

## HOW TO APPLY FOR ADMISSION

## Students Attending College For The First Time.

1. Get an Application for Admission form from your high school principal. Out-of-state students write to Department of Student Personnel, Colorado State College of Education.
2. Fill in Part I of the Application for Admission and have the high school office complete the form and send it to the Department of Student Personnel. Applications may be filed any time after the close of the first semester of the senior year in high school.
3. Upon receipt of the application, the college will inform you of your admission status and will send you a form for reserving a room in a college residence hall.
4. Additional information regarding the freshman orientation program, health examinations, etc., will be mailed prior to the opening of college in September.

## Transfer Students (Undergraduates).

1. File with the Registrar, Colorado State College of Education:
A. An Application for Admission including high school record.
B. An official transcript of all credits earned at other colleges or universities.
In order to insure admission, these materials should be sent to the Registrar well in advance of the quarter for which the transfer student wishes to enroll. Necessary forms may be obtained from the Registrar.
Graduate Students Please see pages 41-66.

## PLEASE NOTE

The supply of Catalogs is limited because of the shortage of paper used for the printing of this type of publication.

Students who plan to register at Colorado State College of Education are urged to retain until their graduation the copy of the Catalog that they receive.

Please bring this Catalog with you when you register. Only one Catalog will be given to a student.

Thank you for your cooperation.

# Colorado State College of Education at Greeley 

Bulletin


Yearbook
Number
1952-1953

Entered as second class matter at the post office at Greeley, Colo., under the act of August 24, 1912. Published monthly.

## Directory

Page
College Calendar ..... 4- 5
Officers of Administration ..... 7- 8
Instructional Staff ..... 9- 26
Functions of the College ..... 27
Academic Information ..... 28-31
Undergraduate Program ..... 32- 40
Graduate Program ..... 41- 66
Description of Courses ..... 67-230
Division of Air Science and Tactics ..... 67-72
Division of the Arts ..... 73-104
Division of Education ..... 105-141
Division of Health and Physical Education ..... 142-158
Division of the Humanities ..... 159-179
Division of Music ..... 180-194
Division of the Sciences ..... 195-216
Division of the Social Studies ..... 217-230
General Information ..... 231-233
Student Personnel - ..... 234-237
Student Activities ..... 238-241
Scholarships, Awards, Loan Funds ..... 242-243
Expenses ..... 244-246
Index ..... 247-251

## College Calendar

## 1952-1953

## Winter Quarter-1952

| December | 10 | - | - | - | - | - | - | - | - | - Registration for all students |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| December | 11 | - | - | - | - | - | - | - | - | - | - | - | - |
| December | 22 | - | - | - | - | - | - | - | - | - | - | - | - |
| Chasses begin |  |  |  |  |  |  |  |  |  |  |  |  |  |
| January | 7 | - | - | - | - | - | - | - | - | - | - | Classes raction |  |
| March | $6-7$ | - | - | - | - | - | - | - | - | - | Final examinations |  |  |

## Spring Quarter-1952

| March | 10 | - | - | - | - | - | - | - | Registration for all students |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| March | 11 | - | - | - | - | - | - | - | - | - | - | - | - Classes begin |
| April | $5-13$ | - | - | - | - | - | - | - | - | - | - | - | Spring vacation |
| April | 14 | - | - | - | - | - | - | - | - | - | - | - | Classes resume |
| May | 23 | - | - | - | - | - | - | - | - | - | - | - | Insignia Day |
| May | 25 | - | - | - | - | - | - | - | - | - | - | Baccalaureate |  |
| May | 27 | - | - | - | - | - | - | - | - | - | Senior Ceremonial |  |  |
| May | 28 | - | - | - | - | - | - | - | - | - | - |  |  |
| Commencement |  |  |  |  |  |  |  |  |  |  |  |  |  |
| May | $27-28-29$ | - | - | - | - | - | - | - | - | Final examinations |  |  |  |

## Summer Sessions-1952

| June | $9-19$ | - | - | - | - | - | - | - | - | Pre-Session |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| June | 21 | - | - | - | - | - | - | Registration for Summer Session |  |  |  |  |
| June | 23 | - | - | - | - | - | - | - | - | - | - | - Classes begin |
| July | 4 | - | - | - | - | - | - | - | - | - | Independence Day |  |
| August | 14 | - | - | - | - | - | - | - | - | - | - | Convocation |
| August | 15 | - | - | - | - | - | - | - | - | - | Final examinations |  |

Fall Quarter-1952

| September | 18 | - | - | Orientation and matriculation of new students |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- |
| September | 22 | - | - | - | - | - |

## Winter Quarter-1953

| December | 8 | - | - | - | - | - | Registration for all students |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| December | 9 | - | - | - | - | - | - | - | - | Classes begin |
| December | 20-January | 4 | - | - | - | - | - | - | - | - |
| Christmas vacation |  |  |  |  |  |  |  |  |  |  |
| January | 5 | - | - | - | - | - | - | - | - | Classes resume |
| March | $5-6$ | - | - | - | - | - | - | - | Final examinations |  |

## Spring Quarter-1953

| March | 16 | - | - | - | - | - Registration for all students |  |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| March | 17 | - | - | - | - | - | - | - | - | - |
| Classes begin |  |  |  |  |  |  |  |  |  |  |
| May | 22 | - | - | - | - | - | - | - | - | - Insignia Day |
| May | 24 | - | - | - | - | - | - | - | - |  |
| Baccalaureate |  |  |  |  |  |  |  |  |  |  |
| May | 26 | - | - | - | - | - | - | - | Senior Ceremonial |  |
| May | 27 | - | - | - | - | - | - | - | - Commencement |  |
| May | $28-29$ | - | - | - | - | - | - | - Final examinations |  |  |

## Summer Sessions-1953

| June |  | 8-18 | - | - |  | - | - |  | - | - | - |  |  |  | n |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| June |  | 20 | - |  | - | - | - |  | Regi | istr | ation |  |  | Su | mmer Session |
| June |  | 22 | - | - | - | - | - |  | - | - | - | - |  |  | Classes begin |
| July | (Saturday) | 4 | - | - | - | - | - | - |  | - | - |  |  |  | pendence Day |
| August |  | 13 | - | - | - | - | - | - | - | - | - | - |  |  | Convocation |
| August |  | 14 | - |  |  |  |  |  |  |  | - |  | Fin | nal | examinations |

# Officers of Administration 

Thomas L. Girault, A.B., A.M.<br>President of the Board of Trustees<br>William Robeet Ross, Ph.D.<br>President of the College<br>Winfield Dockery Armentrout, Ed.D., Ll.D.<br>Vice-President of the College<br>George Willard Frasier, Ph.D., Ll.D., Sc.D.<br>President Emeritus of the College

## Board of Trustees

(Appointed by the Governor of the State of Colorado)

```
E. L. DUTCHER, LL.B., LL.D. (1939) - - - - - - - - Gunnison
Thomas L. Girault, A.B., A.M., (1947) - - - - - - - Denver
LEONARD M. HAynie, A.B., (1949) - - - - - - - - Alamosa
BARNARD HOUTCHENS, A.B., LL.B., (1948) - - - - - - Greeley
ANNA C. Petteys, A.B., A.M., (1945) - - - - - - - - Brush
LESLIE J. SAVAGE (1935) - - - - - - - - - - - Crawford
*J. BURTON VASCHE, Ed.D., (1951) - - - - - - - - - Denver
The figures in parentheses show the date of first appointment.
```


## Officers of the Board of Trustees

Mr. Girault - - - - . . . . - . - . . . . President
Mrs. Petteys - - - - - - - - - - - Vice-President

Mr. Glen C. Turner - - - - . - . - - . - . Secretary
Mr. Houtchens, Mrs. Petteys, Mr. Girault - - Executive Committee
*Ex-Officio.
359. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN METALWORK. Three hours credit.
Prerequisites, 55a, 57a or equivalent. This course shall include objectives, course content, shop organization, evaluation and methods of teaching the various phases of metal work.
360. PROBLEMS OF THE METAL SHOP. Three hours credit.

Prerequisite, 359 or equivalent. Advanced course in the organization of both unit and general metal shops and shop practice handled on the seminar basis, giving the graduate students an opportunity to work on problems they have confronted in the field.

362a,b. PROBLEMS IN DRAFTING AND PLANNING. Three hours credit each.
Prerequisite, $61 \mathrm{a}, \mathrm{b}, \mathrm{c}$. Objectives, course content, and teaching procedures of all units in drafting. Courses are set up in terms of individual needs.

368a,b. ADVANCED ARCHITECTURAL DRAFTING. (Summer Session only). Four hours credit each.
Prerequisite, 161 e or equivalent. Advanced home and school building planning. Laws, standards, and computation of cost. Open to school administrators as well as industrial arts teachers.
399. THESIS. Eight hours credit.

## Instructional Staff

Verne Ahlberg, A.B., Macalaster College; A.M., Columbia University; Graduate Student, Duke University, Columbia University, Central School of Speech, London.

Associate Professor of Speech
Margaret Newsome Allen, A.B., A.M.., Colorado State College of Education.

Assistant Professor of Education

Ellis Charles Archer, B.S., Northwestern State College, Oklahoma; M.S., University of Kansas; Graduate Student, University of Chicago, University of Hawaii.

Assistant Professor of Business Education
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.

Professor of Education
Clarence Theodore BaAb, A.B., A.M., Colorado State College of Education; Ed.D., Pennsylvania State College.

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

Professor Emeritus of Art
Richard Franklin Ball, B.S., State Teachers College, Pennsylvania; A.M., Colorado State College of Education.

Associate Professor of Art
Samuel Clay Bedinger, A.B., A.M., Colorado State College of Education.
Assistant Professor Emeritus of Business Education
John Addis Beel, B.S., Montana State College, Bozeman; Ph.D., Iowa State College of Agriculture and Mechanic Arts, Ames.

Assistant Professor of Chemistry

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

Professor of Industrial Arts
John Edgar Bothell, A.B., A.M., Colorado State College of Education.
Assistant Professor of 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
Thomas bond Burnam, A.B., A.M., University of Idaho; Ph.D., University of Washington.

Assistant Professor of English
Lonis Conner Butler, A.B., A.M., Colorado State College of Education; Ed.D., New York University.

Professor of Physical Education
Martin Candelaria, A.B., Coe College; A.M., Ed.D., University of Denver. Assistant Professor of Spanish

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

Associate Professor of English
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
*On leave Fall Quarter, 1952.

Harald Peter Christensen, A.B., A.M., Ph.D., State University of Iowa. Associate Professor of Political Science<br>\title{ 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.<br><br>Professor Emeritus 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 Emertus of Business Education

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

Vincent Arden Cyphers, B.S., Pacific University; A.M., Colorado State College of Education.

Instructor of Health and Physical Education

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

Helen Caldwell Davis, A.B., Grinnell College; A.M., State University of Iowa; Ph.D., University of Chicago.

Professor of Elementary Education

Ray Lawrence DeBoer, A.B., Augustana College; A.M., Ed.D., University of Denver.

Assistant Professor of Speech
*Donald Gilmore Decker, B.S., Michigan State Normal College; A.M., Colorado State College of Education: Ph.D., Teachers College, Columbia University; Sci.D. in Ed., Michigan State Normal College.

## Professor of Science

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

Professor Emeritus of History and Political Science
John Joseph Dooley, A.B., Colorado College; LL.B., University of Michigan Law School.

Instructor of Business Education
**Jule Statton Doubenmier, A.B., A.M., Colorado State College of Education; Graduate Student, University of Southern California.

Professor of Physical Education
***Mary Frances Dougherty, A.B., A.M., Colorado State College of Education.

Assistant Professor of Physical Education
Dale Dykins, B.Mus., M.Mus., College of Music, Cincinnati.
Assistant Professor of Music
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 Att
Margaret Elizabeth Everett, B.S., University of Wisconsin; A.M., State University of Iowa.

Assistant Professor of Health and Physical Education
Wilma Rose Farrar, A.B., Colorado State College of Education; A.M., Columbia University.

Assistant Professor of Business Education
*On leave Fall, Winter, and Spring Quarters, 1952-53.
**On leave Summer Session.
***On leave Fall, Winter, and Spring Quarters, 1952-53.

Forest Norland Fisch, A.B., A.M., Colorado State College of Education; Graduate Student, George Peabody College.

Associate Professor of Mathematics

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; Sc.D., Colorado State College of Education.

Professor of Education

Forrest Willard Frease, A.B., B.S., Kansas State Teachers College, Emporia; A.M., University of Kansas; Ph.D., University of Pennsylvania.

Assistant Professor of English

John Barton Fulbright, A.B., Adams State College; A.M., Colorado State College of Education.

Assistant Professor of Education

DON GARLICK, B.F.A., University of Oklahoma; M.Mus., Eastman School of Music, University of Rochester.

Assistant Professor of Music

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 and Stanford University.

Associate Professor of Education
Marvin Edgar George, B.S., Bowling Green State University; A.M., Columbia University; Graduate Student, Ohio State University.

Associate Professor of Public School Music

[^0]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 Martin Goodbrod, B.F.A., University of Nebraska; A.M., Teachers College, Columbia University; Student with Herbert Schmidt, Guy Maier, Earnst Hutcheson, Alton Jones, Percy Grainger, and Mrs. Marjorie McKowan; Graduate Student, Juilliard School of Music.

Associate Professor of Music
*William T. Gower, B.Mus., M.Mus., University of Denver.
Assistant Professor of Music

Lyman Graybeal, B.S., George Peabody College for Teachers and Vanderbilt University; A.M., Columbia University; Ed.D., New York University.

Professor of Education

Fitzhugh Lee Hambrick, A.B., University of Oklahoma; A.M., Colorado State College of Education; Ed.D., 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
*On leave Fall, Winter, Spring, and Summer, 1952-53.

Kenneth James 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, A.B., Southwestern College, Kansas; A.M., Ph.D., University of Illinois.

Professor of Zoology
**Martha Lucile Harrison, Ph.B., A.M., University of Chicago.
Associate Professor of Elementary Education
William Frederick Hartmani, A.B., Nebraska State Teachers College, Chadron; A.M., Colorado State College of Education; Graduate Student, Northwestern University.

Associate 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
Dick R. Hay, A.B., A.M., Colorado State College of Education.
Assistant Professor of Physical Education
jacob Daniel Heilman, A.B., Mublenberg 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
**On leave Fall and Spring Quarters.

[^1]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

Helen Barbara Hunt, B.S., University of Vermont; M.S., New York University; Graduate Student, New York University, Columbia University, Traphagen School of Fashion.

Assistant Professor of Home Economics
Rita 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.

Associate 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
Herbert Roland Jensen, B.B.A., A.M., University of Minnesota; Ed.D., Teachers College, Columbia University.

Associate Professor of Education
Elizabeth Hays Kendel, A.B., L.H.D., 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; Graduate Student, University of Denver.

Assistant Professor of Music

Herbert John Klausmeier, B.S., A.M., Indiana State Teachers College; Ed.D., Stanford University.

Assistant Professor of Education

Winfield Leroy Knies, A.B., Colorado State College of Education; M.B.A., University of Washington.<br>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 and Drama
Jessie Emily Latham, R.N., City Hospital, McKinney, Texas; A.B., A.M., Colorado State College of Education.

Assistant Professor of Health Education

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

Assistant Professor of Art
Elizabeth Lehr, B.S., A.M., Columbia University.
Associate Professor of Elementary Education
*L. Edmond Leipold, B.S.. A.M., Ph.D., University of Minnesota; Graduate Student, Harvard University.

Associate Professor of Education
*Ivan Howard Linder, A.B., A.M., University of Nebraska; Graduate Student, Stanford University.

Associate Professor of Education
**Leslie Dae Lindou, A.B., University of Minnesota; A.M., University of Wisconsin; Graduate Student, University of Toronto, Yale University.

Professor of English
J. Max Lubbers, A.B., A.M., Colorado State College of Education.

Assistant Professor of Industrtal Arts
*On leave Fall, Winter, and Spring Quarters.
**On leave Fall, Winter, and Spring Quarters, 1952, 1953.

Arno Henry Luker, LL.B., B.S., University of South Dakota; A.M., Michigan State College; Ed.D., Colorado State College of Education.

Assistant Professor of Education

## Cornell J. Lupear, Lieutenant Colonel, U. S. Air Force. <br> Professor of Air Science and Tactics.

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

Associate Professor Emeritus of Elementary Education

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

Professor of Art

Anthony Maria-Rossi, B.S., New York University; A.M., Colorado State College of Education.

Instructor of Physical Education
***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
William Lyle McDivitt, A.B., Adams State College; A.M., Colorado State College of Education; Graduate Student, Colorado State College of Education. Assistant Professor of Education
$\dagger$ Paul Gordon McKee, A.B., Monmouth College, Illinois; A.M., Ph.D., State University of Iowa; L.H.D., Monmouth College.

Professor of Elementary Education
Charles W. MCLAIN, B.S., M.S., Colorado Agricultural and Mechanical College; Graduate Student, University of Minnesota.

Assistant Professot of 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.

Professor of Music
***On leave Fall and Winter Quarters.
†On leave Spring Quarter.

Florence Marguerite Meyer, A.B., Grinnell College; A.M., University of Chicago.<br>Assistant Professor of English<br>*Estell Elgar Mohr, B.S., Columbia University ; A.M., Colorado State College of Education; Graduate Student, Ohio State University; Ed.D., Stanford University.<br>Professor of Public School Music<br>ARTHUR D. MOINAT, B.S., Colorado Agricultural and Mechanical College; M.S., Oregon State College; Ph.D., University of Illinois.

Assistant Professor of Science

GAylord Dean Morrison, B.S., Northwest Missouri State College: A.M.. University of Nebraska; Ed.D., University of Missouri.

Assistant Professor of Education

James Thompson Nardin, A.B., Harvard University; A.M., Lehigh University; Ph.D., University of Chicago.

Assistant Professor of English

Louise Adelaide Neaí, A.B., Friends University, Wichita, Kansas; A.M., University of Colorado.

Associate 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 Arts

Anna 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.MI., Colorado State College of Education; Graduate Student, New York University.

Assistant Professor of Education
*On leave Winter Quarter, 1953.

[^2]LUCY LYNDE RosenQuist, Ph.B., University of Chicago; A.M., Columbia University; Graduate Student, Columbia University.

Associate Professor Emeritus of Elementary Education

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 Carolyn Roukema, A.B., A.M., Colorado State College of Education.

Associate 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
George Franklin Sanderson, A.B., A.M., Colorado State College of Education.

Associate Professor of Education

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

Professor Emeritus of Industrial Arts

Lester Frederick Schmidt, A.B., A.M., Wayne University; Graduate Student, University of Wisconsin.

Assistant Professor of History
**Edith MARIE SElberg, A.B., A.M., Colorado State College of Education; Graduate Student, University of Chicago.

Associate Professor of Biology

JACK SHAW, A.B., University of Saskatchewan; B.Ed., M.Ed., University of Manitoba; Ph.D., University of Minnesota.

Associate Professor of Education
**On leave Summer Session.

[^3]Associate Professor of Physical Education
Doris Carol Steffy, A.B., Iowa State Teachers College; A.M., University of Iowa.

Assistant Professor of Physical Education
Freeman Henry Tewksbury, A.B., A.M., Colorado State College of Education; Certificate, School of Modern Photography, New York City.

Instructor of Science
Frances Jane 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
Charles P. Troyer, Major, U. S. Air Force; B.S., Oregon State College. Associate Professor of Air Science and Tactics

Floss ann TURNER, Ph.B., University of Chicago; A.M., Columbia University; Graduate Student, Stanford University.

Associate Professor of Elementary Education
Glen Corbin Turner, A.B., Pomona College; M.B.A., Harvard University; Graduate Student, Claremont Graduate School, Harvard University.

Professor of Business Administration
SUSAN HART VAN METER, B.S., University of Missouri; A.M., Columbia University; Graduate Student, Ohio State University.

Associate Professor Emeritus of Elementary Education
Eugene John Waldmann, A.B., A.M., Colorado State College of Education. Instructor of Education

Wayman E.- Walker, B.M.E., Colorado University; M.Mus., University of Southern Caliiornia.

Instructor of Music
*Roland Cornell Waterman, B.S., New York State Teachers College; A.M., Columbia University.

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

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

Professor of Geography
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 Emeritus of Home Economics
Doris Emma Willis, B.S., Prince School of Retailing, Simmons College; A.B., College of Wooster; M.S., University of Indiana; Graduate Student, University of Indiana.
Assistant Professor of Business Education
Grace Hannat 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.

Associate Professor of Art
$\dagger$ James Benjamin Woodruff, A.B., A.M., Colorado State College of Education.

Assistant Professor of Art
*On leave Fall, Winter, Spring, and Summer, 1952-53.
**On leave Fall Quarter, 1952.
***On leave, Fall, Winter and Spring Quarters, 1952-53.

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
LesLie Day Zeleny, B.S., University of Minnesota; A.M., Columbia University; Ph.D., University of Minnesota; Graduate Student, School of Economics and Political Science, University of London.

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 Libratian and Associate Professor of Library Science
Irene Engle Bogan, A.B., Drake University; B.S. in Library Science, University of Illinois.

Cataloger
Catherine Hunt Gates, B.S., University of Missouri; B.S. in Library Science, University of Denver.

Acquisitions Libratian
Richard Lee Gobble, B.S., A.M., University of Denver.
Acquisitions and Reference Assistant
*Margaret Marie Porter, A.B., A.M., Colorado State College of Education; Certificate of Librarianship, University of Denver.

Laboratory School Libratian
*On leave Fall Quarter, 1952

## LIBRARY STAFF (Continued)

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

Reference Librarian and Assistant Professor of Library Science
Florence Mae Williams, A.B., Quincy College; B.S. in Library Science, University of Southern California.

Cataloger and Reference Assistant

## ROTC Non-Commissioned Officers

Herschel I. Coash, M. Sgt., U. S. Air Force.
Instructor of Air Science and Tactics

Harry E. Collins, M. Sgt., U. S. Air Force.

Instructor of Air Science and Tactics

Kirol R. Holm, Jr., T. Sgt., U. S. Air Force.

Instructor of Air Science and Tactics
Ruben P. Naseth, T. Sgt., U. S. Air Force.
Instructor of Air Science and Tactics

## INTERNS

## Clarence Denny Auchard

Secondary School
A.B., York College; Graduate Student, University of Kansas, Colorado State College of Education.

Donald Wesley Brown Secondary School
B.S. in Ed., A.M., University of Nebraska; Graduate Student, Colorado State College of Education.

CYRIL BUTTERFIELD Secondary School
B.Ed., Western Illinois College; Graduate Student, Colorado State College of Education.

# INTERNS (Continued) 

## Fern Delia Cazel <br> Elementary School

B.Ed., University of California, Los Angeles; Graduate Student, Colorado State College of Education.

## Dola Mae Daugherty <br> Elementary School

B.S., Capital University; Graduate Student, Colorado State College of Education.

## Marjorie Harkness

Elementary School
B.S., University of Minnesota; Graduate Student, Colorado State College of Education.

## LeRoy Raymond Kerns

Secondary School
A.B., Colorado State College of Education; Graduate Student, Colorado State College of Education.

## James Maloney

Secondary School
A.B., Colorado State College of Education; Graduate Student, Colorado State College of Education.

## William Rains

Secondary School
A.B., Colorado State College of Education; Graduate Student, Colorado State College of Education.

Robert Reid Elementary School
A.B., Ed.M., Eastern Washington College of Education; Graduate Student, Colorado State College of Education.

HARRY SAMIS Secondary School
A.B., Huron College; A.M., Colorado State College of Education; Graduate Student, Colorado State College of Education.

Homer Eugene Thomas
Secondary School
A.B., Colorado State College of Education; A.M., Stanford University; Graduate Student, Colorado State College of Education.

## 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. Four programs are offered-an undergraduate program and three graduate programs. 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. A permanent 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.

## Graduate Program

1. Master of Arts (A.M.) degree. This degree is offered in seven divisions of the College. A permanent certificate to teach in Colorado accompanies the degree.
2. Advanced 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

Colorado State College of Education is accredited by the North Central Association of Colleges and Secondary Schools, the American Association of Colleges for Teacher Education, and was on the last list published of institutions approved by the Association of American Universities. (The Association no longer acts as an accrediting agency).

## 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 held in June, July, and August.

## 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.

## 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 upperclassmen and graduate students; (d) 300 to 399 are for graduate students; (e) 400 to 499 are primarily for candidates for the doctorate.

## Transcripts

Regularly enrolled 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. All veterans entering under this program must present a Certificate of Eligibility valid for use at Colorado State College of Education. This certificate must be presented at the time of registration. Further information concerning enrollment under the G. I. Bill may be obtained by writing the Veterans Office, Department of Student Personnel.

## Proficiency Examinations

Proficiency examinations in certain required courses in a student's major or minor may be taken to determine whether or not the student may be excused from these courses, or to determine whether credit may be granted.

## Undergraduate Course Load

The normal undergraduate course load for a quarter is 15 hours of academic credit. This does not include the physical activity courses required in the freshman and sophomore years. A maximum of 18 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.

## 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 half " $D$ ' $s$ ", the numerical value of his marks would be 2.5 .

## Scholastic Average

Regularly enrolled students are expected to maintain a scholastic average above 2.5 throughout the freshman and sophomore years, and an average above 2.75 for the junior and senior years. A minimum grade average of 2.75 is required for graduation.


#### Abstract

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.


## Late Enrollment

No student will be permitted to enroll in a course after the first two weeks of the fall, winter, and spring quarters. Registrations after the first week of the regular summer quarter must have the approval of the Director of Instruction and the faculty member involved. No late enrollments will be approved for the two week Pre-session. These regulations apply to new registrations and to students wishing to change programs.

## Probationary Status

A student may be admitted on probation or will be placed on probation if he fails to earn in any quarter a grade average above the minimum for his class ( 2.5 or above for freshmen and sophomores; 2.75 or above for juniors and seniors). If his cumulative grade average for the regular academic year is not above the minimum he will be under academic suspension. The college reserves the right to suspend a student at any time that his record, academic or non-academic, warrants it.

## 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.

## Changes In Programs

Changes in programs will be permitted without penalty until four o'clock on the Friday following registration. After that period all changes will cost one dollar. In the fall quarter no student will be permitted to enroll in a course after the first two weeks. For the winter and spring quarters no student who was enrolled the previous quarter will be permitted to register after the official registration day of the quarter.

## 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 three ways:
(1) A high school graduate may be admitted to the college if his high school transcript shows that he has the ability to do college work. The college does not require the high school graduate to have a specific number of credits in science, language, mathematics, English, or other subjects.

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 may obtain the "Application for Admission" blanks by writing to the Director, Department of Student Personnel.

The "Application for Admission" blanks should be sent to the Director, Department of Student Personnel, several weeks prior to the quarter in which the student wishes to be admitted.
(2) A person who is twenty years of age or over and who is not a high school graduate may be admitted by successfully completing a series of entrance examinations. The prospective student must make scores and meet the standards set by the Admissions Committee. Psychological, achievement, and English tests are used. Students admitted on this basis must take these tests at least one week before the day of registration.
(3) A transfer student may be admitted if he has a good academic record and standing at the college from which he wishes to transfer. Transfer students will file with the Registrar, before their enrollment, official transcripts of all college work taken at other institutions. Transfer students will be classified by the Registrar and the chairman of the student's major division.

Students graduating from a junior college or transferring two years of college work may have to spend more than two years at Colorado State College of Education to complete the requirements for graduation.

## Conditions of 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.

## Matriculation

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) complete the standardized tests (English, psychological, and achievement, which are used for student advisement and placement) ; (2) take health examinations; (3) have photograph taken for official files; (4) file with the College a complete transcript of previous high school or college records.

## Faculty Advisers

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

## Health Examinations

A health examination is required before a prospective student's first enrollment. The college will provide a form on which the report of such examination is to be made. Examinations will be given annually thereafter and at other specified times in the College Health Office 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.

Minimum Residence Requirement
An undergraduate student must earn at least 45 quarter hours in residence to meet the minimum requirement for an undergraduate degree.

## 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, Home Economics, Industrial Arts, Business Education, Elementary Education, Secondary Education, Music, Physical Education for Men, Physical Education for Women, English, Foreign Languages, Speech and Drama, Science (with concentrations in either Biological or Physical Science), Mathematics, History, and Social Studies.

## Undergraduate Curriculum

The undergraduate curriculum consists of the following areas:
A. General Education

42 quarter hours from the areas of Humanities, English Composition, Sciences, Social Studies, General Psychology, Personal Living, Physical Education (6 hours).
B. Professional Education

31-38 quarter hours including Psychology of Childhood and Youth, Educational Psychology, American Education, The Elementary School or The Secondary School, Methods and Observation, Student Teaching, Philosophy of Education.
C. Broad Areas of Concentration

1. A major of 48 quarter hours and minor of 24 quarter hours.
2. General Secondary major with three or four minors.
D. Free Electives

28-35 quarter hours.
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 Major; (c) Elementary Education Major.

## Bachelor of Arts Degree (With Teaching Certificate) 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 39.
(b) Major courses required in field of specialization and not to exceed 48 hours.
(c) One or two minors with a minimum of 24 quarter 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) Free electives to complete 180 quarter hours of academic credit.
(e) Six quarter hours of physical exercise, three hours in the freshman year and three hours in the sophomore year.

## Bachelor of Arts Degree (With Teaching Certificate) General Secondary Major

Students who take the General Secondary 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 39.
(b) Minimum of 35 quarter hours in each of three subject matter fields, (or) minimum of 24 quarter hours in each of four subject matter fields.
(c) Sufficient electives to complete 180 quarter hours of academic credit.
(d) Six quarter hours of physical exercise, three hours in the freshman year and three hours in the sophomore year.

## Bachelor of Arts Degree (With Teaching Certificate) 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 39.
(b) Major courses listed on Page 107, plus adequate preparation in content courses recommended by the student's adviser.
(c) Sufficient electives to complete 180 quarter hours of academic credit.
(d) Six quarter 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; 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 40.
(b) Major courses required in field of specialization not to exceed 48 quarter hours.
(c) A minor with a minimum of 24 quarter hours outside the major.
(d) Sufficient electives to complete 180 quarter hours of academic credit.
(e) Six quarter hours of physical exercise, three hours in the freshman year and three hours in the sophomore year.

## Student Teaching

Student teaching assignments are made in the campus laboratory schools, Ernest Horn Elementary and College High School, and in cooperating public schools in the state.

All assignments for student teaching are made with the approval of the Director of Student Teaching. Before assignments are made, students must have: (1) an average grade of " $C$ " in major courses; (2) completed the prerequisite courses in methods and observation; (3) health, personal characteristics, and professional attitudes considered essential for successful teaching.

A student who submits required evidence of at least three years of satisfactory teaching experience 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.

## COMMON COURSES

## Bachelor of Arts Degree (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.



## Junior and Senior Years

| COURSE | NUMB | ER |  |  | COURSE TITLE | HOURS | CREDIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ed. | 105 | - | - - |  | American Education | - - - | - - 3 |
| Ed. | 150 | - | - - |  | Methods and Observation | - | - $\quad 5$ |
| Ed. | 151 | - | - - |  | Student Teaching - - | - - | 8 to 15 |
| Ed. | 214 | - |  |  | The Elementary School |  |  |
| Ed. | 216 |  | - |  | The Secondary School - | - - - | 3 |
| Ed. | 295 | - | - |  | Philosophy of Education | - - | - $\quad 3$ |

# General Requirements. 

(Effective Date of These Rules)

All graduate students admitted to candidacy for the master's degree after June 15, 1950, are subject to the following regulations. Classified students who have not exceeded the time limits and who have been admitted to candidacy prior to June 15, 1950, will follow the rules in force at the time of their admission to candidacy as stated in the catalog of the concurrent date to the time of their registration. Doctoral students not yet admitted to candidacy will follow the rules as herein published.

## 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 twentyfour 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 field of Education and Psychology are prerequisites for admission to coutses 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.

## Courses for Seniors

Senior students, who are within six 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.

## 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. The professor aids the student in planning a unified program and acts as his 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 at the desk marked "Unclassified" until an evaluation of their transcripts is possible. When the student is admitted to full graduate standing and assigned a major professor, 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 at the desk marked "Unclassified." 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 the 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 Graduate office will endeavor to aid in every way possible, the responsibility for any error in his own enrollment or in the interpretation of the rules rests with the student.

All rules herein printed presuppose that the student will meet the graduation requirements in the minimum time. In some cases, however, a longer period of time may be necessary to meet the requirements.

## 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 fifteen 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 200 or above carry graduate credit.

## Individual Studies

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. No Individual Study is permitted in absentia.

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

## 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.

## 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.

## 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. In connection with this course an English Usage Test will be required and such other objective tests as the Graduate Council may deem important for beginning graduate students.

## English Usage Requirement

1. The English Usage Test now required in connection with the " 300 " and " 400 " courses will be given the first week of the summer session.
2. In addition to the objective English Usage Test, a short English composition will be required to test the student's writing ability.
3. For those students who fail to make the twentieth percentile on the English Usage Test, a remedial writing laboratory will be required for no credit.
4. For those students who fall in the percentile range of 21-40 of the English Usage Test, the instructor in the remedial writing laboratory will judge the student's composition and will determine whether the student shall be required to take the remedial writing laboratory.
5. The students falling in the forty-first and above percentile may be required to enroll in the remedial writing laboratory if in the judgment of the instructor of the laboratory the student's composition is poor.
6. For the remedial writing laboratory a materials and service charge of $\$ 10$ will be required. This charge is in addition to the regularly published charges of the college.
7. This program includes not only the new prospective students, but also all previous students who have not made the 20th percentile or above on the English Usage Test or who have not made up this English deficiency.
8. When in the judgment of the instructor of the remedial writing laboratory the student's written work has markedly improved, the English Usage examination will be repeated and if the student's score falls in the 30th percentile or above he will be judged to have met the requirement as stated in the Graduate Bulletin: "has satisfactorily demonstrated proficiency in English Usage."
9. Time for and room assignment of the remedial writing laboratory will be announced in the mimeographed instructions for registration and on the Graduate bulletin board in Cranford Hall.

## Time Limit for Written Work

All written work such as theses, research studies, and papers must be completed within two years after the fulfillment of course work.

## Graduate Credit in Off-Campus Classes

The following policy applies to off-campus classes for graduate credit when the courses are offered by members of the resident faculty.

Students wishing to apply credit in off-campus courses toward a master's degree must conform to the following procedure:

First: They must be admitted to the graduate school. This may be done (a) by filling out admission blanks received from the Graduate Office, (b) by filing a certified copy of all undergraduate work taken previously (graduates os CSCE need not file a certified copy of their credentials as they are already in the files of the college), (c) by obtaining a notification from the Director of the Graduate School that they have been admitted.

Second: All courses must be listed in the official college catalogs as graduate courses. This means courses which are identified by numbers of 200 or above.

Third: The student must abide by all other requirements set forth by the instructor of the course and the Graduate Council.

Fourth: Not more than eight hours credit of off-campus work may apply to a master's degree.

## Master of Arts Degree

The degree of Master of Arts is offered in these seven instructional divisions of the college, with majors in each division as follows: Division of the Arts-Industrial Arts, Fine Arts, and Home Economics; Division of Education-Elementary Education, Educational Administration, Secondary Education, Educational Psychology and Guidance, Business Education, and Supervision in Elementary Education; Division of Health and Physical Education-Physical Education, Health Education, and Supervision of Physical Education; Division of MusicMusic, Supervision of Music; Division of the HumanitiesEnglish and Speech; Division of The Sciences-Biological Sciences, Mathematics, Physical Sciences, and Science Education; DIvision of the Social Studies-History, Social Studies.*

[^4]
## Admission to Candidacy

Action on admission to candidacy for the degree of Master of Arts will be taken after the student (1) has been in residence for at least one quarter or summer session earning at least twelve hours of graduate course credit, (2) has achieved a 3.7 grade average or better, (3) has satisfactorily demonstrated proficiency in English Usage (see pages 45-46) and (4) has satisfied all the classification requirements of the Graduate Council, such as undergraduate and professional prerequisites.

The student failing to meet the above requirements will be continued on probation for a second quarter. In the event he does not meet the requirements for candidacy at this time, he will be informed that no more graduate credit earned by him will be applicable to a master's degree.

## Time Requirements

The minimum time requirement for any degree in the college is one academic year or thirty 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 degree. Such transfer of credits may reduce load, but it will not reduce the residence requirements, i.e., four full summer sessions or their equivalent (thirty 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 offcampus classes or in courses classified as "extension."

## 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 whose undergraduate record shows a high specialization in a few areas at the expense of general cultural background in the so-called liberal arts and sciences may be required by his major professor upon the recommendation of the Director of the Graduate School to present part of his graduate work in the areas of the liberal arts and sciences.

## Thesis or Written Reports for the <br> Degree of Master of Arts

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 three or four hours.

Students writing theses will be under Plan A. Students not writing theses will present three reports. Such students will be under Plan B.

The three written reports under Plan B shall be in the major or concentration and in connection and in harmony with courses in the major or concentration open only to graduate students or in those courses in the major or concentration as may be designated by the Director of the Graduate School. It is suggested that a report be written in the first quarter or session in connection with a course taught by the major professor.

Upon written request of the major professor the Director of the Graduate School may approve one report to be written in a course open only to graduate students or other designated courses and outside the area of the major or concentration, provided that the topic for the report is in harmony with the major or the concentration.

## Plan A in Detail

(For students approved for thesis)
All general requirements for a graduate degree heretofore mentioned in this bulletin apply to this plan. In addition, the student shall:

1. Earn 45 quarter hours of graduate credit, one-third of which shall be in courses in the student's major or concentration, which are open only to graduate students.
2. Plan with the major professor a unified program which will contain in the first quarter or session in residence the required " 300 " course and a graduate course with the major professor.
3. If approved for thesis register for four hours of thesis credit (course 399) in each of the second and third quarters or sessions in residence. Registration for theses in absentia, or in the pre-session, will not be permitted. Acceptance of approval to present a thesis must be made by the student not later than the second quarter or session in residence and a typewritten outline of the proposed thesis approved by the major professor and the Director of the Graduate School must be filed in the Graduate Office not later than the end of the sixth week of the second quarter or session.
4. The thesis shall conform to the standards of the Graduate School as given in the "English Style-Form Standards."
5. 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 four copies of the thesis in final typed form, approved and signed by the major professor and ready for the Director's approval and signature. The thesis should be in the hands of the major professor for final reading by the beginning of the fourth week of the final quarter or session in residence.

After being signed and bound three copies of the thesis become the property of the college and one is retained by the student. 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 $\$ 8$ is made for binding the four copies. Since the thesis is the property of the college, any use made of the data therein for publication purposes must have the approval of the Director of the Graduate School before publication.
6. 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.
7. Pass a written comprehensive examination in the major or concentration. 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, after being evaluated by the major professor, shall be filed in the Graduate Office at least ten days before the end of the last quarter or session in residence.
8. Apply for a list of graduation requirements not later than the final week of the quarter or session prior to the quarter or session in which the student expects to graduate.

## Plan B in Detail

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

1. Earn 45 quarter hours of graduate credit, one-third of which shall be in courses in the student's major or concentration which are open only to graduate students.
2. Plan with the major professor a unified program which will contain in the first quarter or session in residence the required " 300 " course and a graduate course with the major professor.
3. File in the Graduate Office three typewritten reports which have been presented as partial requirements of the courses in the major or concentration open only to graduate students or in other courses as may be designated by the Director of the Graduate School.
4. The above-mentioned written reports shall conform to the standards as given in the "English Style-Form Standards."
5. Pass a written comprehensive examination in the graduate major or concentration. 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 will be evaluated by the major professor and filed in the Graduate office, at least ten days before the end of the last quarter or session in residence.
6. Apply for a list of graduation requirements not later than the final week of the quarter or session prior to the quarter or session in which the student expects to graduate.

Please see the Graduate Bulletin for -Creative Thesis.

## Advanced Graduate Diploma

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

## Admission and Advisement

Students desiring to earn this diploma must apply specifically for work on this level. Admission blanks are available in the office of the Graduate School. Admission to this level of work will be granted provided: (1) the student holds the master's degree from an acceptable graduate school (2) the student has a specific problem he wants to solve (3) the student's previous undergraduate and graduate records show high quality scholarship and promise of continued success as a graduate student. If and when the student is admitted to work for this diploma, he will be assigned to a major professor by the Director of the Graduate School.

Admission to work for this diploma is not a guarantee of admission to work on the doctorate level.

## Areas of Specialization

The purpose of the Advanced Graduate Diploma is to give the student the opportunity for professionalized specialization in certain of the subject-matter areas of the elementary and secondary school curriculum and in other phases of education. The area of specialization will be determined by the practicum.

## The Practicum

The practicum consists of a practical professional activity and a detailed report of the same. The problem selected shall be one of a highly specialized nature rather than one of general import.

The student is required to divide his enrollment for the practical activity (Ed. 401) between the second and third quarters or sessions. The student will present to the major professor by the sixth week of the second quarter or session a written outline of the plan of his practical activity. At least two weeks before the end of the third session the detailed written report, when approved by the adviser, shall be filed in the Graduate office.

## Specific Requirements for the Diploma

The general rules of the Graduate Council relative to admission, matriculation, course load, grade average and graduate courses apply to this program. To be eligible for the Advanced Graduate Diploma of Specialization the student shall meet the following requirements:

1. Earn thirty-six quarter hours of graduate credit above the master's degree. All thirty-six hours shall be residence credit, earned on the campus of Colorado State College of Education. Graduate credit earned in off-campus classes or in other institutions cannot apply toward the required hours for this diploma.
2. At least sixteen quarter hours of the course work must be earned in regularly scheduled classes in the major area open only to graduate students and taught by faculty members with the earned doctor's degree. Eight hours of course credit (Ed. 401) must be earned in some practical professional activity. As preparation for this activity the student shall enroll in the course (Ed. 400) "Introduction to Graduate Study" in the first quarter of residence unless he has already had its equivalent on the graduate level. In connection with this course an English Usage Test will be given and is required of all students, whether they are enrolled in the " 400 " course or not. Students failing to make a creditable showing on the English Usage Test (40th percentile or better) may be discouraged from continuing on for the advanced diploma. Enrollment for the practicum in absentia will not be permitted.
3. Present a detailed report of the practical professional activity.
4. All requirements for this diploma must be completed within a period of two years or five summer sessions.
5. Apply for graduation requirements the last week of the second quarter or session in residence.

## Doctor of Education Degree

Prior to the fall of 1948, the program for the degree of Doctor of Education was exclusively one of alternating on-campus and off-campus activities and was considered as an in-service type of advanced professional education. The program was divided into two parts. One called for the pursuance of certain courses on the campus during the summer sessions. The other planned for practical research projects to be completed while the student was engaged in professional activities. The Graduate School will continue this in-service type of program and will make ample provision for an adequate doctoral program of courses during the summer session. Hereafter this exclusively summer program will be designated as Plan I.

Beginning with the fall quarter of 1948 , students were permitted to register during the academic year for work applicable to the doctorate provided there was an adequate number of course offerings and the student was approved for such work beforehand by the Director of the Graduate School. This plan of two academic years in residence will be designated as Plan II. Under this plan the research studies will be registered for as a part of the regular course load and completed on the campus.

Another program designated as Plan III requires residence for three summer sessions and one academic year (See plan on page 66). Under this plan one of the research studies will be registered for as a part of the regular academic load and will be completed on the campus.

## Limitations on Enrollment for the Doctorate

1. The Graduate Council reserves the right to limit at any time the number of students permitted to enroll for work applicable to the doctorate.
2. It will be understood that the first summer session or regular quarter in residence is a trial session or quarter and that the Graduate Council has the right to discourage any student from continuing for the doctorate.
3. Students holding the A.B. and the A.M. degrees from Colorado State College of Education will not be permitted to register for this degree.
4. Members of the faculty of Colorado State College of Education are not permitted to earn the doctorate here except by special permission of the Graduate Council.
5. Students without adequate teaching experience may not work for the doctor's degree.

## 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 research 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," (Ed. 400), unless they have already had its equivalent on the graduate level. In connection with the " 400 " course, an English Usage test and an objective test in Education and Psychology will be required. All new students are required to take these two tests even though they are not required to enroll for Ed. 400.

One-third of the work applicable to the doctor's degree must be in courses open only to graduate students (courses numbered 300 or above.) Registration for field studies is not included in this requirement.

A maximum of twenty-four quarter hours of graduate course credit may be taken outside the field of Education provided the student enrolls in graduate courses taught by members of the faculty with the earned doctor's degree and that the plan for such work is approved by the Director of the Graduate School and the major professor.

Majors: Educational Administration, Educational Psychology and Guidance, Elementary Education, Secondary Education.

Minors: (All the above fields and): Curriculum, Higher Education, and Philosophy of Education.

## General Program

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 a minor.

## Research Studies

Normally two research studies of a practical nature are required. The student may receive eighteen quarter hours of credit for these studies. The student will register for the research studies by the payment of a research fee. The preliminary outlines of the studies are prepared under the supervision of the major professor and a research committee of four appointed by the Director of the Graduate school. One member of the research committee shall be a representative of the faculty who is not a member of the Division of Education.

The research committee will pass judgment on the credithour value of the completed study and will report the same to the Director of the Graduate School. When the research committee cannot agree on the credit value of the study, it may refer the study to the Graduate Council for evaluation. Under no consideration may the student petition for an evaluation of research credit.

Normally, each research study will carry nine hours credit. However, if the first study, in the opinion of the research committee, does not merit nine hours and is awarded fewer hours, then the student's second study must be of such merit as to warrant the granting of a sufficient number of hours so that the total for both studies will be eighteen. In no case will a third study be permitted.

If, on the other hand, the first study is of such excellence: and merit that the research committee unanimously judges it to be worth eighteen hours of credit, the committee may so recommend to the Graduate Council and if the recommendation is approved by the Council only one study will be required of the student.

At all times the Graduate Council reserves its prerogative of re-evaluating the research studies.

## Candidacy for the Degree

To be eligible for formal admission to candidacy for the degree of Doctor of Education, the student shall have earned at least thirty-six quarter hours of resident graduate credit in major and minor with better than a " $B$ " average, shall have passed satisfactorily the Preliminary Examination, shall have completed Research Study Number 1, shall have satisfactorily defended this Research Study in an oral examination, and shall have completed all classification requirements. As a part of the classification requirements the Graduate Council may require the student to furnish records of acceptable scores on standardized intelligence tests.

Admission to candidacy will be based upon the evidence available: (1) from staff members with whom the student has studied on this campus; (2) from the official transcripts concerning the type and quality of the student's accomplishments in other institutions; (3) from the results of the Preliminary Examination, the English Usage test, and an objective test in Education and Psychology; and (4) from the results of the examination on Research Study Number 1. Admission to candidacy will be by action of the Graduate Council upon recommendation of the student's major professor.

## Time Requirements

The maximum time limit for earning the doctor's degree is eight summers for those enrolled only in the summer sessions. For those selecting the suggested year program, the time limit is five calendar years. In the event of a manifest hardship delay which exceeds the time limit, the candidate may petition the Graduate Council for an extension which may be granted under such provisions as determined by the Council.

## Residence Requirements

The minimum residence time requirements for the degree of Doctor of Education is six full summers, or their equivalent, for those enrolled only in the summer session. For those enrolled during the regular year, the minimum residence requirement will be six regular quarters of full-time study.

Registrations in the pre-session in a course open only to doctoral candidates will be counted as meeting this residence time requirement only when the student is enrolled in the summer session 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 as given above. 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 on the last approved list of 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.

The Graduate Council reserves the right to suggest to doctoral students the advisability of earning twelve quarter hours of course work on the campus of another institution which was on the last approved list of the Association of American Universities and which offers the doctorate. Off-campus and extension classes will not be included in this suggestion and only those courses previously approved by the major professor, the research committee, and the Director of the Graduate School will be applicable to the degree. The total number of hours earned away from the campus cannot exceed twelve quarter hours.

## 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 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, research studies. and the examination.

## Research Professor

At the request of the major protessor, a research professor may be appointed for directing a particular research 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 research study.

## Specific Requirements

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

1. Earn ninety quarter hours of graduate credit beyond the master's degree. Twenty-four hours of this credit must be in courses open only to graduate students.
2. Be in residence on the campus of Colorado State College of Education at least six full summer sessions, or two academic years or their equivalent.
3. Present two research studies of a practical nature, for which the student may receive eighteen quarter hours of credit.
4. Pass satisfactorily the following examinations in addition to the usual course examinations:
(a) Preliminary Examination in major and minor. This examination will take place normally after the student has successfully completed, with better than a " $B$ " average, thirty-six quarter hours of full-time course work in both the major and the minor. The examination will be both written and oral and will be comprehensive in nature, covering both major and minor fields
and will include any previous academic work in major and minor fundamental thereto. It is the duty of the student to present a written request to the Graduate Office for the examination. The major professor must approve in writing this request before any time will be set or an examining committee will be appointed. The Director of the Graduate School will set the time for the examination and with the advice of the major professor will appoint an examining committee, one member of which shall be from the faculty who is not a member of the Division of Education. The written examination in the major will be given by the major professor and in the minor by the member of the Division of Education who regularly teaches courses in the minor and who is a member of the examining committee.

The written examinations will be given before the oral and will be available to all members of the examining committee prior to the oral and finally shall be filed in the student's folder in the Graduate Office. The examining committee will evaluate these written and oral examinations as follows:
(1) Satisfactory
(2) Unsatisfactory with the privilege of additional examinations for which a fee will be charged.

## (3) Failure

In the case of failure the student will have eliminated himself from further work applicable to the doctorate and may not present himself for further examinations.
(b) Oral Examinations in Defense of the Research Studies. When a student has satisfied his research committee that he has completed a research 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 faculty who is not a member of the Division of Education. The research study shall be complete in every detail and ready for the final typewritten copies to be made before the student ot the major professor may ask the Director of the Graduate School to set the date for the oral examination. A vita is required for each copy of the research study.
5. Pay $\$ 40$ for the publication of each research study. The research 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 two extra copies of the abstract of each study. This abstract cannot be more than 1500 words and must include a vita. These are in addition to the copies of the abstract which are bound with the typewritten copies of the research 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 research study. At least four copies of each research 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. Any use of the study for publication purposes must have the approval of the Director of the Graduate School prior to publication.
7. Apply for final graduation requirements not later than the final week of the session or quarter prior to the session or quarter in residence in which the student expects to graduate.

## Doctor of Education Degree

## Suggested Time Schedule for Plan I <br> (Exclusively Summers)

First Summer Session- 12 hours of course work in major and minor; 4 hours in " 400 " course; a course with major professor; English Usage Test; Advanced Test in Education.

Second Summer Session-12 hours of course work in major and minor; presentation of outline of proposed first research study; payment of research fee.

Third Summer Session- 12 hours of course work in major and minor; defend first research study; determination of hours of credit for first research study.

Fourth Summer Session- 12 hours of course work; preliminary examination in major and minors; candidacy if qualified.

Fifth Summer Session-12 hours of course work; approval of outline of second research study.

Sixth Summer Session-12 hours of course work; defend second research study.

## Doctor of Education Degree

## Suggested Time Schedule for Plan II

(Two regular academic years)
First Quarter-12 hours of course work in major and minor; 4 hours in "400" course; a course with major professor; English Usage Test; Advanced Test in Education.

Second Quarter-12 hours of course work in major and minor; presentation of outline of proposed first research study.

Third Quarter-12 hours of course work in major and minor; pay research fee; defense of first research study; determination of credit for first research study; preliminary examination in major and minors.

Fourth Quarter-12 hours of course work; candidacy if qualified; outline of second research study.

Fifth Quarter-12 hours of course work.
Sixth Quarter-12 hours of course work; defense of second research study.

## Doctor of Education Degree

## Suggested Time Schedule for Plan III

(Three summer sessions and one academic year)
First Summer Session- 12 hours of course work which includes: 4 hours in Ed. 400 and 4 hours with major professor; English Usage Test; Advanced Test in Education.

Following School Year (Off-Campus Work)—preparation of outline for first research study; pay research fee.

Second Summer Session-12 hours of course work in major and minors; presentation of outline for first research study.

Second School Year-defend first research study; determination of credit for first research study; 36 hours of course work in major and minors; preliminary examination in major and minors; candidacy if qualified; presentation of outline for second research study.

Third Summer Session-12 hours of course work; defense of second research study.

# Division of Air Science and Tactics 

Air Force ROTC was first established in 1946 in leading colleges and universities as a part of the Army's ROTC program. Formal control of its own ROTC program was assumed by the Air Force at college level on July 1, 1949, and introduced at Colorado State College of Education in the fall quarter of 1951.

The Air Force ROTC program of instruction is integrated with the regular college schedule to permit the student to receive academic credit for the military courses taken while qualifying for a Reserve Commission in the United States Air Force. Upon successful completion of the Air Force ROTC program and attainment of a degree and reserve commission, a percentage of the best qualified graduates may apply for regular commissions in the Air Force. If physically qualified, the Air Force ROTC graduate is eligible to apply for pilot or navigator training in the grade of Second Lieutenant with all pay and allowances of that grade.

Purpose: The purpose of the Air Force Reserve Officers' Training Corps program is to supplement the educational background of college graduates to the extent that, in addition to their civilian profession, such graduates will also be fully qualified to perform the duties of junior officers in the United States Air Force and its related reserve components.

Objectives: 1. To develop in each student a high degree of leadership and other desirable attributes of character and personality essential in Air Force officers and American citizens.
2. To give each student a basic understanding of the defense problems of our country with emphasis upon the organization and operational problems and principles of the Air Force.
3. To qualify graduates of the Air Force ROTC program to perform the duties of junior officers in the Air Force without further formal training.

General: The Air Force ROTC program consists of academic courses which normally cover a four-year period of study. The freshman and sophomore AF ROTC courses are commonly referred to as the "Basic Course" and are required for all incoming
male freshmen. The junior and senior AF ROTC courses are commonly referred to as the "Advanced Course" and enrollment in this course is optional and highly selective.

Once a student enrolls in either the Basic or Advanced course, completion of that two-year course becomes a prerequisite for graduation.

A complete distinctive blue Air Force uniform will be issued, on a loan basis, to each student entolled in the AF ROTC program.

Textbooks are also issued, on a loan basis, to each ROTC student.

Deferment: Immediate deferment for students enrolled in the AF ROTC program is permitted by the National Selective Service Act. This is made possible by the need of the Air Force for college graduates with reserve commissions. This deferment, under present Department of Defense policies, will remain in effect should a national emergency arise.

To qualify for an AF ROTC deferment a student must willingly assume the following obligations:

1. To enroll in, and satisfactorily complete, the four-year AF ROTC course of instruction (contingent upon remaining in school).
2. Upon graduation and completion of the AF ROTC course, to accept and retain for a period of eight years a reserve commission in the United States Air Force Reserve.
3. After graduation to serve on active duty for a period of not less than two years if called by the Secretary of the Air Force.

## BASIC COURSE

All incoming male freshmen are required to enroll in, and satisfactorily complete, (with exceptions as listed below) the basic AF ROTC course which requires attendance of military classes three times a week.

Transfer students with 45 or more credit hours are not required to enroll in the basic course. Transfer students may enroll in AF ROTC course on an optional and selective basis if they are found to be fully qualified.

Enrollment in the basic course is not required of freshman students who have served on active duty for a period of one year or more with any branch of the armed forces.

Freshman students in any one of the following categories will not be permitted to enroll in AF ROTC courses and the requirement for completion of the Basic Course as a prerequisite to graduation will be waived in their case:

1. Non-citizen of the United States.
2. Physically unfit.
3. Over 23 years of age.
4. Record of previous convictions by military or civil court.

The Basic Course in the Air Force ROTC program is of two years' duration and includes Air Science (AS) 1a, 1b, 1c, 2a, 2b, 2c. Completion of the Basic Course, or credit for equivalent training, is a prerequisite to enrollment in the Advanced AF ROTC Course.

The Air Force ROTC freshman studies Leadership, Drill and Exercise of Command, and World Political Geography (AS 1a, 1b, 1c). The sophomore studies Aerodynamics and Propulsion, Meteorology, Navigation, Applied Air Power, and continues in other basic military subjects (AS 2a, 2b, 2c). One hour academic credit is allowed for three hours a week of instruction during a quarter.

## ADVANCED COURSE

The advanced course is a two-year course of instruction with emphasis placed on one of two specialties, Administration and Logistics, or Flight Operations. The first prepares the student for general administration particularly in the personnel, supply, and transportation fields. The latter course is designed to provide instruction which will facilitate and materially augment the academic phase of training in the flying schools of the Air Training Command. Actual flying instruction at the college is not provided.

## Eligibility Requirements

To be eligible for enrollment in the Advanced Course the student must submit an application to the Professor of Air Science and Tactics. This application will include:

1. Documentary evidence of completion of the Basic Course or of equivalent training. (Veterans will submit a photostatic copy of discharge).
2. Documentary evidence of age. (Applicants cannot be over 25 years of age upon entrance into Advanced Course).
3. A statement that student will attend an Air Force ROTC summer camp of six weeks' duration during his summer vacation between the junior and senior years.
4. A statement that student has never been a member of a subversive organization.
5. A statement that, upon completion of the course and graduation, student will accept and retain a reserve commission for a period of eight years. Also, that student will serve a minimum of two years on active duty if called by the Secretary of the Air Force.
6. A statement that the student will arrange his student teaching to permit his continued attendance of military classes on the campus.
7. A statement that student has never been convicted by military or civil court. (A waiver can be requested for those students who have been found guilty of minor violations.)
8. Academic record and results of general survey and screening tests. The college and the Professor of Air Science and Tactics will select those applicants found to be the most highly qualified for enrollment in the Advanced Course. The number of students selected is subject to quota limitations imposed by the Air Force.

## Benefits and Allowances for Advanced Course Cadets

1. Commission in either the Regular Air Force or the United States Air Force Reserve.
2. Deferment from Selective Service.
3. Officer-type uniform furnished by the government.
4. Monetary allowance in lieu of subsistence of approximately $\$ 27$ a month and approximately $\$ 112$ for attending Advanced Course Summer Camp of six weeks' duration between the junior
and senior years. Travel allowance of 5 cents a mile to and from camp is allowed.
5. Academic credit of three hours each quarter.
6. ROTC Texts will be furnished on a loan basis. Certain designated texts are to be retained by the student.

The Advanced Course will consist of 5 hours of instruction per week for a minimum total period of 64 weeks.

Students having been formally enrolled in the Advanced Course and subsequently remaining enrolled on the campus but desiring to drop the AF ROTC program for any reason other than the convenience of the government will be required to return to the United States government all monies received by the student due to his enrollment in the AF ROTC program.

## STAFF AND EQUIPMENT

Air Force personnel are detailed by Headquarters, United States Air Force, as instructors in the ROTC Unit. The Professor of Air Science and Tactics, as well as his officer and airmen assistants, are highly qualified and are usually veterans of overseas combat.

Equipment for instruction is furnished by the Air Force including many training aids, mock-ups, and visual training charts pertaining to the subjects taught.

## Description of Courses

1a, b, c. AIR SCIENCE I. One hour credit each quarter.
A study of world political geography to provide the AF ROTC student with a general knowledge of geopolitics and a global viewpoint to serve as a background for subsequent Air Force subjects. Also includes drill and exercise of command, executing the basic elements of drill of the individual and flights, without arms.

2a, b, c. AIR SCIENCE II. One hour credit each quarter.
Prerequisites, AS I (1a,b,c) or equivalent. Designed to present the Air Power concepts by introducing basic map reading and interpretation of aerial photographs, basic principles of aerial navigation, meteorology, aerodynamics and propulsion, applied air power and organization for defense of the United States. General subjects include personal maintenance, weapons familiarization, and drill of the individual flight and squadron to include duties and responsibilities of non-commissioned officers concerning drill, interior guard, parades, and ceremonies.

101a, b, c. AIR SCIENCE III. ADMINISTRATION AND LOGISTICS. Three hours credit each quarter.
Prerequisites, AS I ( $1 \mathrm{a}, \mathrm{b}, \mathrm{c}$ ) and II ( $2 \mathrm{a}, \mathrm{b}, \mathrm{c}$ ). A specialized career training option study of Air Force Supply to include organization, publications, stock control, receipt and turn-in storage, issue, accounting for and disposal of property. Transportation, motor, air, and commercial, is included in the option as well as a short study of individual records of the officer and airman, and non-appropriated funds. General subjects include air operations, psychology of leadership, and military drill.

102a, b, c. AIR SCIENCE III. FLIGHT OPERATIONS. Three hours credit each quarter.
Prerequisites, AS I ( $1 a, b, c$ ) and II (2a, b, c). Organization of Air Force including major commands, their mission, method of operation, and types of equipment. Other courses cover principles of flight, aircraft engineering and introduction to instruments, air navigation, meteorology, and new developments.
201a, b, c. AIR SCIENCE IV. ADMINISTRATION AND LOGISTICS. Three hours credit each quarter.
Prerequisites, AS III (101a, b, c). A continuation of AS III, Administration and Logistics, beginning with a detailed study of the purpose and basic functions of the staff and proceeding to the administration of personnel from the Wing Base level. Functions of the Air Comptroller and Food Service Supervisor concludes the training option phase of the course. General courses include applied fields of officer orientation dealing with Air Force inspection systems, military teaching methods, military law and boards, military management, career development and logistics. Continued training in drill, parades and ceremonies, and psychology of leadership is given.

202a, b, c. AIR SCIENCE IV. FLIGHT OPERATIONS. Three hours credit each quarter.
Prerequisites, AS III (102a, b, c). Offers advanced instruction, in navigation and bombing including theory of radar as applied to each. Generally covers also duties and responsibilities of an electrical counter measures officer and a radar observer.

## Division of the Arts

The Division of the Arts includes the fields of Fine Arts, Home Economics, and Industrial Arts.

The academic programs are:

1. A major in Fine Arts leading to the Bachelor of Arts and Master of Arts degrees with teaching certificates.
2. A major in Home Economics leading to the Bachelor of Arts and Master of Arts degrees with teaching certificates.
3. A major in Industrial Arts leading to the Bachelor of Arts and Master of Arts degrees with teaching certificates.
4. Minors in Fine Arts, Home Economics, Industrial Arts.
5. A major in Fine Arts and Home Economics leading to the Bachelor of Arts degree (liberal arts).

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

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 76, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed on Page 74.
(3) One minor of 24 quarter hours outside the Division of the Arts (a second minor within the Division is optional).
(4) Electives to complete requirements for graduation.

Programs must be planned with the student's adviser.

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

Required courses in the major:


## Fine Arts Minor

## COURSE NUMBER

## COURSE TITLE HOURS CREDIT

F. A. $1 \begin{aligned} & \text { F - - - Drawing - - } \\ & \text { F } \\ & \text { A } \\ & \text { - - - }\end{aligned}$
F. A. 11 - - - Introduction to Design - - - - - 4
F. A. 13 - - - Lettering - - - - - - - - 2
F. A. 17 - - - - Pottery - - - - - - - - 2
F. A. 103 - - - Introduction to Watercolor Painting - - 4
F. A. 116 - - - Crafts Processes and Design - - - - . 4
F. A. 124 - - . Art in the Elementary School - - . . . 5

24

## Fine Arts Minor for Elementary Education Majors



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

The following program is required: (1) Common Courses listed on Page 40 ; (2) At least 48 quarter hours in Fine Arts; (3) One minor outside the Division of the Arts; (4) Electives to complete requirements for graduation. Programs must be planned with the student's adviser.

Courses required for a minor under this program are: F.A. 1, 11, 13, 17, 103 (or 120 ), $116,221 \mathrm{~b}$.

## Graduate Study

Detailed information about the Graduate program may be obtained from

## COMMON COURSES

## Bachelor of Arts Degree (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.



Junior and Senior Years

| COURSE | NUM |  |  |  |  | COURSE TITLE |  | HOURS | CREDIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ed. | 105 | - | - | - | - | American Education | - | - - | 3 |
| Ed. | 150 | - | - | - | - | Methods and Observation |  | - - | - - 5 |
| Ed. | 151 | - | - | - | - | Student Teaching - - |  | - - | 8 to 15 |
| Ed. | 214 | - | - | - |  | The Elementary School |  |  |  |
| Ed. | 216 | - | - | - |  | The Secondary School - |  | - - | - 3 |
| Ed. | 295 | - | - | - | - | Philosophy of Education | - | - - | 3 |

## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (§) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.

1. DRAWING. Three 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. Three 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.
3. DRAWING FOR ELEMENTARY SCHOOL TEACHERS. Three hours credit.
The fundamentals of beginning drawing specifically applied to the needs and methods of elementary school teachers.
4. FIGURE CONSTRUCTION. Three 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. Two hours credit.

Prospective teachers are introduced to the objectives, subject matter content and problems of art education, so that they may work more purposefully throughout the period of their professional preparation.
8. MODELING AND CARVING. Two or three hours credit.

Creative design in the field of small sculpture. Modeling for various techniques. Sculpture with and without armature, plaster casts, carving in plaster, stone, and wood.
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.
12. LETTERING FOR ELEMENTARY SCHOOL TEACHERS. Two hours credit.
Study of letter forms, manuscript writing, poster, blackboard writing, and holiday and unit displays.
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.
17. POTTERY. Two, three, or five hours credit.

Creative experience in the design and construction of pottery. Various methods are studied: glazing, casting, firing.
20. ART APPRECIATION. Three 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.
865. BEGINNING SCENE DESIGN. (Credit may be obtained in Fine Arts or Humanities). Three hours credit. Prerequisite, F.A. 1, 11, or equivalent. 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.
100. WEAVING. Two hours credit.

A study of the fundamentals of threading and weaving on two- and fourharness looms; emphasis on plain and pattern weaving.
103. INTRODUCTION TO WATERCOLOR PAINTING. Four hours credit.
Prerequisite, F.A. 1 or the equivalent. $\AA$ beginning course in watercolor painting.
105. COLOR THEORY. Four hours credit.

Prerequisite, F.A. 11. A study of color relationships and organizational principles pertinent to the color unit.
108. CLAY MODELING. Two or three hours credit.

The theory and techniques of modeling and casting.
110. COMMERCIAL DESIGN AND ILLUSTRATION. Three hours credit. Prerequisites, F.A. 1 and 4. Procedures and techniques of modern commercial art.
114. DESIGN IN TEXTILES. Fout hours credit.

Prerequisite, F.A. 11. Experience in the design and methods of decorating textiles, block print, stencil, batik, free brush and silk screen work.
116. CRAFTS PROCESSES AND DESIGN. Four hours credit.

Prerequisite, F.A. 11. Creative experience in a variety of crafts including leather craft, simple woodwork, and metalcraft, plastics, and others.
117. POTTERY. Two, three or five hours credit.

The principles of design applied to mass, volume, and decoration. Experience in the coil, slab, potter's wheel, casting, glazing, and firing. Beginning course.
118. PUPPETRY. Three 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. Three 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.
120. INTRODUCTION TO OIL PAINTING. Four hours credit.

Prerequisite, F.A. 1 or the equivalent. A beginning course in oil painting.

## 123. ART IN THE SECONDARY SCHOOL. Five 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. Five 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. Three 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. Two hours credit.

Prerequisites, 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.
130. WORKSHOP IN ART FOR ELEMENTARY TEACHERS. Three hours credit.
A study and discussion of the problems in the field of the elementary school art program. Helps the teacher to develop an interest and enthusiasm for the teaching of art through lecture-demonstration and class participation of a wide variety of creative art activities.
132. CARTOON AND CARICATURE. Three hours credit.

Prerequisites, F.A. 1 and 4. The cartoon figure in commercial art. Principles, techniques, and construction. Pen and ink.

133a,b,c. INDIVIDUAL PROBLEMS IN FINE ARTS. Two or four hours credit each.
Open to advanced students who may pursue creative work according to their individual needs.

135a,b,c. LIFE CLASS. Two hours credit each.
Prerequisite, F.A. 1. Opportunity to draw from the human figure.
136. TECHNIQUES AND MATERIALS. Four hours credit.

The use of wash, oil, Wolfe crayon, water color, 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. Three hours credit.

A general study of the forms of commercial design and illustration with specific emphasis upon merchandising and advertising media.
200. TECHNIQUES OF CREATIVE WEAVING. Three hours credit.

Prerequisite, F.A. 100 or equivalent. A study of the problems and various processes of weaving. Emphasis on original designing of patterns for color and texture.
201. TECHNICAL PROCEDURES FOR THE ART TEACHER. Two hours credit.
This course deals with the problems in the teaching and supervision of art in the public schools.
202. ADVANCED COMPOSITION. Three 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 103 or the equivalent. This course seeks to develop individual expression in creative painting and technical mastery of the medium.
204. FIGURE AND COMPOSITION. Four 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.
209. PRINT MAKING. Five 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. Three 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.
219. THE SILK SCREEN PRINTING PROCESS. Four hours credit.

The study of various methods and techniques in contemporary graphic process of silk screen. Applied problems in all the methods with emphasis on serigraphy: blockout, paper stenciling, pro-film, tusche, and the photographic stencil method.
220. OIL PAINTING. Four hours credit.

Prerequisites, F.A. 120 or the equivalent. This course seeks to develop individual expression in creative painting and technical mastery of the medium.

221a. ART HISTORY I. Five hours credit.
A study of the development of art from prehistoric time to and including the Gothic Age.

221b. ART HISTORY II. Five hours credit.
A study of the development of art from the Renaissance to the present day.
225. FIGURE PAINTING. Four hours credit.

Prerequisite, F.A. 120, or equivalent. Painting in oils from the human figure.
226. ART EDUCATION TODAY. (Summer Session only). Four 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.
230. WORKSHOP IN ART FOR ELEMENTARY TEACHERS. Three hours credit.
This course is designed to give the graduate student a philosophy of art education, an understanding of and an opportunity to participate in the essential art activities for the elementary school, to develop his interest and enthusiasm for the teaching of art. Emphasis is given to the creative approach and the integration of the art activities with the entire school program.
8232. ADVANCED SCENE DESIGN. (Credit may be obtained in Fine Arts or Humanities). Three hours credit.
Prerequisites, 65 or equivalent. The techniques of and problems of scenic design involving the esthetic qualities of settings, costumes, properties, and lighting.

233a,b,c. INDIVIDUAL PROBLEMS IN FINE ARTS. Two or fout hours credit each.
Open to advanced students who may pursue creative work according to their individual needs.
243. ART IN CONTEMPORARY LIVING. Three hours credit.

The student elects three out of the following six areas offered for study: foods and table; ready-to-wear costume; interiors, fabrics, and furnishings; pictures and accessories in the home; woods and upholstery; principles of design and color in daily living.
264. INDUSTRIAL ARTS DESIGN. Three hours credit.

Principles of design applied to the various areas of industrial arts.
8279a. ORGANIZATION AND ADMINISTRATION OF THE ARTS PROGRAM. (Credit may be obtained in Fine Arts or Education). Four hours credit.
A course primarily for school administrators, which presents the philosophy, problems of organization, methods and the like of a general arts program.
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.
305. ADVANCED COLOR THEORY. (Summer Session only). Four hours credit.
Prerequisites, F.A. 105 or equivalent. An intensive study of creative color composition.
308. SCULPTURE. (Summer Session only). Two, three, or five hours credit.
The theory and techniques of sculpture, with a study of the processes. Creative work in a choice of plastic media.

8308 g . WORKSHOP IN THE PRODUCTION OF AUDIO-VISUAL MATERIALS. (Summer Session only). (Credit may be obtained in Education or 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 include charts, graphic materials, models, exhibits, slides, recordings, and film strips.
313. GRAPHIC LAYOUT AND DESIGN. (Summer Session only). Four hours credit.
Prerequisite, F.A. 13 or equivalent. 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. Four hours credit.
A study of design and artcrafts adapted to secondary school levels.
317. CERAMICS. Two, three, or five 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. Paper required.
324. CREATIVE ACTIVITIES IN THE ELEMENTARY SCHOOL. (Summer Session only). Four hours credit.
Research and creative experience in the various art activities of the elementary school art education program.
327. PROBLEMS AND TECHNIQUES IN HANDCRAFTS FOR ELEMENTARY SCHOOLS. Three hours credit.
A workshop study of the recent trends in methods and techniques of craft work suited to the elementary school classroom.
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 MAJOR <br> Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 76, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed below.
(3) One Minor of 24 quarter hours preferably in the Di vision of the Sciences to include Bot. 122, General Bacteriology, ( 5 hrs .) ; Chem. 40a, Principles of Chemistry, ( 5 hrs.) ; Chem. 40b, General Inorganic Chemistry, (5 hrs.) ; Chem. 40c, Introductory Organic Chemistry, (5 hrs.) ; Phys. 165, Household Physics (4 hrs.).
(4) 28 to 35 quarter hours of free electives to complete 180 quarter hours of academic credit required for graduation.
Programs must be planned with the student's adviser.

## HOME ECONOMICS MAJOR

Bachelor of Arts Degree (With Teaching Certificate)
Required courses in the major:


## Credential for Teaching Vocational Homemaking

In order to qualify for a Vocational Homemaking Credential under the State Board for Vocational Education, the following credits are also required:


## Home Economics Minor



Recommended electives for Home Economics minors who want to teach homemaking in the secondary schools:

## COURSE NUMBER COURSE TITLE HOURS CREDIT

H. E. 181 - - - - Infant and Child Care - - - . - - 4
H. E. 192 - - - Methods in the Teaching of Homemaking - - 3
H. E. (selected) - - - - - - - . . - - . 5

## Graduate Study

Detailed information about the Graduate program may be obtained from the Graduate Bulletin. Course work will be outlined by the student's major professor.

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

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 76, plus 6 quarter hours in physical activity.
(2) The 48 quarter hours in the major listed below.
(3) One minor of 25 quarter hours preferably in the Division of the Sciences to include Bot. 122, General Bacteriology, ( 5 hrs .) ; Chem. 40a, Principles of Chemistry, ( 5 hrs .) ; Chem. 40 b , General Inorganic Chemistry, (5 hrs.) ; Chem. 40c, Introductory Organic Chemistry, (5 hrs.) ; Chem. 148, Food Analysis, ( 5 hrs. ).
(4) 27 to 34 quarter hours of free electives to complete 180 quarter hours of academic credit required for graduation.
Programs must be planned with student's adviser.

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

Required courses in the major:


## American Dietetics Association Internship Requirements

In order to qualify for an American Dietetics Association internship, the following credits are also required:


## HOME AND FAMILY LIVING MAJOR <br> Bachelor of Arts Degree (Liberal Arts)

The following program is required: (1) Common Courses listed on Page 40; (2) At least 48 quarter hours in Home Economics; (3) One minor of 24 quarter hours outside the Division of the Arts; (4) Electives to complete requirements for graduation. Programs must be planned with the student's adviser.

Courses required for a minor under this program are: H.E. 70, 76, 94, 98, 191a, six hours of electives.

## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbcok. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (§) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.
70. CLOTHES AND PERSONALITY. Three hours credit.

A study of the factors which influence one's personality; posture, grooming, the application of art principles to clothing selection for figure and facial types, appropriate accessories and care of clothing.

## 71. TEXTILES. Three hours credit.

This course is planned primarily for non-majors. It is especially desirable for students of distributive education and others who wish to gain valuable information as consumers of textiles. Fibers, yarns, finishing agents will be studied in relation to selection, use and care of fabrics.

## 72. TEXTILES AND ELEMENTARY CLOTHING CONSTRUCTION. Five hours credit. <br> This course deals with basic principles in garment construction and fitting. Commercial patterns are used in applying these principles through the construction of cotton garments. Included is a study of the fibers, yarns, and manufacturing processes fundamental in the purchase, care and use of cotton and linen textile fabrics.

73. ADVANCED TEXTILES AND CLOTHING CONSTRUCTION. Five hours credit.
Prerequisite, H.E. 72 or equivalent. This course is designed to give students experience in making rayon and nylon garments, thereby developing greater skill in solving fitting and construction problems. The textile study includes the production of silk, wool, and synthetic fibers and the processes in manufacture which influence the characteristics of finished fabrics.
74. CLOTHING SELECTION AND CONSTRUCTION. Five hours credit. This course is planned to assist the student in analyzing her personal needs and in developing standards in selection, purchase, use and care of clothing. Garments are constructed so that techniques in construction and use of sewing equipment may be practiced. This is a non-technical course for non-majors and electors.
75. 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 only to majors 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 is a non-technical course in food preparation planned for men or women students 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.
§98. ELEMENTARY NUTRITION. (Credit may be obtained in Health and Physical Education or Home Economics). Three hours credit.
Enables students to select food suited to their needs in the light of the newer knowledge of nutrition and individual physical fitness.
175. ELEMENTARY DIETETICS. Three houts credit.

Prerequisite, H.E. 74. Dietaries for families of various income levels are planned. Emphasis is given to recent developments in human nutrition. The diet of the young child both in group feeding situations and in relation to the diet of the family is studied. Ten hours laboratory experience arranged per quarter.
180. FAMILY RELATIONSHIPS. Three hours credit.

The relationship of the individual to his human contacts. The establishment of the successful American home.
181. INFANT AND CHILD CARE. Four hours credit.

A study of the growth pattern from conception through infancy and the third year of life. Course deals with prenatal as well as postnatal factors which influence early development. Emphasis upon guidance and provisions for care. The responsibilities of adults for providing a favorable home environment. Limited observation of children.
§183. HOME NURSING. (Credit may be obtained in Home Economics or Health and Physical Education). Two hours credit.
The chief purpose of this course is to develop the ability to give simple nursing care to a sick person in the home. The principles of care are stressed and nursing procedures demonstrated and practiced.
187. INSTITUTION MANAGEMENT. Five 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. Four single and one double laboratory period per week.
188. COSTUME DESIGN. Three hours credit.

Prerequisites, H.E. 72, 73, or equivalent. The development of clothing from primitive peoples to the present fashion industry. Some experience is given in flat pattern designing, draping and adaptation of commercial patterns. Creative problems are planned to develop skill in the application of art principles and an understanding of fitting problems.
189. ADVANCED CLOTHING CONSTRUCTION. Two hours credit. Prerequisites, H.E. 72, 73, 188. Garments are constructed from designs created in H.E. 188. This provides the student with an opportunity to develop greater skill in solving construction and fitting problems.

191a. HOME MANAGEMENT THEORY. Three hours credit.
A study of the use of human and material resources in achieving family goals. Planning for the management of time, energy and money. A study of the selection, operation and care of equipment. Methods used in the care of the house and the family laundry.

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 Margaret Roudebush Home Management House on the campus. Here they put into practice desirable standards of home living.
192. METHODS IN THE TEACHING OF HOMEMAKING. Three 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 material. Includes directed observation.
198. MEAL PLANNING AND SERVICE. Four hours credit.

Prerequisites, H.E. 77, 78 or 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 modern American home. Two single and two double periods weekly.
199. PRESERVATION OF FOOD. Two hours credit.

Prerequisites, H.E. 77, 78 or equivalent. Discussions and laboratory practice in home methods of food preservation by the water bath, pressure cooker, drying, and quick freeze techniques. Observations of commercial methods of food preservation. One single and one double period per week.
8209. NEW TRENDS IN NUTRITION. (Credit for this course may be obtained in Home Economics or Health and Physical Education). Four hours credit.
A detailed study of the value of carbohydrates, fats, proteins, minerals and vitamins in human nutrition. A comprehensive study of nutrition problems in health education. A study of the latest research will be made.

## 243. ART IN CONTEMPORARY LIVING. Three hours credit.

This class deals with the following problems: selection of clothing for the individual man or woman, selection and arrangement of furnishings suitable to the modest home, correct serving of refreshments and informal meals, and attractive, inexpensive table decorations.
§260. NURSERY SCHOOL EDUCATION. (Credit may be obtained in Edu-cation or Home Economics). Three hours credit.
Aims and procedures of the modern nursery school. Includes housing, equipment, food service, health measures, teacher responsibilities and a study of the ways in which growth can be directed. Students must be able to arrange four morning hours per week for observation in the nursery school.
§261. PARTICIPATION IN NURSERY SCHOOL. (Credit may be obtained in Education or Home Economics). Three hours credit.
A course which provides practical application of principles developed in Nursery School Education, Home Ec. 260. Emphasis on individual and group guidance, nursery school curriculum planning and parent-teacher relationships. Includes teaching activities in the nursery school and related readings and discussion. Permission of instructor necessary for enrollment.
268. FAMILY HOUSING. Two hours credit.

A study of housing as it relates to family living. Students learn basic principles and acquire information needed for solving housing problems of typical family groups. Students consider the financing of housing, family needs, and procedures in buying, renting, and building. Plans are made for building and remodeling family housing units.
275. HOME FURNISHING. Three houts credit.

A study of the application of art principles to the selection of furnishings for homes of various types. Emphasis is given to the importancel of considering the needs and resources of the family for intelligent choice, arrangement and care of furnishings.
277. NUTRITION AND THE SCHOOL LUNCH PROGRAM. Four hours credit.
A study of the school lunch program, its organization and management, its effect on the food habits and nutritional state of the elementary and secondary school pupil, and its place as an integral part of the total school program.
279. PRESERVATION OF FOOD. Four hours credit.

Prerequisites, H.E. 77, 78 or equivalent. Open kettle, water bath, pressure cooker, quick freeze, and dehydration methods are discussed and home methods of these types of food preservation are practiced in the laboratory. Commercial canning methods are discussed and observed.
282. NUTRITION IN DISEASE. Three 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.
284. DEMONSTRATION TECHNIQUES. Two hours credit.

Prerequisites, H.E. 72, 77 or equivalent. Practice in the techniques of demonstrating before audiences. All phases of the Home Economics field will be used to furnish types of demonstrations. Four single periods per week.
285. EXPERIMENTAL COOKERY. Three 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.
286. QUANTITY COOKERY. Four hours credit.

Prerequisites, 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. Techniques of buying food in large quantity. The facilities of the student dining halls and the school lunch program are available for laboratory a, signment. Three single periods per week. Twenty hours laboratory per quarter.
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. Criteria are established for buying equipment needed in various types of institutions.
291. MANAGEMENT IN FAMILY LIVING. Four hours credit.

A study of the use of human and material resources in achieving family goals. Planning for the management of time, energy and money. A study of the selection, operation and care of equipment. Methods used in the care of the house and the family laundry are stressed.
292. IMPROVEMENT OF INSTRUCTION IN HOMEMAKING. Four hours credit.
This course is planned for home economics majors and graduate students who wish to take their methods in the summer quarter. A study of the philosophy of homemaking education, characteristics and needs of adolescents, organization of the curriculum, methods and materials.

## 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.
294. INSTRUCTION AIDS IN HOME ECONOMICS. Two houts credit. Students develop and use criteria in evaluating teaching materials and aids. Selecting, organizing and storing of aids is included. Visual aids.and devices used in teaching various phases of homemaking are planned and prepared.
295. TAILORING. Four hours credit.

Prerequisites, H.E. 72, 73 or equivalent. Opportunity for developing skill is presented in the construction of wool suits and coats. Four hours laboratory per week required.
298. PROBLEMS IN FOOD SERVICE. Four hours credit.

Prerequisites, H.E. 77, 78 or equivalent. A study dealing with the problems in food. service which confront the Home Economics teacher. This course will cover the service of food in the home as well as catering for school banquets, receptions and other special school functions where food is served. Three single and two double periods weekly.
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. SUPERVISION OF STUDENT TEACHING IN HOME ECONOMICS. One and one-half to four hours credit.
The qualifications, objectives and responsibilities of the supervising teacher are analyzed. Supervision techniques and methods of evaluating the development of the student teacher are stressed.
302. TEACHING PROBLEMS IN HOMEMAKING. (Summer Session only). Four houts credit.
Modern methods and trends in homemaking education. Problems of the individual teacher are studied and assistance is given the student in working out practical solutions. Common problems are considered by the entire group.
303. TEACHING HOMEMAKING AND RELATED SUBJECTS. (Summer Session only). Four hours credit.
A study of the philosophy and development of homemaking education. Vocational homemaking programs in reimbursed schools, home experiences and homemaking clubs are emphasized. Related subjects of art and science in homemaking are stressed. Cooperative planning, teaching aids, methods and techniques, evaluation and space and equipment are studied.
306. HISTORY OF COSTUME. (Summer Session only). 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 of dress design by students of art in our own country.
307. CLOTHING ECONOMICS. (Summer Session only). Four hours credit.
A study of family and individual clothing problems: Standardization, labeling, consumer protection, recent textile developments, consumer purchasing surveys, custom and wholesale production methods. The relation of fashion to manufacturing and consumption of clothing.
322. INDIVIDUAL STUDIES IN HOME ECONOMICS. (Summer Session only). Two or four hours credit for one problem; a maximum of eight hours credit is permitted.
The course provides for independent study, particularly in those phases of a field of specialization not provided for in formal class courses. A comprehensive written report of each study is required. Admission by special permission of the major professor.
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 considered. A study of Oriental, European, English and American textiles, the synthetic fibers and recent developments in textiles.
380. THE TEACHING OF FAMILY LIVING. (Summer Session only). Four hours credit.
The needs of adolescents and the place of family living in the curriculum. Objectives, course and unit planning, content, teaching techniques, and evaluation of achievement are included. Reference materials, aids and resources and their use. Students receive help with individual problems.
385. RESEARCH IN FOODS. (Summer Session only). Four hours credit. Prerequisites, H.E. 77, 78 or equivalent. A study of the recent findings in food research. Opportunity is given for individual investigation in some problems of food preparation. Valid techniques of experimentation are stressed.
396. DRESS DESIGN IN DRAPING. (Summer Session only). Two hours credit.
Prerequisite, H.E. 188 or equivalent. Problems to develop original discrimination and techniques in costume design, developed with the means of draping fabrics. A problem selected and done on the student's own initiative.
399. THESIS. Eight hours credit.

## INDUSTRIAL ARTS MAJOR Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 76, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed below.
(3) One minor of 24 quarter hours outside the Division of the Arts.
(4) 28 to 35 quarter hours of free electives to complete 180 quarter hours of academic credit required for graduation. Programs must be planned with the student's adviser.

## INDUSTRIAL ARTS MAJOR Bachelor of Arts Degree (With Teaching Certificate)

 Required courses in the major:
*Required courses in the major. Select six hours from:
COURSE NUMBER COURSE TITLE HOURS CREDIT
I. A. 234 - - - History of Industrial Arts - - - - - 4
I. A. 235 - - - Philosophy of Industrial Arts - - - - 3
I. A. 236 - - - Principles of General Shop Organization - - 3
I. A. 238 - - - Current Theory and Practice in the Arts - - 3
I. A. 240 - - . Course Organization in Industrial Arts - - 3
I. A. 241 - - The Place of the Arts in General Education - 3

## Industrial Arts Minor

## COURSE NUMBER

COURSE TITLE
HOURS CREDIT
I. A. 50a - - - Bench Woodwork - - - - - - 3
I. A. 50b - - - Intermediate Woodwork - - - - . 3
I. A. 50 c - - - Machine Woodwork - - . . . - - 3
I. A. 61a - - - Principles of Drafting - - - - - 3
I. A. 61b - - - Principles of Drafting - - . - - 2
I. A.V 61c - - - Principles of Drafting - - - - - . 3
I. A. (electives) - - - - - - - - - - . - - - 7 24

Ed. 150b, Methods and Observation of Teaching Industrial Arts in Secondary Schools (Five hours credit), does not count toward the Minor but is recommended as an elective.

Course substitutions will be made for students who expect to become craft counsellors, playground instructors, et cetera.

## Graduate Study

Detailed information about the Graduate program may be obtained from the Graduate Bulletin. Course work will be outlined by the student's major professor.

## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (8) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.
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.

46a,b. BOOKBINDING. Two to five hours credit.
Practical problems presented to develop basic elementary skills in hand bookbinding.
Unit a. Beginning kinds of fastening sheets together and elementary types of binding applicable to an elementary arts program. Three hours credit.
Unit b. Intermediate binding problems with a unit of bookcrafts. Binding with limited "home-made" equipment is covered for all types of hand binding. Two hours credit.

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

50b. INTERMEDIATE WOODWORK. Three hours credit.
A continuation of 50 a , with emphasis on more advanced hand woodworking processes.

50c. MACHINE WOODWORK. Three hours credit.
Prerequisite, 50a, 50b or equivalent. Experience in the use of common machines found in the average woodworking shop.
54a,b. WORKSHOP IN INDUSTRIAL ARTS FOR ELEMENTARY TEACHERS. Three hours credit each quatter.
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.
55a. INTRODUCTION TO GENERAL METAL. Three hours credit.
First in a sequence of metal courses. Basic shop procedures, objectives, and relationship to other types of work in metal. Emphasis on elementary bench metal, sheet metal, and forge practice.

57a. ELEMENTS OF ART METAL. Two hours credit.
Prerequisite, 55a. Elementary course in art metal work including bowl and tray construction, etching, pierce work, soft and hard soldering, planishing and finishing of copper and aluminum.

57b. ADVANCED ART METAL AND METAL SPINNING. Three hours credit.
Prerequisite, 57a. A course in advanced art metal concerned with the construction of copper, aluminum, brass, German silver and giving experience in extreme raising, chasing and repousse, and metal spinning.

59a. ELEMENTS OF GÅ AND ELECTRIC WELDING. Two hours credit. Prerequisite, 55a. An introductory course in the field of gas and electric welding of mild steel and simple fabrication of projects.

59b. ADVANCED GAS AND ELECTRIC WELDING. Three hours credit. Prerequisite, 59a. Advanced course in gas and electric welding which will include flat, horizontal, vertical, and overhead welding, bronze welding, cast iron welding, use of low temperature alloy rods, and the fabrication of projects and teaching aids peculiar to this area.

61a,b,c. PRINCIPLES OF DRAFTING. Two to eight hours credit.
Practical problems in drafting and planning as accomplished in the following courses:
Unit a. Geometric construction, orthographic projection, sectional views, auxiliary projection, and pencil tracing. Three hours credit.
Unit b. Revolution, isometric, inking, oblique, and cabinet drawing. Two hours credit.
Unit c. Perspective, dimetric, shading, freehand sketching, and blueprinting. Three hours credit.

137a,b. PROBLEMS IN UPHOLSTERY. Two hours credit each quarter.
Techniques and processes in upholstery using various types for all grade levels.

141a,b,c,d. ELEMENTS OF PRINTING. Two to ten houts credit.
Experience with the fundamental operations used in a school graphic arts shop; information as to tools, machines, and materials; the place of printing in community life, and the relationship between printing and other subjects of the curriculum.
Unit a. Three hours credit.
Unit b. Two hours credit.
Unit c. Three hours credit.
Unit d. Two hours credit.

146 c , d. BOOKBINDING. Two to five hours credit.
Prerequisite, 46a,b. Advanced binding problems, including leather binding and advanced bookcrafts.
Unit c. Magazine binding in heavy buckrams, including appropriate sewing in terms of use of book. Course includes a unit on book repairing. Three hours credit.
Unit d. Half-goat bindings of magazines. Special unit on gold lettering, and an advanced unit in bookcrafts is presented. Two hours credit.

147a,b. PROBLEMS IN LEATHERWORK. Two to five hours credit.
Development of basic techniques in leatherwork. Tool designing and tool making for camps and school shops. Study of tanning and relation of work to other areas.
Unit a. Three hours credit.
Unit b. Two hours credit.
148a,b. GENERAL PLASTICS. Two to five hours credit.
An opportunity to become proficient in working with the many kinds of plastics for either a unit or general shop.
Unit a. Two hours credit.
Unit b. Three hours credit.
149. BOOKBINDING FOR SCHOOL LIBRARIANS. Three 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. ADVANCED FURNITURE AND CABINET MAKING. Three hours credit.
Prerequisites, I.A. 50a,b or equivalent. Emphasis on machine use. Students design and construct period and modern pieces of furniture. Study of production methods in industry. Advanced upholstering and wood finishing techniques.

150e. WOODFINISHING. Two hours credit.
Prerequisite, 50a or equivalent. Techniques and processes in wood finishing. Experience with traditional and new types of materials. A study of the needs of public school shops in this area of work.

[^5]151b. EQUIPMENT AND MAINTENANCE PROBLEMS IN METALS. Three hours credit.
Prerequisite, 55a, 57a or equivalent. Up-keep and repair of metalwork tools and machines. Selection and purchase of metalwork tools, machines and supplies for a school shop.

153a,b. WOODTURNING. Two hours credit each.
Prerequisite, 50a or equivalent.
Unit a. Development of basic skills in woodturning.
Unit b. The use of the lathe to supplement bench and machine woodwork.
155a. ELEMENTS OF MACHINE LATHE OPERATION. Two hours credit.
Prerequisite, 55a. An introductory unit concerned with the basic operations performed on a machine lathe including straight and taper turning, thread cutting, and other operations.

155b. ADVANCED MACHINE TOOL OPERATION. Three hours credit. Prerequisite, 155a. Advanced course in machine lathe operation and elementary work with the shaper, milling machine and surface grinder.

157a. ELEMENTS OF JEWELRY WORK. Two hours credit.
Prerequisites, 55a, 57a or equivalent. An introduction into the basic process of jewelry construction including silver soldering, sawing, filing, ring constructions, simple silversmithing and setting stones.

157b. ADVANCED JEWELRY AND LAPIDARY WORK. Three hours credit.
Prerequisite, 157a. This course is designed to give advanced work in jewelry construction and silversmithing with the student cutting and polishing his own setting as an introduction to lapidary work.

161d,e,f. PRINCIPLES OF DRAFTING. Two to seven hours credit.
Prerequisites, 61a,b,c. Practical problems in drafting and planning as accomplished in the following courses:
Unit d. Intersections and pattern development. Two hours credit.
Unit e. Beginning architectural drafting. Three hours credit.
Unit f. Machine drafting and graphic methods in education. Two hours credit.

163a,b. GENERAL SHOP ELECTRICITY. Two to five hours credit.
Elementary principles of electricity that are applicable to projects in the junior and senior high schools. An opportunity will be given to make such projects. Second course will include a unit on house wiring.
Unit a. Two hours credit.
Unit b. Three hours credit.

## 232. IMPROVEIIENT OF INSTRUCTION IN THE ARTS. Three hours

 credit.An analysis of current difficulties and weaknesses in teaching the arts. Curriculum probems, objectives, methods, and administrative and community pressures are studied.
233. MATERIAI S OF INDUSTRY. Three hours credit.

A study of he origin of the materials used in industrial arts classes and processes inv slved in the manufacture of each material. Methods of presenting the elated information and consumer knowledge of each material area are pres nted.
234. HISTORY JF INDUSTRIAL ARTS. Fout hours credit.

A study of the origin, movements, and leaders responsible for theories and philosophies of industrial arts. First half of course includes studies up to 1870; secon 1 half deals with progress from 1870 to the present.
235. PHILOSOP HY OF INDUSTRIAL ARTS. Three hours credit.

Prerequisites, I.A. 234 or equivalent. A study of the conflicts in the teaching of ndustrial arts. Relationship of philosophy to actual practice.
236. PRINCIPLI $\mathrm{S}_{\mathrm{S}}$ OF GENERAL SHOP ORGANIZATION. Three hours credit.
The purpose: and philosophy underlying the organization of general shops.
237. DEVELOPj KENT OF INSTRUCTIONAL AIDS IN INDUSTRIAL ARTS. Th ree hours credit.
Visual aids, nstruction sheets, charts, graphs, and other instructional devices are planned and developed. The student will select, plan, and construct, where apprc priate, various instructional aids.
238. CURRENT THEORY AND PRACTICE IN THE ARTS. Three hours credit.
Current con roversial issues which confront the teacher of the arts. Problems of star dardization, laboratory organization, administrative and community attit ides, and correlation with other departments.
239. ORGANIZATION AND ADMINISTRATION OF INDUSTRIAL EDUCATICN. Three hours credit.
A study of he purposes and programs of industrial education in secondary schools, incl Iding industrial arts and vocational-industrial education. Special emphasi: upon the program of vocational-industrial education as provided throu sh the Smith-Hughes Act, the George-Dean Act, and other pieces of fer eral legislation.
240. COURSE (JRGANIZATION IN INDUSTRIAL ARTS. Three hours credit.
Criteria und relying the organization of a course of study in industrial arts. Techniques by which courses are developed or revised. Each student prepares a cour e of study in the field of his interest.
241. THE PLACE OF THE ARTS IN GENERAL EDUCATION. Three 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. Three hours credit each.
Prerequisite, $141 \mathrm{a}, \mathrm{b}, \mathrm{c}$ or equivalent. Treats printing as a great art and deals with the origin, development and application of the principles of design in the field of typography.
247. ADVANCED CONSTRUCTION PROBLEMS. Three hours credit.

Prerequisite, 50a,b,c or equivalent. A course for advanced woodworking students with emphasis on application of steel square to construction problems.

248a,b. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN BOOKBINDING. Three hours credit each.
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. Second course provides opportunity to do creative work in gold and leather on bindings.
250. CONTEMPORARY FURNITURE DESIGN AND FABRICATION. Five hours credit.
A brief introduction of recognized periods of furniture design leading to the present concept of functionalism and the techniques of fabricating contemporary design.
254. THE ARTS IN RECREATION. Three hours credit.

The organizing of various types of craft work for a recreational program. Problems of finance; opportunity to develop proficiency.
255. THE USE OF NEW MATERIALS. Three hours credit.

A study of the newer materials of industry and methods of adapting them for use on both junior and senior high school levels.
256. ADVANCED ART METAL. Three hours credit.

Prerequisites, 55a, 57a or equivalent. This will be an advanced course in art metal and metal spinning including work in extreme raising, repousse, chasing, use of sectional chucks and others.
257. ADVANCED GENERAL METAL WORK. Three hours credit.

Prerequisite, 55a or equivalent. This shall serve as an advanced course in bench metal work, machine lathe, welding, jewelry and lapidary. This will include an elementary unit in foundry work in the casting of aluminum.
264. INDUSTRIAL ARTS DESIGN. Three hours credit.

Principles of design as they apply to the several areas of industrial arts.
290. INDUST ZIAL ARTS IN AMERICAN EDUCATION. Three hours credit.
A summer pre-session course which considers several important phases in the develo ment of the arts as a part of general education.
300. INTROL UCTION TO GRADUATE STUDY. Four hours credit. A study , if the literature and research in the arts. Criteria for the selection of giaduate work in industrial arts for subsequent quarters. Study of research $t$ chniques. Required of all graduate majors in industrial arts. Taught $j$ intly with home economics and fine arts majors.
301. SEMINAR IN INDUSTRIAL ARTS. Three hours credit.

An opportunity for students doing independent research to report and receive criti ism.
302. A CRI7IQUE OF MODERN INDUSTRIAL ARTS. Three hours credit.
A course in which several instructors participate. Men of divergent points of view 1 resent and defend ideas of common interest to today's industrial arts teach r.
322. INDIVII)UAL STUDIES IN INDUSTRIAL ARTS. Four hours credit. Opportun ity for independent study not provided in regular classes. Open only to $q$ ralified students. Typewritten paper required.

333a,b,c. INLIVIDUAL PROBLEMS IN INDUSTRIAL ARTS. Three hours cre lit each.
Open to selected students for special work not offered in regular classes.
343. TEACH NG TECHNIQUES AND COURSE ORGANIZATION IN THE GR APHIC ARTS. Three hours credit.
The tech tiques and objectives of the graphic arts; their historical development and place in our cultural background; art in printing; shop planning, equipmen: and management; course content and organization.
344. PROBLI:MS OF DESIGN IN THE GRAPHIC ARTS. Three hours credit.
Course is centered around graphic arts problems found in individual projects, with em hasis upon methods of teaching students to recognize, appreciate and use he principles of design on the printed page.
351. TEACHING TECHNIQUES AND COURSE ORGANIZATION IN WOODV'ORKING. Three hours credit.
Prerequis te, $50 \mathrm{a}, \mathrm{b}, \mathrm{c}$ or equivalent. Critical study of current practices. A "refreshe" course for teachers who have been away from the field. Includes techniques in both bench and machine work.
352. PROBL IMS IN WOODWORKING. Three hours credit.

Prerequis te, 351 or equivalent. A study of the problems the specialized teacher o: woodworking in secondary schools must meet.
359. TEACHING TECHNIQUES AND COURSE ORGANIZ. METALWORK. Three hours credit.
Prerequisites, 55a, 57a or equivalent. This course shall includ course content, shop organization, evaluation and methods of various phases of metal work.
360. PROBLEMS OF THE METAL SHOP. Three hours credit. Prerequisite, 359 or equivalent. Advanced course in the orga both unit and general metal shops and shop practice handled on basis, giving the graduate students an opportunity to work $c$ they have confronted in the field.

362a,b. PROBLEMS IN DRAFTING AND PLANNING. Three each.
Prerequisite, 61a,b,c. Objectives, course content, and teaching $p$ all units in drafting. Courses are set up in terms of individual 1

368a,b. ADVANCED ARCHITECTURAL DRAFTING. (Sum1 only). Four hours credit each.
Prerequisite, 161e or equivalent. Advanced home and scho planning. Laws, standards, and computation of cost. Open to ministrators as well as industrial arts teachers.
399. THESIS. Eight hours credit.

## Division of Education

The Div: sion of Education offers the following programs:

1. An indergraduate and graduate major in Elementary Educition.
2. A major in General Secondary leading to the Bachelor of Arts degree is offered in the Division of Education for stude its who do not select a major in any one of these Divis ons-Arts, Health and Physical Education, Humanities, Music, Sciences, Social Studies.

This program requires one of the following two plans: (a) :our subject matter minors of at least 24 quarter hours each in four different teaching fields or (b) three subje :t matter minors of at least 35 quarter hours each in three different teaching fields.
3. A gri duate major in Educational Administration.
4. A griduate major in Educational Psychology and Guidance.
5. A griduate major in Secondary Education.
6. An indergraduate and graduate major in Business Educatio 1.
7. A mar in Library Science.

## GENERAL SECONDARY MAJOR Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 109, plus 6 quarter hours of physical activity.
(2) Three subject matter minors of at least 35 quarter hours each in three teaching fields.
(or)
Four subject matter minors of at least 24 quarter hours each in four teaching fields.
Programs must be planned with the student's adviser in the Division of Education. Students starting this major should consult first with the chairman of the Division of Education.

## ELEMENTARY EDUCATION MAJOR Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 109, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed on Page 107.
(3) 52 to 59 quarter hours of electives to complete 180 quarter hours of academic credit required for graduation. Electives will be selected in consultation with the adviser of elementary majors from these fields: art, English, geography, history, home economics, music, science, and sociology.
Elementary education majors will find it valuable to be able to play simple piano accompaniments. Students may enroll for group piano instruction.
Programs must be planned with the student's adviser.

## ELE MENTARY EDUCATION MAJOR Bachelor of Arts Degree (With Teaching Certificate)

Required courses in the major:

| COURSE NUM 3ER |  |  |  |  | COURSE TITLE HOURS CR |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ed. | 52 | - | - - |  | Teaching the Elementary School Subjects | 5 |
| Ed. | 210 | - | - - |  | Improvement of Instruction in Reading in the Elementary School - | 3 |
| Ed. | 211 | - | - - |  | Improvement of Instruction in Language in the Elementary School - | 3 |
| Ed. | 212 | - | - - |  | Improvement of Instruction in Arithmetic in the Elementary School - | 3 |
| Ed. | 213 | - | - - |  | Improvement of Instruction in Social Studies |  |
| Eng. | 221 | - | - - |  | Literature in the Elementary School | 3 |
| F. A. | 124 | - | - - |  | Art in the Elementary School |  |
| Geog. | 48 | - | - - |  | United States - - - |  |
| Hist. | 75 | - | - - |  | Unit Survey of United States History - - |  |
| Mus. | 14¢ | - | - - |  | Music Methods and Materials for Elementary Teachers | 3 |
| H. P. E. | $20^{\prime}$ | - | - - |  | School Health Education - - - |  |
| H. P. E. | 88a,k, c | - | - - |  | Physical Education Activities for the Ele mentary School |  |
| Sci. | 191 | - | - - |  | Methods of Teaching Science in the Ele mentary School |  |

## Elementary Education Minor

COURSE NUN BER COURSE TITLE HOURS CREDIT


## Graduate Study

Detailed information about the Graduate program may be obtained from the Graduate Bulletin. Course work will be outlined by the student's major professor.

## LIBRARY SCIENCE MINOR

The following program offers 24 quarter hours of credit to meet the North Central Association requirements for a teacherlibrarian in a high school having a student enrollment of 499 or less. Courses in this program are offered over a period of three summers.

Ed. 280 -Organization and Administration of a School Library, Four hours credit.
Ed. 281 -Classification and Cataloging. Four hours credit.
Ed. 282a-Materials for School Libraries, Four hours credit. Prerequisites, Ed. 280, 281.
Ed. 282b-Materials for School Libraries, Four hours credit. Prerequisites, Ed. 280, 281, 282a.
Ed. 283 - The Librarian and the School, Four hours credit. Prerequisites, Ed. 280, 281.
Eng. 226-Literature and Materials in Secondary Schools. Four hours credit.

## COMMON COURSES <br> Bachelo of Arts Degree (With Teaching Certificate)

The Com non Courses listed here are required of all students who are studying for a Bachelor of Arts degree with teaching certificate.



## Junior and Senior Years

| COURSE | NUM ${ }^{\text {a }}$ |  |  |  | COURSE TITLE |  | HOURS | CREDIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ed. | 10! | - | - - | - | American Education |  | - - | - - 3 |
| Ed. | 1511 | - | - - | - | Methods and Observation |  | - | - - 5 |
| Ed. | 15 |  | - |  | Student Teaching |  | - | 8 to 15 |
| Ed. | 21. |  | - - | - | The Elementary School |  |  |  |

Ed. 211 - - - The Secondary School - . . . - 3
Ed. 29! - - - Philosophy of Education - - - - 3

## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (8) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.
25. GENERAL PSYCHOLOGY. Five hours credit.

Designed to help students adjust to their physical and social environment in such areas as effective study, learning and maturation, motivation, perception, emotional control, personality development, and methods of studying human behavior through an understanding and application of some of the basic principles governing human behavior.
26. CAMP FIRE GIRLS' LEADERSHIP. Two hours credit.

Training for leadership in educational, character-building extracurricular activities for girls. The course leads to the National Training Course Certificate of the Camp Fire Girls.
27. BOY SCOUT LEADĘRSHIP. Two hours 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.
28. GIRL SCOUT LEADERSHIP. Two hours credit.
General knowledge of the aims and content of the Girl Scout program.
Designed especially for young women interested in becoming leaders of
Girl Scout troops.
30. TEACHING IN SMALL COMMUNITY SCHOOLS. Three hours credit. This course deals with school management, grouping pupils for instruction, making lesson assignments, directing study, conducting recitations, adapting materials and activities to class groups whose members differ greatly in age, achievement, and ability, and with making the school play an effective role in community improvement.

## 52. TEACHING THE ELEMENTARY SCHOOL SUBJECTS. Five hours credit.

Prerequisite, Ed. 25. This course deals with the teaching of the language arts, arithmetic, and social studies in the elementary school. It is a course preliminary to student teaching (elementary majors), to be completed during the same quarter in which the student enrolls in Education 150 a . Not open to freshmen.

## 52a. TEACHING OF READING AND ARITHMETIC IN THE ELEMENTARY SCHOOL. Four hours credit. <br> Deals with approved methods and materials useful for teaching reading and arithmetic in rural or small elementary schools. Open only to teachers who have had teaching experience in elementary grades.

105. AMERICAN EDU こATION. (This course should be taken before Ed. 214 or 216). Thre: hours credit.
Prerequisites, Ed. 2!, 77, 85 or equivalents. Objectives of education, techniques of education il thinking, characteristics and trends in the American school system, the :eneral program of education, levels of education, fed-eral-state-local relations, problems of teacher education, and welfare.

## 120. INDIVIDUAL EI)UCATIONAL RESEARCH FOR JUNIOR COL-

 LEGE STUDENTS. Two to eight hours credit.Qualified undergraduate students outline and spend a minimum of twentyfive clock hours per quarter hour on a problem. Two copies of a well written paper must be filed before credit is given, one with instructor and one with chairman of division.

150a. OBSERVATION AND METHODS (Elementary Majors). Five hours credit.
Prerequisite, Ed. 25 and 77. A course preliminary to student teaching, to be completed during the same quarter in which the student enrolls in Education 52. Double period, daily class meetings part of which are spent in consideration of general classroom procedures, part in carefully directed observation and participation in an elementary classroom. Group conferences at 4:00 p. m. each Tuesday.

## 150b. METHODS AND OBSERVATION OF TEACHING FINE ARTS IN SECONDARY SCHOOLS. Five hours credit.

Prerequisite, Ed. 105. Methods of teaching fine arts in the junior-senior high school. Classroom organization, the recognition of development and individual growth, techniques and materials, and teaching techniques are the points of emphasis and observation.

150b. METHODS AND OBSERVATION OF TEACHING INDUSTRIAL ARTS IN SECONDARY SCHOOLS. Five hours credit.
Prerequisite, Ed. 105. Teaching methods in industrial arts including problems of class organization, unit development, classroom procedures, cost accounting and evaluation. To be taken quarter student is doing student teaching if possible.

150b. METHODS AND OBSERVATION OF TEACHING HOME ECONOMICS IN SECONDARY SCHOOLS. Five hours credit.
Prerequisite, Ed. 105. This course is planned for home economics majors. A study of the philosophy of homemaking education, organization of the curriculum, methods and materials.

## 150b. METHODS AND OBSERVATION OF TEACHING ENGLISH IN

 SECONDARY SCHOOLS. Five hours credit.Prerequisite, Ed. 105. Presentation of those methods that have proved desirable and valuable in developing adequate performance in all phases of communication. Presentation of literature suitable for high school students.
55. TEACHING OF HISTORY AND GEOGRAPHY. (Summer Session only). Four hours credit.
A methods course in teaching history and geography in the elementary school as separate subject matter courses or as a unified social studies course.
77. PSYCHOLOGY OF CHILDHOOD AND YOUTH. Three houts credit. Prerequisite, Ed. 25, or acceptable equivalent. A course designed to assist prospective teachers to build competence in understanding and guiding the physical, mental, social, and emotional development of children and youth; emphasizes total psychological development from school age to maturity.
78. EDUCATIONAL PSYCHOLOGY. Three hours credit.

Prerequisite, Ed. 25 , or acceptable equivalent. A course designed to assist prospective teachers to build competence in directing pupil learning based upon psychological principles of learning, motivation, readiness, practice, transfer, individual differences, and evaluation.
85. COMMUNITY LIFE AND PROBLEMS. Three hours credit.

Prerequisite, Ed. 25. 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.

888a. PHYSICAL EDUCATION ACTIVITIES FOR THE ELEMENTARY SCHOOL. (Credit may be obtained in Health and Physical Education or Education). Two hours credit.
Prerequisite, physical education activity courses related to elementary schools. Required course for majors in elementary education. Content deals with the basic principles recognized in planning physical education program for elementary school pupils. Emphasis given to play activities as well as the regular physical education program. One hour lecture and 3 hours laboratory weekly.
888b. PHYSICAL EDUCATION ACTIVITIES FOR THE ELEMENTARY SCHOOL. (Credit may be obtained in Health and Physical Education or Education). One hour credit.
Required course for majors in elementary education. Emphasis given to the physical education program and play activities appropriate for elementary school pupils during tre winter months. Three hours laboratory weekly.
§88c. PHYSICAL EDUCATION ACTIVITIES FOR THE ELEMENTARY SCHOOL. (Credit may be obtained in Health and Physical Education or Education). One hour credit.
Prerequisites, H.P.E. 88a,b. Required course for majors in elementary education. Emphasis given to the physical education program and play activities appropriate for elementary school pupils during the spring months. Three hours laboratory weekly.

## 150d. OBSERVATION AND PARTICIPATION IN ELEMENTARY SCHOOL MUSIC. Three hours credit. <br> Prerequisites, Ed. 105 and Music 50a, 50b, 50c. For further and more concentrated experience in school music on the elementary level. The student actively participates in the classes in which he observes, and studies classroom teaching procedures and methods and values with an eye to his own future student teaching.

## 150e. OBSERVATION AND PARTICIPATION IN SECONDARY SCHOOL

 MUSIC. Two houts credit.Prerequisites, Ed. 105 and Music 50a, 50b, 50c. Advanced methods and instructional problems in high school music teaching, observation and participation in a designated music class in college or high school; class discussion of students' problems occurring in observation and participation.

150 g . METHODS AND OBSERVATION OF TEACHING PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL. Three hours credit.
Prerequisite, Ed. 105. A study of mental, emotional, physical and social needs of children of elementary school age levels, and the planning of a program, selection of materials and methods of teaching physical education at these levels.

150h. METHODS AND OBSERVATION OF TEACHING PHYSICAL EDUCATION IN SECONDARY SCHOOLS. Two hours credit.
Prerequisite, Ed. 105. 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.
151. STUDENT TEACHING. Four to fifteen hours credit.

Prerequisites, Ed. 105; Ed. 52 and 150 a for elementary majors; for secondary majors, secondary methods and observation. Includes planning teaching, teaching under the direction of supervising teacher, evaluating teaching in conference with supervising teacher, improving teaching through repeated practice and re-evaluation, and participation in school and schoolcommunity activities.
§188. PHYSICAL EDUCATION ACTIVITIES FOR THE ELEMENTARY SCHOOL. (Credit may be obtained in Health and Physical Education or Education). (Summer Session only). Four hours credit.
Designed to furnish the elementary teacher with materials and laboratory experiences in physical education activities for the elementary school program or activity period.

[^6]150b. METHODS AND OBSERVATION OF TEACHING FOREIGN LANGUAGES IN SECONDARY SCHOOLS. Five hours credit.
Prerequisite, Ed. 105. A study of teaching procedures in foreign languages at the secondary school level. Includes study of content for courses of study, organization of learning materials, procedures in teaching, testing and evaluation.

150b. METHODS AND OBSERVATION OF TEACHING SPEECH IN SECONDARY SCHOOLS. Five hours credit.
Prerequisite, Ed. 105. A study of teaching procedures in speech education.
The course will give the student a knowledge of current practice including objectives of instruction, methods of attaining them, relationship of speech education to total school program.

150b. METHODS AND OBSERVATION OF TEACHING SCIENCE IN SECONDARY SCHOOLS. Five hours credit.
Prerequisite, Ed. 105. An introductory course in science education in which the student studies the major problems of science education. (1) What should I teach? (2) How should I teach it? (3) How do I know when I have taught it? The professional work of the science teacher in relation to organizations, publications, and community relationships is presented.

150b. METHODS AND OBSERVATION OF TEACHING MATHEMATICS IN SECONDARY SCHOOLS. Five hours credit.
Prerequisites, Ed. 105, basic algebra and geometry. A course designed for those who mast give thought to the place and function of mathematics in the secondary program. Method of organizing and presenting content material, with emphasis upon instructional problems and specific difficulties.

150b. METHODS AND OBSERVATION OF TEACHING SOCIAL STUDIES IN THE SECONDARY SCHOOLS. Five hours credit.
Prerequisite, Ed. 105. The objective of this course is to introduce students to the problems of teaching social studies in secondary schools and to develop techniques for use in meeting these problems. It will acquaint the students with materials and methods for use in teaching secondary school social studies.

## 150b. METHODS AND OBSERVATION OF TEACHING BUSINESS EDUCATION IN SECONDARY SCHOOLS. Five hours credit. <br> Prerequisites, Ed. 105 and 216. The methods of teaching typewriting, shorthand, bookkeeping, office practice, general business, and distributive education at the secondary level.

8213. IMPROVEMENT OF INSTRUCTION IN SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. (Credit may be obtained in Education or Social Studies). Three hours credit.
Prerequisite, student teaching or public school experience. Seiection and organization of content, learning activities, problem-solving, social skills and attitudes through the first six grades. Emphasis is placed upon materials and methods for teaching a unified and correlated social studies program.

## 214. THE ELEMENTARY SCHOOL. Three hours credit.

Prerequisite, Ed. 105, student teaching or public school teaching experience. The course deals with the following aspects of the elementary school: (1) its development and purposes, (2) its forms of organization, (3) the types of school records which the teacher uses, (4) problems of evaluating pupil progress and of promotion and retention, (5) the curricular offerings and the teacher's responsibility in determining these, (6) the members of the school staff and the teacher's relation to each.

## 215a. PRINCIPLES AND PHILOSOPHY OF GUIDANCE. Three hours

 credit.Purposes and scope of guidance services, including meanings and concepts, basic elements of such services, the personnel involved, and the organization and evaluation of programs.

215b. TOOLS AND TECHNIQUES OF GUIDANCE. Four hours credit. The study of the tools and techniques of guidance, including school records, measurement, interview, case study, group guidance, placement and follow-up, and the use of referral resources.

215c. OCCUPATIONAL INFORMATION AND ANALYSIS. Three hours credit.
Experience in using, reviewing, and evaluating occupational information. Study of sources and types of material, occupational filing plans, and practical techniques at the secondary school level.
215d. GUIDANCE IN ELEMENTARY SCHOOLS. Three hours credit.
The purposes and scope of guidance at the elementary level, with emphasis placed upon the functions of guidance in relation to children's needs, the functions of different guidance workers are indicated and an analysis is made of representative programs of elementary schools.
$215 e$,f. GUIDANCE WORKSHOP. (Summer Session only). Three hours credit each.
This course is designed to provide concentration of time and study on a special problem in guidance. The needs and interests of class members will determine to a certain extent the course content.
§215h. PSYCHOLOGY OF PERSONNEL MANAGEMENT. (Credit may be obtained in Business Education or Education). Four hours credit.
A study of the principles and techniques of personnel management with attention given to their psychological foundations.

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

Prerequisite, a general reading course or primary reading. Presents theories, research, and practices regarding readiness for reading in the first grade and on through the elementary school, as well as readiness for reading in the subject matter fields.

210 g . TEACHING SPANISH-AMERICAN CHILDREN. Three hours credit. Prerequisite, Ed. 210 or 210 a . The scope of bilingualism, methods, materials and techniques for teaching non-English speaking children, emphasizing foundational work in oral English for beginners, and a guidance program through the grades.

## 210h. LABORATORY COURSE IN TEACHING SPANISH-AMERICAN CHILDREN. Two houts credit.

Prerequisite, Ed. 210 or 210 a . A course in observation, participation, and remedial problems in the teaching of Spanish-American children of various ages, using materials and techniques suited to their needs in acquiring the language arts. Ed. 210 g , if not taken before, should be taken concurrently with this course.
$210 \mathrm{j}, \mathrm{k}, 1$. CONFERENCE ON THE TEACHING OF READING AND LANGUAGE IN ELEMENTARY SCHOOLS. (Summer Session only). Three hours credit each course.
This course is concerned with problems in the teaching of reading and language in the elementary school. The problems presented from time to time will vary according to the lecturers who appear on the program.
211. IMPROVEMENT OF INSTRUCTION IN LANGUAGE IN THE ELEMENTARY SCHOOL. Three hours credit.
Prerequisite, student teaching or public school experience. This course is the basic course in the teaching of language in the elementary school. It considers the scope and nature of an adequate program of instruction in language, and is concerned primarily with the identification of content to be taught and methods and materials to be used.

## 211a. LANGUAGE IN THE PRE-SCHOOL AND PRIMARY GRADES. Three hours credit.

A course in oral language from pre-school through grade three, and written language and the related skills of spelling and penmanship from first grade through grade three. Curriculum content, materials, and techniques will be studied.

## 211 e. TEACHING HANDWRITING AND SPELLING IN ELEMENTARY

 SCHOOLS. Two hours credit.Psychology and teaching of spelling and hand writing in the elementary school. Part of the time will be given to earning a certificate of handwriting from the preferred commercial company.

## 212. IMPROVEMENT OF INSTRUCTION IN ARITHMETIC IN THE ELEMENTARY SCHOOL. Three hours credit. <br> Prerequisite, student teaching or public school experience. Selecting what to teach, the grade placement of content, methods and materials of teaching, and means of evaluating achievement.

# 207. PERSONALITY OF YOUNG CHILDREN. Two hours credit. Prerequisite, a course in psychology. The development of personality from birth through the elementary school years including techniques for developing fine traits; and methods of diagnosis and treatment of problems of personality development which arise in the home and school. 

208a. AUDIO-VISUAL MATERIALS IN EDUCATION. Three hours ctedit.
Introduces students to most audio-visual materials and devices available for improving instruction; each type is demonstrated, and psychological basis for use is discussed as well as its characteristics, advantages and disadvantages; designed to be of value to all interested in education.

208b. AUDIO-VISUAL EQUIPMENT WORKSHOP. Two hours credit.
Prerequisite, Ed. 208a. Provides each student with opportunity to learn how to operate major audio-visual equipments, to do simple maintenance and how to produce lantern slides and mount and file pictures. Includes discussion of types, models and costs.

## 208c. UTILIZING RADIO IN EDUCATION. Three hours credit.

Discusses educational aspects of commercial radio and school and collegeowned broadcasting stations, types of programs available for school use, problems of scheduling and using the live broadcast, the use of records, tape recordings and transcriptions in improving instruction, the development and use of "audio" libraries.
210. IMPROVEMENT OF INSTRUCTION IN READING IN THE ELEMENTARY SCHOOL. Three hours credit.
Prerequisite, student or public school teaching experience. A detailed consideration of the content to be taught and the methods and materials to be used in the teaching of reading from the kindergarten through the sixth grade.

210a. READING IN THE PRIMARY GRADES. Four hours credit.
The nature of reading, the curriculum in reading from the preparatory period through the primary grades, the selection of effective materials of teaching, methods and techniques of teaching, and the use of various types of tests.

## 210d. REMEDIAL READING IN THE ELEMENTARY SCHOOL (Theory). Four hours credit.

Prerequisite, a course in the teaching of reading. A lecture and demonstration course dealing with remedial reading from grades one through six, testing and diagnosis of problem cases, and techniques and devices for use in remedying the difficulties.
210e. LABORATORY COURSE IN REMEDIAL READING. Fout hours credit.
Ed. 210 d should be taken concurrently or following this course. A practice course with actual remedial cases with whom the techniques of diagnosis and treatment of reading difficulties are used.
200. UNIT COURSES IN EDUCATION. (Summer Session only). One hour credit each unit.
Short courses of two weeks' duration, summer only. The title of each specific unit implies the purpose and content of each course.
§201. IMPROVEMENT OF SCIENCE INSTRUCTION IN ELEMENTARY SCHOOLS. (Credit may be obtained in Science Education or Education). Four hours credit.
A study, evaluation, and comparison of several programs suggested for elementary science by various authorities and groups of science educators. Opportunity is provided for students to plan programs and study the reorganization of elementary science curriculums to achieve the objectives of science educators.
§202. IMPROVEMENT OF SCIENCE INSTRUCTION IN SECONDARY SCHOOLS. (Credit may be obtained in Science Education or Education). Four hours credit.
A study, evaluation, and comparison of several programs suggested for secondary school science by various authorities and groups of science educators. Opportunity is provided for students to plan programs and study the reorganization of secondary school science curriculums to achieve the objectives of science educators.
203. AVIATION FOR ELEMENTARY AND SECONDARY TEACHERS. (Summer Session only). Four hours credit.
A non-technical course with subject matter dealing in the elementary phases of maps, weather, navigation, theory of flight, vocations, and social significance of the air age. Methods and materials are for teaching as presented. Units studied selected by personnel of class.
§204. SPECIAL PROBLEMS IN TEACHING ELEMENTARY SCIENCE. (Credit may be obtained in Science Education or Education). Four hours credit.
A study of special instructional problems such as problem solving, scientific attitudes, and controversial issues.
§205. SPECIAL PROBLEMS IN TEACHING SCIENCE IN SECONDARY SCHOOLS. (Credit may be obtained in Science Education or Education). Four hours credit.
A study of special instructional problems such as problem solving, scientific attitudes, and controversial issues.
§206. SPECIAL PROBLEMS IN TEACHING SCIENCE IN COLLEGE. (Credit may be obtained in Science Education or Education). Four hours credit.
A study of special instructional problems such as problem solving, scientific attitudes, and controversial issues.
216. SECONDARY EDUCATION. Three 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. 150 b .

216 . JUNIOR HIGH SCHOOL WORKSHOP. (Summer Session only). Three hours credit.
A practical problems course designed to deal with the organization, administration, and curriculum practices of the Junior High School; based on the needs as determined by the participants in the workshop.

216b. THE JUNIOR HIGH SCHOOL. Three houts credit.
The current value of the junior high school will be analyzed in terms of its historic claims. The functions of the junior high school will be obtained from such analysis. Special guidance, instructional, administrative, and curricular problems will be treated. A synthesis of desirable junior high practice will be developed.
217. EXTRACURRICULAR ACTIVITIES. Three hours credit.

Prerequisite, Ed. 105. Topics covered include school government, athletics, debating, literary and social clubs, school papers, musical and dramatic activities, and civic clubs and projects.
§219. IMPROVEMENT OF SCIENCE INSTRUCTION IN COLLEGE. (Credit may be obtained in Science Education or Education). Four hours credit.
The purpose of the course is to prepare advanced students for teaching science in a general education program in college. The problems studied are those concerned with purposes of education, methods, and evaluation. Demonstration teaching is included.

227a. IMPROVING THE MARKING SYSTEM. Two houts credit.
An educational experience designed to familiarize teachers and administrators with various evaluating and reporting techniques and instruments being used in different secondary schools. Special emphasis will be given to the development of a marking and reporting system to be used in the individual's own school situation.
§228a. MENTAL HYGIENE. (Credit may be obtained in Education or Health and Physical Education). Three hours credit.
Prerequisite, one course in psychology. A general course designed to give an understanding of the problems and principles of mental hygiene observed in normal community and school life.

## 228b. THE PSYCHOLOGY OF EXCEPTIONAL CHILDREN. Three

 hours credit.Prerequisite, one course in psychology. A study of brilliant, retarded, physically handicapped, and emotionally maladjusted children, with emphasis on methods of adjusting instruction to the needs of these children.
229. BASIC PRINCIPLES OF MEASUREMENT. Three hours credit.

A basic course dealing with principles of educational and psychological measurement applied to the construction and use of tests in the elementary and secondary schools.

229a. INSTRUMENTS AND TECHNIQUES OF MEASUREMENT AND EVALUATION. Three hours credit.
A study of the instruments and techniques, both standardized and informal, which are commonly used for measuring and evaluating the outcomes of instruction in the elementary and secondary schools.

229b. MEASUREMENT OF APTITUDES. Three hours credit.
A study of the measurement of aptitudes including special aptitudes as well as general intelligence. Major emphasis will be placed on the prediction of proficiency in various occupations and curricula.
§230. CAMP LEADERSHIP. (Credit may be obtained in Education or Health and Physical Education). Three hours credit.
(Offered during Pre-Session at a mountain campsite). A functional course designed to prepare college students for probable leadership service in summer camps.
236. TECHNIQUES OF TEACHING IN RURAL SCHOOLS. Three hours credit.
Prerequisite, Ed. 25. This course offers opportunities to become familiar with and to evaluate new teaching techniques adapted to the instructional programs of rural schools.
237. COMPARATIVE EDUCATION. Three hours credit.

The philosophy and practices of education in foreign countries, usually including education in Germany, France, Russia, Norway, Great Britain, China, Australia, Canada, Mexico and certain South American countries.
240. PARENT EDUCATION. Two hours credit.

This course deals with problems of starting and continuing programs of parent education in public schools. The selection of sponsoring organizations, organizing parent education groups, meeting the educational interests and needs in child study, home education, and home-school cooperation are emphasized.
241. ADMINISTRATION OF VILLAGE AND CONSOLIDATED SCHOOLS. Three hours credit.
A study of the problems of small schools from the administrative standpoint. Problems such as curricula, supervision, transportation, records, etc. (For undergraduate subject matter majors and students with limited administrative experience. Students who elect this course should not take Ed. 342, 343, 344).

242a,b. SCHOOL ADMINISTRATION WORKSHOP. Three hours credit each.
Problems in the field of school administration proposed by members of the workshop will be studied intensively on a group basis. Salary schedules, improvement of teachers in service, tenure, budgetary control, are sample problems which lend themselves to intensive study.
243. SCHOOL LAW FOR TEACHERS. Three houts credit.

Law concerning the rights, duties and possible liabilities of teachers and the relationship from a legal point of view of teachers and students, administrators, school boards, the public and public agencies.
245. CURRICULUM CONSTRUCTION. Three hours credit.

An appraisal of theories and practices of curriculum making; presentation of a modern, functional philosophy of curriculum making; and survey of the applications of this functional theory to the major areas of living. First of sequence in curriculum: Ed. 245, 246, 247.
246. ADVANCED CURRICULUM CONSTRUCTION. Three hours credit.

This course discusses what to teach in the major areas of living including communication, health, economic life, home and family life, citizenship, leisure, religious-moral experience and personality development. Second of sequence in curriculum.
247. EDUCATIONAL SOCIOLOGY AND COMMUNITY ORGANIZATION. Three hours credit.
Surveys and appraises the implications of outside the school cultural agencies, and attempts to help administrators and teachers utilize the resources of the community in a broad educational program in and out of the school. Third of sequence in curriculum.
248. WORKSHOP IN CO'MMUNITY PROBLEMS. Three hours credit. Provision is made for students to work on individual problems relating to the community. A carefully organized project is required.
249. PROBLEMS OF INTERGROUP RELATIONS. Two hours credit. A course dealing with the evidence as to all types of intergroup relationsrace, nationality, minority groups, income groups, urban and rural groups -and with methods of teaching and measuring intergroup relations.
§251. SPEECH FOR THE CLASSROOM TEACHER. (Credit may be obtained in Humanities or Education). Four hours credit.
A course designed to increase the personal effectiveness of the teacher in the classroom with emphasis on the improvement of instructional speaking. Not for speech majors.
252. SUPERVISION OF BEGINNING TEACHERS. Three hours credit.

A course to aid supervising teachers and principals in directing inexperienced teachers in the first year of teaching. Job-orientation, development of fundamental teaching skills-understanding pupils; teacher-pupil lesson planning; directing learning activities; evaluating learning-and participation in extra-class, school, and community activities. Emphasis will be placed on student teachers as beginning teachers.
8260. NURSERY SCHOOL EDUCATION. (Credit may be obtained in Home Economics or Education). Three hours credit.
Aims and procedures of the modern nursery school. Includes housing, equipment, food service, health measures, teacher responsibilities and a study of the ways in which growth can be directed. Students must be able to arrange four morning hours per week for observation in the nursery school.
§261. PARTICIPATION IN NURSERY SCHOOL. (Credit may be obtained in Education or Home Economics). Three hours credit.
A course which provides practical application of principles developed in Nursery School Education (Ed. 260). Emphasis on individual and group guidance, nutsery school curriculum planning and parent-teacher relationships. Includes teaching activities in the nursery school and related readings and discussion. Permission of instructor necessary for enrollment.

## 262. KINDERGARTEN EDUCATION. Five hours credit.

A course covering the research, theory, and best practices for the education in kindergartens of four- and five-year old children. Organization, housing, and equipping of new kindergartens, the readiness program for first grade, and parent education will have pertinent handlings within the course.

## 263. ADMINISTRATION AND SUPERVISION OF THE ELEMENTARY SCHOOL. Three hours credit. <br> This course deals with types of elementary school organization, administratrative relationships of principal to superintendent and teachers, administration of school services, theory and practice in grouping and grading pupils, promotion-retention policies, supervision of instruction, in-service education of teachers, and school-community relationships. Emphasis is on selection, use and evaluation of supervisory techniques.

## 267. RECONSTRUCTING SECONDARY EDUCATION.

Three hours credit.
Prerequisite, Ed. 216 or equivalent. An educational experience designed to study current problems confronting teachers relative to curriculum and instruction. Emphasis will be given to actual problems taken from in-service situations. These problems will be the bases for cooperative committee study and development of recommendations for improved practices.
270. TECHNIQUES OF ADULT EDUCATION. Two hours credit.

This course will emphasize the development of adult education movements in this country, the psychology and philosophy of adult education, and methods and techniques in practical application.
8271. SAFETY EDUCATION. (Credit may be obtained in Health and Physical Education or Education). Three hours credit.
Comprehensive course for probable administrators of safety programs in public schools.
§271a. SEMINAR IN SAFETY EDUCATION FOR TEACHERS AND SUPERVISORS. (Credit may be obtained in Health and Physical Education or Education). Three hours credit.
A functional approach to problems in safety education for the teacher and supervisor.
272. PRINCIPLES OF VOCATIONAL EDUCATION. Three hours credit. A study of the philosophy and development of vocational education, legislation, state policies, school programs, and non-school agencies and programs.

272a,b,c. WORKSHOP IN VOCATIONAL EDUCATION. (Summer Session only). One to three hours credit.
The workshop in vocational education is set up to help school people work out the problems of organizing and administering vocational education. Particular attention is given to local, state and federal relationship under existing conditions.
§275. ELEMENTARY STATISTICS. (Credit may be obtained in Mathematics or Education). Four hours credit.
An introduction to the meaning and practical use of measures of central tendency, variability, reliability, and relationship. Problems for application are taken principally from education and psychology.

## 277. CHILD PSYCHOLOGY. Three hours credit.

Prerequisite, a course in psychology. A study of the growth, adjustments, and capacities of children from conception through the elementary school years. Emphasis is placed upon what to do in guiding the development of normal children.
278. PSYCHOLOGY OF ADOLESCENCE. Three hours credit.

Prerequisite, a course in psychology. With emphasis on the total personality, this course deals with the adolescent in terms of his physical, mental, social and emotional growth and development, and suggests methods of guiding the adolescent toward a wholesome realization of his potentialities.
§279a. ORGANIZATION AND ADMINISTRATION OF THE ARTS PROGRAM. (Credit may be obtained in Fine Arts or Education). Four hours credit.
A course primarily for school administrators, which presents the philosophy, problems of organization, methods and the like of a general arts program.
$\S 279 \mathrm{~b}$. ADMINISTRATION AND SUPERVISION OF THE MUSIC PROGRAM. (Credit may be obtained in Music or Education). Three hours credit.
A course designed to acquaint the school administrator with the problems of the administration and supervision of the music program. The content includes the place of music in the school program, music equipment, budget, instructional problems, and public relations in music.

## §279c. ORGANIZATION AND ADMINISTRATION OF THE HEALTH EDUCATION PROGRAM. (Credit may be obtained in Health and Physical Education or Education). Two hours credit. <br> A course designed to acquaint the school administrator with the problems of health. The content includes the place of health education in the school program from the nursery school through the twelfth grade. It deals chiefly with four phases: health instruction, health services, health practices, and the importance of allied agencies.

280. ORGANIZATION AND ADMINISTRATION OF A SCHOOL LIBRARY. Fout hours credit.
Aid for teachers in developing libraties in small schools. Includes objectives of school libraries, physical plant, maintenance, discussion of budget and order procedure, circulation procedure and personnel.
281. CLASSIFICATION AND CATALOGING. Four hours credit.

In this course the student learns the fundamentals of classification according to the Dewey System and the construction of a dictionary catalog for the school library. It will include all necessary processes from the time books are acquired until they are ready for circulation. Attention is also given to the library care of pamphlets and audio-visual materials.
282a. MATERIALS FOR SCHOOL LIBRARIES. Four hours credit.
Prerequisites, Ed. 280 and 281. Evaluation of materials for school libraries. Study and principles of book selection, book selection aids and discussion of reading levels and interest of young people.

282b. MATERIALS FOR SCHOOL LIBRARIES. Four hours credit.
Prerequisite, 282a. Discussion of reference work and materials including compilation of bibliographies for classroom use.
283. THE LIBRARIAN AND THE SCHOOL. Four hours credit.

Prerequisites, Ed. 280 and 281. The correlation of the library and the classroom. Teaching the use of the library, publicity techniques, preparation for the teaching of materials, and practice in giving book talks and book reviews.
§291. SOCIAL PSYCHOLOGY. (Credit may be obtained in Education or Social Studies). Two houts credit.
Prerequisite, Ed. 25 or equivalent. Specialized study of the behavior of men in groups: Personality, society and culture, psychological aspects of human conflict, mass behavior, morale and leadership, attitudes.
293. THE JUNIOR AND COMMUNITY COLLEGE. Three hours credit. Prerequisite, Ed. 105. The history, functions, present status, and problems of the junior college and the community college.
295. PHILOSOPHY OF EDUCATION. Three hours credit.

Prerequisites, Ed. 105. and 214 or 216. Educational aims, values and criteria, democracy and education, different systems of educational philosophy, the nature of thinking, method and subject matter.
296. HISTORY OF MODERN EDUCATION. Three hours credit.

This course is based on the material in the most recent texts on history of education with emphasis on modern education.
297. CONCEPTIONS OF MIND IN EDUCATIONAL THEORY. Three hours credit.
Prerequisites, Ed. 105, 216, and 295. Traces the historical development of three major conceptions of mind and shows the relation of each to the aims of 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 expect to receive the degree of Master of Arts.
301. PRACTICUM. (Master of Arts, Doctor of Education). Three or four hours credit.
Open only by invitation to resident graduate students for the master's or doctorate degrees. This course includes practical professional activity of at least two hours daily for one quarter for three or four hours of credit in school administration, counseling, experimental methodology or other areas of education and psychology. In addition to the laboratory experience, the student is required to present an extensive written report emphasizing a review of the literature about the project, procedures used, and conclusions reached. The report must be typewritten and, after being approved by the instructor, filed in the Graduate Office.
§302. SEMINAR IN SECONDARY SCIENCE EDUCATION. (Credit may be obtained in Science Education or Education). Three hours credit.
Teachers who have problems in the field of secondary education may elect this course for the intensive study of their problems. Problems may be selected from such areas as content, method, problem-solving, and evaluation. Teachers will present the results of their study to the group.
§303. SEMINAR IN COLLEGE SCIENCE EDUCATION. (Credit may be obtained in Science Education or Education). Three hours credit.
Teachers who have special problems in the field of college science education may elect this course for the intensive study of their problems. Problems may be selected from such areas as content, method, problem-solving, and evaluation. Teachers will present the results of their study to the group.
§304. SEMINAR IN ELEMENTARY SCIENCE EDUCATION. (Credit may be obtained in Science Education or Science). Three hours credit.
Teachers who have special problems in the field of elementary science education may elect this course for the intensive study of their problems. Problems may be selected from such areas as content, method, problem-solving, and evaluation and organization. Teachers will present the results of their study to the group.
8305. IMPROVEMENT OF INSTRUCTION IN SECONDARY SCHOOL SOCIAL STUDIES. (Credit may be obtained in Social Studies or Education). Three hours credit.
Consideration of recent trends in the organization and teaching of social studies courses in secondary schools. Teachers will be given an opportunity to evaluate new courses of study, new materials and new equipment developed in an attempt to improve teaching procedures.
8308g. WORKSHOP IN THE PRODUCTION OF AUDIO-VISUAL MATERIALS. (Summer Session only). (Credit may be obtained in Education or 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 include charts, graphic materials, models, exhibits, slides, recordings, and film strips.

## 310. IMPROVEMENT OF INSTRUCTION IN READING IN THE ELEMENTARY SCHOOL. (Summer Session only). Four hours credit.

Prerequisite, student or public school teaching experience. A detailed consideration of the content to be taught and the methods and materials to be used in the teaching of reading from the kindergarten through the sixth grade. The material in this course is presented on an advanced graduate level.

## 310a. SPECIAL PROBLEMS IN THE SUPERVISION OF READING. Three hours credit.

Prerequisite, Ed. 210. This seminar course covers important problems in the teaching and supervision of reading in the elementary school, varying somewhat in content from year to year. Problems pertaining to such matters as the content of an adequate instructional program in reading, independence in word identification, meaning difficulties in reading, the selection and use of textbooks and other instructional aids, and the construction of lessons on important skills usually are included.

## 311. IMPROVEMENT OF INSTRUCTION IN LANGUAGE IN THE ELE-

 MENTARY SCHOOL. Four hours credit.Prerequisite, student teaching or public school experience. This course is the basic course in the teaching of language in the elementary school. It considers the scope and nature of an adequate program of instruction in language, and is concerned primarily with the identification of content to be taught and methods and materials to be used. The material in this course is presented on an advanced graduate level.

## 311a. SPECIAL PROBLEMS IN THE SUPERVISION OF LANGUAGE. Three hours credit.

Prerequisite, Ed. 211. This seminar course will cover important problems in the teaching and supervision of language in the elementary school, varying slightly from year to year. Problems pertaining to such matters as the content of an adequate instructional program in language, speaking and writing clearly and exactly, the mechanics of expression, creative writing, the selection and use of textbooks and other instructional aids, and the construction of lessons on important items usually are included.
312. IMPROVEMENT OF INSTRUCTION IN ARITHMETIC IN THE ELEMENTARY SCHOOL. (Summer Session only). Four hours credit. Prerequisite, student teaching or public school experience. Selecting what to teach, the grade placement of content, methods and materials of teaching, and means of evaluating achievement. The material in this course is presented on an advanced graduate level.

## 312a. SPĖCIAL PROBLEMS IN THE SUPERVISION OF ARITHMETIC. Three hours credit.

Prerequisite, Ed. 212 or equivalent. A seminar course which covers the important problems in the teaching and supervision of arithmetic in the elementary school. The content may vary slightly from year to year depending upon the interests of the students enrolled.

## §313. IMPROVEMENT OF INSTRUCTION IN SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. (Credit may be obtained in Social Studies or Education). (Summer Session only). Four hours credit.

Prerequisite, student teaching or public school experience. Selection and organization of content, learning activities, problem-solving, social skills and attitudes through the first six grades. Emphasis is placed upon materials and methods for teaching a unified and correlated social studies program. A study of the literature and techniques of research in the area of the graduate major. The material in this course is presented on an advanced graduate level.

## 8313a. SPECIAL PROBLEMS IN THE SUPERVISION OF SOCIAL STUDIES. (Credit may be obtained in Education or Social Studies). Three hours credit.

This is a seminar course. It is based on the interests and needs of students who enroll in the course. Current trends in curriculum improvement, supervisory objectives and techniques in current use, recent research in methodology, areas of living, social growth and development of children, and the administration of the emerging curriculum are typical topics of interest.

## 315a. ORGANIZATION AND ADMINISTRATION OF GUIDANCE SERVICES. Three hours credit.

The organization and administration of guidance services in the public school system, with emphasis being placed on types of organizations, use of guidance tools, in-service training of workers, evaluation, and the role of various staff members.

315b. COUNSELING TECHNIQUES. Three hours credit.
Prerequisite, at least one course in guidance. An intensive study of the use of the interview for all guidance purposes. Emphasis is given to such approaches as the "directive," "nondirective," and "eclectic" methods, with opportunity provided for their application.

## 315c. PERSONNEL WORK IN COLLEGES AND UNIVERSITIES. Three hours credit. <br> General discussion of the administrative principles and functions of student personnel work including admission policies, college orientation, housing, program planning, and interpretation of tests.

315d. CLINICAL METHODS IN COUNSELING. Four or five hours credit.
Prerequisites, Ed. 215a, 215b, 228a, 315b, and 327. A survey of and practice in clinical methods in counseling and psychotherapy in relation to mental deficiency, special abilities and disabilities, behavior problems, and personality disorders.
322. INDIVIDUAL STUDIES IN EDUCATION. Two, three or four hours credit for each problem; 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.

## 327. PERSONALITY DEVELOPMENT. Three hours credit.

Prerequisite, Ed. 25 and teaching experience or its equivalent. The course is designed to build an understanding of the psychological factors and principles underlying personality development and adjustment.

## 328. GROUP DYNAMICS IN HUMAN RELATIONS. Three hours credit.

Prerequisite, Ed. 228a. A course designed to give an understanding of the principles of group dynamics as applied to group situations including the classroom.

## 329. THE REVISED STANFORD-BINET INTELLIGENCE SCALE.

 Three or five hours credit.Prerequisite, consent of the instructor. Three hours credit: a course dealing with the history and the description of the scale, its use in schools, and the interpretation of the results of the scale. Five hours credit: the work described above plus laboratory experience in the administration of the scale.
§341. PUBLIC FINANCE. (Credit may be obtained in Social Studies or Education). (Summer Session only). Four hours credit.
Prerequisite, one course of " 100 " level in Economics. A study of the methods employed by local, state, and federal governments to finance their activities. Particular attention is paid to the scope and effects of various types of fiscal policy.
342. SCHOOL ADMINISTRATION--FEDERAL, STATE, LOCAL. (First course). Five hours credit.
Prerequisites, 12 hours in education and experience. Federal relations to education, the state as the fundamental educational unit, local administratrative units, duties and the powers of the superintendent, and the administration of personnel.
343. SCHOOL ADMINISTRATION-SCHOOL FINANCE (Second course). Five hours credit.
Prerequisite, 12 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 - SCHOOL BUILDINGS. (Third course). Three hours credit.
Prerequisite, 12 hours in education and experience. School building plans, specifications, construction, maintenance, operation, insurance, and purchase and care of supplies and equipment.
345. PRACTICE IN SCHOOL ADMINISTRATION. Three to six hours credit.
Selected graduate students may study in a public school system under the joint supervision of the college and the superintendent of schools, on an individual program set up to provide each student practical experiences in public school administration suited to his needs.

## 346. SCHOOL BUILDING PROBLEMS. Four hours credit.

Prerequisite, Ed. 344. Technical problems in building school plants, types of material and mechanical equipment, construction practices and supervision of construction. Includes interpretation of blue prints and specifications.
350. METHODS OF INSTRUCTION IN COLLEGE. Two or three hours credit.
Prerequisite, thirty quarter hours of professional education. This course is designed for those who desire to teach in junior or senior college. It is a course concerned with methods of college teaching, the college curriculum, the philosophy of college instruction, the conduct of classes and other pertinent materials.
351. COLLEGE INSTRUCTION. Three to six hours credit.

Prerequisite, Ed. 350 . Open only on invitation. Opportunity will be offered to a selected number of graduate students to aid in college instruction and in the conduct of classes and quiz sections. Three quarter hours credit will be given for four hours of instruction. All instruction will be under the professor responsible for the course taught.
352. STUDENT SUPERVISION. Three to eight hours credit.

A laboratory course to give practical experience, under close supervision, in directing the work of the student teachers. Open to those students who are preparing for supervisory positions and show promise from student teaching or public school experience of undertaking such positions.
364. IMPROVEMENT OF ELEMENTARY SCHOOL INSTRUCTION. (For superintendents). (Summer Session only). Four hours credit.
This course for superintendents attempts to provide answers to three questions concerning each of the subjects commonly taught in the elementary school. These questions are: (1) What should be taught? (2) What methods and materials are effective? (3) How may pupil achievement be measured?

## 365a. JUNIOR-SENIOR HIGH SCHOOL ADMINISTRATION AND SU.

 PERVISION. Three hours credit.Prerequisite, Ed. 216. A survey of the general fields of secondary administration and supervision including areas such as pupil personnel service, selection and in-service growth of teachers, curriculum administration, public relations, the extra-curriculum, and such other areas as will serve to equip professionally the beginning administrator.
365b. PROBLEMS IN JUNIOR-SENIOR HIGH SCHOOL ADMINISTRATION AND SUPERVISION. Three hours credit.
Prerequisite, Ed. 216. The selection and induction of beginning teachers, building the school program, utilization of the physical plant, curriculum analysis, and other similar problems are considered in their organic interrelationship. A project approach is employed. Ed. 365 a is a desirable prerequisite.
369. EXPERIMENTATION IN THE SECONDARY SCHOOL. (Summer Session only). Four hours credit.
Prerequisite, Ed. 216, 267, or 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.
§372. CURRICULUM IN SECONDARY SCHOOL MATHEMATICS. (Credit may be obtained in Mathematics or Education). Three hours credit.
Prerequisite, 24 quarter hours in college mathematics. A study of modern developments in curriculum offerings in secondary school mathematics, with special emphasis on mathematics best suited to the needs of non-collegebound students.
§373. PROBLEMS IN THE TEACHING OF SECONDARY MATHEMATICS. (Credit may be obtained in Mathematics or Education). Three hours credit.
Prerequisite, 24 quarter hours in mathematics at the college level. Special emphasis in this course is placed on such problems of teaching high school mathematics as: individual differences in ability, interests and needs, college preparatory courses and their organization for teaching.

## §374. SEMINAR IN PROBLEMS OF TEACHING SECONDARY MATHEMATICS. (Credit may be obtained in Mathematics or Education). Three hours credit. <br> Prerequisite, graduate standing and experience in teaching mathematics. Graduate students in this course will use their own backgrounds of experience, along with reading and discussion in class, to bring before the group special problems, together with proposed solutions.

§375. ADVANCED STATISTICS. (Credit may be obtained in Mathematics or Education). Four hours credit.
Prerequisite, Ed. 275 or equivalent. Sampling theory, test of significance, chi-square function, correlation methods, introduction to analysis of variance and experimental design in educational research.

## 376. PSYCHOLOGY OF INDIVIDUAL DIFFERENCES. Three hours

 credit.Prerequisite, Ed. 77 or 78 or equivalent. The nature and extent of differences among individuals and differences between such groups as men and women, age, class, race and nationality; factors related to these differences: and the application of the facts of human variability to educational, vocational, social and personnel work.
378. PSYCHOLOGY OF LEARNING. Three hours credit.

Prerequisite, Ed. 77 or 78 or equivalent. The several theories of learning are examined critically for the purpose of developing a working control of the learning process by the student.

## 379. TRENDS IN EDUCATIONAL PSYCHOLOGY. Four hours credit.

Prerequisite, Ed. 77 or 78 or equivalent. A course designed to summarize educational applications of recent psychological research in the areas of human growth and development, the learning process, mental hygiene, guidance, educational outcomes and their appraisal, and implementation of the curriculum.
392. TECHNIQUES OF SUPERVISION IN THE ELEMENTARY SCHOOL. Three hours credit.
Prerequisite, public school teaching or superior work in student teaching. Content of course is planned to meet needs of those preparing for supervising teachers in laboratory schools or for public school supervision. Topics include general direction of pre-service laboratory work and of in-service growth. Emphasis given to planning, teaching techniques, curriculum construction.
395. ADVANCED PHILOSOPHY OF EDUCATION. (Summer Session only). Four hours credit.
Educational aims. values and criteria, democracy and education, different systems of educational philosophy, the nature of thinking, method and subject matter. (This course differentiated in this separate section for graduate students in summer).
396. FOUNDATIONS OF MODERN EDUCATION. Three hours credit. Prerequisites, Ed. 105 and 214 or 216 . This course is designed to study important historical and philosophical backgrounds for the interpretation of present day educational issues.
398. CURRENT EDUCATIONAL TRENDS AND ISSUES. Three hours credit.
Appraises the current studies in such areas as objectives, experimentation, evaluation, administration, levels of education, non-governmental controls, program of education, teacher education and welfare.
399. THESIS. Eight hours credit.
400. INTRODUCTION TO GRADUATE STUDY. Four houts credit. Prerequisite, master's degree. Open only to graduate students who are pursuing courses beyond the master's degree, and is required of all such students who plan to become candidates either for the Advanced Diploma of Specialization or the degree of Doctor of Education.
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.
423. GRADUATE CREDIT FOR DOCTORAL RESEARCH.

This course is registered for by the payment of a research fee. The hours of credit granted will depend on the excellence of the study and will be determined by the Research. Study Committee. (See Graduate rules).
424. GRADUATE CREDIT FOR DOCTORAL RESEARCH.

The hours of credit for the Second Research Study will be determined by the Research Study Committee. (See Graduate rules).
442. SCHOOL ADMINISTRATION-SCHOOL LAW AND PUBLIC RELATIONS. (Fourth course). Three hours credit.
The problems of general school law applicable in typical states and court decisions relative to schools, public relations, and school publicity.
443. SCHOOL ADMINISTRATION-SPECIALIZED AGENCIES. (Fifth course). (Summer Session only). Four hours credit.
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.
444. SCHOOL ADMINISTRATION-DEVELOPING EDUCATIONAL LEADERSHIP. (Sixth course). (Summer Session only). Four hours credit.
The selection, preparation, and placement of educational leaders in the public schools. How leadership emerges and develops. Techniques of community leadership and the use of community resources in developing an educational program.
445. PRACTICE IN COLLEGE ADMINISTRATION. Three to six hours credit.
Selected graduate students may study in the administrative offices under the supervision of the administration, on an individual program set up to provide each student practical experiences in college administration suited to his needs.

493a. SEMINAR IN HIGHER EDUCATION. Three hours credit.
Administration, organization, finances, buildings, and other administrative problems. Individual studies of the problems of higher education. Involves research, writing and group discussions.

493b. SEMINAR IN HIGHER EDUCATION. Three hours credit. Faculty, curriculum, supervision, and instruction. Individual studies of the problems of higher education. Involves research, writing, and group discussions.

493c. SEMINAR IN HIGHER EDUCATION. Three hours credit.
Problems of teacher education. Individual studies of the problems of higher education. Involves research, writing, and group discussions.

493d. SEMINAR IN HIGHER EDUCATION. Three hours credit.
This course deals with problems in general education, philosophy curriculum and administration. Current practices will be compared and evaluated.

## BUSINESS EDUCATION MAJOR Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 109, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed below.
(3) One minor of 24 quarter hours outside the field of Business Education.
(4) 28 to 35 quarter hours of free electives to complete the 180 quarter hours of academic credit required for graduation.
Programs must be planned with the student's adviser.

## BUSINESS EDUCATION MAJOR

Bachelor of Arts Degree (With Teaching Certificate)
Required courses in the major:
COURSE NUMBER COURSE TITLE HOURS CREDIT


Bus. Ed. $41^{\prime}$ - - - Introduction to Business - . . . . . 4
Bus. Ed. 131 - - - Business Law - - - - - - 3
Bus. Ed. $252^{\text {V - - - - Office Management - - - - - }}$
Bus. Ed. $255^{\text {J }}$ - - - Business Organization and Management -
Bus. Ed. $261^{\text { }}$ - - - Retail Store Operation and Management 5
Bus. Ed. 272 - . . The Business Curriculum - - . . 5
Econ. (elective) - - - - - - - - - - - - - - 3

Recommended electives: Bus. Ed. 12, 22, 115, and 264, plus two courses in economics.

Qualifying examinations may be taken for exemption from Bus. Ed. 1, 2, 10, 11, 20, 37, but passing these examinations does not give credit toward a degree in Business Education.

## Business Education Minor


*Ed. 150 b , Methods of Observation and Teaching Business Education in Secondary Schools (Five hours credit) or Bus. Ed. 272, the Business Curriculum (Five hours credit), may be substituted for Bus. Ed. 253 with the permission of the minor adviser.
**Selection may be made from Bus. Ed. 1, 2, 13 or 14, 10, 11, $20,21$.

## BUSINESS EDUCATION MAJOR

## Bachelor of Arts Degree (Liberal Arts)

The following program is required: (1) Common Courses listed on Page 40 ; (2) Bus. Ed., $41,115,131,252$, or 255 or 261 ; (3) 28 hours of electives in Business Education; (4) One minor of 24 quarter hours outside the field of Business Education. Programs must be planned with the student's adviser.

Courses required for a minor are Bus. Ed. 20, 41, 255, plus 10 hours of electives.

## Graduate Study

Detailed information about the Graduate program may be obtained from the Graduate Bulletin. Course work will be outlined by the student's major professor.

## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (§) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.

1. BEGINNING TYPEWRITING. Two hours credit.

A beginning course in typewriting. Emphasis will be given to both personal and vocational use. Students with one year of high school typewriting or the equivalent who can pass a qualifying examination may be exempted from this course.
2. INTERMEDIATE TYPEWRITING. Two hours credit.

Prerequisite, B.Ed. 1 or equivalent. The second course in typewriting. Emphasis will be strictly on vocational use. Students who have had two years of high school typewriting or the equivalent who can pass a qualifying examination may be exempted from this course.
3. PERSONAL TYPEWRITING. One hour credit.

A beginning class in touch typewriting for non-business majors who have had no previous typewriting instruction. The class will meet two hours a week for one hour's credit.
10. BEGINNING GREGG SHORTHAND. Fout hours credit.

Prerequisite, B.Ed. 1 or equivalent. Course comprises complete theory of Gregg shorthand simplified. Students who have had one year of high school shorthand or the equivalent may be exempted from this course upon passing a qualifying examination.
11. INTERMEDIATE GREGG SHORTHAND. Four hours credit.

Prerequisite, B.Ed. 10 or equivalent. Course comprises intensive review of Gregg shorthand theory and completion of the text, Gregg Dictation Simplified. Students who have had two years of high school shorthand or the equivalent may be exempted from this course upon passing a qualifying examination.
12. SHORTHAND TRANSCRIPTION. Three hours credit.

Prerequisites, B.Ed. 2 or equivalent and B.Ed. 11 or equivalent. A combination of materials equivalent to the third quarters of shorthand and typewriting. Emphasis is upon rapid and accurate transcription, speed dictation, punctuation, and other office skills.
13. ADVANCED TYPEWRITING AND OFFICE PRACTICE. Four
hours credit.
Prerequisite, B.Ed. 2 or equivalent. A combination of instruction in type-
writing, the use of office machines, and experience in the administrative
offices of the college. The class will meet two hours a day, four days a
week.

## 14. ADVANCED TYPEWRITING AND SECRETARIAL PRACTICE.

 Four hours credit.Prerequisites, B.Ed. 2 and B.Ed. 12 or equivalent. Deals with the duties of secretaries and gives advanced practice in typewriting and dictation. The class will meet for two hours a day, four days a week.
20. PRINCIPLES OF ACCOUNTING I. Four hours credit.

A beginning course in accounting. Students who have previously studied bookkeeping or accounting may be exempted from this course by passing a qualifying examination. Common business transactions are recorded in various journals, summarized in general and subsidiary ledgers, and the effect of these transactions is reported on classified financial statements.
21. PRINCIPLES OF ACCOUNTING II. Four hours credit.

Prerequisite, B.Ed. 20 or equivalent. The emphasis in this course is on negotiable instruments, accruals, adjusting current assets and fixed assets, the combined cash journal, and the voucher system. A practice set is completed.
22. PRINCIPLES OF ACCOUNTING III. Four hours credit.

Prerequisite, B.Ed. 21 or equivalent. Special accounting problems of businesses organized as partnerships, corporations, or by departments are studied. Some emphasis is given to accounting for a manufacturing business. Financial statements are analyzed by using percentages and ratios. A practice set is completed.
37. BUSINESS MATHEMATICS AND CALCULATING MACHINES. Four hours credit.
This course is designed to perform two purposes: (1) to teach the fundamental mathematical processes and their applications to business situations; (2) to teach the operation of adding-listing machines, key-driven calculators and rotary calculators. Students passing a qualifying examination may be exempted from this course.
41. INTRODUCTION TO BUSINESS. Four hours credit.

This is a general exploratory and orientation course in the areas of business and commerce. A background is provided for the study of subsequent courses in business.
60. ADVANCED CALCULATING MACHINES. Two hours credit. Prerequisite, B.Ed. 37 or permission of instructor. Advanced course in the operation of rotary calculators, key-driven calculators, ten-key and fullbank adding machines.
71. PRINCIPLES OF RETAILING. Three hours credit.

A study of the growth and position of independent, chain, and mail-order stores. Business policies, methods, and basic factors involved in planning, selecting, buying, pricing and selling merchandise are studied.
72. RETAIL SALESMANSHIP. Three hours credit. Principles and practices of retail selling. Primary emphasis is upon store selling.
73. MERCHANDISE INFORMATION-NON-TEXTILES. Three hours credit.
A study of the characteristics and merchandising of non-textiles. Emphasis will be placed upon their analysis.
115. BUSINESS CORRESPONDENCE. Three hours credit.

Prerequisite, ability to typewrite. The basic principles and practices in the preparation of business correspondence. Emphasis placed upon business situations out of which correspondence arises.
117. DUPLICATING AND RECORDING MACHINES. Two hours credit.

The emphasis in this course is on demonstration and teaching methods rather than on practice. Voice writing machines and liquid and stencil process duplicators are studied.
127. PAYROLL ACCOUNTING. Two hours credit.

A study is made of the laws influencing the payroll records business must keep. Payroll routine and reports are studied and practiced.
128. FEDERAL INCOME TAX FOR INDIVIDUALS. Three hours credit. Study and application of the principles in preparing federal income tax returns for individuals.

## 131. BUSINESS LAW. Three hours credit.

This course introduces the student to law and its social and personal applications as especially applicable to business. It considers courts and procedure, the law, its origin and development. Contracts in detail are studied.
132. BUSINESS LAW. Three hours credit.

Prerequisite, Bus. Ed. 131. This is the second course in business law. It deals with negotiable instruments, agency, sales and security arrangements therefor, and real property. Torts and crimes related to business are touched upon as is government regulation of business.
$\S 215 \mathrm{~h}$. PSYCHOLOGY OF PERSONNEL MANAGEMENT. (Credit may be obtained in Education or Business Education). Fout hours credit.
A study of the principles and techniques of personnel management with attention given to their psychological foundations.
233. APPLIED BUSINESS LAW. Four hours credit.

The law of the following fields is applied to business experiences: contracts, negotiable instruments, agency, sales, security arrangements, real property, torts, crimes and business associations. Insofar as possible the experiences of the students are used and the legal significance of these experiences is studied.
251. COLORADO INDUSTRIAL DEVELOPMENT. (Summer Session only). Three hours credit.
The purpose of this course is to provide the opportunity to visit and study various industrial and business establishments in Colorado. Primary emphasis is placed upon visiting Colorado industries and conferences with business executives.
252. OFFICE MANAGEMENT. Five hours credit.

The emphasis in this course is on the functions of the office and office organization; work in the office; office layout, equipment, supplies, and forms; personnel problems in the office; and costs and control of office work.
253a,b,c,d,e,f. IMPROVEMENT OF INSTRUCTION IN THE BUSINESS SUBJECTS. Two hours credit each.
This course primarily for students who have had methods courses and teaching experience. Emphasis is upon improving instruction in each of the areas studied: (a) bookkeeping; (b) office practice; (c) consumer education; (d) shorthand; (e) typewriting; and (f) general business.

253g. METHODS OF TEACHING THOMAS SHORTHAND. (Summer Session only). Four hours credit.
This course includes the study of the principles of Thomas shorthand, the application of these principles in taking dictation, and the methods of teaching Thomas shorthand.

253h. IMPROVEMENT OF INSTRUCTION IN DISTRIBUTIVE EDUCATION. (Summer Session only). Two hours credit.
Important procedures and effective techniques used in teaching high school cooperative classes in retail selling and in evening classes for employed sales and supervisory personnel.
254. CONSUMER EDUCATION. Four hours credit.

This course deals with the problems of the consumer in the management of his income and the buying of goods and services.
255. BUSINESS ORGANIZATION AND MANAGEMENT. Five hours credit.
Deals with different types of organization which have been used in the conduct of business and how business is organized to conduct services. Both large and small business organizations are studied.
257. PRINCIPLES OF INSURANCE. Five hours credit.

The different types of insurance coverage available and the kinds of policies are presented in this course. Primary emphasis is placed upon life insurance. Each student will develop a tentative insurance program.
258. PRINCIPLES OF ADVERTISING. Three hours credit.

The principles of advertising are studied in this course and applied to the different advertising mediums. Advertising campaigns are studied and developed.
261. RETAIL STORE OPERATION AND MANAGEMENT. Five hours credit.
Functions of the main divisions of retailing. Emphasis is on the responsibilities of the store manager and current operating practices.
262. ADMINISTRATION OF DISTRIBUTIVE EDUCATION. Four hours credit.
A survey of the field of cooperative distributive education will be introductory. The course will then stress the organization, administration and supervision of such a program.
264. PRINCIPLES OF MARKETING. Three hours credit.

The purpose of this course is to give students an understanding of the place of marketing in our economic system. The field of retailing, which is a part of marketing, will be given but little emphasis because of its being covered in a separate course.
265. JOB ANALYSIS. (Summer Session only). Four hours credit.

The importance, use, and procedures of job analysis in course construction and on-the-job training.
266. DEVELOPMENT OF DISTRIBUTIVE EDUCATION INSTRUCTIONAL MATERIAL. (Summer Session only). Four hours credit.
Instructional materials will be collected from original sources and qualified and organized into distributive education course outlines.
272. THE BUSINESS CURRICULUM. Five hours credit.

The business curriculum in the high school is the basic consideration in this course. This is the final course in business education for prospective teachers.
277. SUPERVISORY TRAINING: JOB INSTRUCTION TRAINING AND JOB RELATIONS TRAINING. (Summer Session only). Two hours credit.
Procedures involved in teaching business owners, managers and supervisors how to train employees and how to avoid friction and maintain good morale in employer-employee relationships. This course will enable distributive coordinators to be certified by the U. S. Office of Education to teach these courses in adult evening courses for management.
278. ADVANCED SALES TECHNIQUES. (Summer Session only). Four hours credit.
A practical intensive course to develop skill in selling and to furnish subject matter and cases for use in distributive education on both high school and adult levels.

280a,b. WORKSHOP IN BUSINESS EDUCATION. (Summer Session only). Three hours credit each.
Through cooperative effort problems in business education will be solved. Each year a new theme will be used as a point of departure in the discussion of business education problems.
300. INTRODUCTION TO GRADUATE STUDY. Four hours credit. A study of research techniques and their application to business education. Required of all business education majors who are candidates for the master's degree.
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.
370. ADMINISTRATION AND SUPERVISION OF BUSINESS EDUCATION. (Summer Session only). Four hours credit.
This course deals with the problems of administrators and supervisors who are interested in business education as well as heads of departments of business education.
372. ADVANCED CURRICULUM PROBLEMS. (Summer Session only). Four hours credit.
High school curricula and courses of study in business subjects will be planned and developed in this course.
373. CURRENT PROBLEMS IN BUSINESS EDUCATION. Four hours credit.
Current problems in business education are studied and discussed by individuals, committees and class.
399. THESIS. Eight hours credit.

## Division of Health and Physical Education

The Division of Health and Physical Education includes programs for both men and women.

The academic programs are:

1. A major in physical education for women leading to the Bachelor of Arts degree with teaching certificate.
2. A major in physical education for men leading to the Bachelor of Arts degree with teaching certificate.
3. A teaching minor in physical education for men and women planning to teach in secondary schools.
4. A teaching minor in physical education for men and women planning to teach in elementary schools.
5. A teaching minor in health education.
6. A graduate major in physical education leading to the Master of Arts degree.
7. A graduate major in supervision of physical education leading to the Master of Arts degree.
8. A graduate major in health education leading to the Master of Arts degree.

## PHYSICAL EDUCATION MAJOR FOR WOMEN Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 147, except the physical activity courses of the freshman and sophomore years. H.P.E. 80,81 , and 83 will be substituted for the six hours of physical activity required in the common program.
(2) The 48 quarter hours in the major listed on Page 143.
(3) Two minors of 24 quarter hours each. One minor may be in Health Education and the other minor will be outside the Division of Health and Physical Education.
(4) 4 to 11 quarter hours of free electives to complete the 180 quarter hours of academic credit for graduation. Programs must be planned with the student's adviser.

## PHYSICAL EDUCATION MAJOR FOR WOMEN Bachelor of Arts Degree (With Teaching Certificate)

Required courses in the major:

$\qquad$

## PHYSICAL EDUCATION MAJOR FOR MEN

 Bachelor of Arts Degree (With Teaching Certificate)The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 147. Physical activity courses from the professional program may be elected with the approval of the adviser to meet the six hour activity requirement of the freshman and sophomore years.
(2) The 48 quarter hours in the major listed on Page 144.
(3) Two minors of 24 hours each. One minor may be in Health Education and the other minor will be outside the Division of Health and Physical Education.
(4) 4 to 11 quarter hours of free electives to complete 180 quarter hours of academic credit for graduation.
Programs must be planned with the student's adviser.

## PHYSICAL EDUCATION MAJOR FOR MEN Bachelor of Arts Degree (With Teaching Certificate)

Required courses in the major:

| OURSE | NUMBER |  | COURSE TITLE HOURS CRED |
| :---: | :---: | :---: | :---: |
| H. P. | 62 |  | First Aid |
| H. P. E. | 70 |  | Theory and Practice of Gymnastics and Matwork - |
| H. P. E. | 71 |  | Theory and Practice of Minor Sports - - 2 |
| H. P. E. | 73 | - - | Theory and Practice of Basketball - - 2 |
| H. P. E. | 74 |  | Theory and Practice of Boxing and Wrestling |
| H. P. E. | 75 |  | Theory and Practice of Track and Baseball |
| H. P. E. | 76 |  | Theory and Practice of Football |
| H. P. E. | 90 |  | Techniques in Folk Dancing |
| H. P. E. | 92 |  | American Square and Social Dance |
| H. P. E. | 120a, b |  | Anatomy and Physiology - - - |
| H. P. E. | 122 |  | Kinesiology - - |
| H. P. E. | 161 |  | Coaching of Football - |
| H. P. E. | 162 |  | Coaching of Basketball - |
| H. P. E. | 163 |  | Coaching of Track and Field |
| H. P. E. | 164 |  | Coaching of Baseball - - |
| H. P. E. | 202 b | - - | Health Education in the Secondary School |
| H. P. E. | 235 |  | History and Principles of Physical Education |
| H. P. E. | 270 |  | Organization and Admn. of P. E. and Athletics |
| H. P. E. | 272 |  | Recreation Leadership |




## Minor in P. E. For Men (Secondary Level)

COURSE NUMBER COURSE TITLE HOURS CREDIT
H. P. E. 62 - - - . First Aid - - - . . . . . . 2
H. P. E. 73 - - - Theory and Practice of Basketball - - 2
H. P. E. 75 - - Theory and Practice of Track and Base- 2
H. P. E. 76 - - - Theory and Practice of Football - - 2
H. P. E. 161 - - - Coaching of Football - - - - 2
H. P. E. 162 - - - Coaching of Basketball - - . - . 2
H. P. E. 202b - - - Health Education in the Secondary School 4
H. P. E. 270 - - - Organization and Administration of

Physical Education and Athletics - - 3
H. P. E. 272 - - - Recreation Leadership - . - . 3

Ed. $\quad 150 \mathrm{~h}$ - - Methods and Observation of Teaching Physical Education in Secondary Schools (Men) - - - - -

## Minor in Health Education (Men and Women)

COURSE NUMBER COURSE TITLE HOURS CREDIT
H. P. E. 98 - - - Elementary Nutrition - - - - - 3
H. P. E. 202a - - Health Education in the Elementary $\begin{aligned} & \text { School - }\end{aligned}$
H. P. E. 202b - - - Health Education in the Secondary School 4
H. P. E. 208 - - - Community Hygiene and Sanitation - 4
H. P. E. 213 - - - Health Counseling - - - - - 2
H. P. E. 228a - - - Mental Hygiene - - - - . 3
H. P. E. 271 - - - Safety Education - - - - . - 3

One hour additional selected with approval of minor adviser - - . . . 1

## Graduate Study

Detailed information about the Graduate program may be obtained from the Graduate Bulletin. Course work will be outlined by the student's major professor.

## COMMON COURSES

## Bachelor of Arts Degree (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.



## Junior and Senior Years

| COURSE | NUMB |  |  |  | COURSE TITLE |  | HOURS | CREDIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ed. | 105 | - | - - | - | American Education |  | - - | - 3 |
| Ed. | 150 | - | - - | - | Methods and Observation |  | - - | - - 5 |
| Ed. | 151 | - | - - | - | Student Teaching - |  | - - | 8 to 15 |
| Ed. | 214 | - | - - | - | The Elementary School |  |  |  |
| Ed. | 216 |  | - - |  | The Secondary School - |  | - - | 3 |
| Ed. | 295 | - | - - | - | Philosophy of Education |  | - - | 3 |

## Physical Activity Program for 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. A total of six quarters of physical activity is required.

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.

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

To be excused from physical activity, students must have the approval of the faculty of the Division of Health and Physical Education.

## Physical Activity Program for Men

During their first year men students should enroll for H.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. A total of six quarters of physical activity is required.

Men students registered for activity courses are required to obtain a locker padlock in the College Bookstore.

To be excused from physical activity, students must have the approval of the faculty of the Division of Health and Physical Education.

## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (§) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.

## NON-PROFESSIONAL COURSES

1. FALL SPGRTS. One hour credit.

Seasonal program. Advised for all first year men students.
2. WINTER INDOOR SPORTS. One hour credit.

Seasonal program. Advised for all first year men students.
3. SPRING SPORTS. One hour credit.

Seasonal program. Advised for all first year men students.
5. TAP DANCING. One hour credit.

6a. BEGINNING CONTEMPORARY DANCE. One hour credit.
6b. INTERMEDIATE CONTEMPORARY DANCE. One hour credit. Prerequisite, H.P.E. 6a.

6c. ADVANCED CONTEMPORARY DANCE. One hour credit.
Advanced analysis and practice of axial and locomotor movement.
7. FOLK DANCING. One hour credit.
8. BEGINNING 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.
14. PLAYS AND GAMES. One hour credit.
15. VOLLEYBALL. One hour ctedit.
16. SWIMMING: 16a, BEGINNING SWIMMING; 16b, INTERMEDIATE SWIMMING; 16c, ADVANCED SWIMMING. One hour credit each quatter.
18. BASKETBALL. One hour credit.
19. MINOR INDIVIDUAL SPORTS. One hour credit.
21. FENCING. One hour credit.
22. MATWORK: 22a, PYRAMIDS; 22b, DOUBLE TUMBLING; 22c, GYMNASTICS. One hour credit each quarter.
23. TENNIS. One hour credit.
25. BODY MECHANICS. One hour credit.

Individual analysis of posture; exercises prescribed for individual needs; instruction and practice in doing everyday movements with maximum efficiency.
26. SPEEDBALL. One hour credit.

For women.
45a. FRESHMAN FOOTBALL; 45 b , VARSITY FOOTBALL; 45c, SPRING FOOTBALL. One hour credit each quarter.

46a. FRESHMAN BASKETBALL; 46b, VARSITY BASKETBALL. One hour credit each quarter.
47. WRESTLING. One hour credit each quarter.

48a. FRESHMAN GYMNASTICS; 48b, VARSITY GYMNASTICS. One hour credit each quarter.

49a. FRESHMAN SWIMMING; 49b, VARSITY SWIMMING. One hour credit each quarter.
52a. FRESHMAN BASEBALL; 52b, VARSITY BASEBALL. One hour credit each quarter.
53a. FRESHMAN TRACK; 53b, VARSITY TRACK. One hour credit each quarter.

54a. FRESHMAN TENNIS; 54b, VARSITY TENNIS. One hour credit each quarter.
61. PERSONAL LIVING. Five hours credit.

The relationship of health practices and attitudes to everyday living patterns is stressed. Effort is made to assist the student in designing a desirable health pattern that will meet the individual's need.
62. FIRST AID. Two hours credit.

This course emphasizes the prevention and emergency treatment of the common accidents.

62b. FIREARM SAFETY. (Summer Session only). Two hours credit. A functional course for teachers and advisers of hobby clubs, rifle clubs, hunting clubs, and other youth organizations. Involves actual use of firearms under field and rifle range as well as classroom conditions.
63. ADVANCED FIRST AID. One hour credit.

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

Prerequisites, H.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, H.P.E. 65.

## PROFESSIONAL COURSES

Courses 70 to 99 are for divisional majors and minors.
70. THEORY AND PRACTICE OF GYMNASTICS AND MATWORK. Two hours credit.
For men. Fundamental skills on parallel bars, rings, side horse, horizontal bar, trampoline, and mats.
71. THEORY AND PRACTICE OF MINOR SPORTS. Two hours credit. For men. Prerequisite, ability to swim. 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.

Prerequisite, enrollment limited to Physical Education majors and minors. 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. Individual analysis of posture; exercises prescribed for individual needs; instruction and practice in doing everyday movements with maximum efficiency. Techniques in the skills of minor individual sports.
81. TECHNIQUES OF VOLLEYBALL AND BASKETBALL. Two hours credit.
For women. Fundamental skills, team play, and rules.
82. TECHNIQUES OF HOCKEY AND SOCCER. Two hours credit. For women. Fundamental skills, team play, and rules.
83. TECHNIQUES OF SWIMMING. Two hours credit.

For women. Prerequisites, ability to swim, Red Cross Intermediate Swimmers Test, or H.P.E. 16b. Fundamental skills in swimming and diving. Advanced swimming.
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 stunts. Practical experience in organizing tumbling games, contests, meets, and demonstrations.

888a. PHYSICAL EDUCATION ACTIVITIES FOR THE ELEMENTARY SCHOOL. (Credit may be obtained in Health and Physical Education or Education). Two hours credit.
Prerequisite, physical education activity courses related to elementary schools. Required course for majors in elementary education. Content deals with the basic principles recognized in planning physical education program for elementary school pupils. Emphasis given to play activities as well as the regular physical education program. One hour lecture and 3 hours laboratory weekly.
888b. PHYSICAL EDUCATION ACTIVITIES FOR THE ELEMENTARY SCHOOL. (Credit may be obtained in Health and Physical Education or Education). One hour credit.
Prerequisite, H.P.E. 8.8a. Required course for majors in elementary education. Emphasis given to the physical education program and play activities appropriate for elementary school pupils during the winter months. Three hours laboratory weekly.
888c. PHYSICAL EDUCATION ACTIVITIES FOR THE ELEMENTARY SCHOOL. (Credit may be obtained in Health and Physical Education or Education). One hour credit.
Prerequisites, H.P.E. 88a,b. Required course for majors in elementary education. Emphasis given to the physical education program and play activities appropriate for elementary school pupils during the spring months. Three hours laboratory weekly.
90. TECHNIQUES IN FOLK DANCING. Two hours credit.

A presentation of the materials, methods, and techniques necessary for teaching folk dancing.
91. TECHNIQUES IN TAP DANCING AND COMPOSITION. Two hours credit.
Fundamental skills, methods, and materials necessary in the teaching of tap dancing.
92. AMERICAN SQUARE AND SOCIAL DANCE. Two hours credit.

Fundamental skills, methods, and materials necessary in the teaching of the square and the social dance. Practical experience in organizing and conducting the square dance.
93. TECHNIQUES IN CONTEMPORARY DANCE. Two hours credit.

The analysis and techniques of movement qualities and their use in relation to time and space.
94. PROBLEMS IN DANCE COMPOSITION. Two hours credit.

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

Prerequisites, H.P.E. 90, 91, 93, 94. The compilation and presentation of teaching units using progression in techniques for folk, tap, social, and contemporary dancing.
§98. ELEMENTARY NUTRITION. (Credit may be obtained in Home Economics or Health and Physical Education). Three hours credit. Enables students to select food suited to their needs in the light of the newer knowledge of nutrition and individual physical fitness.

120a,b. ANATOMY AND PHYSIOLOGY. Three hours credit each quarter.
The study of structure and function of the human body including the digestive, circulatory, respiratory, reproductive, nervous, excretory, and endocrine systems.
122. KINESIOLOGY. Three hours credit.

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

129a,b,c. TEACHING OF SPORTS FOR WOMEN. Two hours credit each quarter.
Prerequisites, H.P.E. 81, 82, 83, 84. A consideration of the basic techniques of fall, winter, and spring sports emphasizing teaching procedures.
161. COACHING OF FOOTBALL. Two hours credit.

Prerequisite, H.P.E. 76, or 45 a , or 45 b , or permission of the instructor. The technique and strategy of coaching football with emphasis upon type of formations, defense, play series, rules, and football coaching in general.
162. COACHING OF BASKETBALL. Two hours credit.

Prerequisite, H.P.E. 73, or 46 a , or b , or permission of the instructor. 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, H.P.E. 75, or 53a, or 53b, or permission of the instructor. A study of the techniques of coaching the various events in track and field, the rules, and methods of conducting track meets.
164. COACHING OF BASEBALL. Two hours credit.

Prerequisite, H.P.E. 75, or 52 a , or 52 b , or permission of the instructor. Techniques and procedures in developing individual and team play. Defensive baseball: pitching, catching, infielding, outfielding, strategy. Offensive baseball: batting, baserunning, strategy.
8183. HOME NURSING. (Credit may be obtained in Home Economics or Health and Physical Education). Two hours credit.
The chief purpose of this course is to develop the ability to give simple nursing care to a sick person in the home. The principles of care are stressed and nursing procedures demonstrated and practiced.

# §188. PHYSICAL EDUCATION ACTIVITIES FOR THE ELEMENTARY SCHOOL. (Credit may be obtained in Education or Health and Physical Education). (Summer Session only). Four hours credit. <br> Designed to furnish the elementary teacher with materials and laboratory experience in physical education activities for the elementary school program or activity period. 

## 202a. HEALTH EDUCATION IN THE ELEMENTARY SCHOOL. Four hours credit.

Prerequisite, H.P.E. 61. A course in health education designed to acquaint students with the factors of health instruction, health service programs, and methods and materials appropriate to the elementary school level.

202b. HEALTH EDUCATION IN THE SECONDARY SCHOOL. Four hours credit.
Prerequisite, H.P.E. 61. A course in health education designed to acquaint students with the factors of health instruction, health service programs, and methods and materials appropriate to the secondary school level.
203. HEALTH EDUCATION WORKSHOP. Three hours credit.

Prerequisites, upper division or graduate status and permission of the instructor. The workshop will be concerned with the practical problems of the organization and administration of school health programs. Consideration will be given to health instruction, medical and nursing services, nutrition, school lunch programs, safety, mental hygiene, and environmental sanitation. Students will actively participate in group conferences on methods, activities, procedures, materials for health education.
208. COMMUNITY HYGIENE AND SANITATION. Four hours credit.

The functions of the sanitation division primarily within local agencies, but also as related to state and national sanitation.
8209. NEW TRENDS IN NUTRITION. (Credit may be obtained in Home Economics or Health and Physical Education). Four hours credit.
A detailed study of the value of carbohydrates, fats, proteins, minerals and vitamins in human nutrition. A comprehensive study of nutrition problems in health education. $A$ study of the latest research will be made.

## 212. INTRODUCTION TO PSYCHOSOMATICS. (Summer Session only). Four hours credit. <br> Prerequisites, a course in human physiology or permission of instructor. The causes, symptoms, treatment and prevention of emotional-physical relationships, disturbances, disorders, diseases.

213. HEALTH COUNSELING. Two hours credit.

Prerequisite, H.P.E. 202a or $b$, mental hygiene and guidance courses. Effective techniques for aiding students in solving personal health problems.
§228a. MENTAL HYGIENE. (Credit may be obtained in Education or Health and Physical Education). Three hours credit.
Prerequisite, one course in psychology. A general course designed to give an understanding of the problems and principles of mental hygiene observed in normal community and school life.
§230. CAMP LEADERSHIP. (Credit may be obtained in Health and Physical Education or Education). Three hours credit.
(Offered during Pre-Session at a mountain campsite). A functional course designed to prepare college students for probable leadership service in summer camps.
232. PROBLEMS OF INDIVIDUAL GYMNASTICS. Three hours credit.

Prerequisites, H.P.E. $120 \mathrm{a}, \mathrm{b}$ and 122. The science of muscular action in relation to postural defects and treatment.

## 235. HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION. Three

 hours credit.Prerequisites, H.P.E. $120 \mathrm{a}, \mathrm{b}$, senior or graduate standing. A study of the history of physical education from the Ancient Greeks to the present time, followed by the basic foundations and principles upon which the profession is built.

## 255. CONTEMPORARY DANCE TECHNIQUES. Four hours credit.

Prerequisite, H.P.E. 93 or permission of instructor. Basic work and movement analysis including laboratory work in composition.
256. MUSIC IN THE CONTEMPORARY DANCE. Four hours credit.

Prerequisite, H.P.E. 94 or permission of instructor. The techniques of playing percussion instruments with compositions of rhythmic studies for such instruments and a more advanced study of music form and analysis in relation to dance.
265. ADVANCED TECHNIQUES IN TEACHING MAJOR SPORTS TO MEN. Two or four hours credit.
Prerequisite, teaching or coaching experience. Designed to assist the in-service teacher of major sports for men with special problems of the field including organization, strategy, personnel.
267. ADVANCED TECHNIQUES IN TEACHING SPORTS TO GIRLS. Four hours credit.
Prerequisite, Ed. 150 h or teaching experience. $\AA$ course in advanced teaching and officiating of girls' sports.
269. ORGANIZATION AND ADMINISTRATION OF A PHYSICAL EDUCATION PROGRAM FOR GIRLS. Four houts credit.
Covers the organizational and administrative problems of the girls' physical education program.
270. ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION AND ATHLETICS. Three hours credit.
Covers the organizational and administrative problems of physical education and athletics on the high school level. Aims and objectives, management of athletics, the physical plant, intramurals, and administrative policies.
8271. SAFETY EDUCATION. (Credit may be obtained in Health and Physical Education or Education). Three hours credit.
Comprehensive course for probable administrators of safety programs in public schools.
§271a. SEMINAR IN SAFETY EDUCATION FOR TEACHERS AND SUPERVISORS. (Credit may be obtained in Education or Health and Physical Education). Three hours credit.
A functional approach to problems in safety education for the teacher and supervisor.
272. RECREATION LEADERSHIP. Three hours credit.

Readings, reports, and projects covering the philosophy, methods, and materials for the recreation leader.
275. METHODS AND MATERIALS OF DRIVER EDUCATION. Four hours credit.
This course emphasizes the underlying characteristics and psychology of drivers, the development of laws, and the basic principles of automobile driving and operation. Completion of course requirements insures certification by the Colorado Department of Public Instruction and the American Automobile Association.
§279c. ORGANIZATION AND ADMINISTRATION OF THE HEALTH EDUCATION PROGRAM. (Credit may be obtained in Education or Health and Physical Education). Two hours credit.
A course designed to acquaint the school administrator with the problems of health. The content includes the place of health education in the school program from the nursery school through the twelfth grade. It deals chiefly with four phases: health instruction, health services, health practices, and the importance of allied agencies.
280. CARE OF ATHLETIC INJURIES. Four hours credit.

Prerequisites, H.P.E. 62, 120a,b, and 122. Laboratory required. Intensive course in care and treatment of athletic injuries with much time devoted to each specific injury. The exiology, pathology, signs and symptoms, treatment, and adapted activities will be given for the major injuries.
288. HEALTH AND PHYSICAL EDUCATION IN THE ELEMENTARY SCHOOL. Three hours credit.
Designed for the elementary teacher utilizing both laboratory and lecture techniques in developing a functional program of health and physical education in the elementary school.
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.

## 303. PROBLEMS IN HEALTH EDUCATION. Four hours credit.

Prerequisite, H.P.E. 202a or b. Advanced study of research relating to the most pertinent problems in the field of personal health.
304. SCHOOL HEALTH ADMINISTRATION. Four hours credit.

Prerequisite, permission of instructor. Survey of school programs including organization, administration, supervision, personnel, legal aspects, equipment and finance; school health services and interrelationship; testing and evaluation techniques; developmental programs in health education; and curriculum. For health educators.
308. ADMINISTRATION OF PUBLIC HEALTH PROGRAMS. Four hours credit.
Types of health organizations and their administration at local, state and national levels.
310. SEMINAR IN HEALTH EDUCATION. Four hours credit.

Prerequisite, H.P.E. 202a or b. Intensive consideration to individual student problems as related to the various areas of the field.
312. TESTS AND MEASUREMENTS IN HEALTH AND PHYSICAL EDUCATION. Four hours credit.
A survey of tests and measurements in health and physical education, their uses and methods of construction, and presentation of necessary statistical material for test interpretation.
322. INDIVIDUAL STUDIES IN HEALTH AND PHYSICAL EDUCATION. Four hours credit.
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, H.P.E. 120a,b. Effect of muscular activities on the various systems and organs of the body.

## 336. THE SCIENCE OF BODY MECHANICS. Four hours credit.

A course designed to give fundamental material in the relationship of bones and muscles to movement; the analysis of movement in various activities, and the recognition of and exercises for remediable defects. Emphasis will be placed on problems of individual students in relationship to home or school situations.
340. CURRICULUM IN HEALTH AND PHYSICAL EDUCATION. Four hours credit.
Principles involved in curriculum construction. Experience provided in building curricula.
344. SUPERVISION OF PHYSICAL EDUCATION. Four hours credit. Prerequisites, Ed. $150 \mathrm{~g}, 150 \mathrm{~h}$, or permission of instructor. Concepts, principles, organization, and techniques of supervision for use by superintendents, supervisors, and teachers in the construction or supervision of a physical education program.
355. ADVANCED TECHNIQUES AND COMPOSITION FOR THE CONTEMPORARY DANCE. (Summer Session only). Four hours credit. Prerequisite H.P.E. 93 or permission of instructor. A continuation of H.P.E. 255 stressing problems in composition to be presented in performance before an audience.
356. WORKSHOP IN CONTEMPORARY DANCE. (Summer Session only). Four hours credit.
Prerequisite, H.P.E. 255, 355, or permission of instructor. Problems connected with the staging of dance performances.


#### Abstract

377. ORGANIZATION AND ADMINISTRATION OF COMMUNITY RECREATION. (Summer Session only.) Four hours credit. This course deals with the complete organization and administration of the community recreation program. It treats the ten essential areas of this subject such as the fact finding survey, legal aspects, municipal organization, organization of recreation department, financing, records and reports, publicity, cooperation and relationships, leadership, program.


399. THESIS. Eight hours credit.

## Division of the Humanities

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

The academic programs are:

1. A major in English leading to the Bachelor of Arts and Master of Arts degrees with teaching certificates.
2. A major in Foreign Languages leading to the Bachelor of Arts degree with teaching certificate.
3. A major in Speech and Drama leading to the Bachelor of Arts and Master of Arts degrees with teaching certificates.
4. Minors in English, Foreign Languages, Speech and Drama.
5. A program leading to the Bachelor of Arts degree (liberal arts).

## ENGLISH MAJOR

## Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 161, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed on Page 160.
(3) Two minors of 24 quarter hours each. Only one of these may be taken in the Division of the Humanitiesin Speech and Drama or Foreign Languages.
(4) 4 to 11 quarter hours of free electives to complete 180 quarter hours of academic credit required for graduation.
Programs must be planned with the student's adviser.

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

Required courses in the major:
COURSE NUMBER COURSE TITLE HOURS CREDIT
Eng. 4a, 4b, $210-\quad-\quad-\quad$ English Composition - $-\quad-7$ or 8 or 9
Eng.
Eng
Eng. (selected)* - - - - - - - - - - - - - - - 9

Eng. 61 - - - American Literature Since the Civil War 4
$\begin{array}{lll}\text { Eng. 110a or b or c - - } \\ \text { Eng. } & \text { Creative Writing - } & \text { - }\end{array}$

Voice and Diction - - - - - 4
Sp. 114 - - - Introduction to the Theater - - - 3
Courses selected to total 48
*Selected from:


## English Minor



Courses selected to total 24

## Graduate Study

Detailed information about the Graduate program may be obtained from the Graduate Bulletin. Course work will be outlined by the student's major professor.

## COMMON COURSES

## Bachelor of Arts Degree (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.



## Junior and Senior Years

| COURSE | NUMB |  |  |  | COURSE TITLE | HOURS | CREDIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ed. | 105 | - | - - |  | American Education | - - - | - - 3 |
| Ed. | 150 | - | - - |  | Methods and Observation | - - | - 5 |
| Ed. | 151 | - | - - |  | Student Teaching - | - - - | 8 to 15 |
| Ed. | 214 | - | - - |  | The Elementary School |  |  |
| Ed. | 2 |  | - - |  | The Secondary School or | - - |  |
| Ed. | 295 |  | - - |  | Philosophy of Education | - - | 3 |

## Description of Courses

Courses marked with a section mark (§) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

## HUMANITIES

1. FIRST COURSE IN THE HUMANITIES. Three hours credit.

A systematic historical study of the great philosophic ideas from Greek times to the present. These ideas are developed from a study of the literature, painting, sculpture, architecture and music of the periods studied. This course is further designed to develop active creative interests in the arts.
2. SECOND COURSE IN THE HUMANITIES. Three hours credit. Continuation of Humanities 1.
3. THIRD COURSE IN THE HUMANITIES. Three hours credit. Continuation of Humanities 2.
240. ADVANCED COURSE IN THE HUMANITIES. Five hours credit. Offered jointly by various members of the staff, this course consists of an intensive humanistic treatment of a few great works and great themes in literature in correlation with the other arts.

ENGLISH
4a. ELEMENTARY ENGLISH COMPOSITION. Five hours ctedit. The basic needs for correct, acceptable usage in writing, with practice in written expression.
4b. ELEMENTARY ENGLISH COMPOSITION. Four hours credit. Continuation of Eng. 4a.
50. SHAKESPEARE. Three hours credit.

A basic Shakespeare course for the English major with a special stress on plays that are usually taught in the public schools.
51. THE RESTORATION AND EIGHTEENTH CENTURY. Three hours credit.
A study of major writers of the period with attention to their influence on subsequent ideas and literary forms.
52. THE ROMANTIC MOVEMENT. Three hours credit.

The development of English Romanticism; its social and philosophical backgrounds. Wordsworth, Coleridge, Byron, Shelley, and Keats; with some consideration of the essayists and minor poets.
53. VICTORIAN PROSE AND POETRY. Three hours credit.

A study of the poems and more important prose works of the major Victorian writers, and of their relation to the life of the times.
54. CONTEMPORARY BRITISH LITERATURE. Three hours credit.

British literature between the wars and to the present day. Consideration of how the main currents in British life and thought have determined its direction.
55. HISTORY OF IDEAS IN ENGLISH LITERATURE. Three hours credit.
Prerequisite, four of the five courses in the " 50 " series. An examination of the principal ideas which shaped the literature of England from Chaucer to the present. Sources and comparative movements are traced. Both subject matter and technique are considered.

58a. SURVEY OF ENGLISH LITERATURE (700-1800). Four hours credit.
Comprehensive readings in English literature following its development from Beowulf to the Romantic movement.

58b. SURVEY OF ENGLISH LITERATURE (1800-1945). Four hours credit.
Comprehensive readings in English literature following its development since the Romantic movement.

58c. SURVEY OF AMERICAN LITERATURE. Four hours credit.
Reading of major writers from the beginning to the present with particular attention to democratic values.
60. AMERICAN LITERATURE TO THE CIVIL WAR. Four hours credit. A study of a body of American literature produced in the $17 \mathrm{th}, 18 \mathrm{th}$, and 19th centuries. The course includes textual criticism of the major works.
61. AMERICAN LITERATURE SINCE THE CIVIL WAR. Four hours credit.
Prerequisite, Eng. 60. A study of American literature in the late 19 th and 20 th centuries. The course includes reading and criticism of important writers.

101a,b,c. TECHNIQUES OF NEWSWRITING. One hour credit each quarter.
Practice in journalistic writing with actual experience on the college newspaper.

110a,b,c. CREATIVE WRITING. Two hours credit each quarter.
Opportunity to write creatively under criticism with emphasis upon the individual's own purposes and experiences. A student is allowed a maximum of six hours credit.

200a,b,c,d. WORKSHOPS IN THE TEACHING OF ENGLISH. (Summer Session only). Three hours credit each unit.
A series of workshops in special problems in the teaching of English, conducted by authorities in the field.
201. JOURNALISM-THE SCHOOL NEWSPAPER AND ANNUAL. Three hours credit.
Instruction in all phases of preparation and publication of school news. papers and annuals.
202. EXPLORATORY READING. Four hours credit.

Contemporary literature as it relates to the needs of adolescents.
203. NEW APPROACHES TO THE TEACHING OF GRAMMAR. Four hours credit.
A considpration of the psychological, linquistic, and functional principles which affect the teaching of grammar. The development of new materials for grammar instruction in the light of these principles.
210. ADVANCED COMPOSITION. Three hours credit.
$\dot{A}$ course intended for upper division and graduate students to increase competence in expository writing. Special emphasis will be placed upon English style form standards for the term or research paper. Attention will be given to footnotes, bibliography, methods of library research, manuscript form and style.
211. THE ENGLISH LANGUAGE. Four hours credit.

The course presents a history of the development of the English language, the historical basis of usage and grammar, the sources of the English vocabulary, and the problem of communication.
221. LITERATURE IN THE ELEMENTARY SCHOOL. Three hours credit.
A survey of children's literature that is appropriate for grades through the sixth. Chief emphasis on modern selections. Consideration of interests and abilities governing the choice of literature in the first six grades.
226. LITERATURE AND MATERIALS 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.
231. THE SHORT STORY. Three hours credit.

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

Ten novels will be studied intensively as illustrations of such techniques as impressionism, expressionism, and stream of consciousness. Points of view such as naturalism and realism will also be studied.
235. CONTEMPORARY AMERICAN DRAMA. Three hours credit.

A comprehensive view of the best dramatic literature of the modern American theater: lectures, discussions, and readings from a selected list of contemporary dramas.
239. THE FORMS AND MEANING OF POETRY. Four hours credit. A study of some of the formal aspects of poetry (prosody, stanzaic and "named" forms, and the like), of types (lyric, narrative, dramatic), and of the poets' use of language.

255c. ELIZABETHAN DRAMA EXCLUSIVE OF SHAKESPEARE. Five hours credit.
The drama from 1585 to 1642 ; the major dramatists, stage conditions, acting companies, and changes in dramatic form and subjects reflecting the life of the times.

258a. READINGS IN ENGLISH LITERATURE FROM 700-1800.
(Summer Session only). Four hours credit.
A survey of English literature from Beowulf to the Romantic Movement.
258b. READINGS IN ENGLISH LITERATURE FROM 1800-1945. (Summer Session only). Four houts credit.
A survey of English literature from the Romantic Movement to the present time.

258c. READINGS IN AMERICAN LITERATURE TO 1865. (Summer Session only). Four hours credit.
A survey of the beginnings of American literature until the time of the Civil War.

258d. READINGS IN AMERICAN LITERATURE SINCE 1865. (Summer Session only). Four hours credit.
A survey of modern American literacure.
289a. LITERATURE OF THE OLD TESTAMENT. Three hours credit. A study of the Old Testament writings to develop an appreciation of their literary value. Study is made of the historical background of the various writings, and the ideas that were developed by the writers.

289b. LITERATURE OF THE NEW TESTAMENT. Three hours credit. A study of the New Testament writings, the period in which they were written and the ideas that were developed by the writers.

## 290. LATIN AMERICAN LITERATURE IN TRANSLATION. Four hours credit. <br> The nature, fundamental aspects and development of literature in Latin America, including Brazil, are studied. Readings, oral and written reports, and discussions cover literature of special interest from the colonial through the revolutionary and modern periods-the epic, romantic gaucho and realistic types. (Conducted in English).

291. FRENCH LITERATURE IN TRANSLATION. Four hours credit. A rapid survey of French literature from the eleventh century to the present, stressing the relation of French literary movements to European cultural history and the influence of French writers upon western civilization. (Lectures, individual readings, and reports).
292. REMEDIAL WRITING LABORATORY FOR GRADUATE STU. DENTS. No credit.
A required remedial writing laboratory for graduate students whose English Usage ability is low and who need help. No credit will be granted for the course. An extra fee for services and materials will be charged.
293. 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.
294. BRITISH LIFE AND LITERATURE SINCE 1920. Four hours credit. Special study of Joyce, Lawrence, Forster, Huxley, Virginia Woolf, and T. S. Eliot. Contemporary literature related to other features of British life.
295. THE AMERICAN CRITICS. Four hours credit.

A seminar for graduate students in theory and practice of criticism of literature in America. The major critics and the recognizable "schools" are a nalyzed.
303. RECENT ENGLISH AND AMERICAN POETS. Four hours credit. Prerequisite, Eng. 239. A history of recent poetry in English, from the Imagists to the present.
304. THE GREEK DRAMA. Four hours credit.

A study of the dramas of Aeschylus, Sophocles, Euripides and Aristophanes to note the development of dramatic technique and the developing ideas from the beginnings of classicism, through the golden age, to decadence.
305. PROLETARIAN LITERATURE. Three hours credit.

A study of the backgrounds and major developments of proletarian literature in the United States: novel, essay, poetry, criticism.
312. OLD ENGLISH. Five 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. Five hours credit. Writings of Geoffrey Chaucer (especially The Canterbury Tales and Troilus and Cressida) in Middle English; selected writings to illustrate both the literary qualities and linguistic aspects of Middle English.
314. SHAKESPEARE SEMINAR. Four hours credit.

Detailed study of three of the great plays, introduction to Shakespearean scholarship, and a review of Shakespearean criticism. Offered only when five or more students request the course.
315. MILTON SEMINAR. Four hours credit.

A study of Milton's prose and poetry. Offered only when five or more students request the course.
316. SEMINAR IN TENNYSON AND BROWNING. Five hours credit.

A review of the shorter poems of both men and a special stress on some of the longer works (Maud; Idylls of the King; The Ring and Book) and an introduction to the critical writings about Tennyson and Browning. Offered only when five or more students request the course.
317a,b. SEMINAR IN MAJOR AMERICAN WRITERS. Four hours credit each quarter.
A study of selected American writers, with special emphasis on their relation to the currents of American thought. Reports by each member of the class will be determined by the interest of the student. Offered only when five or more students request the course.
318. SEMINAR IN RESTORATION AND EIGHTEENTH CENTURY DRAMA. Fout hours credit.
A study of the types of plays written between 1660 and 1800 , with particular attention to Heroic Tragedy, Comedy of Manners, and Sentimental Drama, as represented by Dryden, Wycherley, Etherege, Otway, Congreve, Steele, Addison, Goldsmith, and Sheridan, etc. Offered only when five or more students request the course.
322. INDIVIDUAL STUDIES IN ENGLISH. Credit hours by artangement. Maximum credit, four hours.
Qualified students outline definite problems and present a typewritten paper under the guidance of a faculty member in the division.
323. SEMINAR IN TEACHING THE HUMANITIES. Four hours credit. A consideration of the purpose of the humanities as a field for the discovery of human knowledge. The various plans for integrating the humanities in college general education programs are studied. Practical work in the development of materials for teaching in the humanities is a part of the course. Offered only when five or more students request the course.
324. SEMINAR IN COMMUNICATIONS. Four hours credit.

A study of the purpose of communications as a part of general education. The various types of communication courses offered in college general education programs will be studied. Each student will prepare and present practical materials for use in such courses. Offered only when five or more students request the course.
325. SEMINAR IN WORLD LITERATURE. Five hours credit.

Taught jointly by several members of the division, each presents one or more of the great literary masterpieces of the world. These will be considered in chronological order though no attempt will be made to carry on a historical study. Offered only when five or more students request the course.
326. RECONSTRUCTING THE ENGLISH CURRICULUM. Four hours credit.
A study of the place of English in the curriculum of the secondary school, with a consideration of appropriate materials and their placement.
399. THESIS. Eight hours maximum credit.

## FOREIGN LANGUAGES MAJOR Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 161, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed below.
(3) One minor of 24 quarter hours either within or outside the Division of the Humanities. If within the division, it will be selected from Speech and Drama or English.
(4) 28 to 35 quarter hours of free electives to complete 180 quarter hours of academic credit required for graduation.
Programs must be planned with the student's adviser.

## FOREIGN LANGUAGES MAJOR Bachelor of Arts Degree (With Teaching Certificate)

Required courses in the major:
For Beginning Students In Languages
HOURS CREDIT
(1) Three years of one language (French, Latin, or Spanish) - 36
(2) One year of a second language - . . . . . . . . 12-15

For Students With language In High School
(1) If a student has had two or more years of a single language in high school, he may start his college work with the intermediate course in that language, taking 21 quarter hours of college work in it -21
(2) Second language will be selected by the student - - - 24
(3) Advanced work in either (1) or (2) above - - . . 3

Please Note-College credit will not be given for language courses taken in high school.

## Minor in Foreign Languages

The requirements are 24 quarter hours in one language.

## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (§) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.

## FRENCH

1, 2, 3, ELEMENTARY FRENCH. Five hours credit each quarter.
Introduction to spoken and written French, with emphasis on oral work. Principles of pronunciation and grammar; exercise in speaking, reading, and writing. Credit is not given until the three quarters are complete.
5. INTERMEDIATE FRENCH COMPOSITION. Three hours credit.

Prerequisite, two years of high school French or one year of college French. Grammar review, study of idioms, imitative composition. Drill in use of the phonetic alphabet.
6. INTERMEDIATE FRENCH READING AND CONVERSATION. Three hours credit.
Prerequisite, two years of high school French or three quarters of college French. A study in French of French political and cultural history, with lectures, reading and conversation. (This course may be taken without having had French 5).
7. INTERMEDIATE FRENCH FICTION. Three hours credit.

Prerequisite, two years of high school French or three quarters of college French. Short stories and plays. Conversation based on the reading. (This course may be taken without having had French 5 or 6 .)
205, 206, 207. SURVEY OF FRENCH LITERATURE. Four hours credit each quarter.
Prerequisite, two years of college French or the equivalent. A study of French literature from the eleventh century to the present. Lectures, reading, recitation, and individual reports in French. Each course may be taken independently. French 205, Medieval and Renaissance Literature; French 206, Classicism; French 207, Romanticism and Modern Literature.
225. EIGHTEENTH CENTURY FRENCH LITERATURE. Three hours credit.
Prerequisite, two years of college French or the equivalent. Literature, society, and trends of thought in eighteenth century France. Readings, lectures, and discussion in French.
226. FRENCH ROMANTICISM. Three houts credit.

Prerequisite, two years of college French or the equivalent. The Romantic movement in France in relation to the movement elsewhere in Europe. Readings, lectures and discussion in French.

## 227. TWENTIETH CENTURY FRENCH LITERATURE. Three hours credit.

Prerequisite, two years of college French or the equivalent. Lectures in French on writers and literary trends of this century, with extensive individual readings and reports.

## GERMAN

1, 2, 3. ELEMENTARY GERMAN. Five hours credit each quarter.
The course aims to develop the ability to speak practical German accurately and fluently, and to read the language in direct comprehension. In the last quarter the reading is differentiated to suit individual purposes and may include simple scientific German. Credit not given until three quarters are completed.
5. INTERMEDIATE GERMAN COMPOSITION. Three hours credit. Prerequisite, two years of high school German or one year of college German. Review of grammar; imitative composition, oral drill.
6. INTERMEDIATE GERMAN READING AND CONVERSATION. Three hours credit.
Prerequisite, two years of high school German or one year of college German. Reading of modern German fiction, with conversation based on the reading. (This course may be taken without having had German 5).
7. INTRODUCTION TO GERMAN CLASSICS. Three hours credit.

Prerequisite, German 5 or 6 or the equivalent. Reading and discussion of one classical play and short poems of the classical period.

## ITALIAN

1, 2, 3. ELEMENTARY ITALIAN. Five hours credit each quarter.
A three-quarter sequence designed especially for music students, with emphasis on pronunciation and vocabulary, particularly music terms. Basic grammar, simple reading, and conversation. No credit is given until three quarters are completed.

## LATIN

1, 2, 3. ELEMENTARY LATIN. Four hours credit 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 and the professions. Emphasis on vocabulary, word derivation, comparative grammar. No credit given until three quarters are completed.
5, 6, 7. INTERMEDIATE LATIN. Three hours credit each quarter.
Prerequisite, two years of high school Latin or one year of college Latin. Reading of an anthology containing selections of intermediate grade, accompanied by constant intensive grammar review. Each course may be taken independently.

205, 206, 207. SURVEY OF LATIN LITERATURE. Three hours credit each quarter.
Prerequisite, four years of high school Latin or two years of college Latin. A chronological study of Latin literature of the classical period covering five centuries. Each course may be taken independently.

## SPANISH

1, 2, 3. ELEMENTARY SPANISH. Five hours credit each quarter.
Three quarter sequence in the basic elements of Spanish through the auraloral conversational approach; intensive and extensive use of oral-aural materials; writing and reading exercises; the use of audio-visual aids and devices to provide practical materials for pronunciation comprehension, adequate construction, and fluency of expression in the language. Credit is not given until the three quarters are completed.
5. INTERMEDIATE SPANISH. Four hours credit.

Prerequisite, two years of high school Spanish or one year of college Spanish or the equivalent. Review of the basic principles of the language. Auraloral orientation through oral and written composition, conversation and audio-visual aids; stressing normal fluency and readiness in the use of Spanish in ordinary communication.
6. INTERMEDIATE SPANISH. Four hours credit.

Prerequisite, two years of high school Spanish or one year of college Spanish. A continuation of Spanish 5 but emphasizing more intensive reading, oral reports. advanced composition, and extensive conversation based on Spanish and Spanish-American areas.
7. INTERMEDIATE SPANISH. Four houts credit.

Prerequisite, two years of high school Spanish or one year of college Spanish. A continuation of Spanish 6. Based on Spanish-American cultural materials, sources, films, audio-visual materials and a higher level of allaround comprehension and fluent functional use of the language and culture.
105. SURVEY OF SPANISH LITERATURE. Three hours credit.

Prerequisite, two years of college Spanish or the equivalent. An introduction and orientation to Spanish literature through reading and discussing appropriate materials designed for students beginning the advanced level. The materials portray the development of literary and social ideas prevalent at various periods in the national life of Spain. Some English is used, when necessary, to interpret more accurately the significance; otherwise, Spanish is the language of the course. It is not a translation course.
106. SURVEY OF SPANISH LITERATURE. Three hours credit. Prerequisite, two years of college Spanish or the equivalent. Organized as a basic course, illustrating important periods and various gentes of Spanish literature, by notable authors. The literary language of the representative samples selected is generally modernized to enable the student to understand it and to form critical opinions as well as to appreciate good writings as literature. Conducted in Spanish. Spanish 105 is not a prerequisite.
107. SURVEY OF LATIN AMERICAN LITERATURE. Three hours credit.
Prerequisite, two years of college Spanish or the equivalent. A general survey of Spanish-American literature and some of its underlying history. This course completes the series of Spanish 105, 106, 107. It presents a comprehensive view of the literature of the Spanish-speaking world at various periods of time and is designed to provide the student with sufficient basic information and sources for him to use for practical purposes.
175. SPANISH READING. Three hours credit.

Prerequisite, at least one year of college Spanish. Designed to fit the reading abilities and interests of various members. Class meets two days a week for intensive reading. Extensive outside reading is reported in conference.
209. SPANISH AMERICAN LITERATURE. Three hours credit.

This course is designed to serve advanced students and teachers of Spanish. It consists of an anthology of Latin American literature in Spanish, and a brief reference outline of the history of literature, in English, up-todate. Readings, discussions, and reports are in Spanish.
216a,b. ADVANCED SPANISH READING IN LITERATURE. Three hours credit each quarter.
This study of Spanish literature is divided into two parts: one quarter is devoted to each part. 216a, from the beginning to 1700 , including the Golden Age (Three credit hours). 216b, from 1700 to the contemporary. A brief analysis of the history of Spanish literature and important literary productions. Special readings of various types of literature; oral and written reports and discussion. Conducted in Spanish. (Three credit hours).

## FOREIGN LANGUAGE

222. INDIVIDUAL STUDIES IN FOREIGN LANGUAGE. Credit by arrangement. Maximum credit, five hours.
Prerequisite, two years in college, or the equivalent, of the language in which the study is made. Individual readings and written reports, with regular conferences, in any subject the student may select; in any foreign language offered in the college (French, German, Italian, Latin, Spanish).
223. THE TEACHING OF FOREIGN LANGUAGES. Three hours credit. A study of problems in the teaching of foreign languages at the secondary school level. Includes development of content for courses of study, organization of learning materials, procedures in teaching, testing and evaluation.

## SPEECH AND DRAMA MAJOR Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 161, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed below.
(3) Two minors of 24 quarter hours each. Only one of these may be taken in the division of the Humanities and selected from English or Foreign Languages.
(4) 4 to 11 quarter hours of electives to complete 180 quarter hours of academic credit required for graduation.
Programs must be planned with the student's adviser.

## SPEECH AND DRAMA MAJOR Bachelor of Arts Degree (With Teaching Certificate)

Required courses in the major:



## Graduate Study

Detailed information about the Graduate program may be obtained from the Graduate Bulletin. Course work will be outlined by the student's major professor.

## ENGLISH MAJOR

## Bachelor of Arts Degree (Liberal Arts)

The following program is required: (1) Common Courses listed on Page 40; (2) The English requirements listed for the major on Page 160 with the exception that substitutions may be made for Eng. 201 and Sp. 114 with the consent of the adviser; (3) One minor; (4) Electives to complete requirements for graduation. Programs must be planned with the student's adviser.

Courses required for a minor under this program are: Eng. 58a, 58b, $58 \mathrm{c}, 211$, and eight hours of composition.

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

The following program is required: (1) Common Courses listed on Page 40; (2) The Foreign Language requirements listed for the major on Page 169 ; (3) One minor; (4) Electives to complete requirements for graduation. Programs must be planned with the student's adviser.

Courses required for a minor under this program are 24 quarter hours in one language.

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

The following program is required: (1) Common Courses listed on Page 40: (2) The Speech and Drama requirements listed on Page 174 with the exception that substitutions may be made for Sp .125 and 164 with the consent of the adviser; (3) One minor; (4) Electives to complete requirements for graduation. Programs must be planned with the student's adviser.

Courses required for a minor under this program are 24 quarter hours in speech selected with the advice of a member of the faculty in speech and drama.

## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark ( $\S$ ) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.

## SPEECH AND DRAMA

5. FUNDAMENTALS OF SPEECH. Four hours credit.

This is a basic course in speech designed to aid the student in acquiring ease, poise, and effectiveness in speech.
16. VOICE AND DICTION. Four hours credit.

A study of the development and use of the speaking voice with particular attention to individual needs.

18a. ARGUMENTATION AND DEBATE. Three hours credit.
A basic course designed to give the speaker experience and skill in debating.
18b. INTERCOLLEGIATE DEBATING. Two hours credit.
Primarily for those students participating in campus and inter-collegiate programs in discussion and debating.
45. SPEECH COMPOSITION. Two hours credit.

This course consists of the study of the techniques involved in the writing of memorized speeches. Several written speeches are studied analytically and speeches are then written to be memorized.
62. PUBLIC 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 hours credit.

An introduction to the basic principles of acting and dramatic production.
865. BEGINNING SCENE DESIGN. (Credit may be obtained in Fine Arts or Humanities). Three hours credit.
Prerequisite. F.A. 1, 11, or equivalent. A study of the art of the theater from the designer's point of view. Practical experience in working out art problems involved in production.
112. CHILDREN'S THEATER. Three 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. INTRODUCTION TO THE THEATER. Three hours credit.

A lecture and laboratory course in all aspects of play production. Attendance at rehearsals for campus productions required.
115. THEATER WORKSHOP. (Advanced Characterization). Four hours credit.
A lecture and laboratory course in characterization in which the student participates in college theater productions.
116. THEATER WORKSHOP. (First Course in Play Direction). Four hours credit.
A lecture and laboratory course in the principles of direction in which the student participates in college theater productions.
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. CRITICAL THINKING. Four hours credit.

A study of evidence, reasoning, semantics, beliefs and prejudice as they affect thought processes involved in all forms of oral and written discourse.
125. TEACHING SPEECH IN THE SECONDARY SCHOOLS. Three hours credit.
A study of objectives, problems, resources, and projects in the teaching of speech in junior and senior high schools.
164. INTRODUCTION TO REMEDIAL SPEECH. Three hours credit.

An introduction to the area of speech difficulties on the elementary, secondary, and college levels. Training in recognition, diagnosis, and the treatment of minor speech problems. Speech $265 \mathrm{a}, \mathrm{b}$, or c required as a part of the course.
200. TECHNIQUES OF PLAY DIRECTION. Three hours credit.

Prerequisite, Speech 115 and 116 or equivalent. An advanced course in the direction of three-act and one-act plays for public presentation.

208b. RADIO SPEAKING. Fout houts credit.
This course gives an understanding and some measure of skill in utilizing the radio in the classroom auditorium. Problems of radio production and radio appreciation are discussed.
214. SUMMER THEATER WORKSHOP. (Summer Session only). Four hours credit.
Prerequisite, student must be a member of the Summer Theater Company. Practical experience in acting and other aspects of theater work in the six productions done by the summer theater. Discussion, lecture, and laboratory procedures used.
215. DIRECTING HIGH SCHOOL AND COMMUNITY PLAYS. Three 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. Three hours credit. Prerequisite, Speech 117 or consent of instructor. The development of greater skill in reading various forms of literature.
218. DISCUSSION TECHNIQUES. Four hours credit.

Principles and practice in organizing, conducting, and participating in all forms of public discussion including round-tables, symposiums, debates, and forums.
8232. ADVANCED SCENE DESIGN. (Credit may be obtained in Fine Arts or Humanities). Three hours credit.
Prerequisites, 65 or equivalent. The techniques and problems of scenic design involving the esthetic qualities of settings, costumes, properties, and lighting.
250. SPEECH EDUCATION. Four hours credit.

A seminar study of practices and trends in speech education in elementary and secondary schools.
§251. SPEECH FOR THE CLASSROOM TEACHER. (Credit may be obtained in Education or Humanities). Four hours credit.
A course designed to increase the personal effectiveness of the teacher in the classroom with emphasis on the improvement of instructional speaking. Not for speech majors.
252. BUSINESS AND PROFESSIONAL SPEAKING. Four hours credit. Designed particularly to give school administrators instruction and practice in organizing and presenting speeches which they are called upon to make in connection with their professional positions.
265. SPEECH PATHOLOGY. Three hours credit.

Prerequisite, Speech 164. A consideration of disorders of articulation, phonation, rhythm, and symbolization with emphasis on methods and materials of re-education. Speech $265 \mathrm{a}, \mathrm{b}, \mathrm{c}$, or s required as part of the course.

265a,b,c,s. REMEDIAL SPEECH LABORATORY. One or two hours credit. This course supplements the methods of speech diagnosis and treatment with observation and supervised teaching and is a required part of Speech 164, Speech 265, and Speech 266.
266. ADVANCED SPEECH PATHOLOGY. Three hours credit. Prerequisite, Speech 164 or 265 . A continuation of Speech 164 and 265 with further study of severe disorders of speech and factors that contribute to these disorders. Speech $265 \mathrm{a}, \mathrm{b}, \mathrm{c}$, or s required as part of the course.
370. THE PSYCHOLOGY OF SPEECH. Four hours credit.

A study of 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.

## Division of Music

The Division of Music offers a complete program in the professional and cultural education of the music teacher and the musician. The areas of music study include music theory, sightsinging and ear training, history and literature of music, music education, and all areas of individual music performance.

The academic programs are:

1. A major in music leading to the Bachelor of Arts and Master of Arts degrees with teaching certificates.
2. A five year program leading to the Bachelor of Arts degree with teaching certificate and the Bachelor of Music degree.
3. A minor in music for elementary education majors.
4. A minor in music for students other than elementary education majors.

## MUSIC MAJOR

## Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 184, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed on Page 181.
(3) One minor of 24 quarter hours outside the Division of Music.
(4) 28 to 35 quarter hours of free electives to complete 180 quarter hours of academic credit required for graduation.
Programs must be planned with the student's adviser.

## MUSIC MAJOR Bachelor of Arts Degree (With Teaching Certificate)

Required courses in the major:

| COURSE NUMBER |  |  |  | COURSE TITLE | HOURS | CR |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mu | 2a |  |  | Sight Singing and Notation |  | - |  |
| Mus | 2 b | - - | - - | Sight Singing and Elementar | ry Theory | - |  |
| Mus. | 2 c |  |  | Sight Singing and Harmo | Analysis | - |  |
| Mus | 50a,b,c | - - | - - | Introduction to Music Educ | on |  |  |
| Mus | 51a | - - |  | Advanced Sight Singing | d Ear | g |  |
| Mus | $5.1 \mathrm{~b}, \mathrm{c}$ | - - | - - | Advanced Sight Singing and |  |  |  |
| Mus | $52 \mathrm{a}, \mathrm{b}, \mathrm{c}$ | - - | - - | Harmony |  |  |  |
| Mus | 58a,b,c | - - | - - | History of Music |  |  |  |
| Mus | 152 | - - |  | Counterpoint |  |  |  |
| Mus | 153 |  |  | Form and Analysis |  |  |  |
| Mus | 154 | - - | - - | Instrumentation | - - |  |  |
| Mus. | 155a | - - |  | Instrumental Conducting |  |  |  |
| Mus. | 155 b | - - |  | Choral Conducting | - - - | - - |  |
| Mus. | 165 |  |  | Teaching Instrumental Music |  | - - |  |

## Music Proficiencies and Activity Requirements

Major Performance-Demonstrate the ability to present a musicianly performance in the playing of a music instrument or in singing. The student will be expected to appear as a soloist in a major portion of a senior recital. For most students this will entail continuous study of the major instrument.

Secondary Performance-Demonstrate the ability to use a secondary instrument or voice in ensemble playing or singing.

Piano-Demonstrate the ability to play, at sight, a piano accompaniment suitable for community or classroom singing.

Music activity-Continuous participation in one or more music organizations of the college.

Elective credit may be used in enrolling for work in applied music and music activity. Such earned credit will apply toward graduation.

## Graduate Study

Detailed information about the Graduate Program may be obtained from the Graduate Bulletin. Course work will be outlined by the student's major professor.

## Bachelor of Arts (With Teaching Certificate) and Bachelor of Music Degrees <br> (Five Year Combined Course)

Admission to candidacy for the combined Bachelor of Arts and Bachelor of Music degrees is based upon the recommendation of a reviewing committee composed of members of the Music Division. The student who desires to complete the combined degrees must demonstrate an outstanding degree of musical talent. Application for admission to the combined degrees program must take place prior to the close of the student's second year in college.

The following is required for the completion of the combined degrees program:


## Music Proficiencies

Complete the proficiency requirements outlined for the Bachelor of Arts degree. In addition, the student will supplement this proficiency requirement by:

Major Performance: Complete twenty-seven additional quarter hours of work in his major instrument. The student will register for three quarter hours of work in his major instrument each term through the third, fourth, and fifth years of study.

Recital: Each candidate for the combined degrees will present a complete graduation recital.


## COMMON COURSES

## Bachelor of Arts Degree (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.



## Junior and Senior Years



## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (§) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.

## Music Theory, History and Literature

## 2a. SIGHT SINGING AND NOTATION. Two hours credit.

Sight reading of standard music materials, pitch and rhythmic dictation. Symbols of music notation, staff, clefs, scale construction in major and minor keys, and intervals.

2b. SIGHT SINGING AND ELEMENTARY THEORY. Two hours credit. Prerequisite, Music 2a. Continuation of sight reading, ear-training, and dictation; elementary theory to include study of intervals and inversions, triads and inversions, construction of principal and secondary chords, melody writing, and elementary form study.

2c. SIGHT SINGING AND HARMONIC ANALYSIS. Two hours credit. Prerequisites, Music 2a and 2 b . Continuation of sight reading, ear-training and dictation; chords of seventh and ninth, cadences, analysis, and eartraining of standard harmonic materials.

48a. MUSIC FOR ELEMENTARY TEACHERS. Three hours credit.
A comprehensive study of the rudiments of music, gauged to fit the needs of the classroom teacher who teaches her own music. Practice is given in simple ear-training, dictation, rhythm work, syliable reading, and group singing.

## 48b. MUSIC FOR ELEMENTARY TEACHERS. Three hours credit.

Prerequisite, Music 48a or equivalent. A continuation of 48a through more difficult ear-training, music dictation, syllable reading, and rhythmic problems; a study of scales, intervals, and chords, and the playing of simple melody instruments.

51a. ADVANCED SIGHT SINGING AND EAR TRAINING. Two hours credit.
Prerequisites, Music $2 \mathrm{a}, 2 \mathrm{~b}, 2 \mathrm{c}$ or equivalent. This course is a continuation of the first-year courses in sight singing and will provide additional and more advanced training in the techniques of sight singing and ear-training of melodic, harmonic, and rhythmic materials.

51b. ADVANCED SIGHT SINGING AND CHORAL LITERATURE. Two hours credit.
Prerequisite, Music 51a. A continuation of training in sight singing and ear training. Includes rhythmic, melodic, and harmonic dictation. Emphasis will be given to the reading of a wide variety of standard choral works graded to supply reading experiences of progressive difficulty.

51c. ADVANCED SIGHT SINGING AND CHORAL LITERATURE. Two hours credit.
Prerequisite, Music 51 b . A continuation of the sight singing, ear-training, and dictation experiences given in the preceding courses of this series. Reading experiences in this course will include standard materials for mixed, women's and men's choruses, and the larger vocal forms such as opera and oratorio.
52a. HARMONY. Three hours credit.
Prerequisites, Music 2a, 2b, and 2c. A review of scales, intervals, triads and their inversions; normal chord progressions; correlated studies in ear-training, dictation, sight singing and composition.
52b. HARMONY. Three hours credit.
Prerequisite, Music 52a. A structural harmony unit consisting of seventh chords, inversions, ninth chords and modulations; correlated studies of eartraining, dictation, sight singing and composition.
52c. HARMONY. Three hours credit.
Prerequisite, Music 52b. A structural harmony unit consisting of chromatic harmony, altered chords, embellishing chords, modulations and original compositions.
54. KEYBOARD HARMONY. Two hours credit.

Prerequisite, elementary piano ability. For classroom teachers of elementary music. The primary objective of the course is to help the student learn to play simple accompaniments to songs for children when given the melody only.
58a. HISTORY OF MUSIC. Two hours credit.
Prerequisite, Music $2 \mathrm{a}, 2 \mathrm{~b}, 2 \mathrm{c}$. The historical changes in music from earliest times to the sixteenth century ending with analysis of the great church works of Palestrina.

58b. HISTORY OF MUSIC. Two hours credit.
Prerequisite, Music 58a. The period from Palestrina to 1800 with emphasis on the changes caused by the Reformation and the development of instruments and ending with a study of the works of Beethoven.

58c. HISTORY OF MUSIC. Two hours credit.
Prerequisite, Music 58b. A survey of the musical development from Beethoven to the contemporary composers.
100. MUSIC APPRECIATION. Two hours credit.

An analysis of the basic elements of music through record listening and study for a better appreciation of the art.

## 152. COUNTERPOINT. Three hours credit.

Prerequisites. Music 52a, 52b,52c. A study of the five species of counterpoint through four parts (or voices); the invention, canon, and fugue; a seminar on the construction and form as applied to contrapuntal technique.
153. FORM AND ANALYSIS. Three hours credit.

The purpose of this course is to acquaint the student with the structure of music, beginning with the single note or figure through to the analysis of the sonata, rondo, and variation forms.
154. INSTRUMENTATION. Three hours credit.

Prerequisites, Music 52a, 52b, 52c, 152, 153. A course planned to develop knowledge and skill in arranging and orchestrating for various combinations of instruments from a few instruments to a full symphony orchestra.

155a. INSTRUMENTAL CONDUCTING. Two hours credit.
The technique and practice of instrumental conducting. Use of the baton, conducting basic measure rhythms, indicating variations in dynamics, and tempo variations. Actual experience in conducting instrumental groups is provided.

155b. CHORAL CONDUCTING. Two hours credit.
Problems of conducting bigh school choral groups including rehearsal organization and procedure, tone production, diction, dynamics, tone color, intonation, and other problems of song interpretation. Actual conducting experience of choral singing is provided.
156. SEMINAR IN PIANO LITERATURE. Two hours credit.

To acquaint piano teachers and performers with repertoire. Traditional styles. techniques, and interpretations discussed and performed. Practical appliance of fundamental techniques to teaching and performance. Solo and ensemble playing.
257. PHYSICS OF MUSIC INSTRUMENTS. Three hours credit.

The objectives of this course are to develop an understanding of the physical principles of sound and a study of the acoustical problems in music performance.
262. SYMPHONIC LITERATURE. Three hours credit.

A study of the literature for the symphony orchestra from the time of Haydn and Mozart to present day composers, leading to an understanding and appreciation of the larger works in music.

270a. ADVANCED HARMONY AND FORM ANALYSIS. Three hours credit.
Prerequisites, Music 52a, 52b, 52c, 152, 153, 154. Analysis and composition of the larger forms to include the history and development of the sonata, rondo, variations, polyphonic, free forms and style pieces.

## 270b. ADVANCED HARMONY AND FORM ANALYSIS. Three hours

 credit.Prerequisite, Music 270a. Analysis and composition of primary forms to include irregular phrases and extension devices, harmonization of melodies, review of figured bass, modulation, non-chordal tones, altered chords, and a survey of homophonic forms.
276. SURVEY OF AMERICAN MUSIC. Three hours credit.

A comprehensive study of the music of our country and the people who have produced it, tracing the development of vocal and instrumental music from the time of the Puritans and Pilgrims to today. Some topics are folk music, symphony orchestra, jazz, and new film music. Not limited to music majors.
277. HISTORY OF MUSIC THEORY. Four hours credit.

Prerequisites, Music 58a, 58b, 58c. The history of music composition from the early Greek scales to modern usage with special emphasis on the theoretical principles underlying this development.
295. SEMINAR IN THE ART OF MUSIC LISTENING. Four hours credit.
A course designed to provide the layman with essential information about music, and to contribute to those understandings that will make him a more intelligent listener. Content of the course includes music in its relation to significant historical epochs, the relation of the arts, and developing of a familiarity with many examples of standard music literature.
350. PRACTICAL ARRANGING. Three hours credit.

Prerequisite, Music 154. A project course in arranging for school instrumental and vocal groups. Projects include arranging for small ensembles in both standard and unusual combinations, transcription of parts suitable to individual performers, and the composing and arranging of instrumental and vocal descants for the enrichment of song literature.
351. ADVANCED CONDUCTING. (Summer Session only). Four hours credit.
Prerequisites, Music 155a, 155b. A laboratory course in advanced problems of instrumental and choral conducting. Supervised conducting experience is provided.
360. HISTORICAL ANALYSIS OF MUSIC STRUCTURE. Four houts credit.
Prerequisites, Music 58a, 58b, 58c. An examination of the technical and theoretical aspects of music development from about 900 to the present time to discover the style of each period through the analysis of the various devices used.

[^7]
## MUSIC EDUCATION

50a. INTRODUCTION TO MUSIC EDUCATION. Two hours credit.
Prerequisites, Music 2a, 2b, and 2c. An introduction course for prospective teachers of music covering the place of music in the school program, recent trends in school music, the qualifications of the music teacher, and a consideration of beginning instructional problems.
50b. INTRODUCTION TO MUSIC EDUCATION. Two hours credit.
Prerequisite, Music 50a. A continuation of 50 a . Methods and materials for the teaching of singing, music reading, and related skills, music listening, and rhythm in the public school music program.
50c. INTRODUCTION TO MUSIC EDUCATION. Two hours credit. Prerequisite, Music 50 b . A continuation of 50 b . A study of lesson planning, and classroom techniques in the teaching of music reading, appreciation, creative music, music listening, rhythm. Techniques in conducting high school music.
149. MUSIC METHODS AND MATERIALS FOR ELEMENTARY
TEACHERS. Three hours credit. Prerequisite. Music 48b, or equivalent. A comprehensive music methods course for the elementary classroom teacher. Problems of the child voice, singing, ear-training, rhythm, and note reading are studied and clarified. Music appreciation for each grade is discussed and records suggested. A repertoire of children's songs is built up through the quarter.
151. PRINCIPLES OF PIANO TEACHING. Three hours credit.

Prerequisites, Music 2a, 2b, 2c. This course includes a study of the principles of piano teaching, student observation of teaching procedures, the analysis of specific learning problems, the establishing of reading-readiness for the piano, the combining of ear-training and theory with piano lessons, and a study of criteria for the selection of materials.

## 165. TEACHING INSTRUMENTAL MUSIC. Two hours credit.

This course includes a study of the various aspects of instrumental music in the public schools, both physical and musical, and assists the student in making a systematic preparation for the task of developing a well-rounded instrumental music program.

## 210. MUSIC LITERATURE FOR ELEMENTARY GRADES. Four hours credit.

Song literature for classroom use; the elementary school choir; materials for special music programs; elementary school operettas and cantatas; music for listening and rhythmic activities. This course is designed to meet the needs of both the elementary classroom teacher and the music supervisor.
211. IMPROVEMENT OF INSTRUCTION IN MUSIC READING. Three hours credit.
Prerequisite, an elementary course in music methods. A complete analysis of the program in music reading in the elementary grades. Includes a study of the psychological principles in music reading, constructing a curriculum in music reading development, and a survey of published materials for classroom use.

## 212. MUSIC ACTIVITIES FOR CLASSROOM TEACHERS. Four hours

 credit.Activities in music for children requiring a minimum of musical skill on the part of the teacher. Includes a study of such activities as playing and reading music with simple melody instruments, the use of the autoharp for song accompaniment, the thythm band, the construction of simple instruments, and the teaching of songs and rhythmic activities through the use of the phonograph.
213. PUBLIC PERFORMANCE WORKSHOP. (Summer Session only). Four hours credit.
Types of music programs for school and community. Includes operetta materials and production, the cantata, the all-school musical, program building for the formal concert, public performance management, the music festival, and the church choir.
214. CHORAL LITERATURE. (Summer Session only). Four hours credit. A study of choral literature for high school and community groups. The mixed chorus, girls' glee club, bcys' glee club, the small vocal ensemble, and literature for church choirs. All examples will be read by the class.
215. INSTRUMENTAL LITERATURE. (Summer Session only). Fout hours credit.
A study of instrumental literature for school groups: the high school, band, and orchestra; materials for class and individual instruction; and literature for the small instrumental ensemble.
216. METHODS AND MATERIALS FOR CLASS VOICE INSTRUCTION. (Summer Session only). Four hours credit.
Organization of the voice class, a study of voice production problems, procedures and techniques of group instruction, and a review of song literature for group and solo work.
217. INSTRUMENTAL TECHNIQUES. (Summer Session only). Four hours credit.
Techniques of playing instruments of the band and orchestra. Practical experience provided in (1) development of fundamental techniques in the playing of string, brass, woodwind, and percussion instruments, (2) acquaintance with desirable literature for instructional purposes.
218. MUSIC ENSEMBLE WORKSHOP. Three hours credit.

A workshop course emphasizing ensemble work in all areas of vocal and instrumental music. Covers materials, techniques, methods, artistry in performance, rehearsal problems, and problems in public presentation.
219. MUSIC WORKSHOP FOR ELEMENTARY CLASSROOM TEACHERS AND SUPERVISORS. Three hours credit.
Workshop in elementary school music covering techniques and materials in teaching music reading, singing activities, lessons in music listening, the rhythm program for children, instrumental music for elementary groups, and creative music for children.

223a. PRACTICUM IN BAND CONDUCTING AND PERFORMANCE. Four hours credit.
A course in practical techniques of band conducting and performance including actual performance under outstanding band conductors. Supervised conducting under laboratory conditions. Seminar covering problems of marching band, band literature, and problems of band organization. Open to students by performance audition.
250. SEMINAR IN MUSIC EDUCATION. Three hours credit.

Prerequisite, Ed. 151. A course designed for seniors who have completed student teaching with each student working independently on a problem occurring in his student teaching work. The class is conducted as a seminar with reports and discussion of the student problems.
251. TEACHING SECONDARY SCHOOL MUSIC. Four hours credit.

Prerequisite, Ed. 151. A study of the general music program in the junior high school, the changing voice, instructional problems and materials for vocal ensembles, operetta production, the special music class in high school, and the improvement of music reading in high school music groups.
256. PSYCHOLOGY OF MUSIC. Three hours credit.

The topics included in this course are measurement of music talent, the psychology of music listening, and musical performance.
274. TEACHING MUSIC APPRECIATION. Three houts credit.

Prerequisites, Music 50a, 50b, 50c, Ed. 150 d and 150 e . Developing a music listening program for schools covering methods of teaching, recorded materials, the construction of a grade by grade program, and a study of the published materials about music suitable for elementary and high school students.
§279b. ADMINISTRATION AND SUPERVISION OF THE MUSIC PROGRAM (Credit may be obtained in Education or Music). Three hours credit.
A course designed to acquaint the school administrator with the problems of the administration and supervision of the music program. The content includes the place of music in the school program, music equipment, schedule, budget, instructional problems, and public relations in music.
300. INTRODUCTION TO GRADUATE STUDY. Fout 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.
305. SUPERVISING ELEMENTARY TEACHERS OF MUSIC. (Summer Session only). Four hours credit.
Procedures for supervision and guidance of the elementary music program, cooperative curriculum building, lesson planning, the induction of the beginning teacher, and in-sérvice education for the classroom music teacher.
306. TEACHER EDUCATION IN MUSIC. (Summer Session only.) Four hours credit.
The teacher education program in music including both the pre-service and in-service education of the elementary classroom teacher, the teachers college music curriculum, the administration of college music, the junior college music program, the music program in general education.
310. PROBLEMS OF INSTRUMENTAL SUPERVISION. (Summer Session only). Four hours credit.
A discussion and study of the problems of instrumental supervision based upon an analysis of the professional problems found to exist in the field of teaching instrumental music.
322. INDIVIDUAL STUDIES IN MUSIC. Eight hours maximum credit. Four hours credit.
An opportunity for the graduate student to carry on a research project of his own choice under the supervision of a faculty representative.
323. COMPARATIVE VOICE METHODS AND MATERIALS. (Summer Session only). Four hours credit.
This course deals with singing from the teaching and performing standpoint; the development of singing through the centuries identifying and evaluating contributions of the various schools; materials are supplied and evaluated for teaching purposes; each student takes one private lesson each week in addition to the class work.
324. COMPARATIVE VIOLIN METHODS AND MATERIALS. (Summer Session only). Four hours credit.
A comparison of the methods and materials used in violin teaching; a study of the basic principles of violin playing; each student takes one private lesson each week in addition to the class work.
325. COMPARATIVE PIANO METHODS AND MATERIALS. Four hours credit.
This course is designed for music majors and piano instructors of the graduate level. A thorough study' of the leading methods, both past and present, is made along with studies of the basic fundamentals of piano teaching and techniques; material for all levels of instruction is presented; each student takes one private lesson each week in addition to the class work.
399. THESIS. Eight hours credit.

The Division of Music offers the graduate student an opportunity to either carry on a research project in the music field or to submit a creative thesis in the form of an original composition in one of the larger instrumental or vocal forms.

## MUSIC ACTIVITIES

21. INSTRUMENTAL ENSEMBLE. One hour credit.

Instrumental ensembles include woodwind quartet, string quartet, string trio, and brass ensemble. Groups organized are based upon the talents and interests of the students.
22. VOCAL ENSEMBLE. One hour credit.

Vocal ensembles include men's glee club, women's glee club, trios, and quartets. Groups organized are based upon the talents and interests of the students.
141. MARCHING BAND. One hour credit.

Open to all students, regardless of major field, who have had high school band experience. A study and practice of the fundamentals of drill and presentation of marching maneuvers and pageants at athletic events. Satisfies physical education requirement for Fall Quarter.
142. CONCERT ORCHESTRA. One hour credit.

The standard orchestral literature is performed. The materials used are suitable for high school orchestras with especial emphasis devoted to contest and festival programs.
143. CONCERT BAND. One hour credit.

Open to all students who demonstrate sufficient ability to study, rehearse, and present advanced forms of concert and symphonic band literature.
144. MIXED CONCERT CHOIR. One hour credit.

A selected group of singers who engage in concert performance of the best in choral literature for mixed voices.
145. MEN'S CONCERT CHOIR. One hour credit.

Open to all men who wish to participate in the singing of men's glee club music.
146. WOMEN'S CONCERT CHOIR. One hout credit.

Open to all women who wish to participate in the singing of women's glee club music.

## Instruction in Music Performance

INDIVIDUAL INSTRUCTION. One hour credit.
The Division of Music offers an opportunity for the student to study any major instrument or voice individually with a studio teacher. Such instruction normally provides for one lesson each week. Practice facilities including both the rental of practice rooms and instruments are available.
30. Individual Instruction in Voice.
31. Individual Instruction in Piano.
32. Individual Instruction in Stringed Instruments. (violin, viola, cello, bass)
33. Individual Instruction in Organ.
34. Individual Instruction in Percussion Instruments.
35. Individual Instruction in Woodwind Instruments.
(flute, clarinet, oboe, English horn, bassoon)
36. Individual Instruction in Brass Instruments.
(trumpet, French horn, trombone, baritone, tuba)

CLASS INSTRUCTION. Two hours credit.
Class instruction in the playing of instruments and in singing is offered to the student who desires to develop a teaching and conducting knowledge of instruments outside his field of specialization in applied music. Through group study the student acquires sufficient skill in performance that he can introduce the playing of the instrument studied to beginning pupils. He acquires an understanding of the possibilities and function of the instrument in music organizations, and gains an elementary understanding of materials and procedures employed in class instruction for beginners.

199a. Class Instruction in Stringed Instruments.
199b. Class Instruction in Woodwind Instruments.
199c. Class Instruction in Brass Instruments.
199d. Class Instruction in Percussion Instruments.
199e. Class Instruction in Voice.
199f. Class Instruction in Piano.

## Division of the Sciences

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

The academic programs are:

1. A major in Science leading to the Bachelor of Arts and Master of Arts degrees with teaching certificates. Concentrations to be in Biological Science or Physical Science.
2. A major in Mathematics leading to the Bachelor of Arts and Master of Arts degrees with teaching certificates.
3. A major in Science Education leading to the Master of Arts degree with teaching certificate.
4. Minors in Elementary Science, Mathematics, Biological Science, and Physical Science. A 24 -hour General Science minor may be earned in the Science Division by selecting 24 hours of work in science courses (with at least 8 in one field) with the advice and approval of the student's adviser.
5. A major in Science or Mathematics leading to the Bachelor of Arts degree (liberal arts).

## SCIENCE MAJOR (WITH CONCENTRATION IN

 BIOLOGICAL SCIENCE)Bachelor of Arts Degree (With Teaching Certificate)
The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 199, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed on Page 196.
(3) One minor of 24 quarter hours. It is recommended that this minor be in Mathematics.
(4) 28 to 35 quarter hours of free electives to complete 180 quarter hours of academic credit required for graduation. It is recommended that a Science major graduate with 15 quarter hours in each of the four science fields -Botany, Chemistry, Physics, and Zoology.
Programs must be planned with the student's adviser.
SCIENCE MAJOR (WITH CONCENTRATION IN BIOLOGICAL SCIENCE)
Bachelor of Arts Degree (With Teaching Certificate)
Required courses in the major:


Biol. (electives) - . . . . . . 8
Biological Science Minor
COURSE NUMBER COURSE TITLE HOURS CREDIT
Biol. 51 - - - . Human Biology - - - . - - - . 5
Bot. 22 - - . - General Botany - - - - - . - . 5
Bot. 23 - - - - General Botany - - - - - - - 5
Zool. 11 - - - General Zoology_Invertebrate - . . - - 5
Zool. 12 - . - - General Zoology_Vertebrate - - . . . 5
Elementary Science Minor
COURSE NUMBER COURSE TITLE HOURS CREDIT
Biol. 51 - - - . Human Biology - - - - - - - 5
Sci. 30 - - - - Science Concepts for Elementary Grades - - 4
Sci. 31 - - - Physical Science for Elementary Teachers - - 4
Science (electives to be selected with advice of the student's adviser) - - 11

A 24 -hour General Science minor may be earned in the Science Division by selecting 24 hours of work in science courses (with at least 8 hours in one field) with the advice and approval of the student's adviser.

## Graduate Study

Detailed information about the Graduate program may be obtained from the Graduate Bulletin. Course work will be outlined by the student's major professor.

## SCIENCE MAJOR (WITH CONCENTRATION IN PHYSICAL SCIENCE) Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 199, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed below.
(3) One minor of 24 quarter hours. It is recommended that this minor be in Mathematics.
(4) 28 to 35 quarter hours of free electives to complete 180 quarter hours of academic credit required for graduation. It is recommended that a Science major graduate with 15 quarter hours in each of the four science fieldsBotany, Chemistry, Physics, and Zoology.
Programs must be planned with the student's adviser.

## SCIENCE MAJOR (WITH CONCENTRATION IN PHYSICAL SCIENCE)

Bachelor of Arts Degree (With Teaching Certificate)
Required courses in the major:

| COURSE NUMBER |  |  |  | COURSE TITLE | HOURS CREDIT |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Chem. | 40a | - - - | - | Principles of Chemistry | - - - | - - | 5 |
| Chem. | 40 b | - - | - | General Inorganic Chemistry | - - - | - - | - 5 |
| Chem. | 40 c | - - - |  | Introductory Organic Chemistry | y | - - | - 5 |
| Phys. | 61 | - - - | - | General Physics--Mechanics and | nd Heat | - - | - 5 |
| Phys. | 62 | - - | - | General Physics-Electricity | - | - - |  |
| Phys. | 63 | - - - |  | General Physics-Sound, Ligh Physics - | ht, and | Atomic | c 5 |
| Biol. | 51 | - - - | - | Human Biology (5 hours) | - - - | - - |  |
| Bot. | 22 | - - | - | General Botany ( 5 hours) |  |  |  |
| Bot. | 23 | - - - |  | General Botany (5 hours) |  |  |  |
|  |  |  |  | Human Biology ( 5 or |  |  | 15 |
| Biol. | 51 | - - |  | Human Biology (5 hours) - | 5 | - - |  |
| Zool. | 11 | - - |  | General Zoology - Invertebrate | (5 hours) | ) | - |
| Zool. | 12 | ) | - | General Zoology-Vertebrate | (5 hours) |  | - |
| Phys. S | Sci. | (electives) | - | - | (5 hours) | - - |  |

## Physical Science Minor in Chemistry



*To be selected with the advice of the student's adviser.

# SCIENCE MAJOR (WITH CONCENTRATION IN BIOLOGICAL SCIENCE) Bachelor of Arts Degree (Liberal Arts) 

The following program is required: (1) Common Courses listed on Page 40: (2) At least 48 quarter hours in Science listed in the preceding section under Bachelor of Arts degree (with teaching certificate) ; (3) One minor of 24 quarter hours preferably in Mathematics; (4) Electives to complete requirements for graduation. Programs must be planned with the student's adviser.

Courses required for a minor are Biol. 51, Bot. 22, 23, Zool. 11, 12.

## SCIENCE MAJOR (WITH CONCENTRATION IN PHYSICAL SCIENCE) <br> Bachelor of Arts Degree (Liberal Arts)

The following program is required: (1) Common Courses listed on Page 40; (2) At least 48 quarter hours in Science as listed in the preceding section under Bachelor of Arts degree (with teaching certificate); (3) One minor of 24 quarter hours preferably in Mathematics; (4) Electives to complete requirements for graduation. Programs must be planned with the student's adviser.

Course requirements for a Physical Science minor in Physics are Phys. 61, 62,63 , and 9 hours of electives.

Course requirements for a Physical Science minor in Chemistry are Chem. $40 \mathrm{a}, 40 \mathrm{~b}, 40 \mathrm{c}$, and 9 hours of electives.

## COMMON COURSES <br> Bachelor of Arts Degree (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.



## Junior and Senior Years

| COURSE | NUMB |  |  |  | COURSE TITLE |  | HOURS | CREDIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ed. | 105 | - | - | - | - American Education |  | - - | 3 |
| Ed. | 150 | - | - | - | - Methods and Observation | - | - - | - - 5 |
| Ed. | 151 | - | - | - | - Student Teaching - | - | - - | 8 to 15 |
| Ed. | 214 |  | - |  | - The Elementary School |  |  |  |
| Ed. | 216 |  |  |  | - The Secondary School - |  | - - | 3 |
| Ed. | 295 | - | - |  | - Philosophy of Education |  | - - | 3 |

## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (§) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.

## GENERAL SCIENCE

3. PHYSICAL SCIENCE. Three hours credit.

The study of important general principles of physics and chemistry and their social implications in modern civilization. These will help the student to develop correct concepts about the world in which he lives.
4. BIOLOGICAL SCIENCE. Three houts credit.

The study of important general concepts of the nature of life. Prepared especially to help students to adjust themselves to a proper understanding of the nature of the human body and its reactions to its changing environment.
5. EARTH SCIENCE. Three hours credit.

Units of study organized from concepts of the forces of the physical environment. These units are designed to enable the student to understand and to interpret man's activities in relation to his changing environment.
30. SCIENCE CONCEPTS FOR ELEMENTARY GRADES. Four hours credit.
An elementary course in general science subject matter to provide the elementary teacher with the knowledge of the science concepts taught in each grade, pre-school through eighth grade.
31. PHYSICAL SCIENCE FOR ELEMENTARY TEACHERS. Four hours credit. (Three hours lecture, two hours laboratory).
Subject matter content from the fields of physical sciences is taught to prepare elementary teachers for their work in elementary science.
§102. GENERAL ANTHROPOLOGY. (Credit may be obtained in Science or Social Studies). Five hours credit.
Organic man; races, ancient and modern, cultural dynamics; ancient men and archeology; culture areas of the world and ethnography; social anthropology. Emphasis upon social anthropology.
159. GENERAL METEOROLOGY. Three hours credit.

Weather elements such as temperature, pressure, wind, moisture, air masses, fronts, and storms. Maps and forecasting. Weather as related to agriculture and aviation.
181. DESCRIPTIVE ASTRONOMY. Three hours credit.

A study of the solar system and the place of our Sun in the family of stars. The student learns to recognize and locate the more important stars. Extensive knowledge of science, mathematics and constellations not required.
186. GENERAL GEOLOGY FOR ELEMENTARY TEACHERS. Three 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, to give the student proficiency and skill in recognizing geological structures and rocks and minerals of the Rocky Mountain area. (No person may receive credit for both Geology 186 and Geology 286.)
208. ELEMENTARY SCIENCE WORKSHOP. Three hours credit.

Provision is made for students to work on individual problems related to the teaching of elementary science.
209. UNIT COURSES IN SCIENCE. (Summer Session only). One to four hours credit.
Units of work of current interest in various fields of science. The nature of these units will vary from year to year.
210. THE IMPACT OF SCIENCE IN MODERN LIFE. Four hours credit. The course stresses the social effects and changes in modern life through the application of the results of science.
215. PHYSICAL SCIENCE CONCEPTS FOR ELEMENTARY TEACHERS. Four hours credit.
The fundamental concepts of physical science are presented to provide a background for the teaching of physical science in the elementary school.
8220. WORLD ETHNOLOGY. (Credit may be obtained in Science or Social Studies). Three hours credit.
Cultures different from our own in Asia, Africa, the Americas, Australia, and the adjacent areas. Primitive cultures analyzed.
286. GENERAL GEOLOGY. Four hours ctedit.

A course designed to develop an understanding of the surface of the earth and the processes and forces which have been active in changing it. Special emphasis is given to the physical and historical geology of the Rocky Mountains. (No persons may receive credit for both Geology 186 and Geology 286).
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, three, or fout houts credit for one problem; a maximum of eight hours credit is permitted.
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. Credit may be earned in the fields of biological sciences, physical sciences, science education, or mathematics.
399. THESIS. Eight hours credit.

## SCIENCE EDUCATION

§191. METHODS OF TEACHING SCIENCE IN THE ELEMENTARY SCHOOL. (Credit may be obtained in Education or Science Education). Four hours credit.
The student's purpose for this course is to secure the knowledge of objectives, materials, and methods which they will need as teachers for preparing learning activities and answering children's question in a functional elementary science program.
§201. IMPROVEMENT OF SCIENCE INSTRUCTION IN ELEMENTARY SCHOOLS. (Credit may be obtained in Education or Science Education). Four hours credit.
A study, evaluation, and comparison of several programs suggested for elementary science by various authorities and groups of science educators. Opportunity is provided for students to plan programs and study the reorganization of elementary science curriculums to achieve the objectives of science educators.
§202. IMPROVEMENT OF SCIENCE INSTRUCTION IN SECONDARY SCHOOLS. (Credit may be obtained in Education or Science Education). Four hours credit.
A study, evaluation, and comparison of several programs suggested for secondary school science by various authorities and groups of science educators. Opportunity is provided for students to plan programs and study the reorganization of secondary school science curriculums to achieve the objectives of science educators.
§204. SPECIAL PROBLEMS IN TEACHING ELEMENTARY SCIENCE. (Credit may be obtained in Education or Science Education). Four hours credit.
A study of special instructional problems such as problem solving, scientific attitudes, and controversial issues.
§205. SPECIAL PROBLEMS IN TEACHING SCIENCE IN SECONDARY SCHOOLS. (Credit may be obtained in Education or Science Education). Four hours credit.
A study of special instructional problems such as problem solving, scientific attitudes, and controversial issues.
§206. SPECIAL PROBLEMS IN TEACHING SCIENCE IN COLLEGE. (Credit may be obtained in Education or Science Education). Fout hours credit.
A study of special instructional problems such, as problem solving, scientific attitudes, and controversial issues.
§219. IMPROVEMENT OF SCIENCE INSTRUCTION IN COLLEGE. (Credit may be obtained in Education or Science Education). Four hours credit.
Prerequisite, Ed. 150b or equivalent. The purpose of the course is to prepare advanced students for teaching science in a general education program in college. The problems studied are those concerned with purposes of education, methods, and evaluation. Demonstration teaching is included.
§302. SEMINAR IN SECONDARY SCIENCE EDUCATION. (Credit may be obtained in Education or Science Education). Three hours credit.
Teachers who have problems in the field of secondary science education may elect this course for the intensive study of their problems. Problems may be selected from such areas as content, methods, problem solving, and evaluation. Teachers will present the results of their study to the group.
§303. SEMINTAR IN COLLEGE SCIENCE EDUCATION. (Credit may be obtained in Education or Science Education). Three hours credit.
Teachers who have special problems in the field of college science education may elect this course for the intensive study of their problems. Problems may be selected from such areas as content, method, problem solving, and evaluation. Teachers will present the results of their study to the group.
§304. SEMINAR IN ELEMENTARY SCIENCE EDUCATION. (Credit may be obtained in Education or Science Education). Three houts credit.
Teachers who have special problems in the field of elementary science education may elect this course for the intensive study of their problemb. Problems may be selected from such areas as content, method, problem solving, and evaluation and organization. Teachers will present the results of their study to the group.

## BIOLOGY

51. HUMAN BIOLOGY. Five hours credit. (Three hours lecture, fout hours labotatory).
The purpose of the course is to prepare teachers for giving instłaction in biology in the public schools. Both content and methodology will be considered. The subject matter of biology, not covered in the required biological course but usually included as important content, becomes the nucleus about which the course is organized.
§107. PRINCIPLES OF CONSERVATION. (Credit may be obtained in Social Studies or Science). Four hours credit.
This course will be organized upon the concepts of soil conservation, water conservation, forest conservation, wild life and the conservation of our diminishing mineral resources. Primarily for elementary teachers.
52. CONSERVATION OF NATURAL RESOURCES. (Credit may be obtained in the Sciences or Social Studies). Four hours credit.
A study of the relation of natural resources to the development of man and his culture. Units of study are organized on soil, water, forests and forest products, range management, wild life, and mineral resources. The emphasis throughout is on their relation to man.
53. FIELD SCIENCE. Three hours credit.

Planned especially for elementary and secondary school teachers. The course deals with the identification of common animals and plants, the relationship of the plants and animals to their environments, and economic importance. Field trips required.
209. SYMPOSIUM ON CONSERVATION. Eight hours credit.

A specifically planned course of lectures on the various phases of our natural resources designed particularly to help teachers prepare teaching materials. The laboratory hours will be used to assist students to see good conservation practices and to aid them in the preparation of teaching units.
231. EVOLUTION. Two hours credit.

A study of the factors that have been proposed as causes for gradual development of living organisms and the evidence supporting the theory of evolution. Emphasis is placed on the evolution of man.
232. GENETICS AND EUGENICS. Two hours credit.

A study of the fundamental laws of heredity and their application to plants and animals, with special emphasis on the heredity of man and the present trends of the human race.
238. BIO-ECOLOGY. (Summer Session only). Four hours credit.

Prerequisites, Zool. 11, 12; Bot. 22, 23. A study of the relation of plants and animals to their environment. Field trips required.

## BOTANY

22. GENERAL BOTANY. Five hours credit.

A study of seed plants, the conifers and flowering plants, their structure and functions, economic aspects and classification.
23. GENERAL BOTANY. Five hours credit.

A survey of the plant kingdom including the life cycles, habitats, relationships and evolutionary aspects of the great groups of plants, the algae, fungi, mosses, liverworts, ferns, conifers and flowering plants. Economic relationships are also emphasized.
122. GENERAL BACTERIOLOGY. Five hours credit. (Three hours lecture, four hours laboratory).
Emphasis is placed on the methods of control of microorganisms together with a study of growth characteristics and requirements. This centers about the important health problems. Laboratory and field work are included.
226. PLANT HISTOLOGY AND BOTANICAL TECHNIQUES. Four hours credit. (Double period).
Prerequisites, Bot. 22, 23, or equivalent. Study of plant tissues and methods of killing, imbedding, sectioning, staining, and making botanical material into permanent microscopic mounts.
227. SYSTEMATIC BOTANY. Five hours credit.

Prerequisite, Bot. 23, or equivalent. A historical survey of various systems of classification, codes, and nomenclature; use of manuals for the identification of plants in local areas. Field trips required.
321. PLANT PHYSIOLOGY. Four hours credit. (Two hours lecture, four hours laboratory).
Prerequisite, Chem. 142, or equivalent. A course dealing with the fundamental principles of absorption of water and minerals, transpiration, photosynthesis, translocation and growth of plants.
328. PLANT ECOLOGY. Three hours credit. (Two hours lecture, two hours laboratory).
Prerequisites, Bot. 22, 23. A course planned to give the student an understanding of plant successions resulting from the interrelation and interaction of plant life and the factors of the environment. Field trips required.
330. BOTANICAL SEMINAR. One hour credit.

Assigned reports on current botanical topics.

## CHEMISTRY

40a. PRINCIPLES OF CHEMISTRY. Five hours credit. (Four hours lecture, two hours laboratory).
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, and home economics students.
40b. GENERAL INORGANIC CHEMISTRY. Five hours credit. (Four hours lecture, two hours laboratory).
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. Five hours credit. (Three hours lecture, four hours laboratory).
Prerequisites, Chem. 40a, 40b. 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.
142. ORGANIC CHEMISTRY. Five hours credit. (Four hours lecture, two hours laboratory).
Prerequisite, Chem. 40 c . The chemistry of the carbon compounds of the aliphatic and aromatic series is discussed. Application to the fields of nutrition and industry is stressed.
144. QUALITATIVE ANALYSIS. Four hours credit. (Two hours lecture, fout hours labotatory).
Prerequisites, Chem. 40 b , Math. 76 or 78 b or equivalent. 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. Four hours credit. (Two hours lecture, four hours laboratory).
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.
148. FOOD ANALYSIS. Five hours credit. (Three hours lecture, four hours laboratory).
Prerequisite, Chem. 40c. This course deals with some of the techniques of qualitative and quantitative analysis of foods for certain inorganic and organic constituents.

## 201. PROBLEMS IN TEACHING CHEMISTRY. Four hours credit.

Prerequisite, permission of instructor. This course is designed to deal with special problems in the teaching of chemistry. This includes elementary concepts, laboratory and stockroom problems, and demonstrations.
241. LABOR.ATORY IN ORGANIC CHEMISTRY. Four hours credit.

This course is purely a laboratory course designed to accompany Chem. 242 and 243. It may be taken concurrently with 242 or after 242.
242. ORGANIC CHEMISTRY. Fout hours credit.

This is a course for students with no previous background in organic chemistry. Content: some of the fundamental types of organic compounds are treated with regard to theory and to application.
243. ADVANCED ORGANIC CHEMISTRY. Four hours credit.

Prerequisite, Chem. 142. This course is a continuation of Chem. 142. It reviews comprehensively both the aliphatic and aromatic series of organic compounds.
244. LABORATORY IN ADVANCED ORGANIC CHEMISTRY. One to three hours credit by arrangement. (Two to six hours laboratory). Prerequisite or corequisite, Chem. 243. Organic preparations and qualitative organic analysis constitute the laboratory work.
246. ADVANCED QUANTITATIVE ANALYSIS. Four hours credit. ( $T$ wo hours lecture, four hours laboratory).
Prerequisite, Chem. 145. Special attention is given to the analysis of complex mixtures, and the use of certain analytical instruments.

$$
-206-
$$

247. BIOCHEMISTRY. Five hours credit. (Three hours lecture, four hours laboratory).
Prerequisite, Chem. 40c. An introduction to the chemistry of foods, nutrition, and body processes is given.
248. INTRODUCTORY PHYSICAL CHEMISTRY. Four hours credit.

Prerequisites, Chem. 142, 145, Phys. 63, and Math. 175b. This course is an advanced study of the theoretical principles upon which chemistry is based. The gaseous liquid and solid states, thermodynamics, and colloids are considered.
342. LABORATORY IN INTRODUCTORY PHYSICAL CHEMISTRY. Two hours credit. (Four hours laboratory).
Prerequisites, Chem. 142, 145, Phys. 63, Math. 175b. In this laboratory course, the validity of certain physical laws is demonstrated.
343. INTERMEDIATE PHYSICAL CHEMISTRY. Four hours credit. Prerequisites, Chem. 341, 342. This course is a continuation of Chemistry 341 and deals with electrochemistry, chemical thermodynamics, and atomic and molecular structure.
344. LABORATORY IN INTERMEDIATE PHYSICAL CHEMISTRY Two hours credit. (Four hours laboratory).
Prerequisites, Chem. 341, 342. Laboratory work in electrochemistry and chemical thermodynamics is undertaken in this course.
346. SEMINAR IN CHEMISTRY. (Summer Session only). One hout credit.
Prerequisite, consent of instructor. This course gives the graduate student an opportunity to report on some topic of interest treated in recent literature, as well as to profit by the reports of others.

## PHYSICS

61. GENERAL PHYSICS-MECHANICS AND HEAT. Five hours credit. (Fout hours lecture, two hours laboratory).
The first quarter of the general course in physics treats of the laws. principles, and generalizations of mechanics and heat.
62. GENERAL PHYSICS-ELECTRICITY. Five hours credit. (Fout hourslecture, two hours laboratory).
Prerequisite, Phys. 61. The second quarter of the general course in physics treats of the principles, laws, and generalizations in electricity.
63. GENERAL PHYSICS-SOUND, LIGHT, AND ATOMIC PHYSICS. Five hours credit. (Fout hours lecture, two hours laboratory).
Prerequisite, Phys. 62. The third quarter of the general course in physics treats of the laws, principles, and generalizations concerning sound, light, and atomic physics.
64. ELEMENTARY ELECTRICITY. Five hours credit. (Four hours lecture, two hours labotatory).
A course designed for the student who needs a fundamental background in the general laws, principles, and generalizations of electricity in everyday life.
65. 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 in aircraft power plants such as the jet, turbo-jet, and pro-jet power plants will be included.
165. HOUSEHOLD PHYSICS. Four hours credit. (Three hours lecture, two hours laboratory).
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.
166. ELECTRONICS. Five hours credit. (Four hours lecture, two hours laboratory).
Prerequisites, Phys. 61, 62, 63. This is a general course in electronics and electricity as applied to the reception and transmission of radio. Stress is placed upon the application to radio in everyday living.
167. ELEMENTARY PHOTOGRAPHY. Five hours credit. (Three hours lecture, four hours laboratory).
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.
261. BIOPHYSICS. Four hours credit.

Prerequisites. Chem. 40a,b,c; Phys. 61, 62, 63; Bot. 22, 23; Zool. 11, 12. Biophysics is a course designed to relate the principles of mechanics, heat, electricity, radio, light, sound, and atomic physics to both plant and animal life. Stress is placed upon the recent developments in physics as applied to living things.

## 264a. ADVANCED MECHANICS AND HEAT. Four hours credit.

Prerequisites, Phys. 63 and Math. 175b. This first quarter of advanced physics deals with the development of the concepts of mechanics and heat and the mathematical interpretation of the laws and principles.

264b. ADVANCED ELECTRICITY. Four hours credit.
Prerequisites, Phys. 63 and Math. 175b. 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. ADVANCED SOUND, LIGHT, AND WAVE MOTION. Four hours credit.
Prerequisites, Phys. 63 and Math. 175b. This course deals with the fundamental principles and laws of wave motion, including their application to sound and light, with the emphasis placed upon the modern atomic concepts.
265. EXPERIMENTAL PHYSICAL SCIENCE FOR HIGH SCHOOL SCIENCE TEACHERS. Four hours credit.
Prerequisite, a knowledge of physics or chemistry. Gives the junior and senior high school teacher, the general science teacher, and the prospective teacher in these subjects an opportunity to work with physical science equipment and organize the laboratory work for learning activities.
267. ADVANCED PHOTOGRAPHY. Five hours credit. (Three hours lecture, four hours laboratory).
Prerequisites, Phys. 61, 62, 63, 167; Chem. 40a,b,c. An advanced course in the principles of photography.
366. SEMINAR IN PHYSICS. (Summer Session only). 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.
368. ATOMIC PHYSICS. Four hours credit.

Prerequisites, Chem. 40a,b,c; Math. 175a,b,c; Phys. 61, 62, 63. This course is designed as an advanced course in modern atomic theory, nuclear structure, and their relationship to fundamental physical and chemical theory.

## ZOOLOGY

11. GENERAL ZOOLOGY-INVERTEBRATE. Five hours credit. (Thtee hours lecture, four hours laboratory).
This is the beginning course in zoology. The principles of animal biology will be emphasized. These principles will be studied in the laboratory through the use of selected types.
12. GENERAL ZOOLOGY-VERTEBRATE. Five hours credit. (Three hours lecture, four hours laboratory).
Prerequisite, Zool. 11 or equivalent. A continuation course in general zoology. A study of the anatomy and physiology of the vertebrate animals. Selected types will be used for laboratory study.
13. BIRD STUDY. Three hours credit.

Designed primarily for elementary majors. Classroom, museum, and field studies on the habits, habitats, life histories, migration activities, and economic importance of birds. Students will have an opportunity to learn to identify birds in the field.
116. PHYSIOLOGY OF NARCOTICS AND STIMULANTS. Two hours credit.
A study of the narcotics and stimulants used by man. The physiological effects on the human body are evaluated in terms of the individual's health.
117. HUMAN PHYSIOLOGY. Three hours credit. (Two hours lecture, two hours laboratory).
Prerequisite, Zool. 12 or equivalent. A course in the study of the functions of the human body designed to help the student to understand normal functions and give him the knowledge with which he may establish good health practices for himself.
211. COMPARATIVE MORPHOLOGY OF THE VERTEBRATES. Five hours credit. (Two hours lecture, six hours laboratory).
Prerequisite, Zool. 12 or equivalent. A detailed study of the systems of organs of the vertebrates. The student is expected to make careful dissection of selected types.
215. VERTEBRATE EMBRYOLOGY. Four hours credit. (Two hours lecture, fout hours laboratory).
Prerequisite, Zool. 12 or equivalent. The study of the embryology of the bird and the mammal compared to the embryology of the human body. Designed to provide an understanding of the early development of the human body.
218. ANIMAL HISTOLOGY AND MICROSCOPE TECHNIQUES. Four hours credit. (Double period).
Prerequisite, Zool. 12 or equivalent. The skills of killing, staining, and preparing animal tissue for study are combined with the study of the types of tissues in the animal body.
316. VERTEBRATE ORGANOGENY. Four hours credit. (Two hours lecture, four hours laboratory).
A continuation of Zool. 215, a study of the origin and development of the organs of the body of the vertebrate animal with special reference to the development of the body of man.
317. ENDOCRINOLOGY. Three hours credit.

Prerequisite, Zool. 117 or equivalent. A detailed study of each of the hormones known to be produced in the human body, with respect to its normal effect on the physiology, its effect when overproduced and when there is underproduction.

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

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 199, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed below.
(3) One minor of 24 quarter hours. It is recommended that this minor be in either Biological or Physical Science.
(4) 28 to 35 quarter hours of free electives to complete 180 quarter hours of academic credit required for graduation.
Programs must be planned with the student's adviser.

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

Required courses in the major:
(Sequence I-two years of high school mathematics recommended)


Required courses in the major:
(Sequence II-three years of high school mathematics recommended)

| C | E NU | MBE |  |  | C | E | TITL |  |  |  |  |  | HOURS |  | CREDIT |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Math. | 78 a | - - |  | - | College | Mat | mematics |  |  |  |  | - | - - |  | 4 |
| Math | 78 b | - - |  |  | College | Math | ematics |  |  |  |  |  | - - |  | 4 |
| Math | 78 c | - - |  | - | College | Math | mematics | s |  |  |  |  | - - |  | - - 4 |
| Math. | 175a | - - |  |  | Calculus | - | - - |  |  |  |  | - | - - |  | - - 4 |
| Math. | 175b | - |  |  | Calculus | - | - * |  |  |  |  |  | - - |  | - -4 |
| Math. | 175 c | - ${ }^{-}$ |  |  | Calculus |  | - - |  |  |  |  |  | - - |  | - |
| Math. | (electiv | (es) * | - |  | - | - |  |  |  |  |  |  | - - |  | - 24 |

Required courses in the major: (continued from page 211). *Electives may be selected from:
COURSE NUMBER

## COURSE TITLE

HOURS CREDIT
Math. 79 - - - . Solid Geometry - - - - . . - . . 3
Math. 170 - - - - Mathematical Instruments and Surveying - - 4
Math. 177 - - - Analytic Geometry II - - - - . - 3
Astron. 181 - - - . Descriptive Astronomy - - . - - . - 3
Math. 273
Modern Euclidean Geometry - - - - . 5
Math. 274 - - - . History of Mathematics - - - - . - 3
Math. 275 - - - - Elementary Statistics - - - - - . - 4
Math. 276 - - - - Advanced Calculus - - - . . . . 3
Math. 277 - - - - The Theory of Equations - - - - - 5
Math. 278 - - - Differential Equations - - - . . - 5

## Mathematics Minor

(Sequence 1-two years of high school mathematics recommended)


COURSE TITLE
HOURS CREDIT


-     -         -             -                 - 2

Math 77 - - Plane Trigonometry - - - - - - 3
Math. (electives)* . . . - . . . . . - - . . . . . 9
(Sequence II-three years of high school mathematics recommended)
Math. 78a - - - College Mathematics - - - . . 4
Math. 78b - - - College Mathematics - - - - - . . 4
Math. 78c - - - College Mathematics - - - - - - 4
Math. (electives)* - - . - . . . . . . . . . 12
*Electives may be selected from:
COURSE NUMBER
Math. 79 - - - - Solid Geometry - - - - - - - 3
Math. 175a - - - Calculus - - . - . . . . . . 4
Math. 175b - - - Calculus . - . - . . . . . . . 4
Math. 175 c - - - Calculus - - . . - . - . . . 4
Math. 177 - - - Analytic Geometry II - - - - - - 3
Math. 273 - - - Modern Euclidean Geometry - - - - - 5
Math. 274 - - - . History of Mathematics - - . . - - . 3

## Graduate Study

Detailed information about the Graduate program may be obtained from the Graduate Bulletin. Course work will be outlined by the student's major professor.

## MATHEMATICS MAJOR Bachelor of Arts Degree (Liberal Arts)

The following program is required: (1) Common Courses listed on Page 40; (2) At least 48 quarter hours in Mathematics in the preceding section under Bachelor of Arts degree (with teaching certificate); (3) One minor of 24 quarter hours preferably in either Biological or Physical Science; (4) Electives to complete requirements for graduation. Programs must be planned with the student's adviser.

Course requirements for a Mathematics minor Sequence I (two years of high school mathematics recommended) are Math. 75a, 75b, 76, 77, and 9 hours of electives.

Course requirements for a Mathematics minor Sequence II (three years of high school mathematics recommended) are Math. 78a, 78b, 78c, and 12 hours of electives.

Electives for either minor to be selected from Math. 79, 175a, 175b, 175c, 177, 273, 274.

## Description of Courses

Course offerings for the Fall. Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (§) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.

## MATHEMATICS

70. BASIC MATHEMATICS FOR TEACHERS I. Four hours credit.

Designed to give the student with a limited background in mathematics a course which will be of personal and practical use to him. Also designed to give the prospective teacher of elementary arithmetic a course in content material.
71. BASIC MATHEMATICS FOR TEACHERS II. Two hours credit.

Prerequisite, Math. 70 or consent of instructor. A continuation of Math. 70 with emphasis being placed on more advanced topics of elementary arithmetic such as variation, proportion, mixture problems, and uses of percentage.
72. BASIC MATHEMATICS FOR TEACHERS III. Three hours credit.

Prerequisite, Math. 71 or consent of instructor. A continuation of Math. 71 with emphasis being placed on the following topics: simple algebraic manipulations, informal geometry, elementary statistics, compound interest, installment buying, and other practical problems.
75a. COLLEGE ALGEBRA. Five hours credit.
Prerequisite, two years of high school mathematics. The development and extension of concepts and skills beyond those studied in secondary school, and the practice of clear and independent thinking. with emphasis upon the understandings which lie back of algebraic processes.

75b. COLLEGE ALGEBRA. Two hours credit.
Prerequisite, Math. 75a. A continuation of Math. 75a.

## 76. PLANE TRIGONOMETRY. Three hours credit.

Prerequisite, Math. 75a, or equivalent. A course which develops the trigonometric functions and their application, both theoretical and practical, in the solution of the triangle. Special emphasis is put upon the logarithms and their use in computation in the solution of the triangle and other problems.
77. ANALYTIC GEOMETRY I. Five hours credit.

Prerequisites, Math. 75a,b, and 76, or equivalent. Explains and amplifies algebraic methods in the solving of geometric problems, thus acquainting the student with a powerful method of amplifying algebra and geometry. Especiaily valuable as a margin of information for teachers of both algebra and geometry.

78a. COLLEGE MATHEMATICS. Fout hours credit.
Prerequisite, three years high school mathematics or consent of instructor. The first of three sequence courses designed to correlate algebra, trigonometry, analytic geometry, and elementary calculus. Specific areas covered are: graphs and functions, simple differentiation, simple integration, first and second degree functions.

78b. COLLEGE MATHEMATICS. Fout hours ctedit.
Prerequisite, Math. 78a, or equivalent. A continuation of Math. 78a. This course covers the following areas: rational integral functions, rational fractions, irrational functions, calculation by use of logarithms, and trigonometry.

78c. COLLEGE MATHEMATICS. Four hours credit.
Prerequisite, Math. 78b, or equivalent. A continuation of Math. 78b. This course covers the following areas: simultaneous equations and determinants; analytic geometry of the straight line, circle, ellipse, parabola, and hyperbola; polar coordinates, tangents, normals, and transformations of coordinates.
79. SOLID GEOMETRY. Three hours credit.

Prerequisite, two years of high school mathematics or consent of instructor. A course designed to give the student of mathematics a perspective of the three-dimensional world in which he lives. Specific problems studied are: measurement of linear distances and angles in three-dimensional space; surface areas and volumes of solid figures, including the sphere.

[^8]175a. CALCULUS. (Differential). Fout hours ctedit.
Prerequisites, Math. 78a,b,c, or Math. 75a,b, 76, 77, or equivalent. This course presents the fundamental concepts of the differential calculus with the various applications of the derivative in solving problems in the scientific field. Successive differentiation and differentials are covered.

175b. CALCULUS. (Integral). Four hours credit.
Prerequisite, Math. 175a or equivalent. This course introduces the process of integration and the definite integral with its application to problems in science. Differentiation and integration of transcendental functions are also developed.

175c. CALCULUS. (Differential and Integral). Four hours credit.
Prerequisite, Math. 175 b or equivalent. A continuation of those topics of differentiation and integration which are not adequately treated in Math. 175 a and 175 b . The subject matter deals with differentiation of polar coordinates, radius and circle of curvature, indeterminate forms, series and expansion of functions.
177. ANALYTIC GEOMETRY II. Three hours credit.

Prerequisite, Math. 77 or equivalent. A continuation of Math. 77, emphasizing such topics as transformation of coordinates, tangents, polar coordinates, parametric equations, and cartesian coordinates in space.
209. MATHEMATICS TEACHERS' WORKSHOP. Three hours credit.

Provision is made for students to work on individual problems related to the teaching of mathematics.
272. MATHEMATICS OF FINANCE (Summer Session only). Four hours credit.
Prerequisite, intermediate algebra or consent of instructor. This course offers the student an opportunity to apply his elementary knowledge of arithmetic and algebra to problems of business. Such topics as simple and compound interest, annuities, installment buying, and life insurance are considered.
273. MODERN EUCLIDEAN GEOMETRY. Five hours credit.

Prerequisite, high school plane geometry or consent of instructor. An introduction to the ideas and methods of modern geometry; an extension of Euclidean geometry to theorems not included in high school geometry, to theorems of college level.
274. HISTORY OF MATHEMATICS. Three hours credit.

A general view of the development and contributions of mathematics. A more detailed view of development of arithmetic, algebra, and geometry and evolution of symbolism.
8275. ELEMENTARY STATISTICS. (Credit may be obtained in Mathematics or Education). Four hours credit.
An introduction to the meaning and practical use of measures of central tendency, variability, reliability, and relationship. Problems for application are taken principally from education and psychology.

## 276. ADVANCED CALCULUS. Three hours credit.

Prerequisite, Math. 175 c or equivalent. A continuation of differential and integral calculus with emphasis upon integration involving trigonometric differentials, trigonometric substitutions, integration by various devices and tables; areas, volumes, and centroids of solids; series and expansion of functions.
277. THE THEORY OF EQUATIONS. Five hours credit.

Prerequisite, Math. 175a or equivalent. This course is introduced with the arithmetic of complex numbers; deals with functional relationships, graphic representation and solution of functions. determinants, and symmetric functions.
278. DIFFERENTIAL EQUATIONS. Five hours credit.

Prerequisite, Math. 175c or equivalent. A study of the theory and solution of differential equations. Ordinary and partial differential equations are treated along with numerous applications.
8372. CURRICULUM. IN SECONDARY SCHOOL MATHEMATICS. (Credit may be obtained in Mathematics or Education). Three hours credit.
Prerequisite, 24 quarter hours in college mathematics. A study of modern developments in curriculum offerings in secondary school mathematics, with special emphasis on mathematics best suited to the needs of non-college-bound students.
8373. PROBLEMS IN THE TEACHING OF SECONDARY MATHEMATICS. (Credit may be obtained in Mathematics or Education). Three hours credit
Prerequisite, 24 quarter hours in mathematics at college level. Special emphasis in this course is placed on such problems of teaching high school mathematics as: individual differences in ability, interests and needs, college preparatory courses and their organization for teaching.
8374. SEMINAR IN PROBLEMS OF TEACHING SECONDARY MATHEMATICS. (Credit may be obtained in Marhematics or Education). Three hours credit.
Prerequisite, graduate standing and experience in teaching mathematics. Graduate students in this course will use their own backgrounds of experience, along with reading and discussion in class, to bring before the group special problems, together with proposed solutions.
8375. ADVANCED STATISTICS. (Credit may be obtained in Mathematics or Education). Four hours credit.
Prerequisite, Math. 275 or equivalent. Sampling theory, tests of significance, chi-square function, correlation methods, introduction to analysis of variance and experimental design in educational research.

## Division of the Social Studies

The Division of the Social Studies includes the fields of: (1) General Social Studies, (2) Specialized Social Studies: Economics, Geography, History, Political Science, and Sociology.

The academic programs are:

1. A major in Social Studies leading to the Bachelor of Arts degree with teaching certificate.
2. A major in History and Political Science leading to the Bachelor of Arts degree with teaching certificate.
3. A minor in Social Studies.
4. A graduate major in History.
5. A graduate major in the Social Studies.
6. A program leading to the Bachelor of Arts degree (liberal arts).

## SOCIAL STUDIES MAJOR

## Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 219, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed on Page 218.
(3) One minor of 24 quarter hours outside the Division of the Social Studies.
(4) 28 to 35 quarter hours of free electives to complete 180 quarter hours of academic credit required for graduation.
Programs must be planned with the student's adviser.


HISTORY AND POLITICAL SCIENCE MAJOR Bachelor of Arts Degree (With Teaching Certificate)

The following is the required program:
(1) 73 to 80 academic quarter hours in the Common Courses listed on Page 219, plus 6 quarter hours of physical activity.
(2) The 48 quarter hours in the major listed below.
(3) One minor of 24 quarter hours outside the Division of the Social Studies.
(4) 28 to 35 quarter hours of free electives to complete the 180 quarter hours of academic credit required for graduation.
Programs must be planned with the student's adviser.

> HISTORY AND POLITICAL SCIENCE MAJOR

Bachelor of Arts Degree (With Teaching Certificate)
Required courses in the major:


## COMMON COURSES

## Bachelor of Arts Degree (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.


## Social Studies Minor

COURSE NUMBER
COURSE TITLE
HOURS CREDIT
Hist. 30a,b
or

*Electives selected from economics, geography, political science, and sociology.

## Recommended Electives for Elementary School Teachers*



## SOCIAL STUDIES MAJOR Bachelor of Arts Degree (Liberal Arts)

The following program is required: (1) Common Courses listed on Page 40; (2) At least 48 quarter hours apportioned among economics, geography history, political science and sociology, with from 12 to 24 quarter hours in one area of specialization; (3) One minor of 24 quarter hours outside the Division of the Social Studies; (4) Electives to complete requirements for graduation. Programs must be planned with the student's adviser.

A minor of 24 quarter hours may be arranged in economics, geography, history, political science, or sociology. A general social studies minor may also be arranged.

## HISTORY AND POLITICAL SCIENCE MAJOR <br> Bachelor of Arts Degree (Liberal Arts)

The program is the same as for the Social Studies major except that the 48 quarter hours will be in History and Political Science.

## Graduate Study

Detailed information about the Graduate program may be obtained from the Graduate Bulletin. Course work will be outlined by the Student's major professor.

## Description of Courses

Course offerings for the Fall, Winter, and Spring quarters will carry the credit designated in this Yearbook. The same course offerings scheduled in the Summer Sessions may vary in the amount of credit offered.

Courses marked with a section mark (§) are listed in more than one Division. The Divisions in which credit may be obtained are given in the title of the course. The student is responsible for indicating the Division in which the credit is to apply.

## GENERAL SOCIAL STUDIES

81. THE INDIVIDUAL AND HIS SOCIAL RELATIONS. Three hours credit.
The integration of subject matter offerings in general education: the nature of social science; scientific method analysis of social behavior of the individual based upon data from all fields of the social studies; brief survey of problems connected with the maintenance of the family, contemporary education and intergroup relations.
82. AMERICAN LIFE AND INSTITUTIONS. Three hours credit.

Four major problems in the life of the citizens of the United States in the contemporary period: relationships between man and government, man's organization for production, the role of labor in an industrial society, the position of agriculture.
83. CONTEMPORARY WORLD CULTURES. Three hours credit.

Investigates the geographic framework of contemporary world cultures; reviews briefly the interdependent and interrelated nature of world cultures, and surveys the problem of the maintenance of world peace.
120. INDIVIDUAL STUDIES. Three hours credit for one problem; a maximum of six hours credit is permitted.
Individual undergraduate study under the guidance of a staff member in any area of the division. Field or area of credit to be designated. Available only on consent of instructor concerned. Twenty-five clock hours of work for each credit.
8213. IMPROVEMENT OF INSTRUCTION IN SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. (Credit may be obtained in Education or Social Studies). Three hours credit.
Prerequisite, student teaching or public school experience. Selection and organization of content, learning activities, problem-solving, social skills and attitudes through the first six grades. Emphasis is placed upon materials and methods for teaching a unified and correlated social studies program.
220. MATERIALS AND CONTENT IN SOCIAL STUDIES. Three hours credit.
A practical and advanced course for experienced teachers of the social studies. Individual student problems will be considered. Elementary through secondary social studies covered.
300. INTRODUCTION TO GRADUATE STUDY. Four hours credit.

A study of the literature and technique of research in the area of the graduate major. The course is required of all first quarter graduate students who intend to receive the degree of Master of Arts.
8305. IMPROVEMENT OF INSTRUCTION IN SECONDARY SCHOOL SOCIAL STUDIES. (Credit may be obtained in Social Studies or Education). Three hours credit.
Consideration of recent trends in the organization and teaching of social studies courses in secondary schools. Teachers will be given an opportunity to evaluate new courses of study, new materials and new equipment developed in an attempt to improve teaching procedures.
307. HISTORY AND PHILOSOPHY OF THE SOCIAL STUDIES. Three hours credit.
Develops a synthesis of past and present theory and practice in the social studies. It will discuss a frame-of-reference and objectives as well as content materials and history of the social studies curriculum.
§313. IMPROVEMENT OF INSTRUCTION IN SOCIAL STUDIES IN THE ELEMENTARY SCHOOL. (Summer Session only). (Credit may be obtained in Education or Social Studies). Four hours credit.
Prerequisite, student teaching or public school experience. Selection and organization of content, learning activities, problem-solving, social skills and attitudes through the first six grades. Emphasis is placed upon materials and methods for teaching a unified and correlated social studies program. A study of the literature and techniques of research in the area of the graduate major. The material in this course is presented on an advanced graduate level.
8313a. SPECIAL PROBLEMS IN THE SUPERVISION OF SOCIAL STUDIES. (Credit may be obtained in Education or Social Studies). Three hours credit.
This is a seminar course. It is based on the interests and needs of students who enroll in the course. Current trends in curriculum improvement, supervisory objectives and techniques in current use, recent research in methodology, areas of living, social growth and development of children, and the administration of the emerging curriculum are typical topics of interest.

[^9]322. INDIVIDUAL STUDIES. Three hours credit a problem-maximum credit, six hours.
Individual graduate study under the guidance of a staff member in any area of the division. Field or area of credit to be designated. Available only on consent of instructor concerned. Paper required. Twenty-five clock hours of work for each credit.
399. THESIS. Eight hours credit.

## ECONOMICS

77. PERSONAL INVESTMENTS. Three hours credit.

An analysis of personal investment programs with emphasis on investment in the corporate securities of common stock, preferred stock and bonds. Attention is also given to public securities and briefly to life insurance, savings institutions, and real estate investments.
100. PRINCIPLES OF ECONOMICS. Five hours credit.

An introduction to the analysis of economic activity in the areas of income determinants, business organization, national output and income, employment, production, individual prices, and the allocation of resources, income distribution, public policy relations to business, agriculture, labor, public finance, economic stabilization programs, and international eonomics.
102. CONTEMPORARY ECONOMIC PROBLEMS. Three hours credit. Prerequisite, Econ. 100. An examination of crucial economic problems facing modern society with particular attention being paid to unemployment, agricultural maladjustment, taxation policies, obstacles to foreign trade, wastes in production and consumption, economic inequality, and market instability.
106. MONEY AND BANKING. Three hours credit.

Prerequisite, Econ. 100 or equivalent. The fundamentals of monetary and banking analysis and policy. Money is analyzed from the viewpoint of its nature, source, standardization, effect on price levels, and international ramifications. Banking is analyzed as to organization, operation, transactions, control, and international implications and trends.
200. LABOR MANAGEMENT RELATIONS. Five hours credit.

Prerequisite, one course in Economics. A study of the origins and an examination of the impact of trade unionism on modern industrial organization. The course includes an inquiry into the techniques of collective bargaining, an analysis of labor-management-public relations in contemporary society, and a diagnosis of the interests and human motivations of labor groups.
202. FOREIGN TRADE. Two houts credit.

Prerequisite, Econ. 100 or equivalent. The principles and practices of international trade are analyzed economically including foreign investments, foreign exchange and the balance of payments. Practical aspects of exporting and importing are reviewed.
203. FOREIGN COMMERCIAL POLICY. Two hours credit.

Prerequisite, Econ. 202 or permission of instructor. An analytical survey of the commercial policies of mercantilism, classical free trade and other historically developed theories in the field of international economics, particularly as these apply to the United States.
207. COMPARATIVE ECONOMIC SYSTEMS. Five hours credit.

Prerequisite, Econ. 100 or equivalent. A comparison of the important economic systems of the world: modified capitalism, socialism, fascism, and communism. Emphasis is not on historical development, but on a critical analysis of the ability of these various systems to perform the vital economic functions essential to any economic system.
209. ECONOMIC HISTORY OF THE UNITED STATES. Five hours credit.
A study of the historical changes in American economic institutions, groups, problems and practices including developments in industry, commerce, agriculture, labor, finance and government intervention with emphasis on the post-Civil War period.
277. GOVERNMENT AND BUSINESS. Three hours credit.

Prerequisites, Pol. Sci. 170, Econ. 100. A comprehensive analysis of the role of government in present day American economy. After examining the limits of state intervention, the course relates public policy to the challenge of recurring depressions, labor, agriculture, industry, and public utilities.
§341. PUBLIC FINANCE. (Credit may be obtained in Education or Social Studies). (Summer Session only). Four hours credit.
Prerequisite, one course of " 100 " level in Economics. A study of the methods employed by local, state, and federal governments to finance their activities. Particular attention is paid to the scope and effects of various types of fiscal policy.

## GEOGRAPHY

10. WORLD GEOGRAPHY. Five hours credit.

Tools of world geography. World survey of the inter-relationships of man and his culture to the climates, animal life, minerals, soils and surface features of the earth.
48. UNITED STATES. Four hours credit.

A study of regions and their interdependence. Land use, social and economic problems emphasized.
§107. PRINCIPLES OF CONSERVATION. (Credit may be obtained in Science or Social Studies). Four hours credit.
This course will be organized upon the concepts of soil conservation, water conservation, forest conservation, wild life and the conservation of our diminishing mineral resources. Primarily for elementary teachers.
112. ECONOMIC GEOGRAPHY. Three hours credit.

Geographic and economic conditions affecting the products, industries, commerce and resources of the world. Special emphasis on the United States.
143. EUROPE. Three hours credit.

Physical and cultural patterns. The nations of Europe, their regions, cultures, social and economic organizations with resulting conflicts.
147. LATIN AMERICA. Three hours credit.

Mexico and the countries of South America-regions, cultures, economics, social and political conditions.
203. WORLD RESOURCES AND INDUSTRIES. Five hours credit.

A functional appraisal of the resources and industries of the world including a consideration of their geographical, historical, sociological, technological, and political aspects.
8207. CONSERVATION OF NATURAL RESOURCES. (Credit may be obtained in Science or Social Studies). Four hours credit.
A study of the relation of natural resources to the development of man and his culture. Units of study are organized on soil, water, forests and forest products, range management, wild life, and mineral resources. The emphasis throughout is on their relation to man.
226. AFRICA. Three hours credit.

Relationships between the physical and cultural patterns. Land use, resource development, social and political problems.
244. ASIA. Five hours credit.

The countries of Asia in terms of their physiography, climates, regions, cultures, cultural landscapes, social organizations and economic activities.
255. GEOGRAPHY OF COLORADO. Three hours credit.

An intensive study of the physical and human resources of the state of Colorado and the problems of their utilization.

## WORLD HISTORY

30a,b,c. WORLD HISTORY. Four hours credit each quarter.
World History suitable for the preparation of teachers in elementary and secondary schools. The course will include a brief analysis of the Far East, the Near East, Africa, and the Western Hemisphere as well as a more detailed coverage of European History.
221. THE GREAT WORLD ISSUES (Seminar). Three hours credit.

This course contemplates a thorough inquiry into one or more of the great world issues of the day, approaching the problem or problems from the historical, economic, geographic, cultural, political, and diplomatic viewpoints.

## 251. ANCIENT SOCIAL HISTORY. Three 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. Five hours credit. An advanced study of world developments in recent times.
261. MEDIEVAL LIFE AND INSTITUTIONS. Three 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 BALKANS AND THE NEAR EAST. Five hours credit. Recent developments in the Balkans and the Near East with the historical background.
269. THE FAR EAST. Five hours credit.

The economic, social, educational, philosophical, and political life of the major nations and regions of the Far East.
271. ENGLISH HiSTORY. Five hours credit.

Brief survey of the background of English History to the Tudor Dynasty. The emphasis of the course will be on the economic, political, and social transitions since the defeat of the Spanish Armada.
359. RENAISSANCE AND REFORMATION. Three hours credit.

The civilization produced by the Renaissance and its effects on the religious life of the time are studied as a background for the Reformation. The origins of the controversial questions still prevalent among the modern churches are examined with great care.
362. COLONIAL EMPIRES OF THE TWENTIETH CENTURY. Three hours credit.
The rise of the Great Colonial empires of our day; the emphasis will be placed on imperial administration, race and economic problems, and the changes resulting from the recent world war.

## UNITED STATES HISTORY

70a,b. UNITED STATES HISTORY. Fout houts credit each quarter.
A general survey of the American scene; the European backgrounds of American History, the age of discovery and colonization, the imperial rivalries, the revolution and the new nation, nationalism and sectionalism, the Civil War and Reconstruction, the emergence of modern America, the United States as a world power, the new nationalism, the new freedom and the New Deal.
75. UNIT SURVEY OF UNITED STATES HISTORY. Four hours credit. For elementary teachers only. Detailed consideration of specific units in American History with emphasis upon the content and materials for use in elementary schools.
80. COLORADO HISTORY. Two hours credit.

Indian civilization; Spanish and French explorations; American exploration; Indian Wars; pioneer home life, religion and education; fur, mining, and cattle industries; agricultural development, conservation and reclamation projects, conflicts between capital and labor; territorial and state governments.
246. GEOGRAPHIC INFLUENCES IN U. S. HISTORY. Three hours credit.
Relationships of the geography of the times to the discovery, exploration, settlement, and development of the United States.
252. HISTORY OF THE WEST. Five hours credit.

Western movement beginning with 1607. The Colonial West, organization of Northwest Territory, Indian Wars, United States factory system, frontier religion and education, Cumberland road, coming of steamboat, canal era, frontier monetary problems, relation of Mormons to westward movement, preemption and homestead acts, forty-niners and fifty-niners, transcontinental railroads, range cattle industry.
265. CONTEMPORARY UNITED STATES HISTORY. Three hours credit.
Economic, religious and intellectual conditions in United States in 1900. Progressive movement, rise of imperialistic thought, American interests in the Far East, Wilson's New Freedom, American neutrality 1914-1917, World War I, League of Nations, reason for failure, prosperity, depression 192.9, New Deal, Lend-Lease, World War II, United Nations' organization, Marshall Plan, labor and housing problems.
273. DIPLOMATIC HISTORY OF THE UNITED STATES. Five hours credit.
Principal events in our foreign relations, 1789 to date and the development of policies thereto.
363. AMERICAN REVOLUTION. Three hours credit.

Era from 1760-1763, change in colonial policy 1764-1765, Sugar Act, Stamp Act, Townshend Acts, Intollerable Acts, revolt of American colonies, Declaration of Independence, significance of year 1777, American victory, treaties of peace, Articles of Confederation, Critical period 1783-1787, Constitutional Convention, adoption of Constitution.
364. CIVIL WAR AND RECONSTRUCTION. Three hours credit.

Conditions of slave life, state and federal legislation controlling institution of slavery, compromises of 1820, 1850, operation of Fugitive Slave Law, Kansas-Nebraska Act, Republican Party, Lecompton Constitution, Dred Scott decision, Lincoln-Douglas debates, election of 1860, secession, attempts at compromise in 1860, Lincoln's border state policy, Civil War, emancipation, reconstruction.

## LATIN AMERICAN HISTORY

266. COLONIAL LATIN AMERICA. Five hours credit.

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

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

## POLITICAL SCIENCE

170. NATIONAL GOVERNMENT OF THE UNITED STATES. Five 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.

Prerequisite, Pol. Sci. 170. The organization of state, county, and municipal governments and the administration of public services at each level.
172. PROBLEMS IN UNITED STATES GOVERNMENT. Two hours credit.
Prerequisite, Pol. Sci. 170. The constitutional and extra-constitutional factors affecting the legislative process, the conduct of administration, the budgetary and fiscal policies of the government, and the control of foreign relations.
173. INTRODUCTION TO LAW. Three hours credit.

This is a study of the sources of English law and its development in America closing with a study of practical aspects of certain elementary law. Included among the sources are antecedents to Roman law and Roman law itself. Russian law will be compared with other systems studied.
273. MUNICIPAL GOVERNMENT. Three hours credit.

An analysis of the relationship of city government to state and national governments of the forms, structure and administration of government on the municipal level.
274. INTERNATIONAL ORGANIZATION. Three hours credit.

The bases of international relations, progress in international laws and legislation and modern attempts to establish formal machinery for handling international problems.
275. THE UNITED NATIONS. Three hours credit.

The background and organization of the United Nations. Includes a detailed study of the six organic bodies of the United Nations and its subsidiary agencies.
279. POLITICAL PARTIES AND PRESSURE GROUPS. Two hours credit.
Prerequisite, Pol. Sci. 170. The organization and techniques of political parties in the United States, the voting behavior of the electorate and the problems relating to the machinery of representative democracy.
376. CONTEMPORARY WORLD GOVERNMENTS. Three hours credit. The background structure and functioning of present day European governments. Major attention is given to Great Britain, France, and Russia.
377. THE CONSTITUTION AND ITS INTERPRETATION. Three hours credit.
Prerequisite, Pol. Sci. 170. 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.
380. SEMINAR IN UNITED STATES POLITICS. Two hours credit. Prerequisite, Pol. Sci. 170. Standard seminar-individual research with discussion and critical evaluation.

## SOCIOLOGY

100. SOCIAL PROBLEMS. Three hours credit.

Nature of a social problem; problems of man in relation to the land, personal life history problems, individual and group deviations, problems of social division, social crises, processes and techniques of social adjustment.
101. PRINCIPLES OF SOCIOLOGY. Five hours credit.

Cultural backgrounds of social life, personality and social structure, social relations, social differentiation and stratification, social institutions, social disorganization and social change.
§102. GENER.AL ANTHROPOLOGY. (Credit may be obtained in Science or Social Studies). Five hours credit.
Organic man; races, ancient and modern, cultural dynamics; ancient men and archeology; culture areas of the world and ethnography; social anthropology. Emphasis upon social anthropology.
104. MARRIAGE AND THE FAMILY. Two hours credit.

A study of the modern American family and its culture, marriage in relation to the development of personality, the choice of a mate, marital adjustment, the changing modern family and the nature of the happy family.
202. AMERICAN SOCIETY TODAY. Three hours credit.

An advanced study of American Society as a total social system; its geography, resources, population and technology; its basic social institutions, its group relations; diversity and change in American life and American values.
203. WORLD'S GREAT RELIGIONS. Three hours credit.

A study of several of the contemporary religions of the world; the basic doctrines, the ceremonies, ritual and customs, and their development within the cultural pattern.
206. CRIME AND DELINQUENCY. Two hours credit.

Causes, treatment and prevention of delinquency and crime.
8220. WORLD ETHNOLOGY. (Credit may be obtained in Science or Social Studies). Three hours credit.
Cultures different from our own in Asia, Africa, the Americas, Australia, and the adjacent areas. Primitive cultures analyzed.
221. INDIANS OF THE AMERICAS. Three hours credit.

Primitive cultures on the American continents. Emphasis on the Indian cultures of North America.
222. RACE RELATIONS. Three hours credit.

History, distribution, present status and cultural and genetic differences among the ethnic groups in the United States. Special consideration given to the contributions made by the various groups to our present American culture.
2291. SOCIAL PSYCHOLOGY. (Credit may be obtained in Education or Sociology). Two hours credit.
Specialized study of the behavior of man in groups. Personality, society and culture; psychological aspects of human conflict, man's behavior, morale and leadership, attitudes, sociometry and socio-drama.

## 323. PRIMITIVE AND MODERN SOCIETIES. Three hours credit. <br> Advanced analysis of contemporary cultures. Cultural universals with their implications for the development of our own society.

# 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 principal, four instructors, and ninetysix students. Certificates were granted upon the completion of the two-year 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 name 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 commissioner of education 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 20,000 population. Greeley is in northern Colorado and is 52 miles north of Denver and 52 miles south of Cheyenne, Wyoming. Estes Park is 51 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 forty-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.

## Library Facilities

The College Library has over 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.

## 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 assisting schools and communities with their education problems.

## Field Service Program

In the fall of 1949, the college reestablished its field service program that was so effective before the war. As a part of the field service program Education Centers have been organized in several areas of the state with members of the college faculty in charge. The faculty members, who are known as the directors of the Education Centers, organize and teach classes that carry residence credit when taught by them or some other regular member of the faculty. All rules and regulations affecting campus instructors and instruction shall apply to these off-campus instructors and instruction.

## 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 prohibiting students from completing four quarter hours in correspondence between the end of the Summer Session and the beginning of the Fall quarter.

## Recommendations and Appointments

The Office of Recommendations and Appointments 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.

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

## 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.

## Counseling Services

Counseling services are available for all students of the college. These services provide an opportunity for them to receive help in determining and understanding their aptitudes and interests in order that they might select a course of study in keeping with their needs and desires. Help is also available to assist students who are having difficulty with course work or who present other types of problems which arise in college life, such as those of a personal nature involving social situations, health, finances, or housing.

## Student Residence Halls

The College provides ten 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 p.m. on all nights preceding a schoolday, and by $1: 00$ a.m. on Friday and Saturday night. When residence halls are occupied during vacation, the hours will be the same as when college is open, except on Friday night. Friday will be a $10: 30$ night, Saturday a one o'clock night. The night on which college closes for a vacation will be a one o'clock night only if there is an organized party sponsored by the Associated Students.

## Residence Regulations

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 college-owned bedding at a charge of $\$ 5.00$ each quarter.

## Dining Rooms

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 fifteen dollar ( $\$ 15.00$ ) deposit must be made by the student. If a student decides not to take a room after he has reserved it, $\$ 5.00$ will be refunded if the Director of Student Personnel is notified at least twenty days prior to the quarter for which the room has been reserved.

After the student enters the residence hall, the deposit will be held to the student's credit as a protection against property damage and penalty charges. It will be returned to the student on final withdrawal after deductions have been made for any charges. If the year's contract is broken at the close of any quarter, $\$ 10.00$ of this deposit will be forfeited.

Except for Greeley residents, first-year students are expected to live in the residence halls. Permission to live off-campus is granted only after careful consideration of the request. This consideration will normally include the written consent of parents.

## 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. The same policy of deposits applies.

## Student Employment

A large number of the students of the College have 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. Other types of jobs are available in Greeley business places and homes.

Recommendations for College employment are an important part of a student's record. Each student employed on a College work project must maintain a satisfactory grade average. A cumulative and quarterly average of " C " (3.0) is generally considered as satisfactory for this purpose.

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 Office offers extensive dispensary facilities with graduate nurses in attendance at all times during the college day, and with physicians available at specific 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.

Modified diets are provided by the dietitians in charge of the student dining rooms when possible and on recommendation of the nurse in charge of the Student Health Services.

## 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.

## Student Activities

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. The students also edit and publish a literary magazine, the Fulcrum.

## 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 athletes.

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

## Religious Program

The College emphasizes the value of a religious life and encourages students to attend churches of their choice. Greeley is noted as a city of churches. Most denominations are represented by an active church. There are several student religious groups on the campus. The Religious Council, composed of student representatives of these denominations, is the coordinating agency for campus religious activities.

## 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.

Qualified students are eligible to become members of numerous honorary and service fraternities. The organizations include: Alpha Delta (national journalism fraternity); Alpha Psi Omega (national drama fraternity); Tau Beta Sigma (national band sorority) ; Blue Key (national service fraternity) ; Delta Omicron (national music sorority) ; Delta Phi Delta (national art fraternity) ; Kappa Kappa Psi (national band fraternity) ; Lambda Sigma Tau (national science fraternity); Orchesis (modern dance organization) : Phi Alpha Theta (national history fraternity); Phi Delta Kappa (national professional fraternity); Phi Epsilon Phi (national pep organization for men) ; Phi Mu Alpha Sinfonia (national music fraternity) ; Pi Kappa Delta (national forensic fraternity) ; Pi Lambda Theta (national education sorority); Pi Omega Pi (national business education fraternity) ; Spur (national pep organization for women) ; Kappa Delta Pi (national education fraternity).

## Social Organizations

At Colorado State College of Education there are four social fraternities and seven sororities. The fraternities, all local, are Delta Delta Tau, Delta Psi, Lambda Gamma Kappa, and Phi Delta Pi. The seven sororities are Alpha Sigma Alpha, Alpha Sigma Tau, Delta Sigma Epsilon, Pi Kappa Sigma, Sigma Sigma Sigma, Sigma Kappa, and Theta Sigma Upsilon. All of the sororities are affiliated with National Panhellenic Council. No student is eligible for pledging until he or she has been enrolled at Colorado State College of Education for one quarter.

Panhellenic Council, composed of two representatives from each sorority, and the Inter-Fraternity Council, formed by representatives of the fraternities, function as coordinating agencies for their respective groups, governing pledging and initiation and maintaining a high plane of inter-sorority and inter-fraternity relations on the campus. Both councils sponsor awards to the organizations with high scholastic achievement.

There is an active Independent Students Organization which provides social opportunities for those students who are not affiliated with fraternities or sororities.

## 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

Beginning in 1944, three scholarships of $\$ 500$ each were made available annually 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.

Because of the difficulty of securing complete, detailed information from China about applicants, awarding of these scholarships is being discontinued for the time being.

## "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 arranged 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.

## Loan Funds

Thirteen College loan funds with aggregate resources of over $\$ 36,000$ 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 five thousand students have utilized the loan funds since 1911. The funds are: Phi Delta Kappa, William Porter Herrick Memorial, Sarah Platt Decker Memorial, Rotary, WTK, Fortnightly Music Club, Kendel Music, Altrusa, Shyn, Sigma Upsilon Graduate, Panhellenic, 'Laboratory Schools and Merriman Memorial funds, and Andrew P. Bengtson and Gertrude Bengston Memorial.

## Expenses

## Tuition and Fees for Fall, Winter and Spring Quarters

|  | Fall Qtr. | Winter Qtr. | Spring Qtr. | Total (F-W-S Quarters) |
| :---: | :---: | :---: | :---: | :---: |
| Tuition, Residents of Colorado* | \$27.50 | \$27.50 | \$27.50 | \$ 82.50 |
| Registration | 3.50 | 3.50 | 3.50 | 10.50 |
| College Service (Includes Health services, all Laboratory and Library Fees) $\qquad$ |  |  |  |  |
|  | - 9.25 | 9.25 | 9.25 | 27.75 |
| Associated Students ** ----------------10 | 10.00 | 10.00 | 10.00 | 30.00 |
|  | \$50.25 | \$50.25 | \$50.25 | \$150.75 |

## College Residence Hall Fees

|  | Fall Qtr. | Winter Qtr. | Spring Qtr. | Total (F-W-S <br> Quarters) |
| :---: | :---: | :---: | :---: | :---: |
| Board and Room, Men's Resi- |  |  |  |  |
| dence Halls, range | $\begin{aligned} & \$ 147.50- \\ & \$ 164.50 \end{aligned}$ | $\$ 147.50-$ | $\begin{aligned} & \$ 147.50- \\ & \$ 164.50 \end{aligned}$ | $\begin{aligned} & \$ 442.50 \\ & \$ 493.50 \end{aligned}$ |
| Board and Room, Women's |  |  |  |  |
| Residence Halls, range .------ | \$147.50- | \$147.50- | \$147.50- | \$442.50 |
|  | \$164.50 | \$164.50 | \$164.50 | \$493.50 |

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 college-owned bedding at a charge of $\$ 5.00$ each quarter.

Applications for rooms should be addressed to the Housing Office, Department of Student Personnel. To confirm a reservation, a $\$ 15.00$ deposit is required of the student. If a student decides not to take a room after he has reserved it, $\$ 5.00$ will be refunded if the Director of Student Personnel is notified at least twenty days prior to the quarter for which the room has been reserved.

After the student enters the residence hall, the deposit will be held to the student's credit as a protection against property damage and penalty charges. It will be returned to the student on final withdrawal after deductions have been made for any charges. If the year's contract is broken at the close of any quarter, $\$ 10.00$ of this deposit will be forfeited.

[^10]
# College Residence Hall Fees <br> (Continued from Page 244) 

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.

## Other Fees

Late Registration (assessed for enrollment permitted later than the
hours scheduled each quarter) $\$ 5.00$
Special Examination (required when permission is granted to take an
examination at other than the scheduled hours)
Late Application for Degree - - - - - - . - . . . - . 2.00
Change of Program (assessed for each program change permitted after
the announced grace period)
Extension of Credit
Tuition and Required fees - - - - . . . . . . . 1.00
Board and Room payments by installments - - . - . - 1.50
Credit by Examination
Test - - . - - - . - . - . - . - . 2.00
Credit by examination, per credit hour - . - . . . - 3.00
Tuition for Limited Course Programs per credit hour (registration for
credit or audit up through five hours)
Tuition for On-Campus Limited Course Programs (registration for
credit or audit, five hours or less) per credit hour - - -
Tuition for Correspondence Course Study per credit hour - - - - 3.00
Tuition for Group Instruction Resident Credit in Off-Campus Teach-
ing Centers per credit hour -

## Graduate Fees

Candidates enrolled for a master's thesis, or a practicum, are charged tuition
based on the number of credit hours for which such studies are assigned.
Doctoral research study fee (assessed in three installments of $\$ 30.00$
on registration for each of three quarters during the progress of
the research)
Doctoral publication fees (paid when the research study has been defended and approved)
Binding of master's thesis or doctoral research study (four copies required, fee per copy, \$2.00)
$\begin{gathered}\text { Remedial writing laboratory (required of all students assigned to the } \\ \text { laboratory after tests) }\end{gathered}$. 0.00

## Music Fees

Individual Music lessons per quarter
Music majors - - - . . . . . . . . . 12.50
Other college students - - . - - . . . . . . . 15.00
Persons not enrolled in the college or affiliated schools - - 25.00
Individual Music lessons, less than a full quarter
Violin, piano, organ, strings, each - - - - . - . . 2.50
Other instruments, each . . . . . . . . . . . 2.00

# Music Fees <br> (Continued from Page 245) 

Practice room per quarter (includes piano rental) - - . . . . 5.00
Orchestra or band instrument rental per quarter - . . . . . . 5.00
Organ rental per quarter - - . - . . . . . . . . . 10.00

## Refunds

Partial refunds of tuition or fees on withdrawal are made under Board of Trustees' rulings as follows:

Fall, Winter, or Spring Quarters-

1. Within the first week following registration-all tuition, no fees.
2. Within the second week following registration-three-fourths of the tuition, no fees.
3. Within the third week following registration-one-half of the tuition, no fees.
4. Within the fourth week following registration-one-fourth tuition, no fees.

## INDEX

PAGE PAGE
Absences - - - - - - 30 Bedding and Linen ..... 235
Academic Requirements - - 35, 40 Bills, Payment of ..... 245
Accreditation - - - - - 28 Biology ..... 203
Activities, Student - - - 238 Board and Room, Cost ..... 244
Administrative Departments - - 8 Board of Trustees ..... 7
Administrative Officers 7 Botany ..... 204
Admission- Business Education ..... 134
Undergraduate - - - - 32 Buildings ..... 232
Graduate ..... 41
Advanced Graduate Diploma ..... 54
Advisement 234 Calendar, College Year ..... 4, 5
Air Science and Tactics, Campus ..... 232
Division of - ..... 67
Chairmen of the Divisions ..... 8
Application for Room - - 235, 244
Arts, Division of - - - - 73
Chemistry ..... 205
Clubs ..... 240
Arts, Courses in-
Fine Arts - - - - - 73 College Organizations,
Home Economics - - - - 84 Student ..... 240, 241
Industrial Arts Common Courses ..... 39, 40
Associated Students Conditions of Admission ..... 33
Associated Women Students
Correspondence Study ..... 233
Athletics
Counseling Services ..... 234
Awards ..... 242
Courses, Description of-
Air Science - ..... 71
Bachelor of Arts Degree Biology ..... 203
(With Teaching Certificate) - 35 Botany ..... 204
Bachelor of Arts Degree
Business Education ..... 136
(Liberal Arts)
Chemistry ..... 205
Economics ..... 223
Band Education ..... 110

PAGE
Courses, Description of-
English - - - - - 162
Fine Arts - - - - - 77
Foreign Languages - - - 170
General Science - - - - 200
General Social Studies - - 221
Geography - - - - - 224
Health and Physical Education 148
Home Economics - - - 88
Humanities - - - - - 162
Industrial Arts - - - - 97
Latin American History - - 228
Mathematics - - - - 213
Music - - - - - - 185
Physics - - - - - - 207
Political Science - - - 228
School Librarianship - - 108
Science Education - - - - 202
Sociology - - - - - 229
Speech and Drama - - - 176
United States History - - - 227
World History - - - - - 226
Zoology - - - - - 209
Course Load, Undergraduate - - 29
Course Numbers - - - - 28
Curriculum, Transfer to 1950-40
Debate - - - - . . - 238
Degrees-
Bachelor of Arts
(With Teaching Certificate) 35-37
Bachelor of Arts
(Liberal Arts) - - - - 37-38
Master of Arts - - - - 48
Advanced Graduate Diploma - 54
Doctor of Education - - - 56

Departments, Director of-
Business and Finance - - - 8
Instruction - - - - - 8
Public Relations - - - - 8
Student Personnel - - - 8
Dining Rooms - - . - 235
Division Chairmen - - - 8
Doctor of Education Degree - - 56
Drama (Little Theatre) - - . 239
Economics - - - - - - 223
Education, Division of-
Business Education - - - 134
Elementary - - - - 106, 107
General Secondary - - - - 106
School Librarianship - - 108
Education, Courses in - - 110
Elementary Education
Major - - - 106, 107
Employment, Student - - 236
English - - - - - 159
Entrance Requirements - - 32, 33
Examinations-
Final31

Health - - - - - - 33
Excuses for Absences - - - - 30
Expenses - - - - 244-246
Extension Classes - - - - 233
Extension Credit - - - - 233
Extension of Credit (Finance) - 245
Extracurricular Activities - 238-241

| PAGE | PAGE |
| :---: | :---: |
| Faculty Advisers - - - - 33 Government of the College - 231 |  |
| Faculty, Listing of - - - 9 Grade Evaluation - |  |
| Fees - - - - - 244-246 Grading System - - - - 29 |  |
| Field Service Program - - 232 Graduate Program - - 27, 41-66 |  |
| Financial Aid - - - 242, 243 Graduate School - - - 41-66 |  |
| Fine Arts - . . . . . . 73Graduation Requirements- <br> Undergraduate - - |  |
|  |  |
| Forensics - - - - - 238 |  |
|  |  |
|  |  |
|  |  |
| Freshmen, Information for- |  |
| Admission - - - - 32 |  |
| Advisement - - - - 234 Health Examinations - - - 33 |  |
| Common Courses - - - 39, 40 Health Service - - - . - 237 |  |
| Housing - 234, 235, 244, 245 |  |
| Housing Regulations - 234, 235 History of the College - - 231 |  |
| Registration Dates - - - 4,5 Home Economics - - - 84 |  |
| Work Opportunities - - 236 Honorary Fraternities - - - 240 |  |
| Functions of the College - - 27 Honor Scholarships - - - 242 |  |
|  | Housing |
| General Curriculum - - 39, 40 On-Campus - - - 234, 235 |  |
| General Information - - 231-233 |  |
| General Science - - - - 200 Hosing Regulations - |  |
| General Secondary Major - - 106 |  |
|  | Humanities, Courses in- |
| General Social Studies - - - 221 English - . - - - 162 |  |
| Geography - - - - . 224Foreign Languages - - - - 170 <br> Humanities - - - <br> - |  |
| G. I. Bill of Rights - - - 29 Speech and Drama - - - 17 |  |

PAGE PAGE
Industrial Arts ..... 95
Non-Resident Fees ..... 244
Instructional Staff ..... 9
Intramural Athletics ..... 239
Off-Campus Housing ..... 236
Officers of Administration ..... 7
Organization of the College ..... 7
Personnel, Department of Student - - - - - 234-237
Photographs ..... 34
Physical Exercise Requirements 39, 40
Physical Plant - ..... 232
Physics ..... 207
Placement Service ..... 233
Plans of Study ..... 35
Political Science ..... 228
Probationary Status ..... 31
Publications, Student-
Annual - ..... - 238
College Newspaper ..... 238
Literary Magazine ..... 238
Mathematics ..... 232
Matriculation Requirements ..... 33
Minimum Residence Requirements ..... 34
Music, Division of ..... 180
Music, Courses in ..... 185
Music Organizations-
A Cappella Choir ..... 239
Band ..... 239
Orchestra ..... 239

State Institutions of Higher LearningAdams State College - - - - - - - - AlamosaN. William Newsom, President
Colorado Agricultural and Mechanical College - Fort Collins W. E. Morgan, President
Colorado School of Mines ..... GoldenJohn W. Vanderwilt, President
Colorado State College of Education ..... Greeley
William Robert Ross, President
University of Colorado - ..... - Boulder
Robert L. Stearns, President
Western State College - - - - - - - - - GunnisonPeter P. Mickelson, President
(2)


[^0]:    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

[^1]:    TyRUS Hillway, A.B., Willamette University; A.M., University of California; Ph.D., Yale University.

    Associate Professor of Education

[^2]:    Ernest Barbour O'Byrne, A.B., A.M., Colorado State College of Education; Ph.D., Stanford University.

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

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

    Professor Emertus of History
    Kenneth Frederick Perry, A.B., A.M., Colotado State College of Education; Ph.D., Columbia University.

    Professor of Industrial Arts

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

    Associate Professor of History

    Francis Rushford Quammen, A.B., A.M., Colorado State College of Education; Graduate Student, University of Minnesota.

    Associate Professor of Economics
    Henry D. Rauchenstein, Captain, U. S. Air Force; A.B., State College, Superior, Wisconsin.

    Assistant Professor of Ait Science and Tactics
    Howard TEnNANT Reid, A.B., Brigham Young University; M.S., Ed.D., University of Southern California.

    Assistant Professor of Education
    Alberta Eloise Reitze, A.B., Ohio Wesleyan University; M.S., Kansas State College.

    Assistant Professor of Education
    Arthur Rae Reynolds, A.B., Nebraska State Teachers College, Peru; A.M., Ph.D., University of Minnesota.

    Assistant Professor of History

[^3]:    Ella May Small, A.B., Texas Woman's College; A.M., Texas State College for Wumen; Graduate Student, State University of Iowa, University of California at Los Angeles.

[^4]:    -In the Division of the Social Studies, besides the major in History, a teaching major in "Social Studies" is offered. An undergraduate prerequisite of 44 hours in the Social Studies is required, of which 12 hours must be in the area of the concentration on the graduate level. The student must present a graduate concentration of 24 hours. Of the remaining 21 hours required for the master's degree, at least 9 hours must be in the field of the Social Studies outside the area of concentration. Concentrations are allowed in History or Political Science.

[^5]:    151a. EQUIPMENT AND MAINTENANCE PROBLEMS IN WOOD. Three hours credit.
    Prerequisite, $50 \mathrm{a}, \mathrm{b}, \mathrm{c}$. Up-keep and repair of woodworking tools and machines. Selection and purchase of woodworking tools, machines and supplies for a school shop.

[^6]:    §191. METHODS OF TEACHING SCIENCE IN THE ELEMENTARY SCHOOL. (Credit may be obtained in Science Education or Education). Four hours credit.
    The student's purpose for this course is to secure the knowledge of objectives, materials, and methods which they will need as teachers for preparing learning activities and answering children's questions in a functional elementary science program.

[^7]:    361. SEMINAR IN AESTHETICS AND CRITICISM. (Summer Session only). Four hours credit.
    A study of the literature of aesthetics with specific consideration of its implications for music in an educational program.
[^8]:    170. MATHEMATICAL INSTRUMENTS AND SURVEYING. Fout hours credit.
    Prerequisites, Math. $78 \mathrm{a}, \mathrm{b}$, or $75 \mathrm{a}, \mathrm{b}, 76$, or equivalent. A course designed to show the teacher of mathematics some of the techniques and instruments used in many of the practical problems of measurement. Instruments studied are the slide rule, the sextant, and various instruments used in land surveying.
[^9]:    320. SEMINAR IN THE TEACHING OF THE SOCIAL STUDIES. Three hours credit.
    Individual and group problems in the teaching of social studies in elementary and secondary schools, including junior college.
[^10]:    *Tuition for out-of-state students is $\$ 32.50$ a quarter, $\$ 97.50$ for the three quarters-Fall, Winter and Spring. Students may consult the Business Office for rulings on residence requirements as defined by the Board of Trustees.
    **This fee includes admission to athletic events, plays, subscription to The Mirror (student newspaper) and the Cache la Poudre (student annual).

