBLEMS IN FINE ARTS. Two or four hours create each quarter.
Open to advanced students who may pursue creative work according to their individual needs.
234. ADVANCED SCENE DESIGN. Four hours credit.

Prerequisite, F. A. 215 or equivalent. The techniques and problems of scenic design involving the aesthetic qualities of settings, costumes, properties, and lighting.
300. INTRODUCTION TO GRADUATE STUDY. Four hours credit.

A study of the literature and techniques of research in the area of the graduate major. This course is required of all first quarter graduate students. Taught jointly with majors from Industrial Arts and Home Economics.
308. PLASTIC DESIGN. Two or four hours credit.

The theory and techniques of sculpture, with a study of the processes. Creative work in a choice of plastic media.
308g. WORKSHOP IN THE PRODUCTION OF AUDIO-VISUAL MATERIAL (Alternate Summer Sessions only). Four hours credit.
Credit.may also be obtained in Education. A laboratory course where the student selects concepts needing illustration from instructional problems and produces audio-visual materials to illustrate these concepts. Materials produced are charts, graphic materials, models and exhibits, slides, recordings, and film-strips.
313. GRAPHIC LAYOUT AND DESIGN. Four hours credit.

A study of the development of letter forms, and the principles of graphic design. Advanced problems in lettering and composition.
316. CRAFT PROCESSES AND DESIGN FOR SECONDARY SCHOOLS. Two or four hours credit.
A study of design and artcrafts adapted to secondary school levels.
317. CERAMICS. Four hours credit.

Prerequisite, F. A. 17 or the equivalent. Historical research in design and processes of ceramics ware. Individual creative and technical competence stressed.
322. INDIVIDUAL STUDIES IN ART EDUCATION. Two or four hours credit for one problem; a maximum of eight hours credit is permitted.
Provides for independent study in fields of specialization not provided for in formal classes. Qualified students are expected to spend a minimum of twenty-five clock hours for each quarter hour of college credit.

326. ART EDUCATION IN THE SCHOOLS (Summer Session only). Fout hours credit.
A study of current trends in philosophy and method with stress laid upon the creative approach and its relation to personality development as well as community needs. Members of the class may do concentrated work on their own teaching problems.
328. THE CURRICULUM IN ART EDUCATION (Summer Session only). Four hours credit.
A review of the best literature on the content and organization of the curriculum in general education, and the professional literature in art education. Analysis and evaluation of courses of study, the building of curricula and significant units for teaching art.
399. THESIS. Eight hours credit.

## HOME ECONOMICS

Students who receive the Bachelor of Arts degree with a teaching certificate in Home Economics will be certified by the State Board for Vocational Education. The Dietetics major meets internship requirements prescribed by the American Dietetics Association.

# Bachelor of Arts Degree <br> (With Teaching Certificate) 

Home Economics

## MAJOR

The following program is required: (A) Common Courses listed on Page 29; (B) H. E. 70, 71, 72, 73, 74, 77, 78, 180, 181, 183, 191a, 191b, 198, 275, 279, 288, 293, 295; (C) Econ. 104; Ed. 228a, 261, 272; F. A. 116; (D) Science minor of 24 hours including: Bot. 122; Chem. 41a, b, c; Phys. 65, and an additional four hours of laboratory science. Programs will be planned with the student's adviser.

## MINOR

Courses required are: H. E. 70, 72 (or 73), 74, 77, 191a, 191b, 292; four hours of electives.

## Dietetics

## MAJOR

The following program is required: (A) Common Courses listed on Page 29; (B) H. E. 70, 71, 72, 73, 74, 77, 78, 180, 181, 275, 279, 282, 284, 285, 286, 287, 289, 293, 297; (C) Ed. 272; (D) Science minor: Bot. 122; Chem. 41a, b, c, 48, 247; Zool. 117. Programs will be planned with the student's adviser.

# Bachelor of Arts Degree <br> (Liberal Arts) <br> Home Economics 

## MAJOR

The following program is required: (A) Common Courses listed on Page 30; (B) H. E. 70, 71, 72, 73, 74, 77, 78, 180, 181, 183, 191a, 191b, 198, 275, 279, 288, 293, 295; (C) A 24 hour minor outside the division; (D) Electives to complete requirements for graduation. Programs will be planned with the student's adviser.

## MINOR

Courses required are: H. E. 70, 72 (or 73), 74, 94, 191a; four hours of electives.

## Dietetics

## MAJOR

The following program is required: (A) Common Courses listed on Page 30; (B) H. E. 70, 71, 72, 74, 77, 78, 180, 181, 275, 276, 279, 282, 284, 285, 286, 287, 289, 297; (C) Science minor: Bot. 122; Chem. 41a, b, c, 48, 247; Zool. 117. Programs will be planned with the student's adviser.

## GRADUATE STUDY

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

## Description of Courses

70. CLOTHES AND PERSONALITY. Four hours credit.

This course is planned to develop the student's interest in personal appearance. Good grooming is stressed.
71. TEXTILES. Four hours credit.

A study of the nature and limitations of commonly used fabrics; the design of weaves and their wearing qualities. Testing of both well-known and recently developed fabrics in the textile field.
72. FUNDAMENTALS OF CLOTHING CONSTRUCTION. Four hours credit.
Instruction in the care and operation of sewing machines and their attachments. A commercial pattern is used in constructing a dress and in making a child's garment. The student is encouraged to remodel a garment. Four hours laboratory per week required.
73. DRESS DESIGN AND CONSTRUCTION. Four hours credit.

To develop the ability to work with fabrics and create attractive costumes. The student will select and make an appropriate dress for afternoon or street wear. Four hours laboratory per week required.
74. ELEMENTARY NUTRITION. Four hours credit.

To enable students to select food suited to their needs in the light of the newer knowledge of nutrition and individual physical fitness.
77. COOKERY AND TABLE SERVICE. Four hours credit.

A study of the fundamental processes of cookery. Laboratory work consists of planning, preparing, and serving meals. The breakfast, lunch, and buffet supper are emphasized. This course open to majors only except by special permission. Three single and two double periods per week.
78. FOOD PREPARATION AND SERVICE. Four hours credit.

Emphasis is given to principles of cooking involved in more difficult food preparation. Laboratory work centers around the planning, preparing, and serving of the family dinner and more elaborate and formal types of meals. This course is open only to majors except by special permission. Three single and two double periods per week.
94. ELEMENTARY COOKERY AND FOOD SERVICE. Four hours credit. This course is planned for Home Economics minors but may be selected by any student desiring more knowledge of the fundamental processes of cookery and food marketing. Simple meals and party refreshments will be planned, prepared and served. Three single and two double periods weekly.
180. FAMILY RELATIONSHIPS. Two hours credit. The relationship of the individual to his immediate human contacts. The establishment of the successful American home.
181. CHILD CARE AND TRAINING. Two hours credit.

A study of the child as an integrated personality; his physical, emotional, and social development as affected by the home and other socializing agencies. Observation of nursery school children.
183. HOME NURSING. Four hours credit.
Materials and methods of caring for the sick in the home.

191a. HOME MANAGEMENT THEORY. Four hours credit.
A study of the techniques of efficient home-making. Emphasis is given to economical management in terms of time, energy, and money.
191b. HOME MANAGEMENT RESIDENCE. Two hours credit.
Prerequisites, H. E. 77, 78, 191a, or equivalent. Students live for a period of six weeks in the Practice Cottage on the campus. Here they put into practice the desirable standards of home living.
198. MEAL PLANNING AND SERVICE. Four hours credit.

Prerequisites, H. E. 77, 78, or the equivalent. This course provides more practice in individual and group work in planning, preparing, and serving meals. Opportunities are planned to show how to solve some of the problems of the hostess in serving food on various occasions in the modest American home. Two single and two double periods weekly.

## 275. THE HOME AND ITS DECORATION. Four hours credit.

 A study of suitable furnishings for homes of various types. Advanced students prepare illustrative material with extensive research on types of architecture, furniture and fabrics of historical periods.276. DIETETICS. Four hours credit.

Prerequisite, H. E. 74. Advanced human nutrition. Animal feeding experiments developed as individual research problems. Dietaries for families of various income levels are planned. Ten hours laboratory during the quarter required.

## 279. PRESERVATION OF FOOD. Two hours credit. <br> Prerequisites, H. E. 77, 78, or equivalent. Laboratory practice in home methods of food preservation. Discussions and observation of commercial canning methods and preservation of food by the quick freeze and dehydration processes. One single and one double period per week.

282. NUTRITION IN DISEASE. Four hours credit.
Prerequisite, H. E. 74. A study of the fundamental principles involved in
the treatment of disease through diet. Ten hours laboratory during the quarter required.
283. DEMONSTRATION COOKERY. Two hours credit.

Prerequisite, H. E. 77, 78, or equivalent. Practice in the techniques of demonstrating before audiences the preparation of food. One single and one double period per week.

[^4]286. INSTITUTION COOKERY. Four hours credit.

Prerequisite, H. E. 77, 78, or equivalent. Application of cookery to large quantity preparation. Meal planning for various types of food service. Practice in using labor-saving devices of modern institutional kitchens. The facilities of the student dining halls and the faculty club are available for laboratory assignment. Two single and two double periods per week.
287. INSTITUTION MANAGEMENT. Four hours credit.

The organization and management of various types of institutions. Specific emphasis is given to problems of personnel, the physical plant and efficient work schedules.
288. COSTUME DESIGN. Four hours credit.

This is a study of the development of the fashions of the day traced through an historic background. Some work is given in sketching the fashion figure before taking up the creative problem of designing and making a costume.
289. INSTITUTION ECONOMICS. Two hours credit.

A study of the records necessary for the efficient administration of various types of institutions. Simple bookkeeping mechanics are developed and elementary principles of food cost accounting are studied.
290. HOUSEHOLD ECONOMICS. (Summer Session only). Four 'hours credit.
Discussion of home-making as a business. Consumer problems of the homemaker. Criteria for the purchasing of household equipment and supplies are determined.
292. METHODS IN THE TEACHING OF HOMEMAKING. Four hours credit.
This course is planned for Home Economics minors. A study of the philosophy of homemaking education, characteristics and needs of adolescents, organization of the curriculum, methods and materials. Includes directed observation.
293. ADULT EDUCATION IN HOMEMAKING. Two hours credit.

A study of the philosophy of adult education, procedures used in promoting and organizing adult programs, and methods used in teaching adults. Includes observation and practice in working with adults.
295. TAILORING. Four hours credit.

Prerequisites, H. E. 72, 73, or equivalent. The making of tailored suits and coats. A remodeling problem may also be used. Special emphasis is placed on tailored finishings. Four hours laboratory per week required.
296. DEMONSTRATION TECHNIQUES IN CLOTHING. Two hours credit.
Prerequisites, H. E. 72, 73, or equivalent. Experience in demonstrating before audiences, the problems and techniques used in clothing construction, and the making of household furnishings.
297. INSTITUTION FURNISHINGS. Two hours credit.

Projects involving the selection and arrangement of furnishings needed in institutions, with emphasis on the artistic as well as on durability.
300. INTRODUCTION TO GRADUATE STUDY. Four hours credit.

A study of the literature and techniques of research in the area of the graduate major. This course is required of all first quarter graduate students. Taught jointly with majors from Industrial Arts and Fine Arts.
301. CHILD WELFARE (Summer Session only). Four hours credit.

A study of the effects upon the child of heredity and the environment in the home and in society.
302. TEACHING PROBLEMS IN HOMEMAKING. (Summer Session only). Four hours credit.
Modern methods and trends in homemaking education. Problems of the individual teacher will be studied and assistance given the student in the working out of practical solutions.
305. PROBLEMS IN INTERIOR DECORATION. (Summer Session only). Four hours credit.
Prerequisites, F. A. 11, F. A. 205, or the equivalent. The application of art principles to the decoration of the home.
306. HISTORY OF COSTUME. Four hours credit.

An intensive study of the development of costume through the ages and its influence on the designs of present-day costumes. The development of the designers of Paris and the recent achievements in dress design by students of art in our own country.
322. INDIVIDUAL STUDIES IN HOME ECONOMICS. Two or four hours credit for one problem; a maximum of eight hours credit toward the degree of Master of Arts is permitted.
The course provides for independent study, particularly in those phases of a field of specialization not provided for in formal class courses.

333a, b. INDIVIDUAL PROBLEMS IN HOME ECONOMICS. Four hours credit each quarter.
371. ADVANCED TEXTILES. (Summer Session only). Four hours credit. Prerequisite, H. E. 71 or equivalent. A study of recent textile developments. Problems of individual interest are developed.
399. THESIS. Eight hours credit.

## INDUSTRIAL ARTS

## Bachelor of Arts Degree (With Teaching Certificate)

## MAJOR

The following program is required: (A) Common Courses listed on Page 29; (B) I. A. 34, 41a, b, 46a, b, 50a, b, c, 55 w $155 \mathrm{y}, \mathrm{z}, 61 \mathrm{a}, \mathrm{b}, 161 \mathrm{c}, 153 \mathrm{a}$; (C) Eight hours selected from I. A. 235, 236, 238, 240a; (D) Students without a high school background in fine or industrial arts may elect when possible: F. A. 111 (or I. A. 264), F. A. 17, 116; (E) One minor outside the division; ( F ) Electives to complete requirements for graduation. Programs will be planned with the student's adviser.

## MINOR

Courses required are: I. A. $34,50 \mathrm{a}, \mathrm{b}, 55 \mathrm{w}, 155 \mathrm{y}, \mathrm{z}, 61 \mathrm{a}, \mathrm{b}$, 161c; four hours of electives. Course substitutions will be made for students who expect to become craft counselors, playground instructors, etc.

In accredited high schools, teachers are required to have a minimum of seven and one-half hours of college credit in the field of industrial arts in which they teach.

## GRADUATE STUDY

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

## Description of Courses

34. INTRODUCTION TO INDUSTRIAL ARTS. Two hours credit.

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

41a, b, c, ELEMENTS OF PRINTING. Two or four hours credit each quatter.
Course " $a$ "' is elementary, " $b$ " is intermediate, " $c$ " is advanced. Experience with fundamental operations used in a school print shop.

46a, b. BOOKBINDING. Two or fout houts credit each quatter.
Basic processes ranging from elementary to advanced binding. Part of course devoted to work with limited equipment. Bookcrafts and leatherwork may be studied.

50a, b, c. WOODWORK. Two or four hours credit each quatter.
Courses " $a$ ", " $b$ ", and " $c$ " progress from elementary to more advanced work. Study of woods, materials and supplies parallel development of skills.

54a, b. WORKSHOP IN INDUSTRIAL ARTS FOR ELEMENTARY TEACHERS. Two or four hours credit each quarter.
Development of basic skills through elementary work in wood, metal and other materials easy to get. Adaptation of work to classroom or small shop. Creative work with limited equipment.
$55 \mathrm{w}, \mathrm{x}$. METALWORK. Two or four hours credit each quarter.
Course " $w$ " is elementary art metal, course " $x$ " is general metal. Opportunity is provided for the designing and construction of projects in a variety of materials.

61a, b. PRINCIPLES OF DRAFTING. Two or four hours credit each quarter.
Course " a " is orthographic projection and working drawing; course " b " is pictorial drawing.
137. WOODFINISHING AND UPHOLSTERY. Two or fout hours ctedit. Techniques and processes in woodfinishing and upholstery. Study of materials.
146c. BOOKBINDING. Two or four hours credit.
Prerequisite, I. A. 46a, b or equivalent. Advanced binding problems. `
147. PROBLEMS IN LEATHERWORK. Four hours credit.

Development of basic techniques in leatherwork. Tool designing and tool making for camps and school shops. Study of tanning, course organization, and relation of work to other areas.
148. GENERAL PLASTICS. Two or four hours credit.

An opportunity to become proficient in working with the many kinds of plastics for either a unit or a general shop.
149. BOOKBINDING FOR SCHOOL LIBRARIANS. Four hours credit. Opportunity to develop skills in library binding and repairing. A study of handmade equipment, purchasing of supplies, and economical ways of binding books.
150d. WOODWORK. Two or four hours credit.
Prerequisite, I. A. $50 \mathrm{a}, \mathrm{b}$ or equivalent. Emphasis on machine use.
151a, b. EQUIPMENT AND MAINTENANCE PROBLEMS. Fout hours credit in each area.
Course " a ", is upkeep and repair of woodworking tools and machines; course " $b$ " is maintenance, repair and construction of metalworking equipment. Admission by permission of instructor.
153a, b. WOODTURNING. Two or four hours credit each quarter.
Prerequisite, I. A. 50a or the equivalent. Development of basic skills in woodturning and the use of the lathe to supplement bench woodwork.

155 y, z. METALWORK. Two or four hours credit each quarter.
Course " y " is sheet metal, and course " z " presents the construction of ornamental iron problems.

161c, d. PRINCIPLES OF DRAFTING. Two or four hours credit each quarter.
Course " $c$ " is elementary architectural drawing; course " $d$ " is machine drawing.
163. GENERAL SHOP ELECTRICITY. Two or four hours credit.

Elementary principles of electricity that are applicable to projects on the junior high school level, and an opportunity to construct projects that use these principles. Methods of organizing a unit.
233. MATERIALS OF INDUSTRY. Fout houts credit.

A study of the origin of the materials used in industrial arts classes and processes involved in the manufacture of each material. Methods of presenting the related information and consumer knowledge of each material area are presented.

## 234. HISTORY OF INDUSTRIAL ARTS. Four hours credit.

A study of the movements of Industrial Arts, divided into two periods: from their beginnings to 1870 , and from 1870 to 1917 :
235. PHILOSOPHY OF INDUSTRIAL ARTS. Fout hours credit.

Prerequisite, I. A. 234 or equivalent. A study of the conflicts in the teaching of industrial arts. Relationship of philosophy to actual practice.
236. PRINCIPLES OF GENERAL SHOP ORGANIZATION. Four hours credit.
The purposes and philosophy underlying the organization of general shops.
238. CURRENT THEORY AND PRACTICE IN THE ARTS. Fout houts credit.
Current controversial issues which confront the teacher of the arts. Problems of standardization, laboratory organization, administrative and community attitudes, and correlation with other departments.

240a. COURSE ORGANIZATION IN INDUSTRIAL ARTS. Fout houts credit.
Criteria underlying the organization of a course of study in industrial arts. Techniques by which courses are developed or revised. Each student prepares a course of study in the field of his interest.

240b. DEVELOPMENT OF INSTRUCTION AIDS IN INDUSTRIAL ARTS. Four hours credit.
Prerequisite, I. A. 240 a or equivalent. Visual aids, instruction sheets, and instructional devices will be planned and developed. The student will select, plan, and construct, where appropriate, various instructional aids.
241. THE PLACE OF THE ARTS IN GENERAL EDUCATION. Four hours credit.
Incorrect concepts of the different areas of the arts are studied. Philosophies, objectives, and current methods of teaching the arts are presented.

## 242a, b, c. ADVANCED THEORY AND PRACTICE OF TYPOGRAPHIC

 DESIGN. Two or four hours credit each quarter.Prerequisite, I. A. 41a, b or the equivalent. An advanced course which treats printing from the standpoint of design. Offers opportunity to do creative work beyond ordinary commercial printing.

## 248. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN

 BOOKBINDING. Four hours credit.Methods of relating the bindery to the library and the classroom. Organization of binding as a general shop unit. Development of courses to meet individual needs.
254. THE ARTS IN RECREATION. Four hours credit.

The organizing of various types of craft work for a recreational program. Problems of finance, working with limited equipment, meeting interests of different age groups. Laboratory opportunity to develop proficiency.
256. ADVANCED ART METAL. Two or fout hours credit.

Prerequisite, I. A. 55 w or equivalent. Advanced processes in art metal and jewelry work.
264. INDUSTRIAL ARTS DESIGN. Four hours credit.

Principles of design as they apply to the several areas of industrial arts.
300. INTRODUCTION TO GRADUATE STUDY IN INDUSTRIAL ARTS. Four hours credit.
A study of the literature and research in the arts. Criteria for the selection of graduate work in industrial arts for subsequent quarters. Study of research techniques. Required of all graduate majors in industrial arts. Taught jointly with Home Economics and Fine Arts majors.
301. SEMINAR IN INDUSTRIAL ARTS. Four hours credit.

An opportunity for all students doing independent research to report and receive criticism.
322. INDIVIDUAL STUDIES IN INDUSTRIAL ARTS. Credit toward the degree of master of arts limited to eight hours.
Opportunity for independent study not provided in regular classes. Open only to qualified students. Typewritten paper required.

333a, b, c. INDIVIDUAL PROBLEMS IN INDUSTRIAL ARTS. Four hours credit each quatter.
Open to selected students for special work not offered in regular classes.
343. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN PRINTING AND THE GRAPHIC ARTS. (Summer Session only). Four houts credit.
Objectives of printing and graphic arts, their historical development and place in our cultural background; art in printing, shop planning, equipment and management, course content and organization.

## 344. PROBLEMS OF DESIGN IN PRINTING AND THE GRAPHIC ARTS.

 (Summer Session only). Four hours credit.Prerequisite, I. A. 343. Forms and trends of design and methods by which it functions in the graphic arts. Problems and projects arising from pupil's interests. Opportunity for individual creative work.
351. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN WOODWORKING. Fout hours credit.
Critical study of current practices. A "refresher" course for teachers who have been away from the field. Includes techniques in both bench and machine work.
352. PROBLEMS IN WOODWORKING. Four hours credit.

Prerequisite, I. A. 351 or the equivalent. A study of the problems the specialized teacher of woodworking in secondary schools must meet.
359. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN METALS (Summer Session only). Four hours credit.
Objectives, course content, and methods of teaching all phases of metal work. Industrial, social, and economic significance of metals. A study of the various types of metal shop organization.
360. PROBLEMS OF THE METAL SHOP (Summer Session only). Four houts credit.
Prerequisite, I. A. 359 or the equivalent. Methods of organizing courses on both unit and general shop basis.

362a, b. PROBLEMS IN DRAFTING AND PLANNING. Four hours credit each quarter.
Objectives, course content, and teaching procedures. Drafting problems and their solution.

368a, b. ADVANCED ARCHITECTURAL DRAFTING (Summer Session only). Four hours credit each quarter.
Prerequisite, I. A. 161c or the equivalent. Home and school planning. Laws, standards, and computation of cost. Open to school administrators as well as industrial arts teachers.
399. THESIS. Eiaht hours credit.

## Division of Education

The Division of Education includes the fields of Elementary Education, General Secondary (Distributive) major, School Librarianship, and Business Education.

## Bachelor of Arts Degree (With Teaching Certificate)

## ELEMENTARY EDUCATION

## MAJOR

The following program is required: (A) Common Courses listed on Page 29; (B) F. A. 124; Mus. 149; P. E. 14, 202; Speech 13; Eng. 121; Sci. 191; Ed. 53 (or 211), 54 (or 212), 210, 213; (C) From 65 to 73 hours of electives in art, English, geography, history, home economics, music, science, and sociology. In selecting these courses, the adviser of elementary majors should be consulted. Elementary majors will find it valuable to play simple piano accompaniments. Students may enroll for group piano instruction. Programs will be planned with the student's adviser.

## MINOR

Courses required are: Ed. 210, 211, 212, 213; two of the following: F. A. 124; Mus. 149; Speech 13; Eng. 121; Sci. 191.

## GENERAL SECONDARY

A General Secondary curriculum is offered for students who do not select a major in any one of the divisions. This curriculum requires four subject matter minors of at least 24 hours each in four divisions, or three subject matter minors of at least 36 hours in three divisions.

In addition, the Common Courses listed on Page 29 are required. Electives will be added to complete requirements for graduation. Programs will be planned with the adviser of general secondary majors.

## GRADUATE STUDY

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

## LIBRARY MINOR

Students interested in positions as teacher-librarians may minor in library science in two ways. (1) - They may take the minor entirely at Colorado State College of Education. Under this plan they will be required to take Ed. 182, 280, and 281 (the basic 12 hours of required library science courses). Besides this basic program they should take at least 12 hours from the following: Ed. 208a, 283; Speech 13; Eng. 319, Eng. 126; I. A. 149. (2) -They may take a quarter of basic required undergraduate courses in library science in the School of Librarianship of the University of Denver. This work will be transferred for the equivalent of one quarter, usually 16 credit hours. Under this plan a student will still be held for at least eight hours more of course work to be taken from: Ed. 208a, 283; Speech 13; Eng. 319, Eng. 126; I. A. 149. The adviser of this library science minor is the chairman of the Division of Education.

## COOPERATIVE CURRICULUM FOR SCHOOL LIBRARIANS

Graduates of schools of librarianship are appointed as graduate library internes. Persons interested should write to the Librarian of Colorado State College of Education.

## GRADUATE STUDY

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

## Description of Courses

25. GENERAL PSYCHOLOGY. Four hours credit.

Introducing the student to the scientific study of human behavior, with emphasis upon the growth and development of the individual within his physical and social environment.

26a. CAMP FIRE GIRLS' LEADERSHIP. Two hours credit. Training for leadership in extra-curricular activities for girls. The course leads to the National Training Course Certificate of the Camp Fire Girls.

26b. BOY SCOUT LEADERSHIP. Two houts credit.
Designed to give students a general knowledge of the aims and content of the Boy Scout program; with emphasis on the methods that can be used to teach the program to boys.

26c. GIRL SCOUT LEADERSHIP. Two hours credit.
For young women interested in becoming sponsors of Girl Scout Troops.
30. TEACHING IN SMALL COMMUNITY SCHOOLS. Four hours credit. Managing the small school, organizing multiple-grade, groups for instruction, and selecting and adapting learning materials and activities to wide age-range classes.
53. TEACHING READING IN THE ELEMENTARY SCHOOL. Four hours credit.
A beginning course in teaching reading. Required of those students who are preparing for their first student teaching assignment. Special attention is given to the problems of when the child is ready to start learning to read, the steps in beginning reading, and how to make the pupil efficient in reading in general school work.
54. TEACHING ARITHMETIC IN THE ELEMENTARY SCHOOL. Four hours credit.
A beginning course in teaching arithmetic. Required of those students who are preparing for their first student teaching assignment. Special attention is given to problems of developing understanding of numbers, teaching the basic combination, efficient use of the arithmetic textbook, and developing accuracy.
77. PSYCHOLOGY OF CHILDHOOD AND YOUTH. Four houts credit. Prerequisite, Ed. 25 or the equivalent. The study of the physical, social, and intellectual growth and development of the pupil from pre-school age through the high school. This course meets educational psychology requirements.
85. COMMUNITY LIFE AND PROBLEMS. Fout hours credit.

A course designed to give prospective teachers an experience in study of typical kinds of community life. Each student will elect either to participate during the term in some community activity or to make a simple type of community survey.
105. AMERICAN EDUCATION. (This course should be taken before or with Ed. 214 or Ed. 216). Four hours credit.
Objectives of education, techniques of educational thinking, characteristics and trends in the American school system, the general program and materials of instruction, and problems of teacher-education and welfare.
108f. WORKSHOP IN RADIO PRODUCTION. (Credit may also be obtained in the Division of the Humanities). Four hours credit.
Elements of radio speaking, acting, script writing, and production with emphasis on educational programs. Taught on a laboratory basis with actual broadcasting on local station required of students.
120. INDIVIDUAL EDUCATIONAL RESEARCH FOR SENIOR COLLEGE STUDENTS. A maximum of eight hours credit. Two or fout hours credit for one problem.
Qualified undergraduate students outline a definite problem and spend a minimum of twenty-five clock hours for each quarter hour of college credit. Two typewritten copies of a well written paper must be filed before credit is given, one with the instructor who directs the individual study and one with the chairman of the division.

## 150a. OBSERVATION AND APPLIED TECHNIQUES OF TEACHING IN THE ELEMENTARY SCHOOL. Four hours credit.

Students who enroll in this course must have the personal and scholastic qualifications essential for a teacher. Scheduled observation and participation periods and a weekly group conference each Tuesday at 4:00 p. m., in addition to regular class study and discussion.

150b. METHODS OF TEACHING IN SECONDARY SCHOOLS. Four hours credit.
Prerequisites, Ed. 105 and Ed. 216. A methods course in a given major area provides for a study of teaching procedures at the secondary school level. The course is offered in the following areas: Fine Arts, Industrial Arts, Home Economics, Business Education, English, Speech and Drama, Foreign Language, Mathematics, Science, Social Studies, Physical Education, and Music.

150c. OBSERVATION AND DIRECTED PARTICIPATION. Four hours credit.
Prerequisites, Ed. 105 and Ed. 216. A course in which the student participates in supervised classroom activities and applies the methods and teaching techniques learned in Ed. 150 b . Ed. 150 c may be taken concurrently with Ed. 150 b or during a subsequent quarter. The assignment for Ed. 150 c must be made during the first quarter of the student's junior year with the designated teacher in the area in which the student teaching is to be done.
151. STUDENT TEACHING. Four to sixteen hours credit.

Prerequisites, the personal qualifications essential for a teacher, and for elementary majors Ed. 150a, Ed. 53, and Ed. 54; for secondary majors Ed. 150 b, Ed. 216 , and the appropriate methods and directed participation courses. Content includes planning of definite teaching units, classroom teaching under supervision, conferences with supervising teachers on procedures employed, and participation in school and school-community activities.
158. ADVANCED OBSERVATION - STUDENT TEACHING. Four hours credit.
Prerequisites, public school teaching experience and Ed. 105, together with methods courses appropriate for the area or teaching situation being observed. Carefully directed observation analysis and evaluation of teaching in either the Ernest Horn Elementary School, or the College Secondary School, together with discussion of how to adapt methods observed to the student's particular teaching situation.
182. DIRECTED LIBRARY PRACTICE. Four hours credit.

Prerequisites, Ed. 280 and 281, or the equivalent. A minimum of eight. hours a week of directed work in the elementary, secondary, or college' libraries.
200. UNIT COURSES IN EDUCATION. One hour credit for each unit. Short courses of two weeks' duration. The title of each specific unit implies the purpose and content of the course.
203. AVIATION FOR ELEMENTARY AND SECONDARY TEACHERS. Four houts credit.
A non-technical course dealing with maps, weather, navigation, aerodynamics, civil air regulations, vocations, and social significance of the air age, and methods and materials for teaching. Class needs are considered.
207. PERSONALITY OF YOUNG CHILDREN (Summer Session only). Four hours credit.
Prerequisite, a course in psychology. Development of personality from birth through early childhood with methods of diagnosing and treating classroom problems of personality development.

208a. AUDIO-VISUAL AIDS IN EDUCATION. Four hours credit.
Topics include the underlying philosophy and psychology of learning as it relates to these aids, an examination of the various aids ranging from the field trip and objective materials through the motion picture, still picture, graphic materials, etc. A laboratory period is required.
208b. THE RADIO IN EDUCATION. Four hours credit.
Topics include the place of radio in society, the use of radio and recordings as instructional devices in the classroom, school radio and sound equipment, problems of school broadcasting, and teaching discrimination and appreciation.
208c. COMMUNICATIONS, EDUCATION, AND PROPAGANDA. Four hours credit.
A study of the methods, interests, and issues involved, together with the techniques of propaganda analysis. This is followed by an examination of the press, radio, and motion picture with special emphasis on techniques of developing discrimination.
208f. WORKSHOP IN RADIO PRODUCTION (Advanced course. Summer Session only. Credit may also be obtained in the Division of the Humanities). Four hours credit.
Elements of radio speaking, acting, script writing, and production with emphasis on educational programs. Taught on a laboratory basis with actual broadcasting on local station required of students.
210. IMPROVEMENT OF INSTRUCTION IN READING IN THE ELEMENTARY SCHOOL. Four hours credit.
Prerequisites, Ed. 150a or 151, or teaching experience. Content, methods, and materials to be used in the teaching of reading from the kindergarten through the sixth grade.

210a. READING IN THE PRIMARY GRADES (Summer Session only). Four hours credit.
The nature of reading, the curriculum in reading for the primary grades, the selection of effective methods and materials for teaching, and the use of tests.

210b. READING IN THE INTERMEDIATE GRADES (Summer Session only). Four hours credit.
The purpose of this course is to provide guidance in attacking problems to be met in the teaching of reading in the fourth, fifth, and sixth grades.

210d. REMEDIAL READING IN THE ELEMENTARY SCHOOL (Summer Session only). (Note the laboratory course, Ed. 210e). Four hours credit. A lecture course dealing with remedial reading from grades one through six, testing and diagnosis of problem cases, and techniques and materials for use in remedying the difficulties.

210e. LABORATORY COURSE IN REMEDIAL READING (A laboratory course. Summer Session only). Fout hours credit.
To be taken with Ed. 210d. A practice course with actual remedial cases, with which the materials and techniques of diagnosis and treatment of difficulties are used.

## 210f. READING READINESS. Four hours credit.

Presenting theories, research, and practices regarding readiness for reading in the first grade and on through the elementary school, and readiness to read in subject-matter fields.

210 g . TEACHING SPANISH-AMERICAN CHILDREN. Four hours credit. The scope, methods, materials, and techniques for teaching non-Englishspeaking children, emphasizing foundational work in oral English for beginners and a guidance program through the grades.
210h. LABORATORY COURSE IN TEACHING SPAÑISH-AMERICAN CHILDREN. Four hours credit.
No prerequisite. A course in observation and participation of teaching Span-ish-American children of various ages, using techniques and materials suited to their needs in the language arts.
210i. PROBLEMS IN READING. Four hours credit.
A special course to discuss specialized problems in reading.
211. IMPROVEMENT OF INSTRUCTION IN LANGUAGE IN THE ELEMENTARY SCHOOL. Four hours credit.
Prerequisites, Ed. 150a or 151, or teaching experience. Improvement in instruction, content, methods, and materials to be used in the teaching of speaking and writing from the kindergarten through the sixth grade.
211a. LANGUAGE IN THE PRE-SCHOOL AND PRIMARY GRADES (Summer Session only). Four hours credit.
A course in oral language from pre-school through grade three, and written language, penmanship, and spelling in the primary grades. Curriculum content, materials, and techniques will be studied.

211b. LANGUAGE IN THE INTERMEDIATE GRADES (Summer Session only). Four hours credit.
The purpose of this course is to provide guidance in coping with problems to be met in the teaching of language in the fourth, fifth, and sixth grades.
212. IMPROVEMENT OF INSTRUCTION IN ARITHMETIC IN THE ELEMENTARY SCHOOL. Four hours credit.
Prerequisites, Ed. 150a or 151, or teaching experience. Selecting what to teach, the grade placement of content, method and materials of teaching, and means of evaluating achievement.

212a. ARITHMETIC CONCEPTS FOR YOUNG CHILDREN (Summer Session only). Four hours credit.
Study and discussion of the development of number readiness and the utilization of the meanings of numbers in teaching the fundamental processes.

212b. ARITHMETIC IN THE INTERMEDIATE GRADES (Summer Session only). Four hours credit.
Problems in the teaching of arithmetic in the fourth, fifth, and sixth grades.
213. IMPROVEMENT OF INSTRUCTION IN SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. Four hours credit.
Selection and organization of content, learning activities, problem-solving and social action skills, building social values, and developing methods of teaching unified and correlated social studies programs.
214. THE ELEMENTARY SCHOOL. Four hours credit.

Prerequisite, Ed. 105. Origin and development of the elementary school, its purposes, organization, types of curricula, teacher-parent relationships, and other non-instructional problems.

215a. PRINCIPLES OF COUNSELING. Two or four hours credit. The fundamental principles of guidance programs.
215c. GUIDANCE IN ELEMENTARY SCHOOLS. Four hours credit.
The scope and best techniques for carrying out a program in personnel and guidance from pre-school through grade six.
215 g . VOCATIONAL GUIDANCE (Summer Session only). Fout hours credit.
A basic course in the principles and techniques of vocational guidance appropriate for teachers of high school and college age youth.
215h. APPLIED TECHNIQUES OF COUNSELING. Four hours credit.
Prerequisite, a guidance course. This course is designed to give the student practical applications in guidance procedures in schools and colleges.
216. SECONDARY EDUCATION. Four hours credit.

Prerequisite, Ed. 105. An introductory course in secondary education concerned with the general problems of the evolution of the secondary school, purposes, the curriculum, learning materials, methods, and evaluation. (This course should precede or be taken in the same quarter with Ed. 150b).
217. EXTRA-CURRICULAR ACTIVITIES AND GUIDANCE. Four hours credit.
Prerequisite, Ed. 105. Topics covered include school government, athletics, debating, literary and social clubs, the school papers, musical and dramatic activities, and civic clubs and projects.
227. TEACHERS' CLASSROOM TESTS. Fout hours credit.

Practical and technical training in the construction, evaluation, and interpretation of teacher-made tests, with special emphasis given to interpreting results.

## 227a. IMPROVING THE MARKING SYSTEM. One hour credit.

A unit course designed to assist teachers and administrators in the improvement of school marking and reporting practices.

227b. CONSTRUCTION AND USE OF ACHIEVEMENT TESTS. One hour credit.
How to construct and use various types of achievement tests.
228a. MENTAL HYGIENE. Four hours credit.
Prerequisite, Ed. 25 or its equivalent. A general non-technical course designed to give an understanding of the problems and principles of mental hygiene observed in normal community life.

228b. THE PSYCHOLOGY.OF EXCEPTIONAL CHILDREN. Four hours credit.
Prerequisite, teaching experience and Ed. 25. The evaluation and adjustments necessary for understanding and teaching the brilliant, retarded, physically handicapped, and emotionally maladjusted child.
229a. EDUCATIONAL MEASUREMENTS IN ELEMENTARY SCHOOLS (Summer Session only). Four hours credit.
A survey of the available standardized measuring instruments appropriate for use below the high school level.
229b. MENTAL TESTS AND MEASUREMENTS (Summer Session only). Four hours credit.
Mental testing and measurement. Training provided in administering tests and in evaluating the tests and their results.
236. TECHNIQUES OF TEACHING IN RURAL SCHOOLS. Four hours credit.
This course offers opportunities to become familiar with and evaluate new Tteaching techniques adapted to the instructional programs of rural schools.
237. COMPARATIVE EDUCATION (Summer Session only). Four hours credit.
The philosophy and practices of education in foreign countries, usually inclúding education in Germany, France, Russia, Norway, Great Britain, China, Australia, Canada, Mexico, and certain South American countries.

## 240. PARENT EDUCATION. Two hours credit.

To acquaint teachers with the important parent-home-school relationships in the educational process. The course deals with the philosophy of parentteacher organization, methods of promoting a parent-teacher program, and local units of parent-teacher associations.

## 241a. ADMINISTRATION OF VILLAGE AND CONSOLIDATED SCHOOLS. Fout hours credit. <br> (For men undergraduate subject matter majors and students with limited administrative experience. Students who elect this course should not take Ed. $342,343,344$ ). A study of problems of small schools from the administrative standpoint. Curricula, supervision, transportation, records, and other problems.

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

An appraisal of theories and practices of curriculum making, presentation of modern functional philosophy of curriculum making, and survey of the applications of this functional theory to the major areas of knowledge. (This is the first of three courses in the curriculum field: Ed. 245, 246, 247).
246. ADVANCED CURRICULUM CONSTRUCTION. Fout hours credit. This course discusses what to teach in the major areas of experience, including health, economic life, home and family life, civic education, leisure and recreation, religion, and individual development.
247. EDUCATIONAL SOCIOLOGY. Four hours credit.

Surveys and appraises the implications of outside-of-school agencies, such as associational influences, customs, social control, parent education, youth problems, libraries, motion pictures, museums, the press, and the radio.
249. PROBLEMS OF ORGANIZING A COMMUNITY. Four hours credit. This course attempts to help administrators and teachers to utilize the resources of the community in a broad educational program in and out of school.

## 249a. WORKSHOP IN COMMUNITY PROBLEMS (Summer Session only).

 Fout hours credit.Provision is made for students to work on individual problems relating to the community. A carefully worked out report in the form of a term paper is required.

249b. PROBLEMS OF INTERGROUP RELATIONS. Two houts credit.
A course dealing with the evidence as to all types of intergroup relations (race and nationality, minority groups, income groups, urban and rural groups) and with methods of teaching and measuring intergroup relations.
261. PRE-SCHOOL AND KINDERGARTEN EDUCATION (Summer Session only). Four houts credit.
A course presenting the theories, research, and best practices for the education of children in schools from the age of two years until their entrance to first grade.
262. CREATIVE EDUCATION (Summer Session only). Four hours credit. This course is designed to appraise the place and contribution of the theory of children's interests in education.
263. ORGANIZATION AND SUPERVISION OF THE ELEMENTARY SCHOOL. Four hours credit.
Types of school organization, administration of school services, pupil accounting, supervision of the instructional program, in-service education of teachers, school-community relationships.
266. SECONDARY SCHOOL CURRICULUM, INSTRUCTION, AND ADMINISTRATION (Summer Session only). Four hours credit.
Prerequisite, Ed. 216 or the equivalent. The problems of teachers, particularly those concerning curriculum and instruction on which the members of this class are working in service, will be used for cooperative committee study and development of recommendations for improved practices.
267. RECONSTRUCTING SECONDARY EDUCATION (Summer Session only). Four hours credit.
Prerequisite, Ed. 216 or the equivalent. Progressive thinking and progressive practices in secondary education and in the major teaching fields of the students enrolled will be used as a basis for the development of plans for the improvement of secondary school teaching.
271. TECHNIQUES OF ADULT EDUCATION (Summer Session only). Four hours credit.
This course will emphasize the development of the adult educational movement in this country, the psychology and philosophy of adult education, and methods and techniques in practical application.
272. PRINCIPLES OF VOCATIONAL EDUCATION. Two or four hours credit.
A study of the philosophy and development of vocational education, types of vocational education, legisiation, state policies, school programs, and non-school agencies and programs.
275a. APPLIED GENERAL STATISTICS. Fout hours credit.
A basic course introducing the student to the meaning and practical use of measures of central tendency, variability, reliability, and relationship.

277a. CHILD PSYCHOLOGY. Four hours credit.
Prerequisite, a course in general psychology or the equivalent. This course presents important information about the growth, adjustments, and capacities of children from conception through elementary school years. Emphasis placed upon what to do in guiding the development of children.

277b. PSYCHOLOGY OF ADOLESCENCE. Fout hours credit.
This course gives data concerning physical, emotional, and social development of normal adolescence; examines critically the school program, and suggests methods of directing growth of the adolescent.
279. DEVELOPMENT OF AMERICAN PSYCHOLOGY. Four hours credit. Prerequisite, Ed. 25 or its equivalent. Using a historical approach, a study is made of the various trends leading to the growth of structuralism, functionalism, behaviorism, and organismicgestalt psychology.
280. ORGANIZING A SCHOOL LIBRARY. Four hours credit.

Aid for teachers in developing libraries in small schools; principles of maintenance and administration on either elementary or secondary level, simple classification and cataloging, converting schoolrooms to effective libraries.
281. LIBRARY MATERIALS FOR SCHOOLS. Four hours credit.

Evaluation of library resources. Coordination of materials with class needs. For both elementary and secondary schools.
283. INDIVIDUAL STUDIES OF LIBRARY PROBLEMS. Four hours credit.
Prerequisites, Ed. 280, 281, or their equivalent. (See Ed. 322 for equivalent requirements as to written work). A careful analysis of a practical library problem culminating in an individual study.
290. PROFESSIONAL EDUCATION OF TEACHERS (Summer Session only). Two hours credit.
Deals with general administration and control of teachers' colleges, the teaching staff, selection, admission, and supervision and control of students, records, reports, placement, finance, curriculum, educational research, and relationships with other educational institutions.
291. SOCIAL PSYCHOLOGY. (See Social Studies 202). Four houts credit. Prerequisite, Ed. 25 or its equivalent. Human behavior is studied in reference to social conditioning and membership in cultural and institutional groups: family, church, state, and economic organizations.
292. SUPERVISION OF STUDENT TEACHING. Two houts ctedit.

Study of appropriate techniques for directing the work of student teachers. Particular attention is given to teaching students how to plan lessons, conduct class discussion, analyze pupil difficulties, and evaluate pupil achievement.
294. APPLIED LOGIC. Four hours credit.

Prerequisites, Ed. 105, Ed. 216, and Ed. 295. Logical meaning, logical structure, factual reasoning, dialectical method; the problems of reality, self, moral values, religion, and the esthetic experience.
295. PHILOSOPHY OF EDUCATION. Four hours credit.

Prerequisites, Ed. 105 and Ed. 214 or Ed. 216. Educational aims, values and criteria, democracy and education, different systems of educational philosophy, the nature of thinking, method and subject matter. Open only to seniors and graduate students.

295a. FOUNDATIONS OF MODERN EDUCATION. Four hours credit.
Prerequisites, Ed. 105 and Ed. 216. This course is designed to study important historical and philosophical backgrounds for the interpretation of present-day educational issues. A substitute for Ed. 295.
296. MODERN PHILOSOPHIES OF EDUCATION. Four hours credit.

Prerequisites, Ed. 105, Ed. 216, and Ed. 295. A study of three schools of philosophy and their educational implications-realism, idealism, and pragmatism.
297. CONCEPTIONS OF MIND IN EDUCATIONAL THEORY. Four hours credit.
Prerequisites, Ed. 105, Ed. 216, and Ed. 295. Traces the historical development of three major conceptions of mind and shows the relation of each to the aims of education.
298. CURRENT EDUCATIONAL TRENDS AND ISSUES (Summer Session only). Four hours credit.
(Equivalent to Ed. 105). Appraises the current studies in such areas as objectives of education, experimentation and evaluation, administration (elementary, secondary, and higher education), non-governmental controls, the program of education, teacher personnel, and welfare.
298a. SOCIAL AND EDUCATIONAL PLANNING IN THE POSTWAR WORLD (Summer Session only). Four hours credit.
The course, dealing with recent social and educational trends, presents needed adaptations for a broadened program for education.
300. INTRODUCTION TO GRADUATE STUDY. Four hours credit.

A study of the literature and techniques of research in the area of the graduate major. This course is required of all first quarter graduate students who intend to receive the degree of Master of Arts.
308g. WORKSHOP IN THE PRODUCTION OF AUDIO-VISUAL MATERIALS. (Alternate Summer Sessions only). (Credit may also be obtained in the Fine Arts). Four hours credit.
A laboratory course in which the student selects concepts needing illustration from instructional problems and produces audio-visual materials to illustrate these concepts. Materials produced are charts, graphic materials, models and exhibits, slides, recordings, and film strips.
308h. THE ADMINISTRATION OF AUDIO-VISUAL AIDS. (Alternate Summer Sessions only). Four houts credit.
Organization, functions, and administration of audio-visual programs in schools, school systems, colleges, and industries. Other topics include personnel, budget and finance, library, production, and technical services, teacher education, and public relations.
309a, b, c. SEMINAR IN ELEMENTARY EDUCATION. Two or four hours credit each quarter.
This course gives intensive consideration to instructional problems in the elementary school. The problems included each quarter are determined by the interests of the students enrolled.

## 315d. GUIDANCE IN SECONDARY SCHOOLS. (Summer Session only)' Four hours credit. <br> Principles and techniques of guidance, functions of guidance workers, and analysis of representative guidance programs in secondary schools.

315e. PROBLEMS IN SECONDARY SCHOOL GUIDANCE (Summer Session only). One to four hours credit.
An advanced course which considers specialized problems such as home room guidance, tests and their use in guidance, records and reports, and individual guidance problems.

## 315f. PERSONNEL WORK IN COLLEGES AND UNIVERSITIES. Four

 hours credit.General discussion of the administrative principles and functions of student personnel work. Admission policies, college orientation, housing, program planning, and interpretation of tests.
322. INDIVIDUAL STUDIES IN EDUCATION. Two or four hours credit for one problem; a maximum of eight hours credit.
Qualified students outline a definite problem and spend a minimum of twenty-five clock hours for each quarter-hour of college credit. Two typewritten copies of a well-written paper must be filed before credit is given, one with the instructor who directs the study and one with the Director of the Graduate School.
325. CONTEMPORARY PSYCHOLOGICAL PROBLEMS. Four hours credit.
This course deals with the contemporary status of the most persistent problems identified with the study of human behavior, such as intelligence, learning, thinking, and personality.

## 329c. THE STANFORD-BINET SCALE OF INTELLIGENCE. Four hours credit.

A laboratory course in the use of the scale, leading to the student's becoming qualified to administer it in schools and clinics.

> 342. SCHOOL ADMINISTRATION. (First Course). Four hours credit. Prerequisites, twelve hours in education and experience. Federal relations to education, the state as the fundamental educational unit, local administrative units, duties and powers of the superintendent, and the administration of personnel. (Admininistration majors may earn up to 20 hours in this field by taking Ed. $342,343,344,442$, and 443 ).

> 343. SCHOOL ADMINISTRATION. (Second course). Fout hours credit. Prerequisites, twelve hours in education and experience. Child accounting, business administration, preparation and use of the budget, cost accounting and fiscal control, indebtedness, short-time borrowing and bonds.
344. SCHOOL ADMINISTRATION. (Third course). Four hours credit. Prerequisites, twelve hours in education and experience. School building plans, specifications, construction, maintenance, operation, insurance, and purchase and care of supplies and equipment.
352. STUDENT SUPERVISION. Fout to eight houts credit.

Open to those students who have a record of very successful public school teaching experience and are preparing for supervisory positions. A laboratory course to give practical experience, under close supervision, in directing the work of student teachers.
364a. IMPROVEMENT OF INSTRUCTION IN READING AND LANGUAGE. (For school administrators). Four hours credit.
This course offers a consideration of the most crucial problems to be solved in supervising the teaching of reading and language in the elementary school.
364b. IMPROVEMENT OF INSTRUCTION IN ARITHMETIC, SPELLING, AND SOCIAL STUDIES. (For school administrators). Four hours credit.
This course offers a consideration of the most crucial problems to be solved in supervising the teaching of arithmetic, spelling, and social studies in the elementary school.
365. JUNIOR-SENIOR HIGH SCHOOL ADMINISTRATION AND SUPERVISION (Summer Session only). Four houts credit.
Prerequisites, Ed. 216 or the equivalent. The important problems in school administration and supervision as recognized and selected by secondary school administrative personnel enrolled in this course will determine its content.
368. THE SMALL HIGH SCHOOL (Summer Session only). Four hours credit.
Emphasis is directed in this course to those secondary school problems associated particularly with the small school.
369. EXPERIMENTATION IN THE SECONDARY SCHOOL (Summer Session only). Four hours credit.
Desirable prerequisites, Ed. 216 and Ed. 267, or the equivalent. Secondary school organization, curriculum, and instructional practices as developed by the Secondary School of Colorado State College of Education provide the approach in this course to the study of various plans for the improvement of secondary education.

375b. STATISTICAL METHODS FOR RESEARCH. Four hours credit.
Prerequisite, Ed. 275a. A course providing the student with advanced statistical techniques appropriate for administrative and research work in education. Special emphasis given to research data.
378. ADVANCED PSYCHOLOGY OF LEARNING (Summer Session only).

- Fout houts credit.-- :-

Prerequisites, teaching experience and Ed. 77 or its equivalent. The several theories of learning are examined critically for the purpose of developing a working control of the learning process by the student.
393a, b, c. SEMINAR IN HIGHER EDUCATION (Summer Session only). Four hours credit.
The purposes of this course are orientation and study of the problems of higher education including organization, control, curriculum, personnel and guidance, instruction.

## 399.THESIS. Eight hours credit.

400. INTRODUCTION TO GRADUATE STUDY. Four hours credit. This course is open only to students enrolled for course work applicable to the Advanced Diploma of Specialization and the degree of Doctor of Education, and is required of all such students the first quarter in residence. A student who has had a similar graduate course elsewhere may be excused from this requirement by the Director of the Graduate School upon presentation of a written request approved by the major professor.
401. PRACTICUM FOR ADVANCED GRADUATE DIPLOMA OF
SPECIALIZATION. Eight hours credit.
Practical professional activity or project, which culminates in an extensive
written report of the project, emphasizing procedures used and conclusions
reached.

## 422a. RESEARCH PRELIMINARY TO FIELD STUDY NO. 1.

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

422b. RESEARCH PRELIMINARY TO FIELD STUDY NO. 2.
Required of all candidates for the degree of Doctor of Education preparatory to Field Study No. 2. This preparatory work must be done on the campus as part of a student's regular course load and in consultation with the major professor or the research professor.

423a, 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, 423a, fall quarter, four hours; 423b, winter quarter, four hours; 423 c , spring quarter, four hours. For the second study the credit is offered in the same way.

424a, b, c. GRADUATE RESEARCH CREDIT FOR FIELD STUDY NO. 2. Each course four hours-maximum twelve hours for Field Study No. 2.
442. SCHOOL ADMINISTRATION (Fourth course). Four hours credit. Prerequisites, twelve hours in education, experience, and graduate classification. The problems of general school law applicable in typical states and court decisions relative to schools, public relations, and school publicity.
443. SCHOOL ADMINISTRATION (Fifth course). Four hours credit. Prerequisites, twelve hours in education, experience, and graduate classification. Administration of adult education, federal-supported classes, such as agriculture, home economics and distributive occupations, libraries, health agencies, military training, and other specialized and allied educational agencies.

## BUSINESS EDUCATION

Bachelor of Arts Degree
(With Teaching Certificate)

## MAJOR

There are two fields of specialization in this major-Business Management and Secretarial Science. In addition to the Common Courses listed on Page 29, the following business courses are reguired in both areas: Bus. Ed. 1, 2, 10, 11, 20, 37, 41, 131, 132, 272. Addition requirements in Business Management are: Bus. Ed. 21, 22, 255 eight hours in economics, and one 26 hour minor outside the division. Additional requirements in Secretarial Science are: Bus. Ed. 12, 13, 115, 124, and one 26 hour minor outside the division. Programs will be planned with the student's adviser.

## MINOR

Courses required are: Bus. Ed. 131, 253, 255; Econ. 100, and 12 hours selected from Bus. Ed. 1, 2, 10, 11, 20, 21. Proficiency examinations may be taken for exemptions from Bus. Ed. $1,2,10,11$, but passing these examinations may not give credit toward a degree in Business Education.

## Bachelor of Arts Degree <br> (Liberal Arts)

## MAJOR

The following program is required: (A) Common Courses listed on Page 30; (B) Business Education courses 20, 37, 41, 131, 255; (C) Twenty-eight hours of electives in business education; (D) One 24 hour minor outside the division. Programs will be planned with the student's adviser.

## MINOR

Courses required are: 24 hours in the division.

## GRADUATE STUDY

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

## Description of Courses

1. TYPEWRITING. Two hours credit.

A beginning course in typewriting. Students who have had one year of typewriting in high school may not take this course for credit.
2. ADVANCED TYPEWRITING. Two hours credit.

The second quarter of typewriting. Students who have taken two years of typewriting in high school may not take this course for credit.
10. GREGG SHORTHAND. Four hours credit.

A beginning course in shorthand. Students who have had one year of shorthand in high school may not take this course for credit.
11. ADVANCED GREGG SHORTHAND. Four hours credit.

The second quarter of shorthand. Students who have had two years of shorthand in high school may not take this course for credit.
12. ADVANCED SHORTHAND TRANSCRIPTION. Fout hours credit. A combination of materials equivalent to the third quarters of shorthand and typewriting.
13. OFFICE PRACTICE. Four hours credit.

Prerequisite, B. Ed. 12 or the equivalent. A combination of instructions in the use of office machines and experience in the administrative offices of the College. The class will meet for two consecutive hours each day.
14. SECRETARIAL PRACTICE. Four hours credit.

Prerequisite, B. Ed. 13 or the equivalent. This course deals with the duties of secretaries and gives advanced practice in transcription.
20. INTRODUCTORY ACCOUNTING. Four hours credit.

A beginning course in accounting which deals primarily with the mechanics of bookkeeping.
21. PRINCIPLES OF ACCOUNTING. Four hours credit.

A beginning course in the principles and theory of accounting.
22. ADVANCED ACCOUNTING PRINCIPLES. Four houts credit. Prerequisite, B. Ed. 21 or the equivalent. The second quarter of accounting principles.
37. BUSINESS MATHEMATICS. Fout hours credit.

This course deals with the business applications of mathematics.
41. INTRODUCTION TO BUSINESS. Fout hours credit.

This is a general exploratory and orientation course in the area of business education.
115. BUSINESS REPORTS AND CORRESPONDENCE. Fout hours credit. The basic principles and practices in the preparation of business reports.

## 117. DUPLICATING AND RECORDING MACHINES. (Summer Session only). Two hours credit.

Demonstrations of duplicating and recording machines with a minimum of practice.
123. CORPORATION ACCOUNTING். Four hours credit.

Prerequisite, B. Ed. 22 or the equivalent. The principles of accounting are applied to the books, records, and accounts of a corporation.
124. SECRETARIAL ACCOUNTING. Four hours credit.

This course presents a system of records for individuals and professional people.
126. COST ACCOUNTING. Four hours credit.

Prerequisite, B. Ed. 22 or the equivalent. This is an advanced course in accounting which deals with the problems of the equitable distribution of costs in manufacturing.
127. SOCIAL SECURITY AND PAYROLL ACCOUNTING. Two hours credit.
Prerequisite, B. Ed. 22 or the equivalent. This course presents a modern system of record keeping and the required forms and reports which are required by law under the Social Security Act.
128. INCOME TAX RECORDS AND REPORTS. Two houts credit.

The records, reports, forms, and practices involved in dealing with income taxes.
131. BUSINESS LAW. Four hours credit.

This course deals with the law of contracts.
132. BUSINESS LAW. Four hours credit.

This course deals with the law of negotiable instruments.
133. BUSINESS LAW. Four hours credit.

This course deals with the law of agency, bailments, partnerships, personal property, and real estate.
156. RETAIL MERCHANDISING. Four hours credit.

This is a cooperative part time course dealing with the principles of retail merchandising and store selling.
157. PRINCIPLES OF INSURANCE. Four hours credit.

The different types of insurance coverage available, the kinds of policies, and the agencies of insurance are presented in this course.
158. ADVERTISING. Four hours credit.

The principles and practices of advertising are studied in this course through a cooperative part time plan.
159. SALESMANSHIP. Four hours credit.

The principles of good salesmanship will be studied through a cooperative part time plan.
160. CALCULATING MACHINES. Two hours credit.

This is a beginning course in the use of a number of different kinds of calculating machines.
161. ADVANCED CALCULATING MACHINE PRACTICE. Two hours credit.
Speed building in the use of one particular calculating machine is the chief objective of this course.

This course deals with advanced problems in classroom presentation and the
teaching of business law.

## 253. TEACHING THE BUSINESS SUBJECTS. One or two hours credit.

This course consists of a series of one-and two-hour unit courses which deal with teaching methods in: (a) bookkeeping; (b) merchandising; (c) consumer economics; (d) shorthand; (e) typewriting; (f) office appliance; (g) handwriting; and (h) introduction to business.
54. CONSUMER EDUCATION. Four hours credit.

This course deals with the problems of the consumer in the management of his personal business and financial activities.
255. BUSINESS ORGANIZATION. Four hours credit.
-. This course deals with the different types of organization which have been used in the conduct of business.


The course deals with the preparation of classroom tests, a survey of pubfished tests, and the methods and practices of testing in the classroom.
269. GUIDANCE IN BUSINESS EDNCATVN. Two ho\&ts credit. .

The course covers guidance, placement, and fiollow-up/ptagtices and methods as applied to pupils and students interested in business education.
270. ADMINISTRATION AND SUPERVISION OF BUSINESS EDUCATION. Four hours credit.
This course deals with the problems of administrators and supervisors who are interested in business education.
272. THE BUSINESS CURRICULUM. Four hours credit.

The business curriculum in the high school is the basic consideration in this course.
273. CURRENT PROBLEMS IN BUSINESS EDUCATION. Fout hours credit.
The analysis of current problems and trends in business education.
300. INTRODUCTION TO GRADUATE STUDY IN BUSINESS EDUCATION. Four hours credit.
Required of all majors in business education who are candidates for the degree of Master of Arts.
316. SECRETARIAL SCIANCE. Foutr hourf credit.
A general survey courselin the secretarial field for gradude students only.
322. INDIVIDUAL STUDIES. Four hours credit.

This course provides an opportunity for the graduate student to engage in individual research in the field of business education. Paper required.
375. ADVANCED ACCOUNTING PROBLEMS. Four hours credit.

Prerequisite, at least twelve hours of college credit in accounting, or the equivalent. The course deals with advanced problems in accounting.
376. ANALYSIS OF FINANCIAL STATEMENTS. Fout hours credit. Prerequisite, at least twelve hours of college credit in accounting, or the equivalent. The analysis and interpretation of financial statements for credit, financial, and management purposes is the chief consideration in this course.
399. MASTER'S THESIS. Eight hours credit.

## Division of Health

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

Bachelor of Arts Degree (With Teaching Certificate)

For Women

## MAJOR

The following program is required: (A) Common Courses listed on Page 29; (B) P. E. 14, 62, 80, 81, 82, 83, 84, 85, 90, 91, 92, 93, 94, 95, 120a, b, 122, 129a, b, c, 150a, 150b, 202, 203, 232, 235, 272; (C) Membership in the Dance Club for one year; (D) Two minors of 24 hours each outside the division. Electives to complete requirements for graduation. Programs will be planned with the student's adviser.

## MINOR

Courses required for students majoring in General Secondary (Distributive) major: P. E. 62, 80, 81, 90, 92, 129a, b, c, 150b, 272.

Courses required for students majoring in Elementary Education: P. E. 62, 80, 84, 85, 90, 92, 129b, c, 150a, 272.

Bachelor of Arts Degree
(With Teaching Certificate)

## For Men <br> MAJOR

The following program is required: (A) Common Courses listed on Page 29; (B) P. E. 62, 70, 71, 73, 74, 75, 76, 92, 120a, b, 122, 150a, 150b, 161, 162, 163, 164, 202, 235, 270 , 272; (C) In addition, two hours of dance selected with the advice of the major professor; (D) Two minors of 24 hours each outside the division. Electives to complete requirements for graduation. Programs will be planned with the student's adviser.

Men majoring or minoring in physical education are not required to take physical activity courses during the quarters in which they are members of freshman or varsity athletic squads, or are enrolled in professional courses numbered from 70 to 99 inclusive. Permission of the instructor is required for enrollment in freshman or varsity sports.

## MINOR

Courses required are: P. E. 62, 73, 75, 76, 150b, 161, 162, 270, 272.

## GRADUATE STUDY

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

## NURSING

In cooperation with affiliated schools of nursing, the College offers a combined academic and professional program. A diploma of nursing is granted by the cooperating school of nursing, and a bachelor of arts degree with a major in nursing is granted by the College. Two years of the program are in the College and three years in the school of nursing. Courses vary according to the school of nursing the student attends. Details will be sent upon request.

## Physical Education Program <br> (For Non-Majors) <br> WOMEN

During their first year, women students should enroll for a class in dance, one group sport, and one individual sport, each carrying one hour of credit per quarter. After the first year, students may register for any one hour course not previously taken, for a total of six hours credit. Courses meeting these requirements are numbered from 1 to 60 inclusive. Courses may be repeated with approval of divisional faculty members.

## MEN

During their first year men students should enroll for $P$. E. 1, 2, 3, each carrying one hour of credit per quarter. After the first year, students may register for any one hour course not previously taken, for a total of six hours credit. Courses meeting these requirements are numbered 1 to 60 inclusive. Courses may be repeated with approval of divisional faculty members.

## Athletic Clothing and Lockers

Women may purchase regulation gymnasium suits from the College Bookstore in the Student Union. These suits are required.

Men and women students registered for activity courses are required to obtain a locker padlock in the College Bookstore. Locker assignments for women are made in Gunter Hall, Room 109. Locker assignments for men are made in the Gymnasium Equipment Room.

## Physical Activity

Three hours of physical activity are required in the freshman year and three hours in the sophomore year for a total of six hours credit. To be excused from physical exercise, students must have the approval of the faculty of the Division of Health.

## Description of Courses

NON-PROFESSIONAL COURSES
1, 2, 3. ORIENTATION IN PHYSICAL EDUCATION ACTIVITIES. One hour credit each quarter.
Seasonal program. Recommended for all first-year men students.
5. TAP DANCING. One hour credit.

6a. BEGINNING MODERN DANCING. One hour credit.
6b. INTERMEDIATE MODERN DANCING. One hour credit. Prerequisite, P. E. 6a.
7. FOLK DANCING. One hour credit.
8. SOCIAL DANCING. One hour credit.
9. AMERICAN SQUARE DANCING. One hour credit.
10. FIELD HOCKEY. One hour credit.
11. SOFTBALL. One hour credit.
12. SOCCER. One hour credit.
13. TOUCH FOOTBALL. One hour credit.
14. PLAYS AND GAMES. One hour credit.
15. VOLLEYBALL. One hour credit.
16. SWIMMING: 16a, BEGINNING SWIMMING; 16 b , INTERMEDIATE SWIMMING; 16c, ADVANCED SWIMMING. One hour credit each quarter.
17. GOLF. One hour credit.
18. BASKETBALL. One hout credit.
19. MINOR INDIVIDUAL SPORTS. One hour credit.
20. BOXING. One hout ctedit.
21. FENCING. One hour credit.
22. MATWORK: 22a, PYRAMIDS; 22b, DOUBLE TUMBLING; 22c, GYMNASTICS. One hout ctedit each quatter.
23. TENNIS. One hour credit.
24. INDIVIDUAL GYMNASTICS. One hour credit.

45a. FRESHMAN FOOTBALL; 45b, VARSITY FOOTBALL; 45c, SPRING FOOTBALL. One hour credit each quarter.
46a. FRESHMAN BASKETBALL; 46b, VARSITY BASKETBALL. One hour credit each quarter.
47a. FRESHMAN WRESTLING; 47b, VARSITY WRESTLING. One hour credit each quarter.
48a. FRESHMAN GYMNASTICS; 48b, VARSITY GYMNASTICS. One hour credit each quarter.

49a. FRESHMAN SWIMMING; 49b, VARSITY SWIMMING. One hout credit each quarter.
50a. FRESHMAN BOXING; 50b, VARSITY BOXING. One hout credit each quarter.
51a. FRESHMAN FENCING; 51b, VARSITY FENCING. One hour credit each quatter.
52a. FRESHMAN BASEBALL; 52b, VARSITY BASEBALL. One hout credit each quatter.
53a. FRESHMAN TRACK; 53b, VARSITY TRACK. One hour credit each quarter.
54a. FRESHMAN TENNIS; 54b, VARSITY TENNIS. One hour credit each quatter.
61. PERSONAL HYGIENE. Four hours credit.

This course presents basic facts about health and disease. It aims to educate the student in the protection and promotion of his health and that of the community and to encourage desirable health behavior.
62. FIRST AID. Two hours credit.

The course emphasizes the prevention, diagnosis, and treatment of the common accidents seen in daily life.
63. ADVANCED FIRST AID. One hour credit.

Prerequisite,' P. E. 62.
64. INSTRUCTORS' COURSE IN FIRST AID. One hour credit.

Prerequisites, P. E. 62 and 63.
65. SENIOR LIFE SAVING. One hour credit.

Prerequisite, ability to pass the preliminary swimming requirements.
66. WATER SAFETY INSTRUCTORS' COURSE. One hour credit. Prerequisite, P. E. 65.
67. INSTRUCTORS' COURSE IN ACCIDENT PREVENTION. One hour credit.

## PROFESSIONAL COURSES

Courses 70 to 99 are for physical education majors and minors; in special instances others may entoll with permission of the instructor.
70. THEORY AND PRACTICE OF GYMNASTICS AND MATWORK. Two hours credit.
For men. Fundamental skill techniques in gymnastics and matwork.
71. THEORY AND PRACTICE OF MINOR SPORTS. Two hours credit. For men. Fundamental skill techniques in minor sports.
73. THEORY AND PRACTICE OF BASKETBALL. Two hours credit. For men. Fundamental skill techniques in basketball.
74. THEORY AND PRACTICE OF BOXING AND WRESTLING. Two hours credit.
For men. Fundamental skill techniques in boxing and wrestling.
75. THEORY AND PRACTICE OF TRACK AND BASEBALL. Two hours credit.
For men. Fundamental skill techniques in track and baseball.
76. THEORY AND PRACTICE OF FOOTBALL. Two hours credit.

For men. Fundamental skill techniques in football.
77. AQUATICS AND WATER SAFETY. Two hours credit.

Prerequisite, ability to swim. For men. Waterfront and pool activities, safety procedures, and techniques of teaching swimming.
80. BODY MECHANICS AND MINOR INDIVIDUAL SPORTS. Two hours credit.
For women. The first part of the course will present exercises for posture and body alignment. The second part will offer skill techniques in minor individual sports.
81. TECHNIQUES OF VOLLEYBALL AND BASKETBALL. Two hours credit.
For women. Fundamental skills, team play, rules, and techniques.
82. TECHNIQUES OF HOCKEY AND SOCCER. Two hours credit. For women. Fundamental skills, team play, rules, and techniques.
83. TECHNIQUES OF SWIMMING. Two hours credit.

For women. Beginning, intermediate, and advanced swimming. Fundamental skills in swimming and diving.
84. TECHNIQUES OF TENNIS AND SOFTBALL. Two hours credit. For women. Fundamental skills, team play, rules, and techniques.
85. TECHNIQUES OF TUMBLING. Two hours credit. For women. Fundamental skills and techniques in tumbling and matwork.
90. TECHNIQUES IN FOLK DANCES OF VARIOUS COUNTRIES. Two hours credit.
91. TECHNIQUES IN TAP DANCING AND COMPOSITION. Two hours credit.
92. AMERICAN SQUARE AND SOCIAL DANCING. Two hours credit. Fundamental skills, materials, and techniques of teaching square and social dance.
93. TECHNIQUES IN THE MODERN DANCE. Two hours credit. Dance techniques of movement, rhythm, and composition in modern dance.
94. USE OF MUSIC IN THE DANCE. Two hours credit.

A study of the history of music and dance, of musical and dance forms, dance composition, and the use of music as dance accompaniment.
95. PROBLEMS IN TEACHING THE DANCE. Two hours credit.

The analysis of techniques from a teaching standpoint will be presented for folk, tap, social, and modern dancing. Opportunities for practice teaching will be offered.

120a, b. ANATOMY AND PHYSIOLOGY. P. E. 120a. Four hours credit. P. E. 120b. Two hours credit.

The study of structure and function of the human body, including digestive, circulatory, respiratory, reproductive, nervous, excretory, and endocrine.
122. KINESIOLOGY. Four hours credit.

This course gives detailed work on the skeletal and muscular systems. Advised especially for students wishing to go into physical therapy work.

129a, b, c. TEACHING OF SPORTS FOR WOMEN. Two hours credit each quatter.
A consideration of the basic techniques of fall, winter, and spring sports, emphasizing teaching procedures.
150a. METHODS OF TEACHING PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS. Four hours credit.
A study of planning, materials, and methods in physical education for the elementary school based on mental, physical, and social needs of the child at various age levels.

150b. METHODS OF TEACHING PHYSICAL EDUCATION IN SECOND. ARY SCHOOLS. Four hours credit.
A study of planning, materials, and methods in physical education for the secondary school based on mental, physical, and social needs of the student at various age levels.
161. COACHING OF FOOTBALL. Two hours credit.

Prerequisites, P. E. 76, or P. E. 45a, b, or permission of the teacher. Sports techniques, rules, strategy, teaching procedures, training regulations, and reading material in the field.
162. COACHING OF BASKETBALL. Two hours credit.

Prerequisite, P. E. 73, or P. E. 46a, b, or permission of the teacher. Theory and practice in scouting, charting, scoring, timing, and officiating. Principles of successful modern offensive and defensive play. Procedures in developing and utilizing playing personnel.
163. COACHING OF TRACK AND FIELD. Two hours credit.

Prerequisite, P. E. 75 , or P. E. $53 \mathrm{a}, \mathrm{b}$, or permission of the teacher. A detailed study of competitive track and field athletics. Experience in organizing and conducting track meets.
164. COACHING OF BASEBALL. Two hours credit.

Prerequisite, P. E. 75, or P. E. 52a, b, or permission of the teacher. Techniques and procedures in developing individual and team play. Defensive baseball, pitching, catching, infielding, outfielding, strategy. Offensive baseball: batting, baserunning, strategy.
183. HOME NURSING. Four hours credit.

Materials and methods of caring for the sick in the home. Special emphasis is given to conserving time, energy, and money.
202. SCHOOL HEALTH EDUCATION. Two hours credit. (Summer Session, Four hours credit).
A philosophy of health teaching and the presentation of criteria for judging materials and methods of health teaching.
203. SOCIAL HYGIENE. Two hours credit.

A consideration of the hygienic implications of those social contacts that are particularly influenced by sex.
210. CAMP LEADERSHIP. Three hours credit.
(Offered during Pre-Session in a camp near Estes Park). A practical camping course at a modern Rocky Mountain campsite. Theory and practical experience for camp counsellors and directors.
232. THE PROBLEMS OF INDIVIDUAL GYMNASTICS. Fout hours credit.
The science of muscle action in relation to postural defects and treatment.
235. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION. Four hours credit.
The history and principles presented in this course are for the purpose of giving a background of knowledge essential to the understanding of physical education today.
255. MODERN DANCE TECHNIQUE. Four hours credit.

Basic work in techniques and rhythms of the modern dance and the fundamentals of composition. Laboratory work required.
256. MUSIC IN THE MODERN DANCE. Four hours credit.

The technique of playing percussion instruments and composition of rhythms for percussion. The study of music form and composition in relation to the dance.
270. THE ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION AND ATHLETICS. Four houts credit.
An advanced course for physical education teachers and coaches, covering the procedures and policies of physical education and athletics.
271. SAFETY EDUCATION. Four hours credit.

Comprehensive course for probable administrators of safety programs in public schools.
272. RECREATIONAL LEADERSHIP. Four hours credit.

A discussion of a recreational program for schools and parent-teacher groups and their coordination with community recreational organizations and types of programs for various groups in relation to age level.
300. INTRODUCTION TO GRADUATE STUDY. Four hours credit.

A study of the literature and techniques of research in the area of the graduate major. This course is required of all first quarter graduate students who intend to receive the degree of Master of Arts.
312. TESTS AND MEASUREMENTS. Four hours credit.

A survey of tests in health and physical education, their use and methods of construction, and presentation of necessary statistical material for test interpretation.
322. INDIVIDUAL STUDIES IN HEALTH AND PHYSICAL EDUCATION. Four hours credit for one problem; maximum of eight hours toward the degree of Master of 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 a formal class course. Paper required.
325. PHYSIOLOGY OF EXERCISE. Four hours credit.

Prerequisite, P. E. 120a, b. Effects of muscular activities on the various organs and systems of the body.
336. KINESIOLOGY OF INDIVIDUAL GYMNASTICS. Four hours credit. A study of the bones and muscles of the body and application to a program in posture training.
338. SOCIOLOGY OF PLAY. (Summer Session only). Four hours credit. Prerequisite, P. E. 272. The extent, need, functions, theories, nature and development of play. Qualifications and development of play leaders.
340. CURRICULUM IN PHYSICAL EDUCATION. Four hours credit.

Principles involved in curriculum making; the necessity of a comprehensive curriculum; and the formulation of a progressively graded curriculum.
341. ADMINISTRATION OF PHYSICAL EDUCATION. Four hours credit.
This course deals with policies and building construction in the organization of a program of physical education.
342. SUPERVISION OF PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL. (Summer Session only). Four houts credit.
Desirable prerequisite, P. E. 150a. Topics discussed are position and duties of a supervisor of physical education in the administrative organization of a school system.
343. SUPERVISION OF PHYSICAL EDUCATION IN THE SECONDARY SCHOOL. (Summer Session only). Four hours ctedit.
Desirable prerequisite, P. E. 150 b . Topics discussed are position and duties of a supervisor of physical education in the administrative organization of a school system.
355. ADVANCED TECHNIQUE AND COMPOSITION IN THE MODERN DANCE. (Summer Session only). Four hours credit.
A continuation of P. E. 255 with stress on composition. Advanced work in technique and composition with special emphasis on original composition. Laboratary work required.
357. WORKSHOP IN MODERN DANCE. Fout hours credit.

Prerequisites, P. E. 255, P. E. 355. Teaching principles of dance; composition for groups; planning and presenting a dance concert; lighting, costuming, color and design for dance performances. Laboratory work required.
375. CURRICULUM IN RECREATION. (Summer Session only). Four hours credit.
Principles involved in curriculum making; an appreciation of the wide scope of the field in recreation; the necessity of a comprehensive curriculum; the formulation of a progressively graded curriculum.
377. ADMINISTRATION OF COMMUNITY RECREATION. (Summer Session only). Four houts credit.
This course includes making budgets, necessary facilities and equipment, efficient records, actual visits to recreational projects, and reports on these supervisory visits.
399. THESIS. Eight hours credit.

## Division of the Humanities

The Division of the Humanities includes the fields of English, Speech and Drama, Foreign Languages, and the Humanities.

ENGLISH<br>Bachelor of Arts Degree<br>(With Teaching Certificate)

## MAJOR

The following program is required: (A) Common Courses listed on Page 29; (B) Eng. 4b, 58a, 58b, 58c, 110, 126, 211; Speech 5 (or 16), 120; (C) An additional 20 to 28 hours in English; (D) Two minors of 24 hours each, one of which may be speech and drama, or foreign language, and one outside the division. Programs will be planned with the student's adviser.

## MINOR

Courses required are: Eng. Lit. 58a, 58b; Am. Lit. 58c; Eng. 126, 211; 8 hours of electives in composition and speech.

## ENGLISH <br> Bachelor of Arts Degree <br> (Liberal Arts)

## MAJOR

The following program is required: (A) Common Courses listed on Page 30; (B) Eng. 4b, 58a, 58b, 58c, 110, 211; Speech 5, (or 16) 120; plus 40 hours of electives; (C) A 24 hour minor outside the division; (D) Electives to complete requirements for graduation. Programs will be planned with the student's adviser.

## MINOR

Courses required are: 24 hours in the division, to be planned with a member of the division faculty.

## GRADUATE STUDY

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

## Description of Courses

ENGLISH
4a, b. ELEMENTAR'Y ENGLISH COMPOSITION. Four hours credit each quarter.
The basic needs for correct, acceptable usage in writing, and practice in written expression.
44. INTERMEDIATE COMPOSITION. Four hours credit.

Variety, clearness, and correctness in writing. Special emphasis upon functional grammar.

58a. SURVEY OF ENGLISH LITERATURE. 700-1744. Four hours credit. Comprehensive readings in English literature following its development from early forms and content to more definite expression in the early eighteenth century.

58b. SURVEY OF ENGLISH LITERATURE. 1744-1945. Four hours credit
The same plan as that indicated for 58a.
58c. SURVEY OF AMERICAN LITERATURE. Fout houts credit.
A course in American literature following the plan of the survey courses in English literature.
110. CREATIVE WRITING. Four hours credit.

Opportunity to write creatively under criticism with emphasis upon the individual's own purposes and experiences.
121. LITERATURE IN THE ELEMENTARY SCHOOL. Four hours credit. Required of elementary majors. A survey of children's literature appropriate for grades three to six inclusive; consideration of interests and abilities governing the choice of literature in these grades.
126. TEACHING ENGLISH IN SECONDARY SCHOOLS. Four hours credit.
Materials for teaching English in secondary schools. Principles for the selection of literature for high school pupils, and critical study of selected readings.
130. THE EIGHTEENTH CENTURY. Four hours credit.

Readings and discussions of new trends of thinking and expression in literature and life that made the transition between the Renaissance and the modern world.
131. PROSE AND POETRY OF THE ROMANTIC MOVEMENT. Four hours credit.
Sources and development of Romantic Movement. Historical background of thought leading to the American and French Revolutions, and effect upon writers and statesmen of that period and the present one.
132. PROSE AND POETRY OF THE VICTORIAN PERIOD. Four hours credit.
Reading and discussion of the best essays, criticism, and poetry of the Victorian era. Contrast and comparisons with present-day poets, critics, and conditions.
133. CONTEMPORARY PROSE AND POETRY. Four hours credit.

Reading and discussion of the best essays, criticism and poetry of the present day.
201. JOURNALISM AND THE SCHOOL NEWSPAPER. Four hours credit. Instruction in all phases of preparation and publication of school papers.
209. LATIN-AMERICAN LITERATURE IN TRANSLATION. (Summer Session only). Four hours credit.
Lectures in English on the literary movements and principal writers of Spanish-American countries.
210. ADVANCED COMPOSITION. Four hours credit.

Individual practice in writing, for improvement in technique, form, and content. Special attention to term, designated, and research papers.
211. THE ENGLISH LANGUAGE. Four hours credit.

Non-technical study of the English language. Principles of general language and history of the English language. Usage and grammar. Psychology of language teaching. $\quad \sim$
226. ENGLISH IN JUNIOR HIGH SCHOOLS. (Summer Session only). Four hours credit.
A course similar to Eng. 126 in materials and methods with emphasis on the junior high school.

## 231. THE SHORT STORY. Fout hours credit

The study of typical modern short stories to observe the methods of modern writers and the interpretations of our present-day life embodied in this form of literature.
232. THE DEVELOPMENT OF THE NOVEL. Four hours credit.

Reading novels showing changes from the eighteenth century to the present. Emphasis on the range of subject matter, effectiveness of construction, and worth of content.
233. THE CONTEMPORARY NOVEL. Fout hours credit.

The form and content of representative novels of recent decades as expressions of present-day points of view.
234. THE STUDY OF MODERN DRAMA. Four hours credit.

Reading and class discussion of plays that best represent the thought currents and the dramatic structure of the drama of our times.
236. THE THEATER AND THE.WORLD TODAY. Four hours credit. Recent drama and motion pictures; reading, discussion, and papers on comparative values of materials. Attendance at theater or motion pictures when possible.
239. THE FORMS AND MEANINGS OF POETRY. Fout hours credit. Critical study of the forms and content of some of the greatest poetry written through the centuries. Special reference to the poets of the twentieth century.
242. CONTEMPORARY RUSSIAN LITERATURE. Fout hours credit. Intensive reading of major Russian poets, novelists, and short story writers since 1920.

244a. WORLD LITERATURE. (Alternate Summer Sessions only). Four hours credit.
The emergence and development of great ideas through the literature of successive culture epochs in Western civilization: Greek, Medieval, Renàissance, 18th Century and 19 th Century.
244b. WORLD LITERATURE (Alternate Summer Sessions only). Four hours credit.
Continuation of 244a into the diverse expression and value of these ideas in modern world literature.

255a. SHAKESPEARE'S EARLIER DRAMAS. Four hours credit.
Developing critical appreciation of various types of plays through an understanding of the drama and poetry of Shakespeare. A study of comedies, tragedies, and histories of Shakespeare's earlier periods.
255b. SHAKESPEARE'S LATER DRAMAS. Four hours credit.
Continuation of 255 a . Reading and discussion of Shakespeare's greatest tragedies and final plays; summation of his life and times, together with evaluation of his work as dramatist and poet.
255c. ELIZABETHAN DRAMA (1585-1642). Four hours credit.
Great dramatic literature of the period, other than that of Shakespeare; consideration of stage conditions, acting companies, changes in dramatic form and subjects reflecting the life of the time.
258b. READINGS IN ENGLISH LITERATURE. (Through the modern period). Four hours credit.
258c. READINGS IN AMERICAN LITERATURE. Four hours credit.
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289a. LITERATURE OF THE OLD TESTAMENT. Four hours credit.
Development of appreciation of the Bible as literature, with emphasis on literary value through a study of folklore, short stories, poetry, biography and prophetic writings of the Old Testament.

289b. LITERATURE OF THE NEW TESTAMENT. Four hours credit. A companion course to 289a.
300. INTRODUCTION TO GRADUATE STUDY. Four hours credit. A study of the literature and techniques of research in the area of the graduate major. This course is required of all first quarter graduate students who intend to receive the degree of Master of Arts.

## 312. OLD ENGLISH. Four hours credit.

Anglo-Saxon grammar and vocabulary. Reading of important documents from the period-Alfred's Translations, Charters and Historical Documents, Anglo-Saxon poetry, etc. Emphasis on background for contemporary grammar.
313. CHAUCER AND MIDDLE ENGLISH. Four hours credit.

Writings of Geoffrey Chaucer (Canterbury Tales and Troilus and Cressida) in Middle English, showing the transition from complicated AngloSaxon to the speech of today.
319. LABORATORY COURSE IN REMEDIAL READING. (Summer Session only). Four hours credit.
Survey of methods of diagnosing and treating remedial reading problems in the secondary school. Practical application of principles to actual cases in the remedial reading laboratory.
322. INDIVIDUAL STUDIES IN ENGLISH. Four hours credit.

Qualified students outline definite problems and present a typewritten paper. .
335. GREAT NOVELS OF THE TWENTIETH CENTURY. Four hours credit.
Discussion of great novels since 1900 that have enlarged the scope and importance of the novel. Eight novels will be intensively studied in class.
337. THE DEMOCRATIC THEME IN RECENT FICTION. (Summer Session only). Four hours credit.
Books and correlative reading are chosen pointing to the necessity for maintaining and developing the way of life which is called democracy.
341. WORLD VIEWS IN NINETEENTH AND TWENTIETH CENTURY POETRY. (Summer Session only). Four hours credit.
A survey of the waves of revolutionary thought as expressed by poets from the time of the French Revolution to the present time.
356. SHAKESPEARE, MAN OF GENIUS. (Summer Session only). Four hours credit.
Intensive study of specially selected plays. The enriched background, depth and beauty of thought, and universality of understanding are emphasized.
399. THESIS. Eight hours maximum credit.

FOREIGN LANGUAGES

## Bachelor of Arts Degree <br> (With Teaching Certificate)

MAJOR
The following program is required: (A) Common Courses listed on Page 29; (B) From 48 to 56 hours of credit in languages depending upon a student's language background; (C) Proficiency in one or more of the following: Latin, Spanish, French or German- (Greek or Italian may be offered by students proficient in these languages) ; (D) Two minors of 24 hours each, one of which may be English or speech and drama, and one outside the division; (E) Electives to complete requirements for graduation. A student who has had two years of a language in high school will not be given college credit for the elementary course in that language. Programs will be planned with the student's adviser.

## MINOR

Courses required are: 28 hours in languages for beginning students; 24 hours for students who studied two years of a language in high school, provided the same language is studied in the College. (These students begin with the intermediate course). Two minors are the equivalent of a major.

## Bachelor of Arts Degree <br> (Liberal Arts)

## MAJOR

The following program is required: (A) Common Courses listed on Page 30; (B) Sixty-four hours of language; (C) One minor outside the division; (D) Electives to complete requirements for graduation. Programs will be planned with the student's adviser.

## MINOR

Courses required are: 28 hours in languages for beginning students; 24 hours for students who continue with a language they studied for two years in high school.

Requirements are the same as for the minor in the Bachelor of Arts with teaching certificate.

## GRADUATE STUDY

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

## Description of Courses

## FRENCH

1, 2, 3. ELEMENTARY FRENCH. Four hours credit each quarter.
A study of pronunciation, including phonetics, and the principles of grammar. Practice in reading. Credit is not given until the three quarters are completed.
5. INTERMEDIATE FRENCH. Four hours credit.

Prerequisite, two years of high school French or one year of college French. Grammar review, study of idioms, imitative composition. Intensive drill in phonetics.
6. INTERMEDIATE FRENCH. Four hours credit.

A history of France in French is studied to give a historical background for subsequent study of French literature.
7. INTERMEDIATE FRENCH. Four hours credit.

Varied readings of plays and short stories, with conversation based on the reading.
122. INDIVIDUAL STUDIES. Fout hours credit.

205, 206, 207. SURVEY OF FRENCH LITERATURE. Four hours credit each quatter.
Prerequisite, two years of college French or the equivalent. Study of "Nouvelle Anthologie Francaise" by Schinz, Robert, Giroud, or a similar anthology. Each course may be taken independently.
208. FRENCH CIVILIZATION. Four hours credit.

Lectures in English to provide students and prospective teachers of French with a knowledge of French life and customs. Students choose phases of French civilization for reports. Offered on request.
216. SUPPLEMENTARY READINGS IN FRENCH LITERATURE. Four hours credit.
Course content varies according to the needs of the students. It presupposes at least 28 hours of study of the language.
225. EIGHTEENTH CENTURY FRENCH LITERATURE. Four hours credit.
Prerequisite, two years of college French or the equivalent. Literature, society, and trends of thought of the Eighteenth Century. Discussion in French.
226. FRENCH ROMANTICISM. Four hours aredit.

Procedure and prerequisite the same as for Fr. 225. The Romantic writers in France with relation to the movement elsewhere in Europe. Emphasis on Hugo and Musset.
227. TWENTIETH CENTURY FRENCH LITERATURE. Four hours credit.
Prerequisite, same as for Fr. 205. Lectures on the writers of this century with extensive individual readings and reports.
260. FRENCH LITERATURE AND ENGLISH TRANSLATION. (Summer Session only). Four hours credit.
Lectures on the most important French writers. Outside readings with reports. No knowledge of French required.

## GERMAN

1, 2. ELEMENTARY GERMAN. Four hours credit each quarter.
The course aims to develop accurate pronunciation, to enable students to read simple German directly, without translation, and to use and understand simple spoken German. Credit not given until three quarters are completed.
3. ELEMENTARY GERMAN. Four hours credit.

The class is divided into two groups, one reading literary German of elementary grade, the other simple scientific German.
5. INTERMEDIATE GERMAN. Four hours credit. Grammar review, composition, oral practice.
6. INTERMEDIATE GERMAN. Four hours credit.

German history is studied in German, using Friederich's, "Kurze Geschichte des Deutschen Volkes," or a similar textbook.
7. INTERMEDIATE GERMAN. Four hours credit.

Schiller's "Wilhelm Tell" and short poems are studied as representative of Germany's greatest literary period.

## ITALIAN

1, 2, 3. ELEMENTARY ITALIAN. Four hours credit each quarter. A three quarter sequence designed especially for music students. Elementary grammar, reading and conversation. Emphasis on pronunciation and vocabulary building. No credit given until three quarters are completed.
5. INTERMEDIATE ITALIAN. Four hours credit.

Prerequisite, two years of high school Italian or one year of college Italian. Grammar review and composition.
6. INTERMEDIATE ITALIAN. Four hours credit.

Prerequisite, same as for Ital. 5. Study of Capocelli's, "L'Italia nel Passato e nel Presente." Practice in conversation.
7. INTERMEDIATE ITALIAN. Four hours credit.

Prerequisite, same as for Ital. 5. Varied reading and conversation.

## LATIN

1, 2, 3. ELEMENTARY LATIN. Four hours ctedit each quarter.
A terminal course designed especially for students who wish Latin as a background for the study of English and other modern languages, for science or the professions. Emphasis on vocabulary and word derivation, and on comparative grammar. No credit given until three quarters are completed.
5, 6, 7. INTERMEDIATE LATIN. Four hours credit each quarter.
Prerequisite, two years of high school Latin or one year of college Latin. Study of Wedeck's "Third Year Latin" accompanied by a thorough study of grammar. Each course may be taken independently.

105, 106, 107. SURVEY OF LATIN LITERATURE. Four hours credit each quatter.
Prerequisite, four years of high school Latin or two years of college Latin. Study of Harrington and Scott's, "Selections from Latin Prose and Poetry", or a similar anthology. Each course may be taken independently.

## SPANISH

1, 2, 3. ELEMENTARY SPANISH. Four hours credit each quarter.
A three quarter sequence in pronunciation, principles of grammar, and practice in reading and speaking simple Spanish. Credit is not given until the three quarters are completed.
5. INTERMEDIATE SPANISH. Four hours credit.

Prerequisite, two years of high school or one year of college Spanish. Review of the principles of grammar; extensive composition, and some speaking.
6. INTERMEDIATE SPANISH. Four hours credit.

Prerequisite, two years of high school or one year of college Spanish. Practice in reading and speaking.
7. INTERMEDIATE SPANISH. Four hours credit.

A continuation of Sp . 6 with the same prerequisites. Novels and short stories are read.
105. SURVEY OF SPANISH LITERATURE. Four hours credit.

Prerequisite, two years of college Spanish or equivalent. Plays, poems, and essays of the first half of the nineteenth century are read and literary movements studied.
106. SURVEY OF SPANISH LITERATURE. Four hours credit.

A continuation of the study of nineteenth century literature. Sp .105 is not a prerequisite.
107. SURVEY OF SPANISH LITERATURE. Four hours credit.

A study of the novel beginning with the costumbrista movement. Lectures on modern Spanish novelists. One novel is read in class; others are read outside.

## 122. INDIVIDUAL STUDIES. Four hours credit.

175. SPANISH READING. (Summer Session only). Four hours credit. Prerequisite, at least one year of college Spanish. Designed to fit the reading abilities of the various members. Class meets two days a week for intensive reading. Extensive outside reading is reported in conference.

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

Prerequisite, at least two years of college Spanish or the equivalent. Exposition, narration, description, and debates serve as bases for conversation.
216. SUPPLEMENTARY READINGS IN SPANISH LITERATURE. Four hours credit.
Course content varies according to the needs of the students. It presupposes at least 28 hours of study of the language.
225. DON QUIJOTE. Four hours credit.

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."
226. CLASSICAL DRAMA. Four hours credit.

Prerequisite, three years of college Spanish. Study of the theater in Spain under Philip III and Philip IV. Discussion of Culteranismo and Conceptismo and their effect on Spanish literature. Plays by Alarcon, Lope de Vega, and Calderon are read in class.
231. THE TEACHING OF FOREIGN LANGUAGES. Four hours credit. Consideration of problems of particular concern in teaching French, Spanish, and Latin in secondary schools; functions and values of language study; courses of study; organization of materials.
322. INDIVIDUAL STUDIES IN FOREIGN LANGUAGE. Four hours credit.
Qualified students outline a definite problem to be undertaken, and present a typewritten paper.
399. THESIS. Eight hours maximum credit.

# HUMANITIES <br> Bachelor of Arts Degree <br> (Liberal Arts) 

The following program is required: (A) Common Courses listed on Page 30; (B) Eng. 4b, 58a, 58b, 58c, 110, 211; Speech 5 (or 16), 120. A typical program may include a selection from the following: 36 hours in the humanities; 50 hours in the social studies; 20 hours in the sciences; 15 hours in music, with individual lessons and participation in band, orchestra, and choir; eight hours in education, and 20 hours in the arts. A scholarly, creative work, usually a paper, will be presented in the final quarter of the senior year. Programs will be planned with the student's adviser.

## APPROVED COURSES

Courses approved are: F. A. 1, 2, 11, 14, 17, 103a, 212, 221, 230; H. E. 70, 71, 180, 275, 288; I. A. 46a, b, 146c, 50a, b, c. 55 w; Ed. 105, 277b, 296, 297; P. E. 272, 338; Mus. 2a, b, c, 52a, b, c, 58a, b, c, 152a, b, c, 276, 361, and individual lessons each quarter; Sci. 207; Astron. 181; Geol. 186; Math. 274; Ecón. 100, 102, 104, 304; Geog. 10; Hist. 20, 21, 30, 31, 32; Pol. Sci. 170, 171, 274, 279; Soc. 100, 101, 202.

## Description of Courses

1, 2, 3. THE BASIC COURSE IN THE HUMANITIES. Four hours credit each quatter.
Required of all freshmen fall, winter, and spring quarters. A systematic historical study of the great philosophical ideas from Greek times to the present. These ideas are developed from the artistic expression of the epochs studied. The course is further designed to develop active creative interests in the arts.
199. CREATIVE STUDY IN THE HUMANITIES. Eight hours credit. This is an individual creative study leading to the presentation of a piece of work, usually a scholarly paper, showing a grasp of the meaning of the humanities and the interrelationships of the various fields. For seniors in the humanities only.

## SPEECH AND DRAMA

## Bachelor of Arts Degree <br> (With Teaching Certificate)

## MAJOR

The following program is required: (A) Common courses listed on Page 29; (B) Eng. 4b, 211; (C) From 48 to 56 hours in speech and drama; (D) Two minors of 24 hours each, one of which may be in English or foreign language, and one outside the division. Programs will be planned with the student's adviser.

## MINOR

Courses required are: Speech 125, and a 24 hour minor with courses from each of the following: (1) discussion and public speaking; (2) drama, radio and interpretation; (3) voice and diction; (4) speech correction. Speech 13 and 112 do not count toward the minor. Participation is expected in the Little Theater of the Rockies, forensics, and radio production.

## GRADUATE STUDY

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

## Description of Courses

5. READING AND SPEAKING ENGLISH. Four hours credit.

This course is designed to develop a skill in oral reading and to aid the student in acquiring ease, poise, and effectiveness in speech.
13. STORY TELLING. Four hours credit.

Principles of the art of story-telling are applied in class and laboratory practice. Attention is given to arrangement and selection of stories for the several school levels.
16. VOICE AND DICTION. Four hours credit.

Provision for individual differences of each student with regard to voice difficulties.
18. DISCUSSION AND DEBATE. Two houts credit both fall and winter quarters or four hours credit one quarter.
Primarily for, but not restricted to, those students participating in the campus and intercollegiate program in discussion and debating.
62. EXTEMPORE SPEAKING. Four hours credit.

Experience in speaking to groups of people. Emphasis is placed on the preparation and organization of the speech.
63. FIRST COURSE IN DRAMA. Four houts credit.

An introduction to the basic principles of acting and dramatic production.
65. FIRST COURSE IN SCENE DESIGN. Four hours credit.

An introductory course in the techniques and problems of scene design and stagecraft.
108f. RADIO WORKSHOP. Four hours credit.
A beginning laboratory course in radio production.
112. CREATIVE DRAMATICS. Four hours credit.

A lecture and laboratory course in dramatics for elementary and secondary school teachers. Contribution of creative dramatics to education. Demonstration of procedure best adapted to work in children's dramatics.
$114,115,116$. THEATER WORKSHOP. Four hours credit each quarter. A lecture and laboratory course in all aspects of play production. Attendance at rehearsals for campus productions required.
117. ORAL INTERPRETATION. Four hours credit.

The student is given an opportunity to read aloud in all the forms of literature and is aided in gaining skill in an artistic presentation.
120. THE ART OF STRAIGHT THINKING. Four hours credit.

A study of prejudices, beliefs, evidence, reasoning, and semantics as they affect thought processes involved in all forms of oral and written discourse.
125. TEACHING SPEECH AND DRAMA IN SECONDARY SCHOOLS. Fout houts credit.
Problems in teaching speech and drama in the high school. Examination of materials for creative and formal drama. Discussion techniques.
164. INTRODUCTION TO A REMEDIAL PROGRAM IN SPEECH. Fout hours credit.
A general introductory survey of phonetics, voice science, and speech pathology. Lectures, discussions, recordings, case studies and demonstrations.
208b. RADIO IN EDUCATION. Four hours credit.
The course gives an understanding and some measure of skill in utilizing the radio in the classroom and auditorium. Problems of radio production and radio appreciation are discussed.
208f. ADVANCED RADIO WORKSHOP. (Summer Session only). Four houts credit.
Prerequisite, 108 f , or consent of instructor. A laboratory course in radio writing, speaking and dramatic production with special emphasis on problems in school broadcasting.
214. SUMMER THEATER WORKSHOP. Fout hours credit.

Practical experience in all aspects of production in the summer theater. Consent of instructor must be procured before registering.
215. DIRECTING HIGH SCHOOL AND COMMUNITY PLAYS. (Summer Session only). Four hours credit.
Reading, discussion and projects dealing with the practical problems faced in the direction of dramatic productions in high schools and in community theaters.
217. ADVANCED ORAL INTERPRETATION. (Summer Session only). Four hours credit.
Prerequisite, Speech 117 or consent of instructor. The development of greater artistic skill in reading various forms of literature.
218. DISCUSSION TECHNIQUES. Four hours credit.
(Suggested prerequisite, Speech 120). Principles and practice in organizing, conducting, and participating in round-table discussions, symposiums, debates, and forums.
221. ADVANCED SCENE DESIGN. Four hours credit.

Prerequisite, Eng. 65 or its equivalent. An advanced course in the techniques and problems of scenic design involving the esthetic qualities of settings, costumes, properties, and lighting.
250. SPEECH EDUCATION. (Summer Session only). Four hours credit. Objectives, principles, practices, and trends in speech education in the elementary and secondary schools.
252. BUSINESS AND PROFESSIONAL SPEAKING. Four hours credit. Public speaking for teachers, administrators, and others who are called upon in the course of their work to address audiences and preside over meetings.
265. CORRECTION OF SPEECH DISORDERS. (Summer Session only). Four hours credit.
A study of the manifestations and causes of disorders of speech with emphasis on re-education. Laboratory work in the speech clinic required as part of the course.
300. INTRODUCTION TO GRADUATE STUDY. Four hours credit. A study of the literature and techniques of research in the area of the graduate major. This course is required of all first quarter graduate students who intend to receive the degree of Master of Arts.
322. INDIVIDUAL STUDIES IN SPEECH AND DRAMA. Four hours credit.
Independent study in a field of specialization not provided for in formal classes. Typewritten paper required.
370. THE PSYCHOLOGY OF SPEECH. (Summer Session only). Four hours credit.
The nature and origin of speech; the relationship of speech to emotion, learning, meaning and thought; the development of speech in the child; speech and personality.
375. PHONETICS. (Summer Session only). Four hours credit.

The science of speech sounds with special application to the use of phonetics in speech instruction in elementary and secondary schools.
399. THESIS. Eight hours maximum credit.

## Division of Music

The Division of Music presents a varied program for cultural and professional experience, including individual lessons in voice, piano, organ, brass and woodwind instruments, violin and other stringed instruments. These lessons may be taken with or without credit.


## Bachelor of Arts Degree <br> (With Teaching Certificate) MAJOR

The following program is required: (A) Common Courses listed on Page 29; (B) Mus. 2a, b, c, 50a, b, c, 58a, b, c, 99a, b, c, 152a, b, c, 153a, b, c, 155a, b, c, 250; (C) Nineteen hours of individual instruction; (D) Participation in band, orchestra, a cappella choir, instrumental or vocal ensemble (maximum of six hours credit applied to graduation) ; (E) One minor outside the division; (F) Electives outside the division to complete requirements for graduation; (G) Play at sight a simple piano accompaniment, sing agreeably, demonstrate a teaching knowledge of a stringed, brass, and woodwind instrument; (H) Make a creditable public appearance in either playing or singing.

## MINORS

Minors are offered in vocal music, instrumental music, and for elementary education majors. Courses required are: VOCAL MUsic Minor-Mus. 2a, b, c, 50a, b, c, 58a, b, c; three hours of individual instruction; Instrumental Music Minor-Mus. 2a, $\mathrm{b}, \mathrm{c}, 50 \mathrm{a}, \mathrm{b}, \mathrm{c}, 99 \mathrm{a}, \mathrm{b}, \mathrm{c}$; three hours of individual instruction; Minor for Elementary Education Majors - Mus. 148a, 149. Maximum of six hours individual instruction. The remaining hours will be planned with the student's adviser.

## Bachelor of Music Degree

Majors are offered in piano, organ, violin, orchestral instruments, voice, and composition. Emphasis is on performance and the cultural aspects of music. The student must show satisfactory aptitude for an instrument or in voice, and demonstrate his ability by playing or singing some standard composition in his field before a committee of the division.

## REQUIRED COURSES

First Year: Major and minor instrument or voice ( 12 hours) ; vocal or instrumental ensemble; Mus. 2a, b, c, (or 3a, b, c) ; Hum. 1, 2, 3 ; Eng. 4a; four hours of electives.

Second Year: Major and minor instrument or voice (12 hours) ; vocal or instrumental ensemble; Mus. 52a, b, c, (or 53a, b, c) , 58a, b, c; S. S. 1, 2, 3.

Third Year: Major and minor instrument or voice (12 hours) ; vocal or instrumental ensemble; Mus. 152a, b, c, 270a, b; sixteen hours of electives.

Fourth Year: Major and minor instrument or voice (12 hours) ; vocal or instrumental ensemble; Mus. 153a, b, c, 155a, $b, c$; sixteen hours of electives.

## RECOMMENDED ELECTIVES

Recommended electives in the freshman and sophomore years: F. A. 20; P. E. 61; Speech 5; Sci. 3a, 3b; Ed. 25; Geog. 10; and Foreign Language (required of vocal majors).

Recommended electives in the junior and senior years: Econ. 102; Soc. 100; Eng. 58a, 58b, 58c, and Foreign Language.

COMBINED DEGREES
A five-year course of study is offered leading to the combined degrees of Bachelor of Arts with a teaching certificate and the Bachelor of Music.

## GRADUATE STUDY

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

## Description of Courses

2a, b, c. SIGHT SINGING, EAR TRAINING AND NOTATION. Three hours credit each quarter.
To acquaint the student with sight reading and rote materials, and to serve as an introduction to Music 52a, b, c.
3a, b, c. HARMONY. Three houts credit each quatter.
Required for Bachelor of Music degree. A study of the elements of harmony through writing, analysis, and hearing, including the structure and movement of chords through chords of the seventh, ninth, eleventh, and thirteenth.
21. INSTRUMENTAL ENSEMBLE. One hour credit.

Classes in woodwind quintet, string quartet, string trio, brass ensemble, and other small instrumental groups.
22. VOCAL ENSEMBLE. One hour credit.

Vocal trios, quartets, and other small groups receive training in this course with a view toward being of service in the community.
30. INDIVIDUAL INSTRUCTION IN VOICE. One hour credit.

To experience and understand the correct use of the singing and speaking voice. Special emphasis is placed on building a useful song repertoire and coaching in performance.
31. INDIVIDUAL INSTRUCTION IN PIANO. One hour credit.
32. INDIVIDUAL INSTRUCTION IN VIOLIN (or other stringed instruments). One hour ctedit.
33. INDIVIDUAL INSTRUCTION IN ORGAN. One hout credit. Instruction is given in pipe organ and Hammond organ.
34. INDIVIDUAL INSTRUCTION IN PERCUSSION. One hout credit.
35. INDIVIDUAL INSTRUCTION IN BRASS AND REED INSTRUMENTS. One hour credit.
40. BEGINNING ORCHESTRA. One hour credit.

This organization is devoted to those whose playing is in the less advanced stage.
41. BEGINNING BAND. One hour credit.

This organization is devoted to those whose playing is in the less advanced stage.
42. COLLEGE ORCHESTRA. One hour credit.

This organization is open to all who show sufficient qualifications.
43. CONCERT BAND. One hour credit.
44. A CAPPELLA CHOIR. One hour credit.
45. PIANO CLASS LESSONS. One hour credit.
46. PIANO CLASS METHODS. Two hours credit.

50a, b, c. INTRODUCTION TO MUSIC EDUCATION. Two hours credit each quarter.
A preparatory course for special teachers of school music. Course procedures include observation and participation in music in the laboratory school. A three quarter sequence to be taken in the student's sophomore year.
51. PHILHARMONIC CHOIR. No credit.

A course in choral singing required of all music majors.

52a, b, c. HARMONY. Three hours credit each quarter.
Prerequisite, Music 2a, b, c. A year's course meeting four days a week.
53a, b, c. HARMONY. Three hours credit each quatter.
Required for Bachelor of Music degree. A continuation of Harmony 3a, b, c. Includes a study of modulation, altered chords, augmented sixths, enharmonism, and a discussion of impressionistic harmony and atonal styles.
58a, b, c. HISTORY OF MUSIC. Two hours credit each quatter.
99a, b, c. BEGINNING INSTRUMENTS. Two hours credit each quarter.
148a, b. MUSIC FUNDAMENTALS FOR ELEMENTARY TEACHERS. Four hours credit each quarter.
A two quarter sequence in music for elementary majors.
149. MUSIC METHODS AND MATERIALS FOR ELEMENTARY TEACHERS. Four hours credit.
Prerequisite, Music 148a, b. A course for rural and elementary teachers specifically designed to give a practical working knowledge of music in all elementary grades.

152a, b, c. COUNTERPOINT. Two hours credit each quarter.
Prerequisite, Music 52a, b, c.
153a, b, c. INSTRUMENTATION. Two hours credit each quarter. Prerequisite, Music 152a, b, c.

155a, b, c. TECHNIQUE AND PRACTICE OF CONDUCTING. Eight hours credit for three quarters.
250. SPECIAL PROBLEMS IN PUBLIC SCHOOL MUSIC. Four hours credit.
Prerequisites, Music 50a, b, c, and student teaching. Students will be granted ample opportunity to study individual problems growing out of their student teaching experience.
251. ORGANIZATION AND TEACHING OF SECONDARY SCHOOL MUSIC. Four hours credit.
Problems of the general music class, the changing voice, improvement of music reading, teaching music appreciation, organization and teaching of senior high school music, and the problems of high school music activities.
254. PRINCIPLES OF MUSIC EDUCATION. Four hours credit.

The philosophy of musical education, evaluation of current practices in teaching music reading, rhythmic experience, creative music, and the musical and non-musical child.
256. PSYCHOLOGY OF MUSIC. Four hours credit.

The subjects included in this course are measurements of musical talent, tests and measurements in music, and the psychology of musical performance.

## 257. PHYSICS OF MUSICAL INSTRUMENTS. Four hours credit. <br> The objectives of this course are to develop an understanding of the physical

 principles involved in the production of music.262. SYMPHONIC LITERATURE. Four hours credit.

270a, b. ADVANCED HARMONY AND FORM ANALYSIS. Fout hours credit each quatter.
This course deals with the many kinds of modulations and altered chords, as well as the study of the harmonic and formal aspects of musical composition.
274. PROBLEMS OF MUSIC APPRECIATION (Summer Session only). Four hours credit.
Appreciation defined, evaluation of the present approach, and construction of an original program for elementary and secondary schools.
275. PROBLEMS IN ORCHESTRAL AND CHORAL CONDUCTING (Summer Session only). Four hours credit.
Study of instrumental and choral conducting.
276. SURVEY OF MUSIC IN AMERICA (Summer Session only). Four hours credit.
A study of the growth and development of all phases of American music.
277. HISTORY OF MUSICAL THEORY (Summer Session only). Four hours credit.
Musical composition traced from Greek modes to the present.
300. INTRODUCTION TO GRADUATE STUDY. Four hours credit.
322. INDIVIDUAL STUDIES IN MUSIC. Two to four hours credit for one* problem; a maximum of eight hours credit.
323. COMPARATIVE VOICE METHODS AND MATERIALS (Summer Session only). Four hours credit. Individual lessons required.
324. COMPARATIVE VIOLIN METHODS AND MATERIALS (Summer Session only). Four hours credit. Individual lessons required.
325. COMPARATIVE PIANO METHODS AND MATERIALS (Summer Session only). Four hours credit. Individual lessons required.
361. MUSICAL AESTHETICS (Summer Session only). Four hours credit. Special emphasis is placed on the implication of aesthetics in teaching music.
371. ADVANCED COMPOSITION AND ORCHESTRATION (Summer Session only). Four hours credit.
372. INSTRUMENTAL SUPERVISION (Summer Session only). Four hours credit.
373. VOCAL SUPERVISION (Summer Session only). Four hours credit.
399. THESIS. Eight hours credit.

## Division of the Sciences

The Division of the Sciences includes the fields of Biology, Botany, Chemistry, General Science, Mathematics, Professionalized Science, and Zoology.

## MATHEMATICS Bachelor of Arts Degree (With Teaching Certificate) <br> MAJOR

The following program is required: (A) Common Courses listed on Page 29; (B) Math. $75 \mathrm{a}, \mathrm{b}, 76$ (or 78a, b, c), 175, 176, 177a; (C) Twenty-four hours from the following: Math. 77a, 170, 177b, 272, 273, 274, 277; (D) Two minors, one preferably in science; (E) Elective courses to complete requirements for graduation. Programs will be planned with the student's adviser.

MINOR
Courses required are: Math. $75 \mathrm{a}, \mathrm{b}, 76$ (or 78a, b, c), 177a; eight hours of electives.

## Bachelor of Arts Degree <br> (Liberal Arts) <br> MAJOR

The following program is required: (A) Common Courses listed on Page 30; (B) Math. $75 \mathrm{a}, \mathrm{b}, 76$ (or 78a, b, c), 175, 176, 177a; (C) Twenty-four hours from the following; Math. $77 \mathrm{a}, 170,177 \mathrm{~b}, 272,273,274,277$; (D) A 24 hour minor outside the division; (E) Elective courses to complete requirements for graduation. Programs will be planned with the student's adviser.

## MINOR

Courses required are: Math. $75 \mathrm{a}, \mathrm{b}, 76$ (or 78a, b, c), 177a; eight hours of electives.

## GRADUATE STUDY

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

## Description of Courses

## MATHEMATICS

75a, b. COLLEGE ALGEBRA. Four hours credit each quarter.
The development and extension of concepts and skills beyond those studied in high school, the practice of clear and independent thinking, with emphasis upon the understandings which lie back of algebraic processes.
76. PLANE "TRIGONOMETRY. Four hours credit.

A study of the trigonometric functions and their application, both theoretical and practical, in the solution of the triangle with emphasis upon the logarithms in computation.

77a. SOLID GEOMETRY. Four hours credit.
Extends the deductive methods of plane geometry to three dimensions; shows the many applications of space concepts to physical problems and lays the foundation for more advanced work in the field of three dimensions.

78a, b, c. GENERAL MATHEMATICS. Four hours credit each quarter.
Presupposes at least three years of secondary mathematics. These three courses parallel Math. 75a, b, and 76, but constitute a sequence of algebra, trigonometry, analytic geometry, and the calculus.
170. MATHEMATICAL INSTRUMENTS AND SURVEYING. Fout houts credit.
Prerequisites, Math. 75a, b, and 76. Acquaints the student with the slide rule, the sextant, the level, and the transit. Emphasizes the use of these instruments in the solution of problems obtained from the field.
175. DIFFERENTIAL CALCULUS. Four hours,credit.

Prerequisites, Math. $75 \mathrm{a}, \mathrm{b}, 76,177 \mathrm{a}$, or equivalent. Presents the concept of the derivative and its importance in solving problems in the scientific field.
176. INTEGRAL CALCULUS. Four hours credit.

Prerequisite, Math. 175. Relates integration and differentiation; develops the formulas and skills of integration; and emphasizes the application of the definite integral to the problems of science.

## 177a. ANALYTIC GEOMETRY I. Fout hours credit.

Prerequisites, Math. $75 \mathrm{a}, \mathrm{b}, 76$, or $78 \mathrm{a}, \mathrm{b}, \mathrm{c}$. Explains and applies algebraic methods in the solving of geometric problems, thus acquainting the student with a powerful method of amplifying algebra and geometry. Especially valuable as a margin of information for teachers of both algebra and geometry.

177b. ANALYTIC GEOMETRY II. Four hours credit.
Prerequisite, Math. 177a. A continuation of Anal. Geom. I, emphasizing such topics as transformation of coordinates, tangents, polar coordinates, parametric equations, and Cortesian coordinates in space.

## 272. PRINCIPLES OF TEACHING SECONDARY MATHEMATICS. Four hours credit.

For those who must give thought to the place and function of mathematics in the secondary school program. The course deals with instructional problems and specific difficulties which students encounter.
273. MODERN EUCLIDEAN GEOMETRY. Four hours credit.

An introduction to the ideas and methods of modern geometry; an extension of Euclidean geometry to theorems not included in high school geometry.
274. HISTORY OF MATHEMATICS. Four hours credit.

A general view of the development and contributions of mathematics; a more detailed view of arithmetic, algebra, geometry, and evolution of symbolism; considerations of both applied and theoretical mathematics.
275a, b. ADVANCED CALCULUS. Four hours credit each quarter.
Prerequisites, Math. 175, 176. A continuation of those topics of differential and integral calculus which are not adequately treated in Math. 176. The subject matter deals with infinite series, indeterminate expressions, partial differentiation, and applications of both differentiation and integration.
277. THEORY OF EQUATIONS. Four hours credit.

Prerequisites, Math. 175 and 177a. Deals with functional relationships. graphic representation, and solution of functions. Complex numbers, determinates, and symmetric functions.
372. MATHEMATICS OF FINANCE AND INSURANCE. Four hours credit.
Prerequisite, Math. 177a. A consideration of simple interest and discount, logarithms, graphic representation, compound interest, annuities, bonds, amortization, building and loan associations, and life insurance.
373. THEORY OF NUMBERS. Four hours credit.

Prerequisite, Math. 176. Properties of integers, congruences, quadratic residues, reciprocity law, binary quadratics.
374. PROJECTIVE GEOMETRY. Four hours credit.

Prerequisite, Math. 176. An elementary treatment of the most fundamental propositions of projective geometry from the synthetic point of view with emphasis upon the power of visualization and geometric analysis.
376. DIFFERENTIAL EQUATIONS. Four hours credit.

Prerequisites, Math. 175, 176. Introduces the student to the extensive field of differential equations, and their application to the solution of problems in related fields of science.
377. VECTOR ANALYSIS. Four hours credit.

Prerequisite, Math. 176. Fundamental operations of vector analysis. Application to mechanics and mathematical physics.
379. MODERN ALGEBRA. Four hours credit.

Prerequisite, Math. 176. An introduction of the student to bigher algebra with emphasis upon the most fundamental facts, and important results of algebra, which are new to the student.

# SCIENCE <br> Bachelor of Arts Degree (With Teaching Certificate) 

## MAJOR

The following program is required: (A) Common Courses listed on Page 29; (B) Chem. 40a, 40b, 40c; Phys. 61, 62, 63; Bot. 21, 22, 23; Zool. 11, 12, 13; Sci. 205; (C) Twenty hours of electives in physical or biological science; (D) One 24 hour minor, preferably in mathematics; (E) Additional electives to complete requirements for graduation. Programs will be planned with the student's adviser.

## MINOR

The minor may be obtained in biological or physical science. Courses required are: biological science-Bot. 21, 22, 23; Zool. 11, 12, 13; physical science-Chem. 40a, 40b, 40c; Phys. 61, 62, 63.

## Bachelor of Arts Degree (Liberal Arts) <br> MAJOR

The following program is required: (A) Common Courses listed on Page 30; (B) Chem. 40a, 40b, 40c; Phys. 61, 62, 63; Bot. 21, 22, 23; Zool. 11, 12, 13; Sci. 205; (C) Twenty hours of electives in physical or biological science; (D) One minor outside the division; (E) Additional electives to complete requirements for graduation. Programs will be planned with the student's adviser.

## MINOR

The minor may be obtained in biological or physical science. Courses required are: biological science-Bot. 21, 22, 23; Zool. 11, 12, 13; physical science-Chem. 40a, 40b, 40c; Phys. 61, 62, 63.

## GRADUATE STUDY

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

## Description of Courses <br> NON-SPECIALIZED SCIENCE

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

3b. INTRODUCTION TO BIOLOGICAL SCIENCE. Four hours credit. Major concepts dealing with the nature of life, human reproduction, heredity, and evolution are studied.
205. INTEGRATED SCIENCE. Fout hours credit.

For science majors in their senior year. Organized to integrate the student's knowledge of science and to show the application of science principles to the interpretation of life situations.
207. CONSERVATION OF NATURAL RESOURCES. Four hours credit. Designed to give students an overview of natural resources, what is being done, and what should be done to conserve them. Field trips required.
208. FIELD SCIENCE. Four hours credit.

Planned especially for elementary and secondary school teachers. Deals with geological features and the plant and animal life of this region. Field trips required. (Graduate Science majors will not take this course).
209. UNIT COURSES IN SCIENCE (Summer Session only). Fout hours credit.
A study of literature and techniques of research in the area of the graduate major. This course is required of all first quarter graduate students who intend to receive the degree of Master of Arts.
300. INTRODUCTION TO GRADUATE STUDY (Summer Session only). Four hours credit.
A study of literature and techniques of research in the area of the graduate major. This course is required of all first quarter graduate students who intend to receive the degree of Master of Arts.

## PROFESSIONALIZED SCIENCE

## 191. SCIENCE IN THE ELEMENTARY SCHOOL. Four hours credit. Prerequisites, Sci. 3a and 3b. Study of objectives, materials, and methods of teaching. science in the grades.

292. SPECIAL PROBLEMS IN TEACHING ELEMENTARY SCIENCE. Four hours credit.
Study of problems of teaching and associated curricular and organization problems confronted by supervisors and teachers.
293. TEACHING SEX EDUCATION (Summer Session only). Four hours credit.
A study of sex problems, social adjustment of students and content in sex education.
294. IMPROVEMENT OF SCIENCE INSTRUCTION IN SECONDARY SCHOOLS (Summer Session only). Four hours credit.
Teachers' instructional problems are studied cooperatively with other science teachers and authorities in science education. This course also provides opportunity for supervisors and administrators to study methods of improving the science curriculum of their schools.
295. THESIS. Eight hours credit.

## BIOLOGY

231. EVOLUTION. Four hours credit.

Prerequisites, Zool. 11, 12, and 13 or their equivalent. A study of the factors that have been proposed as a cause of gradual development and of the evidences that have been uncovered to support the belief in evolution.
232. GENETICS AND EUGENICS. Four hours credit.

A study of the fundamental laws of heredity and their application to both plants and animals and to man. The present trend of the race is emphasized.
238. BIO-ECOLOGY. Fout houts ctedit.

Prerequisites, Zool. 11, 12, and 13; Bot. 21, 22, and 23. Designed to enable students to study the relation of plants and animals to their environment. Much of the work will be done in the field.

## BOTANY

21. GENERAL BOTANY. Four houts credit.

An elementary study of the structure and function of flowering plants and their relation to man.
22. GENERAL BOTANY. Fout hours credit.

A study of the lower forms of plants. Begins with the different forms of algae and includes the fungi, liverworts, and mosses.
23. GENERAL BOTANY. Fout hours credit.

Treats of the higher forms of plants from the ferns and their relatives up through the gymnosperms and angiosperms. Evolutionary development is emphasized.
122. GENERAL BACTERIOLOGY. Four hours credit.

Study of bacteria yeasts and molds and their effects upon health, foods, and sanitation.
226. BOTANICAL TECHNIQUE AND PLANT HISTOLOGY. Foui houts ctedit.
Prerequisites, Bot. 21, 22, and 23 , or their equivalent. The study of plant tissues and the science of killing, staining, and making botanical material into permanent microscopic mounts.
227. SYSTEMATIC BOTANY (Summer Session only). Four hours credit. Prerequisite, Bot. 23 or its equivalent, organized to give the student a knowledge of the structural relationships of the different groups of flowering plants and skill in using the manual to identify them.
321. PLANT PHYSIOLOGY. Fout hours credit.

Prerequisites, Bot. 21, 22, and 23 or their equivalent. Planned to give students a functional knowledge of absorption, transpiration, the transpiration stream, food synthesis, translocation, digestion, and respiration, and the relationship of these processes to plant culture.
328. PLANT ECOLOGY (Summer Session only). Four hours credit. Prerequisites, Bot. 21, 22, and 23. Organized to give the student an understandirig of plant successions resulting from the interrelation and interaction of plant life and the factors of the environment.

## CHEMISTRY

40a. PRINCIPLES OF CHEMISTRY. Fout hours credit.
This course deals with the principles of chemistry, and their relationships to daily experience. It is designed for science majors and minors as well as pre-medical, pre-dental, pre-veterinary, and pre-engineering students. No previous knowledge of chemistry is necessary, but high school algebra is essential.
40b. GENERAL INORGANIC CHEMISTRY. Four hours credit.
Prerequisite, Chem. 40a. This course includes a discussion of the chemistry and uses of the most important metals and non-metals and their inorganic compounds.
40c. INTRODUCTORY ORGANIC CHEMISTRY. Four hours credit.
Prerequisite, Chem. 40a. This course provides an elementary introduction to organic chemistry, including some of the many applications in such fields as food. drug, plastic, dye, and vitamin chemistry.
41a, b. INTRODUCTION TO CHEMISTRY. Four hours credit each quarter. This series of courses parallels Chem. $40 \mathrm{a}, \mathrm{b}$, but is designed for Home Economics teaching majors, dietitians, pre-nursing students, and pre-medical technicians. It includes applications of particular interest to these groups of students.
41c. INTRODUCTORY ORGANIC CHEMISTRY. Four hours credit.
Prerequisite, Chem. 41 a . This course parallels Chem. 40c but is designed for Home Economics teaching majors, dietitians, pre-nursing students, and pre-medical technicians.
48. FOOD ANALYSIS. Four hours credit.

Prerequisite, Chem. 40 c or 41 c . This course deals with some of the techniques of qualitative and quantitative analysis of foods for certain inorganic and organic constituents.
142. ORGANIC CHEMISTRY. Five hours credit.

Prerequisite, Chem. 40 c or 41 c . The chemistry of the carbon compounds of the aliphatic series are discussed in some detail. Application to the fields of nutrition and industry are stressed.

## 144. QUALITATIVE ANALYSIS. Five hours credit.

Prerequisite, Chem. 40 b or 41 b and a background in algebra extending through logarithms. In this course, the student is introduced to analytical theory and the methods of detection of common ions. The laboratory work illustrates the class discussion.

## 145. QUANTITATIVE ANALYSIS. Five hours credit.

Prerequisite, Chem. 144. This course provides a discussion of quantitative procedures as well as continued emphasis on analytical theory. The methods of volumetric and gravimetric analysis are applied to common substances in the laboratory.

240a, b. PHYSICAL CHEMISTRY. Six hours credit each quarter.
Prerequisites, Chem. 142 and 145 ; Phys. 61, 62, 63, and Math. 176. This course is an advanced study of the theoretical principles upon which chemistry is based. Opportunity is given in the laboratory to demonstrate the validity of physical laws considered in the class work.
243. ORGANIC CHEMISTRY. Four or five hours credit.

Prerequisite, Chem. 142. This course is a continuation of Chem. 142 and deals principally with the aromatic compounds of carbon.
246. QUANTITATIVE ANALYSIS. Five hours credit.

Prerequisite, Chem. 145. This course is a continuation of Chem. 145, with special attention given to the analysis of complex mixtures.
247. BIOCHEMISTRY. Fout hours credit.

Prerequisite, Chem. 40 c or 41 c . An introduction to the chemistry of foods, nutrition, and body processes is given.
249. LABORATORY PROBLEMS. A maximum of eight houts credit on the undergraduate level and twelve hours credit on the graduate level.
Prerequisite, consent of the teacher. Individual work on laboratory problems in which the student is interested.
340. CHEMICAL THERMODYNAMICS. Thee hours credit.
Prerequisite, Chem. 240 b . This is an extension of the applications of ther-
modynamics to chemical systems beyond the treatment given in elementary physical chemistry. There is no laboratory work.
341. SEMINAR IN CHEMISTRY. One hour credit each quarter.

Prerequisite, consent of the teacher. This course gives the graduate student an opportunity to report on some topic of interest treated in recent literature, as well as profit by the reports of others. A student majoring in the physical sciences may get a total of two hours credit in this course.
342. SURVEY OF ORGANIC CHEMISTRY. Three hours credit.

Prerequisites, Chem. 243, Phys. 361. This course affords a somewhat detailed survey of the field of organic chemistry at an advanced level, with special attention to recent literature. There is no laboratory work.
343. QUALITATIVE ORGANIC ANALYSIS. Three to five houts credit. Prerequisite, Chem. 243. The course deals with the identification of organic compounds in the laboratory.
344. ADVANCED INORGANIC CHEMISTRY. Four hours credit.

Prerequisites, Chem. 145; Phys. 368, and Phys. 366. This course, without laboratory, offers an opportunity for discussion of selected topics in inorganic chemistry based upon recent literature. It is planned especially for the teacher of chemistry to give survey of certain chemical principles and descriptive inorganic chemistry after he has some understanding of atomic and molecular structure.

## GEOLOGY AND ASTRONOMY

186. GENERAL GEOLOGY. Four hours credit.

A course designed to develop an understanding of the surface of the earth and the processes and forces that have been active in changing it.
287. HISTORICAL GEOLOGY. Four hours credit.

Prerequisite, Geol. 186. A study of the history of the earth and its plant and animal life from the earliest times.
181. DESCRIPTIVE ASTRONOMY. Four hours credit.

A study of space and heavenly bodies. The student learns to recognize the planets, principal constellations, and the stars visible in this latitude.
381. ADVANCED ASTRONOMY (Summer Session only). Four hours credit.
A consideration of space and the heavenly bodies which it contains. Includes spectroscopy as applied to astronomy, star distances, classification and magnitude of stars as well as nebulae.

## METEOROLOGY, AND AERONAUTICS

150. PHYSICS OF THE AIRPLANE (AERODYNAMICS). Four hours credit.
This course follows the outline of the C. A. A. for a study of the general service of aircraft and meets the needs of the specialized student who intends to become a teacher of the science of aviation.
151. AIRCRAFT POWER PLANTS. Four hours credit.

A study of the principles, structures and operation of all types of heat engines, including automobile, airplane and diesel engines and their everyday application. A discussion of the modern developments of aircraft power plants such as the jet, turbo-jet and pro-jet power plants will be included.
152. NAVIGATION. Four hours credit.

This course is designed to meet the needs of the teacher of the sciences of aviation and to meet the C. A. A. requirements of study for those who intend to qualify for the private pilot's certificate. It follows the approved outline of the C. A. A.
154. BASIC GROUND SCHOOL. Four hours credit.

A course designed to provide for instruction in the subjects of civil air regulations, general service of aircraft, navigation, and meteorology. Meets the C. A. A. requirements for such a course.
158. CLIMATOLOGY. Four hours credit.

Factors affecting climate, climates of the world, their causes, classification, characteristics, and variability; climate and man.
159. METEOROLOGY. Four hours credit.

Weather elements such as temperature, pressure, wind, moisture, air masses, and storms. Maps and forecasting. Weather as related to agriculture and aviation.

## PHYSICS

61. GENERAL PHYSICS. Four hours credit.

The first quarter of the general course of physics which treats of the laws, principles, and generalizations of mechanics and heat.
62. GENERAL PHYSICS. Four hours credit.

The second quarter of the general course in physics which treats of the principles, laws, and generalizations in electricity. A continuation of Phys. 61.
63. GENERAL PHYSICS. Four hours credit.

The third quarter of the general course in physics which treats of the laws, principles and generalizations contained in a study of sound, light, and atomic physics. A continuation of Phys. 61 and 62.
65. HOUSEHOLD PHYSICS. Four hours credit.

A course designed to meet the needs of majors in home economics. All laws, principles, and generalizations of physics are related directly to their application in the home.
68. ELEMENTARY ELECTRICITY. Fout houts credit.

A course designed for the student who needs a fundamental background in the general laws, principles, and generalizations of electricity in everyday life.
166. ELECTRONICS. Five hours credit.

This is a general course in electronics and electricity as applied to the re-, ception and transmission of radio. Stress is placed upon the applications to radio in everyday living.
167. ELEMENTARY PHOTOGRAPHY. Five hours credit.

An elementary course designed to meet the needs of the amateur photographer and also to furnish an adequate background for more advanced work on the principles of photography.
264a. MECHANICS AND HEAT. Four hours credit.
Prerequisites, Phys. 61, 62, 63, and mathematics through calculus. The first quarter of second year advanced physics which treats of the development of the concepts of mechanics and heat as well as the mathematical interpretation of the laws and principles.
264b. GENERAL ELECTRICITY. Four hours credit.
Prerequisites, Phys. 61, 62, 63, and mathematics through calculus. This course deals with the fundamental development of the important concepts in A. C. and D. C. electricity. It furnishes the necessary background for electrical engineering.

264c. SOUND, LIGHT, AND WAVE MOTION. Four hours credit.
Prerequisites, Phys: $61,62,63$, and mathematics through calculus. An advanced course dealing with the fundamental principles and laws of wave motions including their applications to sound and light with the emphasis placed upon the modern atomic concepts.
361. MOLECULAR STRUCTURE. Four hours credit.

Prerequisites, Chem. 40a, b, c; Phys. 61, 62, 63; and Math. 176. The course will consist of discussions of the modern theories of the structure of molecules based upon the evidences of spectroscopy, theories of ionization and the theories of valence.
366. SEMINAR IN PHYSICS. One hour credit.

This course is designed to permit the student to increase the breadth of his knowledge in physics, to enable him to become familiar with the research and literature of physics and to prepare and present papers on the research in physics either his own problem or the research of others.
367. ADVANCED PHOTOGRAPHY. Five hours credit.

Prerequisites, Phys. 63, 167; Chem. 40a, b, c. An advanced course in the principles of photography.
368. ATOMIC PHYSICS. Four hours credit.

Prerequisites, Phys. 61, 62, 63; Chem. 40a, b, and mathematics through calculus. This course is designed as an advanced course on modern atomic theory, nuclear structure, and their relationship to fundamental physical and chemical theory.
369. ELECTRO-MAGNETIC RADIATIONS. Fout hours credit.

Prerequisites, Phys. 61, 62, 63, 264c; Chem. 40a, b; mathematics through calculus. A graduate course consisting of a study of all the known radiations and their properties. Emphasis is placed upon the principles of light, spectroscopy, and modern theory.

## ZOOLOGY

11. GENERAL ZOOLOGY. Four hours credit.

In this course the principles of animal biology will be emphasized. The principles will be demonstrated in the laboratory by the study of selected types.
12. GENERAL ZOOLOGY. Fout houts ctedit.

A study of the structure and relationship of the invertebrate animals. Selected species of the invertebrates will be used as types.
13. GENERAL ZOOLOGY. Fout hours credit.

A course in the anatomy and physiology of the vertebrate animals. Selected forms from the vertebrate groups will be used for laboratory study.
114. BIRD STUDY. Four hours credit.

Classroom, museum, and field studies on birds, their habits, habitats, life histories, migration activities, and their economic importance.
115. ELEMENTARY ENTOMOLOGY. Four hours credit.

A study of the life history, habits, habitats, and economic importance and controls of the common insects of the region.
117. HUMAN PHYSIOLOGY. Four hòurs credit.

A course planned to help the student to understand the normal functions of the human body. The student will be encouraged to analyze the functioning of his own body to make practical health deductions.
211. COMPARATIVE MORPHOLOGY OF THE VERTEBRATES. Five hours credit.

Prerequisites, Zool. 11, 12, and 13, or equivalent courses. A detailed study of the systems of organs of the vertebrates. The students will be expected to make careful dissections of selected types.
215. VERTEBRATE EMBRYOLOGY. Five hours credit.

Prerequisites, Zool. 11, 12, and 13, or equivalent courses. A study of the embryology of the bird and the mammal designed to provide an understanding of the early development of the human body.
218. ANIMAL HISTOLOGY AND MICROSCOPIC TECHNIQUE. Five hours credit.

Prerequisites, Zool. 11, 12, and 13. The skills of killing, staining, and preparing animal tissue for study is combined with the study of the types of tissues in the animal body.
316. VERTEBRATE ORGANOGENY. Five houts credit.

Prerequisites, Zool. 11, 12, 13, and Zool. 215, or equivalent courses. A continuation of course Zool. 215 arranged to help the student to understand how the organs of the body are developed from the germ layers.
317. ENDOCRINOLOGY. Five hours credit.

Prerequisites, Zool. 11, 12, 13, and 117, or equivalent. A detailed study of the endrocine system including its relationship to physiological functions and to behavior.

## Division of the Social Studies

The Division of the Social Studies includes the fields of Economics, Geography, History, Political Science, and Sociology.

## Bachelor of Arts Degree <br> (With Teaching Certificate)

## MÀJOR

The following program is required: (A) Common Courses listed on Page 29; (B). Social Studies courses distributed as follows: eight hours of economics, including Econ. 100; eight hours of geography, including Geog. 10; eight hours of political science, including Pol. Sci. 170; eight hours of' sociology, including Soc. 101 ; Hist. 20, 21, 30, 31, 32, 267; S. S. 200; (C) A concentration of twelve additional hours in one of the fields in the social studies is recommended; (D) One 24 hour minor outside the division; (E) Electives outside the division to complete requirements for graduation. Programs will be planned with the student's adviser.

Note: Students who intend to do graduate work in economics, geog 'Note:" Students who intend to do graduate work in economics, thangeography, political science or sociolegy, should complete not less than twelve hours of undergraduate work in the field chosen.

## IVIIIVUKゝ

Three minors are offered. The minors and the required courses are: (A) Twenty-four hour minor for students who will teach in secondary schools: Hist. 20, 21, 31, 32, and eight hours elected from economics, geography, political science, and sociology. It is desirable to add S. S. 150 b .
(B) Thirty-six hour minor for students who will teach in secondary schools: Hist. 20, 21, 31, 32, and 20 hours selected from economics, geography, political science, and sociology. It is desirable to add S. S. 150 b .
(C) Twenty-four hour minor for students who will teach in elementary schools: Geog. 10, 246; Hist. 40 (or 252), 100, 158; Pol. Sci. 171.

## Bachelor of Arts Degree

(Liberal Arts)

## MAJOR

The following program is required: (A) Common Courses listed on Page 30; (B) From 48 to 72 hours apportioned among economics, geography, history, political science, and sociology; (C) One 24 hour minor outside the division; (D) Electives to complete requirements, for graduation.

Fields of interest may be emphasized in the major and some courses may be taken in international relations, public administration, or social work background. A 48 hour major may be arranged in history. Programs will be planned with the student's adviser.

## MINOR

A 24 hour minor may be arranged in economics, geography, history, political science, or sociology; geography and history of Europe or Latin America, human or international relations, public administration or social work background.

## GRADUATE STUDY.

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

## Description of Courses

## GENERAL EDUCATION

1. FAMILY AND SOCIAL RELATIONSHIPS. Four hours credit.

Social relations in the family, economic problems of the family, improvement of social and personal relationships in modern society.
2. AMERICAN LIFE AND INSTITUTIONS. Four hours credit.

Physical backgrounds, economic foundations, theory and practice of representative government, problems of the United States in the new age.
3. CONTEMPORARY WORLD CIVILIZATIONS. Fout hours credit.

Geographical and historical prospectives; Occidental, Oriental, and Russian civilizations compared; problems of war and peace.

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## SOCIAL RESEARCH

120. INDIVIDUAL STUDIES. Two to eight hours credit.

Individual undergraduate study under the guidance of a staff member in any area of the Division. Field of credit to be designated. Available only on consent of the instructor concerned.
300. INTRODUCTION TO GRADUATE STUDY. Four hours credit.

A study of the literature and techniques of research in the area of the graduate major. This course is required of all first quarter graduate students who intend to receive the degree of Master of Arts.
322. INDIVIDUAL STUDIES. Two to eight hours credit.

Individual graduate study under the guidance of a staff member in any area of the Division. Field of credit to be designated. Available only on consent of the instructor concerned. Paper required.
399. THESIS. Eight hours credit.

## PROFESSIONAL EDUCATION

150b. TEACHING THE SOCIAL STUDIES IN THE SECONDARY SCHOOL. Four hours credit.
Materials and methods for teaching social studies in the secondary school.
213. IMPROVEMENT OF INSTRUCTION IN ELEMENTARY SCHOOL SOCIAL STUDIES. Four hours credit.
An advanced course- in the teaching and supervision of the social studies in the elementary school dealing with the most recently developed thought and practices.
305. IMPROVEMENT OF INSTRUCTION IN SECONDARY SCHOOL SOCIAL STUDIES. Four hours credit.
The reorganization and improvement of social studies in secondary schools; individual student problems considered; laboratory and seminar procedures.

## ECONOMICS

100. PRINCIPLES OF ECONOMICS. Four hours credit.

Principles of economic relationships, with emphasis on the tools and techniques of economic thinking relating to value, rent, interest, wages, profits, prices, and money.
102. CONTEMPORARY ECONOMIC. PROBLEMS. Four hours credit.

Vital economic problems of modern society, particularly labor issues, agricultural adjustment, and price stabilization. Recommended to follow Econ. 100.
103. PERSONAL SAVINGS AND INVESTMENTS. Four hours credit. Day-to-day problems of the small investor, including home ownership, savings plans, insurance coverage, and stocks and bonds ownership.
104. CONSUMER ECONOMICS. Four hours credit.

This course deals with the different types of organization which have been used in the conduct of business,
105. MARKETING. Four hours credit.

Functions performed by the various agents in distribution combined with a study of the principal current and prospective marketing channels.
106. MONEY AND BANKING. Four hours credit.

Monetary and banking systems; managed currencies, the Federal Reserve System, World Stabilization Funds, and recent banking legislation are examined.
200. LABOR-MANAGEMENT RELATIONS. Four hours credit.

Collective bargaining, job analysis, government regulation, industrial or. ganization for the human aspects of efficiency.
201. PUBLIC FINANCE. Four hours credit.

Structure of government revenues and expenditures at federal, state, and local levels; the validity of various forms of taxation and budgetary procedures.
301. SOCIAL SECURITY. Four hours credit.

Problems of social insurance agencies, both local and national; proposed extensions of social security measures.
302. WORLD ECONOMICS. Four hours credit.

World resources and peoples, international and inter-regional accounts, world trade, capital movements, financial mechanisms, current world economic conditions.
303. ECONOMIC ANALYSIS OF AMERICAN INDUSTRY. Four hours credit.
Structure and characteristics of American industry. Problems arising from competition and new technologies. Business policy.
304. HISTORY OF ECONOMIC THOUGHT. Four hours credit.
A historical and comparative study of economic theories. Current theories
contrasted. A seminar course.

## GEOGRAPHY

10. WORLD GEOGRAPHY. Four hours credit.

Tools of world geography; world survey of the interrelationships of man and his culture to the climates, vegetation, animal life, minerals, soils, and surface features of the earth. Recommended for the freshman year.
112. ECONOMIC GEOGRAPHY. Four hours credit.

Geographic and economic conditions affecting the products, industries, commerce and resources of the world. Special emphasis on the United States.
147. LATIN AMERICA. Four hours credit.

Mexico and the countries of South America; regions, cultures, economic, social, and political conditions.
148. UNITED STATES AND CANADA. Four hours credit.

A study of regions and their interdependence. Land use, social, and economic problems emphasized.
162. METEOROLOGY. Four hours credit.
(Same as Sci. 159). Weather elements such as temperature, pressure, wind, moisture, air masses, and storms. Maps and forecasting. Weather as related to agriculture and aviation.
170. CLIMATOLOGY. Four hours credit.

Factors affecting climate, climates of the world, their causes, classification, characteristics and variability; climate and man.
206. CONSERVATION OF NATURAL RESOURCES. Four hours credit.
(Same as Sci. 207). Conservation and use of soils, water, grasslands, forests, wildlife, and minerals in terms of present and future welfare.
216. MAPS AND MAPPING. Four hours credit.

Map projections, scales, and symbols. Reading and interpretation of special purpose maps such as contour, physiographic; weather, commodity and climatic. Practice in simple map construction.
243. EUROPE. Four hours credit.

Physical and cultural patterns. The nations of Europe. Their regions, cultures, social and economic organizations with resulting conflicts.
1244. ASIA. Four hours credit.

The countries of Asia in terms of their climates, regions, cultures, cultural landscapes, social organizations, and economic activities.
246. GEOGRAPHICAL INFLUENCES IN AMERICAN HISTORY. Fout hours ctedit.
The effects of such physical factors as climate, soil, islands, rivers, mountains, natural vegetation, and other resources in the discovery, settlement, expansion, and development of America.
255. GEOGRAPHY OF THE ROCKY MOUNTAINS. Four hours credit. An intensive study of selected areas and problems of the Rocky Mountains and Great Plains.
B50. SOVIET UNION. Four hours credit.
The geography of the various regions of the Soviet Union.
370. POLITICAL GEOGRAPHY. Four hours credit.

Evaluation of the elements of political geography with their application to present world problems.

## UNITED STATES HISTORY

20. UNITED STATES HISTORY (to 1865). Four houts credit.

Coming of the white man, struggle for control of the continent, revolution and independence, establishment of the Republic, disunion and civil war. Recommended for the freshman year.
21. UNITED STATES HISTORY (1865 to present). Four hours credit. Reconstruction of the Union; political, social, and economic growth of the Nation; the United States as a world power. Recommended for the freshman year.
40. COLORADO HISTORY. Fout houts ctedit.

Indian civilization, mining, cattle, and agricultural frontiers; and industrial development from the days of the cliff dwellers to the present.
158. SOCIAL AND INDUSTRIAL HISTORY OF THE UNITED STATES. Four hours credit.
The development of American industrial life from the colonial period to the present time, including its effect upon the standard of living.
252. WESTWARD MOVEMENT IN UNITED STATES HISTORY. Four hours credit.
Westward movement in the United States from 1636 to 1890 ; the different frontiers and their relation to the Federal Government.
265. CONTEMPORARY UNITED STATES HISTORY. Four hours credit. Social, political and industrial developments since 1914; the war periods, the New Deal and after; the relation of the United States to world problems.

## 363. AMERICAN REVOLUTION. Four houts ctedit.

The causes of the Revolution; the techniques applied to establish a democratic government in the United States.
364. CIVIL WAR AND RECONSTRUCTION. Fout hours credit. Civil War and problems of reconstruction.

## LATIN AMERICAN HISTORY

100. LATIN AMERICAN LIFE. Four hours credit.

Designed to aid the elementary school teacher. The great heroes, Latin American way of life, essential economic and geographic factors.
266. COLONIAL LATIN AMERICA. Fout hours credit.

The work of Spain in the New World with particular emphasis on the fusion of cultures and institutions.
267. MODERN LATIN AMERICA. Four hours credit.

The political structure of the new national states; their economic and social problems.
368. SOCIAL HISTORY OF LATIN AMERICA. Four hours credit. The educational systems, the role played by the church, the types of society developed, and the resultant cultural life.

## WORLD HISTORY

30. WORLD HISTORY. Four hours credit.

Development of the social, political, industrial, and cultural institutions of the major world powers from 1492 to 1815 .
31. WORLD HISTORY. Four hours credit.

The same, 1815-1914.
32. WORLD HISTORY. Four houts credit. The same, 1914 to the present.

## 251. ANCIENT SOCIAL HISTORY. Fout hours credit.

The social life and institutions of the Ancient Near East, Greece, and Rome; detailed study of the religions, cultural development, living conditions, and recent archeological discoveries.
255. CONTEMPORARY WORLD HISTORY (Summer Session only).
Four hours credit.

National and world events commanding the attention of the world today.
261. MEDIEVAL LIFE AND INSTITUTIONS. Four hours credit.

Besides presenting the necessary political framework for the period, this course will give particular attention to the institutions of feudalism, manorialism, the church, monasticism, universities, and the new cities.
268. THE NEAR EAST. Four hours credit. Recent developments in the Near East, with the historical background.
269. THE FAR EAST. Four hours credit.

The economic, social, educational, ethical, religious, and political life of major countries in the Far East.
359. RENAISSANCE AND REFORMATION. Four hours credit.

The civilizations produced by the Renaissance and its effect on the religious life of the time as a background for the Reformation; the origins of controversial questions still prevalent among the modern churches.
360. FRENCH REVOLUTION. Four hours credit.

Social, economic, and political conditions in France leading up to the Revolution; the effects of the Revolution upon Western Civilization.
362. COLONIAL EMPIRES OF THE TWENTIETH CENTURY. Fout hours credit.
The rise of the great colonial empires of our day; their problems of imperial administration, race and economic equality, and changes resulting from the recent war.

## POLITICAL SCIENCE

170. FUNDAMENTALS OF UNITED STATES GOVERNMENT. Four hours credit.
Origin and adoption of the Constitution, basic principles of the American constitutional system, the machinery of popular control, and the structure of the national government.
171. STATE AND LOCAL GOVERNMENT. Four hours credit.

The organization of state, county, township and municipal governments, and the administration of public services at each level.
172. PROBLEMS IN UNITED STATES GOVERNMENT. Four hours credit.
The constitutional and extra-constitutional factors influencing the legislative process, the conduct of administration, national defense and the control of foreign relations, and the regulation of commerce, business, labor and agriculture.
273. FOREIGN POLICY OF THE UNITED STATES. Four hours credit. Principal events in our foreign relations, 1776 to date, and the development of policies relating thereto.
274. INTERNATIONAL ORGANIZATION. Four hours credit.

The bases of international relations, progress in international law and legislation, and modern attempts to establish formal machinery for handling international problems.
276. CONTEMPORARY EUROPEAN GOVERNMENTS. Four hours credit.
The background, structure and functioning of present-day European governments. Major attention to Great Britain, France, Russia, and Italy, with some reference to Switzerland, the Low Countries, and the Scandinavian nations.
279. POLITICAL PARTIES AND ELECTORAL PROBLEMS. Four hours credit.
The organization and techniques of political parties in the United States, voting behavior of the electorate, and problems relating to the machinery of representative democracy.
377. THE CONSTITUTION AND ITS INTERPRETATION. Four hours credit.
The major sections and clauses of the constitution, as developed and interpreted by the courts and by leading writers in the field of constitutional law.
378. PRINCIPLES OF PUBLIC ADMINISTRATION. Four hours credit. The bases of good public administration; problems of administrative organization, personnel, line and staff functioning, and government finance.

## 379 Suennaturnal Law SOCIOLOGY

100.-CONTEMPORARY SOCIAL PROBLEMS. Four hours credit.

Factors restricting the needs for security and activity for certain groups. Sociodramatic interpretations of conflicts between groups over questions of group deviations in both rural and urban areas.
101. PRINCIPLES OF SOCIOLOGY. Four hours credit.

Principles of social relations as applied to both rural and urban societies, group relationships, social organization, and the influence of group participation on personality development.
102. CRIME AND DELINQUENCY. Four hours credit. Causes, treatment, and prevention of delinquency and crime.
103. POPULATION PROBLEMS. Four hours credit. World population trends and their social consequences.
201. INTERGROUP RELATIONS (Same as Ed. 249b). Two houts credit. A specialized study of ethnic and racial conflict and problems of adjustment in both rural and urban areas.
202. SOCIAL PSYCHOLOGY (Same as Ed. 291). Four hours credit.

Prerequisite, Ed. 25 or its equivalent. Human behavior as conditioned in cultural and institutional groups: family, religious, political, and economic.
203. WORLD'S GREAT. RELIGIONS. Four hours credit.

A historic and comparative study of the great religions of the world.
204. CONTEMPORARY, WORLD PROBLEMS. Four hours credit.

Great world issues analyzed sociologically, and interpreted by means of the sociodrama.
301. CONTEMPORARY FAMILY PROBLEMS. Four hours ccredit.

An advanced course in family relationships; scientific selection of mates, predicting success in marriage, analysis of family relationships and their effects on personality; the family in transition.
303. SOCIAL RECONSTRUCTION. Four hours credit.

Analysis of plans for re-establishing a state of equilibrium in the social organization. A seminar course.

# General Information 

## History

The history of Colorado State College of Education closely parallels much of the growth and development of the Greeley Union Colony. The Colony was organized in 1870 by Nathan C. Meeker, traveler and newspaper correspondent, and was named after Horace Greeley.

When the Colony was eighteen years old, a movement was started to establish a normal school to supply teachers for the community and state. The law creating the State Normal School was signed on April 1, 1889, and the cornerstone of the first building was laid on June 13, 1890. Classes were started October 6, 1890, with a staff of the president, four instructors, and ninety-six students. Certificates were granted upon the completion of the twoyear course.

In 1911 the name was changed to Colorado State Teachers College by the state legislature. The College was then offering four years of undergraduate work and granting the bachelor of arts degree. In 1935 the present niame was adopted to recognize the fully developed graduate program which was started in 1913.

## 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. Money for the maintenance of the College comes from a state mill tax and from special appropriations made by the legislature.

## Location

The College is in Greeley, a city of approximately 18,000 population. Greeley is in northern Colorado and is 52 miles north of Denver and the same distance south of Cheyenne, Wyoming. Estes Park is 50 miles west. The nearby mountains provide much recreation for the students. Fishing, hunting, skiing, and picnicking are popular diversions.

## Campus

The College is in a beautiful residential section of Greeley. Much of the campus of eighty-eight acres is planted to trees and foliage. The physical plant includes thirty-one buildings. All of these except the three men's residence halls are on the main campus. The men's residence halls are two blocks east of the main campus and are near Jackson Field, the stadium.

## Public Services

Coordinated through the Department of Public Relations, the College provides several types of services for students, schools, and communities. The services include extension classes and correspondence study, placement of graduates in teaching positions, scheduling staff members and students for speaking engagements, and helping schools and communities with their education problems.

## Extension Classes

Classes are organized in communities where a group of people wish to study the same course. Minimum number of students for which a class will be conducted depends upon the distance the teacher travels to the meeting.

## Correspondence Study

For the convenience of students who cannot meet in extension classes, the College provides individual correspondence courses. Each course consists of a set of study units, which is completed by the student. The student's responses are made in writing to the teacher who reads and grades the papers. In all cases the teachers grading correspondence papers are regular members of the faculty.

## Extension Credit and Regulations

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. No graduate credit is given for extension work.

Students in residence are not permitted to take work by correspondence. This regulation shall not be interpreted as prohibit-
ing students from completing four quarter hours in correspondence between the end of the Summer Session and the beginning of the Fall quarter.

## Placement Bureau

The Placement Bureau helps to place graduates of the College in school positions. The only charge for this service is a small one to cover, in part, the cost of assembling data concerning the applicant. The fee is paid when the applicant enrolls in the Placement Bureau.

School boards and superintendents seeking teachers are also assisted by the Placement Bureau. Superintendents and school board members are invited to visit the College, and utilize the services of the Bureau. Private offices are provided for the visitors.

## Library Facilities

The College Library has nearly 125,000 volumes cataloged, over 400 different periodicals, plus many government documents, pamphlets, and reference materials. The Library is in Carter Hall, a modern building with many comfortable, well-lighted study areas. The book stacks are open to all students and other patrons.

## Student Personnel

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

## Student Residence

The College provides eleven attractive and well-equipped residence halls for men and women students. Residence in these halls provides social, educational, and cultural advantages to the student. Each hall is under the supervision of a director chosen for his or her experience and interest in the personal and social growth of college-age students.

## Residence Regulations

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

Quiet hours in all residence halls and college-approved houses are: Monday through Friday, 8:00 a. m. to noon, and 1:00 p. m. to $4: 00$ p. m.; Monday through Thursday, after $8: 00$ p. m.; Friday and Saturday, after $11: 00$ p. m.; Sunday, $3: 30$ p. m. to 5:00 p. m., and after 8:00 p. m.

## Linen and Bedding

Students are expected to provide their own personal linens and towels and may furnish bedding. The College is, however, equipped to furnish and launder all bedding at a charge of $\$ 5.00$ each quarter except in the Summer Session.

Students living in the residence halls have their meals in the dining rooms maintained on the campus. Rates are established on a room-and-board basis. These rates may vary slightly depending upon location and size of the room as well as upon any marked fluctuations in food costs. Such changes are authorized by the Board of Trustees. Notification of changes in rates is given at least thirty days in advance of any school quarter.

## Application for Rooms

Since the accommodations in the residence halls are in great demand, application for rooms should be addressed early to the Housing Office, Department of Student Personnel. After reservations have been confirmed, a $\$ 10.00$ non-refundable deposit must be made by the student. Checks or money orders are made payable to the College. This will be applied on the regular rental charge.

All first-year students are expected to live in the residence halls. This privilege is extended to other students in the order of their applications.

## Off-Campus Housing

The Housing Office has also investigated and approved many Greeley homes near the campus, and will assist students, who do not live in residence halls, to obtain rooms in the private houses. Boarding places near the College are available for students living off-campus. All resident students are required to live either in the College residence halls or in approved private residences.

## Emergency Housing Project

A limited number of trailer, quonset, and pre-fabricated apartment units are available for veterans with families. These furnished apartments are provided with heat, electricity, and water. All veterans' housing is located on college-owned property, near the men's residence halls and the stadium, Jackson Field. Applications for rentals are made at the Housing Office in the Department of Student Personnel.

## Student Employment

The majority of the students of the College have in the past had part-time employment to help defray their expenses. Many work projects are established on the campus and are staffed by student help. Rates of hourly pay vary with the skill of the worker and the kind of work done. Many types of jobs are available in Greeley business places and homes.

Recommendations for College employment are an important part of a student's record. Employment is encouraged when such employment will not interfere with the student's academic work. Each student employed on a College work project must maintain a general and quarterly average of " $C$ " (3.0).

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

## Social Standards

The College does not have established rules of conduct. A student is expected to be a good citizen of his college community. When a student lacks the essential qualities of scholarship, health, and character, his relationship with the College automatically ends.

## Health Services

The Student Health Offices offer extensive dispensary facilities with graduate nurses in attendance at all times during the college day, and with physicians available at specified office hours.

Allocation of $\$ 2.50$ of the quarterly fees paid by each student provides adequate off-campus health services. Students are given a card with the names, addresses, and telephone numbers of all physicians in Greeley. A student may go to the office of any Greeley physician, or he may call the physician to his residence. Fees and costs of certain operations are paid for from this health fund.

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

## Student Activities

Student government and the direction of student affairs on the campus are administered by the members of the Associated Students. The Associated Students elect in the Spring quarter a student governing body, the Student Council. The Student Council serves in the succeeding school year.

Membership in the Associated Students is required of all students who are registered for five or more credit hours. A membership fee is collected at the time of registration. This fee entitles members to attend, without additional charge, cultural, social, dramatic, and athletic programs. Members also receive a copy of each issue of The Mirror, student newspaper, and the Cache la Poudre, student annual. Facilities of the Student Union building are available to members.

All campus organizations must apply each year to the Student Council for charter, approval. When organizations are recognized both by the Student Council and the Administration of the College, facilities of the campus, set aside for such purposes, may be used by the groups.

## Forensics

Students have an opportunity to participate in a comprehensive program of intercollegiate debate and public discussion. The College is a member of the Colorado-Wyoming Intercollegiate Forensic League and has the Colorado Beta chapter of Pi Kappa Delta, national forensic society. Under faculty supervision, students participate in regional and national programs.

## Publications

Students interested in journalism have an opportunity for expression in two campus publications owned and published by the students. The Mirror is a weekly newspaper, and the Cache la Poudre is the student annual.

## Little Theater of the Rockies

The Little Theater of the Rockies presents several outstanding plays during the school year. Students may try out for parts in the plays or work as stage carpenters, electricians, property managers, etc.

## Athletics

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

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

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

## Religious Program

The College emphasizes the value of a religious life and encourages students to attend churches of their choice. Greele'y is noted as a city of churches. Most denominations are represented by an active church. There are several student religious groups on the campus.

## Music Organizations

The music program is an important part of the college life. Qualified students are eligible to participate in the a cappella choir, the College band, the College orchestra, and the Greeley Philharmonic. During the school year, the Division of Music presents special programs.

## Associated Women Students

All women students are members of the Associated Women Students. This organization supports the many projects which further the growth and betterment of the College. The organization is very active in assuring a friendly welcome to each new student.

## Clubs and Honorary Fraternities

All of the divisions in the College sponsor honorary fraternities and clubs of various types which are of interest to students majoring or minoring in the division. The organizations provide an opportunity for students and faculty members to become better acquainted.

## College Employment

Students employed by the College shall maintain a scholastic average of 3.0 to continue employment in succeeding quarters.

## Scholarships, Awards, Loan Funds

Several scholarships and awards have been established for students of the College. To keep scholarships in force, the recipient must maintain a satisfactory grade average. Unless otherwise noted, applications for scholarships will be made to the Scholarship Committee, Department of Student Personnel.

## Jack Petteys Memorial

Three scholarships of $\$ 500$ each are awarded annually to Chinese students through a fund made available by the Jack Petteys Memorial Foundation. The Foundation was established by Mr. and Mrs. Alonzo Petteys of Brush, Colorado, in memory of their son, Jack Petteys, who lost his life in World War II.

The scholarships are awarded to Chinese men and women, preferably to those born in China, for either graduate or undergraduate study. However, in awarding these scholarships, preference is given to those students working at the graduate level for the Master of Arts degree. Two essential conditions of the awards are a knowledge of both the Chinese and English languages, and the intention to return to China, after the period of study, to engage as active citizens in some phase of Chinese life.

Undergraduate students may apply for renewals for such a period of time as shall be necessary to complete the Bachelor of Arts degree. Graduate students may apply for renewals for such a time as shall be necessary to complete their graduate program.

Letters of application shall include, in addition to high school and college transcripts, the applicant's birthplace, age, sex, health certificate, photograph, present occupation, intended occupation, and probable location of residence in China, and names of references or letters of recommendation. These should be addressed to the Scholarship Fund for Chinese Students in care of the College.

## Frederic J. Allnutt Scholarships

Five annual scholarships are available to graduates of high schools in Weld County, Colorado, through the generosity of Frederic J. Allnutt of Greeley. Each scholarship has a value of $\$ 100$ per year applicable on tuition and college fees. Students who receive these scholarships are selected by the Director of Student Personnel, the Vice-President of the college, and Mr. Allnutt. A student who maintains a satisfactory scholastic record may have the scholarship renewed each year through four years.

A holder forefeits an Allnutt scholarship on withdrawal from the College.

## "Around the World with Dobby" Scholarship

The "Around the World with Dobby" scholarship, awarded annually, was established by members of "Dobby's Gang" in memory of former Colorado State College of Education students who lost their lives in World War II.

The scholarship provides $\$ 50$ per quarter, for three quarters, which is to be used for the payment of fees, tuition, books, and other expenses. The scholarship committee of the College selects the man or woman to receive the scholarship for each school year. The scholarship was made possible by a fund of unsolicited contributions from members and friends of "Dobby's Gang".

## Colorado State College of Education Awards

Colorado State College of Education awards a limited number of Scholarships and Tuition Waivers to graduates of Colorado high schools and junior colleges who deserve such recognition and are especially interested in becoming teachers. These scholarships cover the cost of tuition, but do not include the payment of college fees.

To keep college scholarships in force the recipient must maintain a grade average meeting the standards established by the Committee on Scholarships and must uphold all requirements of good citizenship.

## Joint Honor Scholarships

Cooperating with other state institutions of higher learning in Colorado, the College honors Joint Honor Scholarships which are awarded at high school commencements to outstanding students under a program árranged by the participating institutions. The Joint Honor Scholarship covers the cost of tuition. College and Associated Students fees must be paid by the student. A high school senior is advised to inquire of the principal or superintendent of his school concerning the eligibility standards for such scholarships.

## Tuition Waivers

A restricted number of tuition waivers are awarded by the Scholarship Committee to students who have demonstrated special abilities in a particular field. Scholarship as well as the individual record attained in a particular skill are considered when such an award is granted.

## Loan Funds

Twelve College loan funds with aggregate resources of over $\$ 32,000$ are available to help worthy students. Applications for loans may be made to the Committee on Loans and Scholarships.

All loans are completed on personal, unsecured notes bearing a low rate of interest. Over-all living costs, job prospects, potential earning power, and the credit experience of the student are carefully considered by the Committee. Over four thousand students have utilized the loan funds since 1911. The funds are: William Porter Herrick Memorial, Sarah Platt Decker Memorial, Rotary, WTK, Fortnightly Music Club, Kendel Music Club, Altrusa, Shyn, Sigma Upsilon Graduate, Panhellenic, and Laboratory School funds.

## Expenses

Tuition and Fees by the Quarter
FALL, WINTER, AND SPRING QUARTERS*
Required of Every Student
Tuition
Residents of Colorado ..... $\$ 27.50$
Out-of-state Students** ..... 32.50
Registration ..... 2.50
College Service (including Health Fee) ..... 9.25
Associated Students (average) ..... 9.00
Other Fees
Matriculation (paid once only, first quarter, by every student who becomes a candidate for a degree) ..... 2.50
Late Registration (charged for each separate failure to comply with regulations) ..... 1.00
Special Examination (required when permission is given to take an examination at a time other than that scheduled) ..... 2.00
Late Application for Degree ..... 2.00
Change of Program (each change after grace period) ..... 1.00
Extension of Credit
Tuition and Incidental Fees ..... 1.00
Board and Room (by installments) ..... 1.50
Credit by Examination
Test ..... 2.00
Credit, per quarter hour ..... 3.00

* For Summer Session expenses, refer to Summer Session Bulletin.
** Consult Business Office for rulings on residence requirements as defined by the Board of Trustees.


## Graduate Fees $\dagger$

Doctoral Field Study Publication Fee - - - - - . 27.00
Binding, Master's Thesis or Doctoral Field Study
(per copy) - - - - - - - - - 2.00

## College Residence Hall Fees $\dagger \dagger$

Board and Room, Men's Residence Halls, range 145.00-151.00
Board and Room, Women's Residence Halls, range 132.50-146.50
Linen Service - . . . . . . . . . . . 5.00

## Refunds

Partial refunds of tuition, fees, or other payments are made on withdrawal only in accordance with established rulings of the Board of Trustees. Deposits for residence halls reservations are not refundable.

## Music Fees

Individual music lessons (music majors) - - - - 12.50
Individual music lessons (other college students) - - 15.00
Individual music lessons (students not enrolled in the
college or affiliated schools)
Individual music lessons (less than full quarter)
Voice, piano, organ, strings, each ~ - ~ - 2.50
Other instruments; each - - - - - - 2.00
Practice Room (including piano rental) - - - 5.00
Orchestra or band instrument rental - - - - - - 5.00
Organ rental - - - - - - - - - - 10.00
$\dagger$ Tuition rates applying in the annual Summer Session Bulletin will be charged candidates enrolled under the previous Plan A for the master's thesis or for the doctoral field studies. Charges will be based on the number of credit hours for which the thesis or field study work is assigned.
$\dagger \dagger$ Deposit of $\$ 10.00$ (non-refundable) required for residence hall reservations. Residence hall fees vary directly with the cost of living and are subject to change on thirty days' notice prior to any quarter by action of the Board of Trustees.



## State Institutions of Higher Learning

Adams State College ..... AlamosaIra Richardson, President
$\tau$ Colorado Agricultural and Mechanical College - - Fort Collins Roy M. Green, PresidentColorado School of MinesGoldenBen Parker, President
$V$ Colorado State College of Education ..... Greeley
George Willard Frasier, President
University of Colorado ..... - Boulder
Robert L. Stearns, President
y. Western State College ..... Gunnison
Peter Michelson, President



[^0]:    *State Superintendent of Public Instruction, Ex-Officio. -5-

[^1]:    *On leave Fall, Winter, and Spring Quarters.
    **On leave Fall Quarter.

[^2]:    Susan Hart Van Meter, B.S., University of Missouri; A.M., Columbia University; Graduate Student, Ohio State University.

    Associate Professor Emeritus of Elementary Education

[^3]:    **On leave Fall Quarter.

[^4]:    285. EXPERIMENTAL COOKERY. Fout hours credit.

    Prerequisites, H. E. 77, 78, or equivalent. An opportunity to determine the effects of temperature, time, and different manipulations on foods. Commercial products are tested and compared with home methods of preparation. Two single and two double periods per week.

[^5]:    200. SOCIAL PHILOSOPHY. Four hours credit.

    An integration of the social studies; the search for ideal social relations and organization; ways of making social participation of worth and significance.

