

CATALOG  
AND  
YEAR BOOK

COLORADO STATE TEACHERS COLLEGE

1925—1926

*Opal King  
Basket Locker*

GREELEY, COLORADO  
PUBLISHED BY THE COLLEGE  
APRIL, 1925

## THE COLLEGE CALENDAR

1925

Sept.	29	Wednesday	.....	Registration day for the Fall Quarter
Sept.	30	Thursday	.....	Classes begin
Nov.	26-27	Thursday-Friday	.....	Thanksgiving recess
Dec.	17	Thursday	.....	Fall Quarter closes
Dec.	29	Tuesday	.....	Winter Quarter begins

1926

Jan.	1	Friday	.....	New Year's Day
Mar.	12	Friday	.....	Winter Quarter closes
Mar.	16	Tuesday	.....	Spring Quarter begins
May	7	Friday	.....	Insignia Day
June	2	Wednesday	.....	Spring Quarter closes
June	15	Tuesday	.....	Registration for the Summer Quarter
June	16	Wednesday	.....	Classes begin
Aug.	26	Thursday	.....	Summer Quarter closes

## IMPORTANT ANNOUNCEMENT

CERTIFICATE OF HIGH SCHOOL GRADUATION.—Students enrolling for the first time in the College and those whose admission to the College has not yet been formally arranged must secure a "College Matriculation Blank" from the Registrar. Beginning with the year 1924-25 entrance credits will be accepted only on this blank. This blank includes a formal application for admission, a transcript of entrance subjects and a recommendation from the Principal or Superintendent. Send the application to your Principal or Superintendent who will forward the same, completed, direct to the Registrar. Do not present a diploma unless full and complete data indicated above are not available.

Special summer students may not consider themselves candidates for graduation until properly matriculated. This means that entrance credits must be presented, as indicated above, unless admission is accepted in any other approved manner. All students, even though once graduated, are required to readjust their admission to correspond with regulations which went into effect September 1, 1923.

Students not high school graduates may be admitted conditionally upon presenting a transcript showing the completion of fourteen units, in designated groups. This condition must be removed during the first year by taking one unit of work in Teachers College High School.

Special Admissions—See page 33 for a statement concerning other ways of gaining entrance, either as regular or unclassified students.

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PART I  
ORGANIZATION OF THE COLLEGE

## TRUSTEES OF THE COLLEGE

HON. C. N. JACKSON, Greeley .....	Term Expires 1929
HON. E. M. RUSSELL, Gunnison .....	Term Expires 1929
HON. H. V. KEPNER, Denver .....	Term Expires 1927
HON. GEORGE D. STATLER, Greeley .....	Term Expires 1927
HON. CLIFFORD P. REX, Alamosa .....	Term Expires 1931
HON. EARL M. HEDRICK, Wray .....	Term Expires 1931
HON. MARY C. C. BRADFORD, Denver .....	Term Expires 1927
<i>State Superintendent of Public Instruction</i>	

## OFFICERS OF THE BOARD OF TRUSTEES

MR. KEPNER .....	President
DR. RUSSELL .....	Vice-President
W. F. MCMURDO .....	Secretary
MR. KEPNER, MR. STATLER, MR. JACKSON .....	Executive Committee

## OFFICERS OF ADMINISTRATION

GEORGE WILLARD FRASIER, A.B., A.M., Ph.D, L.L.D.....	President of the College
ETHAN ALLEN CROSS, A.B., A.M., Ph.D. ....	Dean of the College
WINFIELD DOCKERY ARMENTROUT, A.B., A.M.,.....	Director of Instruction
A. EVELYN NEWMAN .....	Dean of Women
J. P. CULBERTSON .....	Secretary to the President
R. M. CARSON .....	Registrar
W. F. MCMURDO .....	Treasurer

## THE FACULTY

GEORGE WILLARD FRASIER

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A.B., Michigan State Normal College; A.M., Leland Stanford Junior University; Ph.D., Columbia University; L.L.D., Colorado College; Instructor in Science, Harbor Beach, Michigan; Superintendent of Schools, Coleman and Mayville, Michigan; Director of Research and Professor of Education, State Teachers College, Cheney, Washington; Associate in Educational Administration, Teachers College, Columbia University; Director Department of Classification and Statistics, Denver Public Schools; Author "The Control of City School Finances;" Joint Author, "An Introduction to Education;" President, Teachers College Section of the National Education Association; Phi Delta Kappa; Kappa Delta Pi.

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† Exchange Professor from Goldsmiths' College, University of London, England, 1925-26.

- LESTER EDWIN OPP *Assistant Professor of Music*  
Piano and cello, Dana's Musical Institute, Warren, Ohio; Mus.B., Dana's Musical Institute; Cellist, First Stand, D.M.I. Symphony Orchestra and D.M.I. String Orchestra; Instructor, 'Cello, Newcastle, Pennsylvania, High School.
- IVAREZ BEIL OPP *Instructor in Music*  
Student Dana's Musical institute, Warren, Ohio; member D.M.I. Symphony Orchestra and Concert Band; Chautauqua and Lyceum Entertainer.
- WILLIAM BIDWELL PAGE *Library Assistant*  
M.D., University of Michigan.
- \*ORA BROOKS PEAKE *Associate Professor of Secondary History*  
Pd.B., Michigan State Teachers College, Ypsilanti, Michigan; A.B., A.M., University of Michigan; Graduate Student, University of Chicago; Teacher in the rural schools of Ionia County, Michigan; Junior High School, Portland, Michigan; History and Civics in Senior High Schools at Homer, Portland, Battle Creek and Bay City, Michigan; Teacher of History and Civics, North Denver High School, Denver, Colorado.
- RHODA BELLE PERMENTER *Assistant Professor of History*  
A.B., Colorado State Teachers College; Graduate Student, Colorado State Teachers College; Student, Oklahoma University, Trinity University, East Texas State Teachers College; Assistant Principal, Aikero High School, Paris, Texas; Superintendent, Palmer Public Schools, Palmer, Texas; Kappa Delta Pi.
- ETHEL BLANCHE PICKETT *Associate Professor of Household Science*  
B.S., A.M., Teachers College, Columbia University; Teachers College, Columbia University, Diploma in Education; Student, Pratt Institute; Teacher, Rural and City Schools, Carthage, Missouri; Head of Department of Home Economics, State Normal School, Silver City, New Mexico.
- HAROLD M. RANDALL *Acting Assistant Professor of English*  
A.B., Parsons College; Graduate Student Northwestern School of Speech. Professor of Social Sciences and Public Speaking, Westminster College, Salt Lake City, Utah. Phi Alpha Phi; Pi Kappa Delta.
- HEDWIG ELIZABETH ROESNER *Associate Professor of Public School Music*  
A.B., B. Mus., University of Illinois; Student, Northern Illinois State Teachers College, DeKalb, Illinois, Bodfors School of Music and Oratory, Moline, Illinois; Augustana Conservatory of Music, Rock Island, Illinois; University of Michigan, Ann Arbor, Michigan; American Institute of Normal Methods, Northwestern University; Principal, McKinley School, East Moline, Illinois; Supervisor of Music, Community High School, Gilman, Illinois; Grades and High School, East Moline, Illinois; Grade, and High School, Bensenville, Illinois; Argentine High School, Kansas City, Kansas; Supervisory Certificate, State of Illinois; Mu Kappa Alpha.
- LUCY LYNDE ROSENQUIST *Associate Professor of Primary Education*  
B.S., Fremont Normal College, Fremont, Nebraska; Kindergarten-Primary Supervisor's Certificate, University of Chicago; Kindergarten Director, Schuyler, Nebraska, Public Schools; Principal, McCormick Orthogenic School, Chicago, Illinois; Kindergarten-Primary Supervisor, Public Schools, Mobile, Alabama; Head of Kindergarten Department, Nebraska State Teachers College, Peru, Nebraska.
- MARGARET MOORE ROUEBUSH *Professor of Household Arts; Head of Division*  
A.B., State Woman's College of Mississippi; Graduate Student, Bryn Mawr College; Teacher in the Public Schools of Mississippi; Instructor in English and History, Smith Academy, St. Louis, Missouri; Supervisor of Home Economics, Oshkosh, Wisconsin; Dean of Women and Head of the Home Economics Department, University of Mississippi; Instructor in Household Art, Western Reserve University; Instructor in Household Art, University of Washington, Seattle, Washington; Ph.B., University of Chicago.

\* On leave.

EARLE UNDERWOOD RUGG

*Professor of Education;  
Head of Division*

A.B., A.M., University of Illinois; Ph.D., Teachers College, Columbia University; Teacher of History and Civics in Monmouth, Illinois, High School and in Oak Park, Illinois, High School; Instructor in Political Science, Illinois Normal University; Assistant in Social Sciences at Teachers College, Columbia University and Assistant in Educational Research in Lincoln and Horace Mann Schools; Author of "Street Railway Franchises in Illinois," "Character and Value of Standardized Tests in History," "Supervised Study in History," and "How the Current Courses in History Geography and Civics Came to Be"; Phi Delta Kappa, Kappa Delta Pi.

OTTO WILLIAM SCHAEFER

*Associate Professor of Industrial Arts*

Student of William Walker, Art Binder of Edinburgh, Scotland; Head of Bookbinding Department, B. F. Wade Printing Company, Toledo; Head of Stamping and Finishing Department, Kistler Stationery Company, Denver; Head of Binding Departments in Cleveland, Detroit, Asheville, Riverside, and Los Angeles.

EDITH MARIE SELBERG

*Assistant Professor of Biology*

A.B., A.M., Colorado State Teachers College; Fellow, Biology Department, Colorado State Teachers College; Kappa Delta Pi.

JOHN HENRY SHAW

*Editor of Official Publications;  
Director of Journalism*

Reporter, Copy Reader, Assistant Financial Editor, Railroad Editor, Philadelphia, Pa., Press; Reporter, Philadelphia Inquirer, Philadelphia Record; Railroad Editor, Philadelphia Public Ledger; Staff Correspondent, Philadelphia Press; Correspondent, New York World, Chicago Tribune, Correspondent, Associated Press; Reporter, Copy Reader, Denver, Colo., Post, Rocky Mountain News, Denver, Colo.; Managing Editor and Editorial Writer, Pueblo, Colo., Chieftain; Editor, Fort Collins, Colo., Morning Express; Editor, Sterling, Colo., Evening Advocate; Owner and Publisher, Sterling, Colo., Enterprise.

ANGIE S. K. SOUTHARD

*Instructor in Music Appreciation*

A.B., Wellesley College; Studied piano in New York and Berlin. Taught in New York and Curitiba, Brazil; Accompanist at the Metropolitan Opera House, New York.

EDITH STEPHENS

*Library Assistant*

A.B., Colorado State Teachers College.

CORA MAY THOMAS

*Library Assistant;  
Classifier and Cataloger*

Graduate, Colorado State Teachers College; Eleven Years Assistant Librarian Greeley Public Library.

J. J. THOMAS

*Assistant Professor of Music*

A.C.M., Dana Musical Institute; Violin Pupil of Charles H. Lowry, who was a student of Theodore Spearing; Pupil of John Hundertmark; Theory pupil of Rei Christopher and Prof. J. D. Cook; Band and orchestral conducting under Professor Lynn B. Dana; Assistant Director of American Air Service Band, England; Musician with the Chautauqua Lake Symphony Orchestra and Concert Band, Chautauqua Lake, New York.

FRANCES TOBEY

*Professor of English  
Acting Head of Division*

B.S., Western Normal College, Iowa; A.B., Colorado State Teachers College; Graduate, Emerson College of Oratory, Boston; Student, Oxford University; Member Faculty, Emerson College of Oratory, Boston; Chair of English and Reading, Denver Normal School; Editor, Emerson College Magazine; Kappa Delta Pi; Pi Kappa Delta.

FLOSS ANN TURNER

*Assistant Professor of Primary Education*

Ph.B., University of Chicago; Diploma State Teachers College, Warrensburg, Missouri; Student, Teachers College, Columbia University; Student, University of Utah; Primary teacher, Roswell, New Mexico; Primary teacher and supervisor, Jordan Consolidated District, Salt Lake County, Utah; Teacher, Demonstration School, City Normal School, Cleveland, Ohio, Summer 1918; Teacher of History and Dean of High School Dormitories, Carbon County, Utah; Supervisor, State Teachers College, Mankato, Minnesota, 1921.

CHARLES FRANKLIN VALENTINE

*Assistant Professor of Physics*

A.B., Kalamazoo College; M.A., Teachers College, New York; Head of Science Department, Dowagiac High School, Dowagiac, Michigan; Principal High School, Hartford, Michigan; Head of Physics Department, Flint High School and Junior College, Flint, Michigan.

SUSAN HART VAN METER

*Assistant Professor of Elementary Education*

Pd.B., Colorado State Teachers College; B.S., in Education, University of Missouri; Teacher, Rural School, Maysville, Missouri; Teacher, Grade School, Maysville, Missouri; Principal, Upper Grades, Como, Colorado; Teacher, High School, Hamilton, Missouri; Superintendent Schools, Union Star, Missouri; Teacher, Training High School, La Plata, Missouri; Superintendent, Intermediate Grades, State Teachers College, Cape Girardeau, Missouri.

EDWARD IRL VARVEL

*Dental Examiner*

Pd.B., Colorado State Teachers College; D.D.S., Colorado College Dental Surgery.

FREDERICK LAMSON WHITNEY

*Director of Educational Research;  
Acting Director of Training Schools;  
Professor of Education*

Ed.B., Ph.B., A.M., University of Chicago; Ph.D., University of Minnesota; Superintendent of Schools, Grafton, North Dakota, and Huron, South Dakota; Principal of the Monroe Elementary School, Minneapolis; Superintendent of Training Department, Duluth State Teachers College; Assistant, Department of Educational Administration, College of Education, University of Minnesota; Director of Training School, State Teachers College, Moorhead, Minnesota; Curriculum Specialist, Department of Curriculum Revision, Denver Public Schools; Author, "The Prediction of Teaching Success", Journal of Education Research Monograph, No. 6, 1924; Phi Delta Kappa; Kappa Delta Pi.

EDITH GALE WIEBKING

*Associate Professor of Household Arts*

A.B., Colorado State Teachers College; Student, Laird's Seminary for Young Ladies, Philadelphia, Pennsylvania; Student, Philadelphia School of Design; Teacher, Six Years, Greeley City Schools.

\*GRACE HANNAH WILSON

*Assistant Professor of Education;  
Director of Religious Activities*

Pd.B., Colorado State Teachers College; A.B., Colorado College; Graduate Student, Harvard University; Secretary Young Women's Christian Association, Iowa State Teachers College.

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\* On leave, 1925-26.

## SPECIAL FACULTY AND GENERAL LECTURERS

Summer Quarter, 1925

DOCTOR EDWIN E. SLOSSON, Scientist; Director of Science Service, Washington, D. C.; Author, Editor, and Lecturer of note; Former literary editor of "The Independent."

DOCTOR WILLIAM STARR MYERS, Professor of Politics, Princeton University. Author of "Socialism and American Ideals" and other works and articles on History and Political Science.

DOCTOR HARRY LAIDLER, Social Economist; Director of the League for Industrial Democracy; Chairman of the Labor Research Department of the Federal Council of Churches; Author and Lecturer on Social and Labor subjects.

MR. RAYMOND ROBINS, Social Economist; Lawyer and noted Civic worker; Industrial expert and strike arbiter.

DOCTOR GEORGE E. RAIGUEL, Physician, and Lecturer on History and Politics; Staff Lecturer on International Politics for the American Society for University Teaching.

DOCTOR WILLIAM MATHER LEWIS, President George Washington University; Author and Lecturer on Economic questions.

PROFESSOR ELLA VICTORIA DOBBS, Associate Professor of Industrial Arts, University of Missouri and President of The Missouri State Teachers Association.

DOCTOR EDWARD HOWARD GRIGGS, Author and Lecturer on Literature and Philosophy.

PROFESSOR SARAH M. STURTEVANT, Assistant Professor of Education, Teachers College, Columbia University; Expert on Extra Curricular Activities in high schools and courses for deans of women and advisers of girls in high schools; Author of several books on the subject.

DOCTOR HENRY HARAP, Member of the faculty of Cleveland School of Education; Expert in Practical Arts.

DOCTOR N. L. ENGELHARDT, Professor of Education, Teachers College, Columbia University; Specialist in Educational Administration.

DOCTOR HAROLD RUGG, Professor of Education, Teachers College, Columbia University; Educational Psychologist; Curriculum Expert in the Social Sciences.

DOCTOR JOHN R. CLARK, Lincoln School, Teachers College, Columbia University; Expert in Mathematics.

MRS. I. ODENWALD UNGER, Sociologist, Author and Teacher. Former student of Lester F. Ward, and translator of his works.

- DOCTOR EDWARD RYNEARSON, Principal Fifth Avenue High School, Pittsburgh, Pennsylvania; Author, Lecturer and Teacher on Biology and specialist in Vocational and Educational Guidance.
- DOCTOR CARLETON W. WASHBURNE, Superintendent of Schools, Winnetka, Illinois; Expert in the field of Individual Instruction.
- DOCTOR HENRY C. PEARSON, Professor of Education, Teachers College, Columbia University, Principal of the Horace Mann School; Author of textbooks in the field of English and Latin.
- PROFESSOR LUCIA WILLIAMS DEMENT, Department of Fine Arts, Teachers College, Columbia University.
- MR. A. L. THRELKELD, Deputy Superintendent of Schools, Denver, Colorado; Specialist in Public School Curriculum Work.
- MR. H. GRAHAM DUBOIS, Professor of English, Newark, New Jersey; Poet and Short Story Writer.
- DOCTOR SAMUEL B. HARDING, Head of Department of History, University of Minnesota; Author, Lecturer and Teacher in Historical Subjects.
- DOCTOR JESSE H. NEWLON, President National Education Association, Superintendent of Schools, Denver, Colorado.
- MR. JAMES H. RISLEY, Superintendent of Schools, Pueblo, Colorado.
- MR. PERCY RECTOR STEPHENS, Celebrated Soloist, New York City.
- MR. J. R. BARTON, Superintendent of Schools, Okmulgee, Oklahoma; Specialist in School Organization.
- MR. O. D. WYATT, Principal E. M. Daggett School, Fort Worth, Texas.
- MR. HOWARD H. JONES, Celebrated Athletic Coach, University of Southern California.
- MR. G. O. CLOUGH, Superintendent of Schools, Tyler, Texas.
- DR. KIMBALL YOUNG, University of Oregon.

## COMMITTEES OF THE FACULTY

## FACULTY COUNCIL

The President of the College, Ex-officio; the Dean of the College, Ex-officio; the Dean of Women, Ex-officio; Howerth, Kendel, Fitzpatrick, Tobey, Baker.

## COMMITTEE ON COMMITTEES

The President of the College, Ex-officio; the Dean of the College, Ex-officio; Dickerson, Heilman, Baker, Finley, Colvin, secretary

NOTE: The President of the College is Ex-officio a member of all committees.

*Admission and Credits:* Cross, Dickerson, Principal of High School, Registrar.

*Alumni:* Wiebking, Carter, Hill, Kendel, Morrison, Mahan.

*Arts-Crafts:* Baker, Wiebking, Hill, Schaefer, Foulk.

*Assembly:* Fitzpatrick, Bishop, Chadwick, Roudebush, Hackman.

*Calendar:* Newman, Cooper, Tobey, McLane.

*Curriculum:* Cross, Jean, Rugg, Whitney, Colvin.

*Estes Park Outings:* Bell, Bishop, Hargrove.

*Faculty Club:* Howerth, Newman, Lyford, Merriman, Thomas, Lowe, Clasbey, Bedinger, Herman, Cave, Rosenquist.

*Loan Funds:* McMurdo, Principal of High School, Newman, Cross.

*Museum:* Carter, Hadden, Barker, Hill, Binnewies.

*Official Publications:* Cross, Shaw, Bishop, Head of English Department, Head of Education department.

*Religious Organizations:* Finley, Campbell, Bishop, Bryson, Dilling, Van Meter.

*Research:* Whitney, Boardman, Jean, Rugg, Ganders.

*Scholarships:* Cross, Director of Extension Service, Director of Training Schools, Registrar, Secretary.

*Extension:* Bell, Bowers, Dickerson, Morrison, Armentrout, Jean, Whitney.

*Radio:* Shaw, Cline, Bowers, Herman, Valentine, Barker.

*Visual Education:* Bowers, Barker, Long, Fitzpatrick, Herman, Morrison, Knies.

*Women's Buildings:* Newman, Davis, Pickett.





PART II  
GENERAL INFORMATION



## HISTORICAL SKETCH

The State Normal School of Colorado was established by an act of the Legislature of 1889. The first school year began October 6, 1890.

At the beginning of the second year the school was reorganized and the course extended to four years. This course admitted grammar school graduates to its freshman year, and others to such classes as their ability and attainment would allow.

At a meeting of the Board of Trustees, June 2, 1897, a resolution was adopted admitting only high school graduates or those who had an equivalent preparation, and practical teachers. This policy made the institution a professional school in the strictest sense.

The Eighteenth General Assembly passed an act making the State Normal School at Greeley, Colorado, also the State Teachers College of Colorado. In the catalog and in all the official publications hereafter the title, "Colorado State Teachers College" will be used.

## LOCATION

Colorado State Teachers College is located at Greeley, in Weld County, Colorado, on the Union Pacific and the Colorado & Southern Railways, fifty-two miles north of Denver. This city is in the valley of the Cache la Poudre river, one of the richest agricultural portions of the state. The altitude is 4,567 feet above sea level. The streets are lined with trees, forming beautiful avenues. The elevation and distance from the mountains render the climate mild and healthful. The city is one of Christian homes and contains churches of all the leading denominations. There are 14,000 inhabitants.

## PLANT

The buildings which are completed at the present time consist of those described as follows:

**THE ADMINISTRATION BUILDING**—The main, or Administration Building, is 240 feet long and 80 feet wide. It has, in it executive offices, class rooms, and class museums. Its halls are wide and commodious and are occupied by statuary and other works of art, which makes them very pleasing.

**THE LIBRARY BUILDING**—This gray stone structure is centrally located and faces the vista of Ninth Avenue. The stained glass windows, class mementoes, make it one of the most beautiful on the campus. It contains 58,200 volumes, a large picture collection, and several thousand pamphlets. The two floors are used for library purposes. The main floor is a reading and general reference room, where are shelved many of the periodicals and reference books. On this floor also are kept reserved books, which are for special use within the building. The basement floor contains the general book collection stacks, government publications, and unbound volumes of magazines. An automatic electric book lift operates between the floors. The volumes in the library have been selected with special reference to needs of students in education, for teachers, and for educational research work.

**THE TRAINING SCHOOL**—The Training School Building is the home of the Training Schools of the College; namely, the Teachers College High School, the Junior High School, the Elementary School, and the Kindergarten. It is a commodious building of red pressed brick and similar in style to the Administration Building. In its construction no pains or expense have been spared to make it sanitary, fireproof, and in every possible way an ideal building for a completely graded training school from the kindergarten to the senior year of the high school, inclusive. The auditorium, the art gallery, and the spacious corridors lend a fine attractiveness to the building. An expenditure approaching \$300,000.00 has been made to provide a training school center comparable in every way with any similar structure in the country.

**INDUSTRIAL ARTS BUILDING**—The Simon Guggenheim Hall of Industrial Arts is a beautiful structure, in the classic style of architecture. It is constructed of gray pressed brick. It accommodates the departments of Manual Training and Art, including every branch of hand work and art training applicable to the highest type of public school of the present and immediate future. This building is a gift to the College from Senator Simon Guggenheim.

**THE CONSERVATORY OF MUSIC**—The Conservatory of Music was formerly the President's House. The large, attractive, and home-like property formerly the center of much social life on the campus when the president of the College entertained, became the home of the Conservatory of Music with the opening of the Summer Quarter, 1924. It is especially well suited for the new purposes to which it has been put. It is well arranged for studio work, private and class lessons, with opportunity for the segregation of the different musical departments. A large recital room is located on the top floor.

**THE MODEL COTTAGE AND CLUB HOUSE**—The first of these is a model cottage of five rooms for demonstrations in house furnishings and house-keeping for the department of Home Economics. The second is the Club House for women students. This beautiful building is used for student social gatherings.

**THE GYMNASIUM-AUDITORIUM**—A temporary wooden structure was completed to take care during the war period of the needs for a modern gymnasium and auditorium. The money was available and plans drawn for the permanent gymnasium and auditorium, but for patriotic reasons, the conservation of labor, materials, and money, these plans were put aside for the time and a large, airy, light wooden building was constructed at small cost to provide a suitable floor for athletic games and an auditorium for the Summer Quarter lectures.

**THE HOUSEHOLD ARTS BUILDING**—After the signing of the armistice and the consequent release of building materials, work was actively pursued on the new Home Economics building, the foundation for which had been already completed. This is a structure similar in construction, color, material, and architectural design to the Industrial Arts Building. It is three stories high and contains ample room for all the class rooms, laboratories, kitchens, dining rooms and work rooms for a well organized department of Household Arts in a teachers college, including both Household Arts and Household Science. A well arranged cafeteria is maintained to provide meals for students.

**THE DORMITORIES**—Three new cottage dormitories were opened in the Fall Quarter, 1921. Each houses from thirty to fifty students. The small houses make it possible to maintain the atmosphere and customs of a well-ordered home. The rooms are airy and well furnished. Each is provided with two single couch beds, two closets, and with hot and cold running water. Each house has a large and delightful living room, a kitchenette, and facilities in the basement for washing and ironing. No meals are cooked in the houses. The kitchenettes are for social purposes and for emergency cooking only.

Though time is very precious, divided as it is among class room studies, departmental clubs, and extra curricula activities, the hall girls make it possible to have Fall getting-acquainted parties, with popcorn and fudge accompaniments, Winter story hours in the attractive living rooms, made more attractive by firelight and candle glow, and spring waffle breakfasts in the club house or picnic suppers in the ravine.

Belford Hall is the largest of the three. It has accommodations for fifty-two girls. Each building is in charge of a director. This hall was named for Mrs. Frances Belford, a prominent Colorado woman, who for many years was on the Board of Trustees of Colorado State Teachers College.

Decker Hall is on the east side of Belford. It has accommodations for thirty-one girls and a director. It was named for Mrs. Sarah Platt Decker, who was not only prominent in Colorado, but known throughout the country as a pioneer worker in the Women's Club movement. She was president of the National Federation of Women's Clubs for many years.

Gordon Hall, southwest of Belford, has accommodations for thirty-one girls and a director. It was named for Mrs. Sophia Park Gordon of Pueblo. Like Mrs. Belford and Mrs. Decker, she was an active worker for civic and social betterment. She was one of the most active members on the Board of Charities and Corrections in the state of Colorado.

Only freshman girls now occupy the dormitories. This ruling was made in order that young girls away from home for the first time might be better cared for. After a girl has been in college a year, it is easier for her to find a suitable room in a private home.

Each student living in the College dormitories is expected to care for her room and to provide the following articles:

Two pairs of sheets for a single bed.

Three pillow cases of 42-inch tubing.

Three bath towels.

Three face towels.

Three wash cloths.

Two blankets and one comforter.

In addition to these, each student may bring her own sofa cushions, pictures, pennants, and other articles for decoration and personal comfort.

Rooms rent at \$21.00, \$25.00, \$27.00 and \$28.00 per quarter for each student, with two students in each room.

Students who make application for a room in the dormitories will deposit \$7.00. This deposit will be applied to the room rent the student pays for the quarter. Rent will be paid in advance for each quarter. In no case will rooms be rented except upon the quarterly plan. Students desiring rooms in the dormitories are requested to write to the Dean of Women at their earliest convenience, in order that their names may be placed upon the waiting list.

OTHER BUILDINGS—Other service buildings, such as an ample heating plant, stables, garages, automobile repair shops, etc., are maintained.

### THE BUILDING PROGRAM

The Legislature of 1916-17 provided a millage tax for building purposes for all the state educational institutions. This taxation extends over a period of ten years and gives to Colorado State Teachers College approximately \$83,000 a year for that period—a total of \$830,000 dollars for building.

### THE CAMPUS

Surrounding the buildings is a beautiful campus of forty acres. It is covered with trees and grass, and dotted here and there with shrubs and flowers.

In the rear of the buildings is a large playground, which covers several acres. In the southwestern portion of this playground is a general athletic field, a complete view of which can be secured from a grandstand which will accommodate more than a thousand spectators. On the portion of the ground adjacent to the buildings there is a complete outdoor gymnasium. To the south of the buildings are located the tennis courts.

### SCHOOL GARDEN

One of the pleasing features of the Spring, Summer and Fall Quarters of the school is the school garden. This garden occupies several acres of ground and is divided into four units—the conservatory, the formal garden, the vegetable garden, and the nursery. From the conservatory

the student passes into the large formal garden, where all kinds of flowers, old and new, abound. Here may be found the first snowdrop of early March and the last aster of late October. From the formal garden we pass to the school garden proper. Here in the garden and nursery the student may dig and plant, sow and reap, the while gathering that knowledge, the handicraft, that is essential in the teaching of a most fascinating subject of the up-to-date school—gardening.

#### DEPARTMENTAL MUSEUMS

The museums of Colorado State Teachers College are fully developed for actual use. Each department maintains a well-arranged museum. The objects in the museums are such as may be used by way of illustrating lessons.

#### EQUIPMENT

The institution is well equipped in the way of laboratories, libraries, gymnasiums, playgrounds, an athletic field, art collection, museums, and a school garden. The library has 56,000 volumes. There is ample opportunity to work out subjects requiring library research. There is a handicraft department connected with the library wherein a student may learn how to conduct a library. The gymnasium is well equipped with modern apparatus. Games of all sorts suitable for schools are taught.

#### THE GREELEY WATER

The water supply of Greeley is obtained from the canon of the Cache la Poudre, forty miles from Greeley, in the mountains. The water is passed through settling basins and filters until all foreign matter is removed. The supply is clear, pure, and ample for all needs of the city. The system was constructed at an expense of \$400,000.00 and is owned by the city.

#### MAINTENANCE OF THE COLLEGE

The maintenance of the College comes from a state mill tax and from special appropriations made by the Legislature.

#### GOVERNMENT

Colorado State Teachers College is under the management of a Board of Trustees of seven members appointed by the Governor of the state. The State Superintendent of Public Instruction serves ex-officio.

The control of student affairs, including matters of conduct and discipline, social life, and the larger phases of student policy, is in the hands of the Associated Students, an organization of the entire student body. Every regularly enrolled student at the time of registration is required to become a member of the association and pay a quarterly fee of \$4.25 for which the activity ticket is issued. This ticket admits the holder to all campus activities with the exception of benefit affairs.

The program provided by the Associated Students throughout the three quarters of the regular school year is rich and varied. The objective in bringing to the students programs involving campus talent such as the Dramatic Club, Glee Club, etc., and artists from the professional entertainment field is three fold: (1) selected entertainment for everyone, (2) development through participation, and (3) development through observation. The fee also provides for athletic events to which the student activity ticket admits, and for the student publications, of which the "Mirror", the weekly paper, is distributed without additional charge.

The affairs of the association are managed by an elected council consisting of the class presidents, two representatives from each class, the officers of the association, and the editors of the student publications. The organization, which is one of the most progressive, has gone through a period of continuous growth and development since its inauguration six years ago.

A unit of the National Organization of Associated Women Students has been formed with the purpose of bringing the entire body of women more closely together for the solving of women's problems on the campus and for helping to maintain the standards of student self-government. It in no way interferes with the activities of the Associated Students but rather co-operates in the fullest possible way. Every woman student on the campus becomes a member of this organization by payment of twenty-five cents due at registration.

#### FUNCTION OF THE COLLEGE

The purpose of the College is to train teachers for public school service. Being supported by public taxation of all the property of the State of Colorado, the College aims first to prepare teachers for all the kinds of public schools maintained within the State of Colorado. This includes rural schools, kindergartens, primary, intermediate grade, upper grade, junior high schools and high schools. The College also accepts the responsibility of training supervisors for rural schools, principals, superintendents, teachers of home economics, industrial arts, fine and applied arts, critic teachers, teachers of defective and atypical children, teachers for adult night schools, etc.

While the College is supported for the training of Colorado teachers, it welcomes students from any state or country and sends its teachers wherever they may be called. Students come to Colorado State Teachers College from many states, and its graduates go in large numbers into the neighboring states and in smaller numbers into distant states and countries.

The College recognizes as its plain duty and accepts as its function the training of students to become teachers in every type of school at present supported by the state, to meet all the demands of the public school system, to forecast those improvements and reforms which the evolution of public systems of education is to bring about in the immediate future, and to train teachers to be ready to serve in and direct the new schools which are in the process of being evolved.

#### STANDARD OF THE COLLEGE

It is the purpose of the trustees and faculty of Colorado State Teachers College to maintain a high standard of scholarship and professional training. Those who are graduated are to be thoroughly prepared and worthy of all for which their diplomas stand. It is the policy of the school by making all graduates "worthy of their hire" to protect those who employ them, for in so doing it protects no less the graduates and the children whom they teach.

#### FEES AND EXPENSES

The expense of attending Colorado State Teachers College is as low as can be made possible by careful management. The total expense may be estimated by taking into account the three largest items: board, room, and college fees.

**DORMITORIES**—The Dormitory Triangle provides housing for 114 women students. Each room is provided with two beds and with complete accommodations for two students. Rooms in the Dormitories cost from \$21.00 to \$28.00 for a quarter. Students in the Dormitories are required to furnish their own bedding and towels. The College has found it much more satisfactory for students to see the rooms before renting them. It is urged, therefore, that students come several days before the opening of the quarter, in order that they may personally select their rooms. If information concerning rooms is desired, students may write Miss Grace Wilson.

**BOARD AND ROOM**—Table board costs an average of \$5.50 per week in the College cafeteria, where meals are supplied at cost to the student. In private boarding houses the cost is usually a little more. Rooms rent by the month for from \$12.00 to \$16.00, for one in a room; \$14.00 to \$18.00

for two in a room. Rooms equipped for light housekeeping cost from \$16.00 to \$24.00 a month.

Board .....	\$65.00
Room .....	30.00
Incidental Fee .....	8.00
Student Association Fee .....	4.25
Total for a quarter (12 weeks) .....	<u>\$107.25</u>

Add to this your own estimate for travel, clothes, laundry, books, amusements, etc.

TUITION—1. Tuition is free to Colorado students.

2. Tuition to non-Colorado students is \$5.00 per quarter.

FEES—The incidental fee (except in the Summer Quarter) is \$8.00 per quarter. This includes matriculation, enrollment, graduation, diploma, library, gymnasium, and physical education fees. This fee is paid by all and is never refunded.

Fees for individual lessons in Piano, Organ, Violin, and other musical instruments, and Voice are extra in the College Conservatory of Music.

The regular courses for the training of teachers in public school music, supervision of music, etc., are free.

TEXTBOOKS—Students may secure the regular textbooks at the College Book Room at a reduction from the publishers' list prices.

## THE SUMMER QUARTER

The Summer Quarter of 1926 will in general follow the plans begun in 1918. Each instructor will include all the material in his courses that he regularly uses and will give full time to each topic. A student will carry sixteen hours of work the same as in other quarters.

The policy of bringing in from other institutions, not only lecturers, but class-room teachers as well will be continued and extended. Forty or more lecturers and teachers from other educational institutions will be in Greeley to give the best they have to the Summer school students.

The Summer School of Colorado State Teachers College began its work in 1905 with a small faculty and about two hundred students. In 1910 practically the whole faculty, exclusive of the training school and high school teachers, remained to teach through the six weeks of the Summer school. In that year there were 443 students. In 1918 the Summer term was placed upon an academic level with the other quarters of the College year. The term was lengthened to a quarter and the credits were made equal in value with those of the college year. With this step the College entered upon the four-quarter year. Today the teachers not only of Colorado, but of neighboring and distant states as well, recognize the fact that the College is doing a large service to the profession of teaching by making it possible for active teachers to keep up with the development of modern educational practice and to continue their professional education without losing time from their teaching. More than two thousand teachers now avail themselves of the opportunity.

Admission to the College at other times is limited to those who have fifteen units of high school work. The strict observance of this rule during the summer would make it impossible for hundreds of experienced teachers, who are not high school graduates, to get into touch with all the new movements in education which the College faculty and visiting



instructors are presenting to the Summer Quarter students. The College opens the Summer classes to all who may profit by the instruction offered.

Any student twenty years of age or over may be enrolled in Colorado State Teachers College for the Summer Quarter without reference to meeting the College requirements for admission. The College believes it can render a valuable service to the teachers of Colorado and surrounding states by allowing any mature man or woman who is teaching or expecting to teach, but who has not graduated from a high school, to enroll in the College for the Summer Quarter and take such work as he or she may be able to carry.

No college credit will be recorded, however, for any student until the requirements for college entrance have been fully met. A record of attendance and work will be kept. This may later be transferred to the permanent records and counted toward graduation when the entrance requirements have been complied with.



PART III

ADMISSION, CERTIFICATION, GRADUATION, CREDITS



ADMISSION

Prior to the school year 1923-24, students were admitted to this College upon presentation of a minimum of fifteen standard high school units, regardless of groups. Beginning with the school year 1923-24 certain designated groups were required. Unconditional admission was limited to graduates of high schools accredited by the North Central Association of Colleges and Secondary Schools or by State Universities. These requirements were revised by a joint committee of Colorado High School Principals and the Admission and Credits Committee of the College, with the result that the following regulations were adopted beginning September 1, 1924, and are now effective:

GROUP I (Required) Minimum of four (4) units must be presented.

- 1. English ..... 3
- 2. Social Science (History, Civics, Sociology, Economics) ..... 1

GROUP II (Required) Minimum of five (5) units must be presented.

- 3. Foreign Languages (A single unit will be accepted in one foreign language, but not in more than one).
  - 4. Mathematics (May include Advanced Arithmetic, after Algebra, but does not include Commercial Arithmetic).
  - 5. The Physical and Natural Sciences (Physics, Chemistry, Biology, General Science, Botany, Zoology, Physical Geography, Physiology, Hygiene, Agriculture).
- } 5

Note: Excess units above what is actually required in Groups I and II may be counted in Group III as electives.

GROUP III (Elective) A maximum of six units may be presented.

- 6. Music and Fine Arts.
  - 7. Commercial Arts.
  - 8. Home Economics.
  - 9. Manual Arts.
  - 10. Normal Training (Maximum of two (2) units).
- } 6

Note: If more than four (4) units are presented in any special field (Nos. 6, 7, 8, 9,) they will be accepted for entrance only in the same special field of work in the College.

Graduates of non-accredited high schools are required to meet the same conditions, except that a standard college entrance test is required in addition to the transcript.

Conditional Admission—Any applicant who is not a high school graduate, but who is credited with 14 high school units may be admitted to the College upon presenting a transcript from a reputable high school, showing the completion of 14 units in designated groups. Such students are limited to a maximum program of 12 hours per quarter in the College, and must make up the deficient high school unit in Teachers College High School during the student's first year in the College. The student cannot be enrolled for the second year until the entrance condition has been removed.

Adult students (twenty years of age or over) may be admitted to the College upon passing an English test and the standard college entrance test, provided the score is sufficiently high to assure the College that the student has the ability to carry on College work, even though he may have had no high school training, or only a partial high school course.

School for Adults—Mature students (twenty years of age or over) who have less than 14 high school units of credit, and who are not admitted through the entrance test, will be assigned to the School for Adults—a division between the high school and the College. As soon as they have completed the equivalent of 15 high school units, or shown the learning power which such completion usually gives, they may be admitted to the College.

## GRADUATION

Since September 1, 1921, credit has been given only for regular College work in institutions uniformly recognized as standard colleges or colleges maintained primarily for the training of teachers. On that date Colorado State Teachers College discontinued giving college credit for teaching experience, handwriting certificates, music certificates, drawing certificates, private study, private lessons of any kind or work in business colleges, conservatories of music, dramatic schools, county institutes, reading circles, or for any other kind of work done in an institution other than one ranking as a standard normal school, college, teachers' college, or university.

Students coming up for graduation since September 1, 1924, are required to meet standard requirements for the certificate or degree no matter what the requirements might have been at the time the student first enrolled in the College. This means that the student must meet the entrance requirements outlined above. It also means the cutting off of credit for life experience, teaching experience, handwriting, art, and music certificates; private lessons in art, music, and the like; and cutting down excessive credit for a quarter's work, and especially the excessive credit formerly given for the Summer term of six weeks.

The College will continue to grant the two-year certificate, the Bachelor of Arts and the Master of Arts degrees, but under the conditions of entrance which became effective September 1, 1924, and the conditions of graduation which became effective September 1, 1924. Students whose entrance was approved under the requirements announced for the school year 1923-24 are not required to make any adjustment because of the revision made as shown above which became effective September 1, 1924.

Ninety-six quarter-hours are required in the courses wherein the Life Certificate is granted upon the completion of two years of work. One hundred and ninety-two quarter-hours are required for the Bachelor of Arts degree.

**ADVANCED STANDING**—Students who come to the College after having done work in another college, normal school, or university, will be granted advanced standing for all such work which is of college grade, provided that the institution in question has required high school graduation as a condition for admission. Those who receive advanced standing are required to take here all of the prescribed subjects in the course they select, unless these prescribed subjects, or their substantial equivalents, have been taken already in the institutions from which the students come. Only the heads of the departments involved have the power to excuse students from taking these prescribed subjects. No advanced standing is granted for additional units above the usual sixteen earned in the four-year high school course.

**COLLEGE ENTRANCE TEST**—One of the standardized college entrance tests is required once of every student working for credit in this College or for credit to be transferred elsewhere. A fee of \$1.00 is charged to cover the cost of the test and scoring. The student is required to take this test before he completes his final enrollment for his first quarter in residence. The student's score is used as a supplement to high school graduation to determine fitness for admission to the College and ability to carry college work creditably.

**UNIT OF COLLEGE CREDIT**—All credits toward graduation is calculated in "quarter-hours." The term "quarter-hour" means a subject given one day a week through a quarter of a year, approximately twelve weeks. Most of the College courses call for four recitations a week. These are called four-hour courses. A student usually selects sixteen quarter-hours, the equivalent of four courses each meeting four times a week, as his regular work.

**MAXIMUM AND MINIMUM HOURS OF CREDIT**—A student registers usually for fifteen, sixteen, or seventeen hours, each quarter. The average shall be not more than sixteen hours for any three consecutive quarters, or forty-eight for the year of nine months. If a student attends during the Summer Quarter, this average shall be understood to apply. If the work is to count as a *resident* quarter, the student must carry at least twelve quarter-hours. A student who wishes to take a larger program than sixteen hours regularly must take one of the standard mental tests. Following the test, the student may carry seventeen or eighteen hours regularly, if the score is high enough to warrant. In no case shall more than eighteen hours be allowed.

**MINIMUM RESIDENCE REQUIREMENT**—The College does not grant any certificate or degree for less than three full quarters of resident study, during which time the student must have earned at least forty-eight (48) quarter-hours of credit. If the student's first graduation is with the Bachelor of Arts degree, only three quarters are required. Students who have already taken the Life Certificate (two-year course) must spend in residence at least two additional quarters for the Bachelor of Arts degree. Extension group classes conducted by members of the College faculty are considered as resident work and may be counted as such to the extent of one quarter for the Life Certificate (two-year course) and one of the two resident quarters required beyond that for the Bachelor of Arts degree. The residence requirement in the graduate school is shown on page 50.

**THE GRADING SYSTEM**—The system of weighted credits which has been in effect for some years past has been abandoned by faculty action. However, extra credit earned under that system while in effect is not to be discounted because of the change. The following grading system has been adopted by faculty action and has been in effect since October 1, 1924.

- A indicates superior work
- B indicates work above average.
- C indicates average work.
- D indicates work below average, but passing.
- F indicates failure.

A grade of A, B, C, or D, yields normal credit in any course taken. A course marked "F" carries no credit and may not be adjusted except by repetition of the course at a later time. Other markings may be used when necessary, as follows:

- "Inc.," Incomplete;
- "W," Withdrawn.

A course marked "Incomplete" must be made up within three months, or during the succeeding quarter, if credit is to be extended. By special arrangement in advance with the Dean or Registrar and the teacher a longer time may be given.

A course marked "Withdrawn" may not be made up unless arrangement has been made at the time of withdrawal with the Dean or Registrar.

**THE SCHOOL YEAR**—The school year is divided into four quarters of approximately twelve weeks each. These are:

1. The Fall Quarter
2. The Winter Quarter
3. The Spring Quarter
4. The Summer Quarter.

This division of the year is especially well suited to a teachers college, for it gives teachers in active service an opportunity equal to any of securing a complete education while actually teaching.

**THE HOUSING OF WOMEN STUDENTS**—All rooming accommodations must be approved by the Dean of Women before permanent registration. The office of the Dean of Women is open during the month of September for the sole purpose of consulting with women students and placing them in

approved houses. It is advised that students attending College for the first time come several days or even a week before the beginning of the Fall Quarter that they may be satisfactorily located. No rooming houses will be allowed on the approved list if they do not have single beds and comfortable bathing and heating facilities.

**PHYSICAL EXAMINATIONS**—A thorough health examination is required of each student as soon as practical after registration and thereafter once each year. Matriculation is not completed until this examination has been made and recorded, and students are not graduated unless the examinations are attended to regularly and promptly. The medical advisers keep regular office hours for free consultation concerning personal health problems. These examinations and conferences have for their purpose the prevention of illness and the promotion of vigorous health of students.

## THE TRAINING SCHOOLS

The training schools have a two-fold function. First, to train college students in the art of teaching. Second, to maintain as nearly as possible an ideal elementary and secondary organization.

The fundamental purpose of a training school is not to serve as a research laboratory, but rather to serve as a laboratory in which the student verifies his educational theory and principles. The Training School, as a laboratory, is a teaching and testing laboratory, rather than a research laboratory. It provides an opportunity for student teachers who have a sufficient knowledge of subject matter and the theory and principles of education to receive practice in the solution of the daily problems and management under the supervision of expert training teachers. New methods that save time, new schemes for better preparing the children for life, new curricula and courses of study are continually considered by this school and tried out, provided they are sound educationally. The aim is not to develop a school that is entirely different from the elementary and secondary schools of the state but to reveal conditions as they are and as they should be. The Training Schools strive to be the leader in the state in all that is new and modern. Effort is made to maintain such standards of excellence in the work that it may at all times be offered as a demonstration of good teaching under conditions as nearly normal as possible in all respects. Untrained and unskilled teachers do not practice on the pupils. This problem is solved by having in each grade or subject a trained teacher, one chosen with the greatest care, whose personality, native intelligence, and training all fit him for the double duty of teaching student teachers to teach and teaching children. The training teacher is at all times responsible for the entire work of his grade or subject. The Training Schools are being built on the theory that the best interests of student teachers and the best interests of the elementary and secondary pupils can be made to harmonize. Whatever interferes with the proper development of one interferes with the proper development of the other.

The Training Schools maintain a complete elementary and secondary school system from the kindergarten to the twelfth year. Students are required to take one quarter of observation (Ed. 2a) and one quarter of student teaching (Ed. 2b) in the Elementary or the Junior High School sometime during their second year in Colorado State Teachers College. A second quarter of teaching may be elected and in most cases is very advisable. Student teaching in the Training Schools includes conferences, observations, supervision, lesson plans, and teaching on the part of the College students. Scheduled group conferences are held the first and fourth Tuesdays of each month.

### ELEMENTARY

The Elementary Training School is a complete elementary school unit containing kindergarten, first, second, third, fourth, fifth, and sixth grades.



In the Elementary School the training teacher spends approximately one-half of his time teaching and the other half observing the student teacher. In this way inexperienced students are not allowed to disturb the advancement of children. During the first week or ten days of each quarter the training teacher does all of the classroom teaching in order to put the school in a good working attitude. The class organization is perfected and the technic of classroom management well established. During this time of adjustment the student teachers are observing the training teacher while he is getting the school well started and organized. During this period of observation, the student teacher writes up lesson plans from the lessons observed and determines from observation how the training teacher puts into actual practice the principles of teaching. Student teachers will form standards for classroom work and definite ideas for applying these standards to classroom instructions. This period gives the student teacher an opportunity to learn the names of the pupils so he or she can easily identify each; the individual differences among the pupils, facts about attendance records and reports. Gradually the teaching will be placed in the hands of student teachers as their success seems to warrant. However, no student will continue teaching any considerable period of time when the class is not making progress under that individual's instruction. Under close supervision during the first part of his teaching the student teacher will not be permitted to go far astray or form bad habits in teaching, and children will not suffer under the instructions.

### SECONDARY

The Secondary Training School is a complete secondary school unit containing the Junior High School, (grades seven, eight, and nine) and the Senior High School, (grades ten, eleven, and twelve).

The primary function of the Secondary School is to train that group of teachers who expect to enter the field of secondary education. A minimum of five hours of student teaching is required of all students in the Senior College who expect to take their Bachelor of Arts degree. Three years of college training are prerequisite to student teaching in grades ten, eleven, and twelve. In the high school the student teacher spends over two-fifths of his time in teaching and the remainder in observation. When not teaching the student teacher is held responsible for preparation and participation in the discussion of the recitation just as any other member of the class.

Students will select the subjects they teach upon the recommendation of the head of the department in which they are majoring and of the Director of the Training Schools. Ed. 101, "Principles of Teaching in the High School," precede the student teaching. This course consists of a series of systematic observations together with a study of the technic and principles of teaching in high schools.

The Teachers College High School (The Secondary Training School of Colorado State Teachers College) is built upon the theory that the highest interests of the student teachers and the highest interests of the high school pupils can be made to harmonize.

In addition to its excellent teaching force, the school has the use of the splendid equipment of the College. The library, the museums, the collections of fine arts, and the laboratories are all available to high school students. The courses are vital and practical and are intended to meet the needs of boys and girls of the present age.

### THE UNGRADED SCHOOL FOR ADULTS

It oftens happens that for economic reasons boys and girls are compelled to leave school in the grades or in the early years of high school. Upon reaching maturity they realize the value of an education and are anxious to obtain it, but are unwilling to enter classes with children. The purpose of the Ungraded School for Adults is to open the door of opportunity to such students. It appreciates the value, in terms of char-

acter and intelligence, of the services rendered by the individual to the community, and gives a reasonable amount of credit for the same. No one can enter the Ungraded School of Adults who has not reached the age of 21 years.

### NEW REQUIREMENTS IN STUDENT TEACHING

1. The required amount of student teaching for the Life Certificate shall be one quarter.

2. As a prerequisite to one quarter of student teaching (Ed. 2b) each student shall be required to spend one quarter in a systematic scheduled class in observation (Ed. 2a) with the training teacher with whom he is to teach the following quarter.

3. The course in observation (Ed. 2a) shall consist of two regular observation hours each week and one conference hour every two weeks with the training teacher. This course shall also include assigned readings, which will supplement the observations and prepare the student for the subsequent course in student teaching. This course in observation (Ed. 2a) shall be given one hour credit.

4. Each student shall be required to pass satisfactorily an achievement test and make a grade not less than "C" in Ed. 2a, as prerequisites to student teaching (Ed. 2b).

5. Each student making a grade of less than "C" in student teaching (Ed. 2b) shall be required to repeat the course.

6. The required amount of student teaching in the senior college for the degree shall be one quarter taken in either the elementary school (Ed. 102) or the high school (Ed. 103).

7. A second quarter of student teaching may be elected in the junior college for the life certificate and in the senior college for the degree.

8. Additional prerequisites for student teaching in the junior college are: Ed. 1, Ed. 5, and the method courses required for the majors listed on page 69. The prerequisite for student teaching in the high school is Ed. 101.

9. A full quarter of student teaching carries five hours credit. This course meets five days a week and in addition two one-hour group conferences the first and fourth Tuesday in each month.

10. Mature students who submit the required evidence of at least three years satisfactory experience may substitute the required student teaching for an advanced course in college upon the approval of the Director of Training Schools under the following conditions:

1. A score above average on the standard college entrance test.
2. A score above average on the English Exemption test.
3. A grade of less than "C" (the average) in two college courses within one quarter disqualifies.

### EXTENSION SERVICE

An ever increasing number of teachers avail themselves of the opportunity for professional advancement which the Extension Service of the College affords.

At first the term "extension course" signified that a given college prepared and sent out to students not resident in the town where the school was located certain desired courses of study. It was at first conceived to be a service by the college to those without the pale.

Those engaged in the service soon realized that the original conception was both narrow and false. They perceived that the college belongs to all the people of the state. The humblest citizen has a vital share in it and as part owner has a right to its privileges.

This thought brought with it a new sense of responsibility, a feeling that the College was in honor bound to minister to the educational needs of all the citizens of the commonwealth who desire to avail themselves of its advantages. The "extension course" ceased to be a courtesy and became a duty.

Extension service comes in this way to mean, in its wider significance, that the group of students who fill college halls and classrooms are but a part of its clientele. There is a larger body of earnest men and women who, also, "covet learning's prize" and would vain "climb the heights and take it" though they must use a path more rugged. It means, also, by reason of the fact that it takes more courage of heart and power of will to succeed in this way than by the more direct method, that the extension group is worthy of all honor and consideration.

It means in final analysis that a college is something more than walls and tower and building site, and that its influence should reach everywhere and be everywhere for good.

### GROWTH OF EXTENSION SERVICE

Coincident with this new and more wholesome attitude on the part of college faculties toward their extension service, there has arisen in the minds of thousands of aspiring and energetic individuals the clear realization that extension courses do afford a sane and practical method of professional advancement.

No phase of educational progress has been more marked in recent years than the rapid growth of extension departments, with the possible exception of the development of Summer schools.

From a few isolated cases of persons connected with colleges twenty years ago in the capacity of extension students, the situation has changed to such an extent that today many of the most eminent colleges have more non-resident students than resident. There has been a corresponding advance in the quality of those taking extension work and the excellence of the courses offered.

The year 1924-25 is proving to be unprecedented in the development of the Extension Service. More than 3400 paid enrollments have now been entered upon the College records. This includes students working in both group classes and correspondence courses.

The standard colleges of America now offer practically all of their courses in the Summer when the public schools are not in session, and most of them can be pursued by extension during the Winter months. Faculty members go directly from all the leading institutions of higher learning to the larger centers of population and thus make available to teachers the most valuable and important courses offered in said institutions.

Courses in Education, Educational Psychology, Educational Sociology, Educational Biology—the four subjects that develop the modern point of view in education—are listed in profusion in the pages which follow. These are supplemented by content courses in Literature, History, Science, Mathematics, Music and Art, that bestow culture and go far toward the development of true personality. To this imposing list are added method courses that are intended to give mastery in the technic of teaching, and vocational courses that correlate the school and the home with the responsibilities which life is to impose.

The teacher who appreciates the dignity and importance of teaching finds in extension courses the means of gaining professional prestige—the child has a right to trained teachers and superintendents and boards of education are constantly looking for them; increased power of service—to serve one must be himself endowed with the things which humanity needs, and these are acquired only through study; and the happiness that comes through growth.

Mr. John Dewey in his little volume on "Interest and Effort in Education" has rendered an inestimable service to the cause of education in making a sharp distinction between that false pleasure that comes through placid receptivity—seeing, hearing, tasting, and touching things, which all too often mean deterioration—and that noble happiness that comes through "Mastery, achievement, and getting ahead." If this philosophy could only be read and understood by all teachers, then, the realization of the joy of growth would impel all and there would be no need for any other incentive for self improvement.

### TWO DISTINCT TYPES

With growth in numbers, there has come improvement in procedure. Experience has taught the better way. The Extension Division has earnestly endeavored to profit by early mistakes and to work out the most practical and helpful way of conducting its courses.

There are two distinct ways in which extension work can be carried on. One is known as the *group plan*, and the other as the *individual plan*.

The former is intended to meet the needs of teachers who can gather in sufficient numbers to justify the organization of a class and the selection of an instructor. Twenty is the minimum number in all cases where a college faculty member does the teaching.

The latter is planned for persons who are too far removed from the larger centers of population to make a co-operative scheme feasible.

### DETAILS RELATIVE TO THE GROUP PLAN

The University of Colorado, the University of Denver, and Colorado State Teachers College have agreed upon the following conditions for granting credit:

1. **STANDARDS**—The standard of the work done shall be of such type as to be acceptable for regular undergraduate credit at each of the above mentioned institutions.

2. **INSTRUCTORS**—No work shall be accepted for credit except that given by instructors duly approved by the institution in which credit is desired.

3. **CLASS PERIOD**—The period of each class shall be ninety (90) minutes, requiring seventeen (17) sessions for three (3) quarter hours' credit. The minimum time requirements for a whole course shall be 1500 minutes spent in class recitation.

4. **FEES**—The fees shall be \$8.00 per student per class yielding three quarter hours' credit.

### THE NATURE OF INDIVIDUAL EXTENSION COURSES

Each extension course consists of a set of study units containing questions such as might be asked in class, assignments such as might be made in residence study, and explanatory sections corresponding to the explanations which instructors often make in class.

The Extension Department sends the student the first four study units of the course he has chosen, together with a list of the books required for the course and names of publishers where the books may be purchased. The student studies the books as directed and works out his first recitation paper—covering the work outlined in the first study unit. The first paper is then mailed to the Extension Division and the student starts the preparation of his second recitation paper. The date on which the paper is received in the extension office is recorded on the student's enrollment card and stamped on the back of the study unit. The latter is then passed without delay to the instructor in charge. When the instructor has graded the paper, he returns it to the extension office, where the date of its return and the grade are recorded on the student's enrollment

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card. It is then returned to the student with additional study units. Other papers, when submitted to the Extension Department, pass through the same process until the course is completed.

## AID TO RURAL TEACHERS

The new Certification Law places definite professional responsibility upon teachers. Conscious of this fact and anxious to make it possible for rural teachers to meet the professional requirements of the law without undue hardship, Colorado State Teachers College has prepared a number of special courses intended to meet the needs of rural teachers, by means of which they can do the work which is required without overstrain and with both pleasure and profit.

Two group extension courses successfully pursued each year (by beginning promptly in September, two group courses can be completed during the year) would enable a teacher to earn enough quarter hours' credit so that one Summer in a standard college, or two half Summers in such college, would meet the requirements of the law in full.

The College is endeavoring to establish these courses in every part of the state. Wherever a group is found who desire to study for credit under the direction of Colorado State Teachers College, a most earnest and thorough effort is made to organize a class.

## THE QUESTION OF COST

A course for which four quarter hours' credit is granted costs eight (8) dollars; i. e., two dollars per quarter hour. Since a course of this type consists of twelve study units, it follows that the College receives fifty cents for the preparation (original) and grading of each study unit. This is, in the judgment of the department, fair both to the instructor and the individual taking the work. A recent survey shows that this is less than the average cost of the service as shown by the bulletins of the standard educational institutions in the country. The instructor receives 75 per cent of the money paid for any given course.

In the past, forty (40) cents additional has been charged for postage. This has proved to be inadequate for the purpose. The rate now in effect is eighty (80) cents. The entire cost of a four hours' course is, therefore, eight (8) dollars and eighty (80) cents.

## TEACHERS PLACEMENT BUREAU

For several years Colorado State Teachers College has endeavored to place her graduates. Beginning in January, 1924, an organized effort was begun to serve to a greater degree both school officials seeking teachers and graduates seeking positions. During the calendar year of 1924, 357 teachers were placed through the Placement Bureau. The grand total in salaries paid to these teachers was \$465,924.00. A careful survey of the success of these teachers reveals that 94 percent of the placements have proved satisfactory to the communities concerned.

Superintendents coming to Greeley in search of teachers will be given every consideration in helping them to get in touch with teachers fitting their exact needs. The personnel of the Placement Bureau will never be too busy to give all school officials every assistance in filling their vacancies.

No one at Colorado State Teachers College is as well acquainted with the school conditions in Colorado as the personnel of the Extension Division. In organizing and promoting College extension service, the director of the department has traveled the entire state again and again. He has visited a large majority of the schools. School officials in the entire Rocky Mountain region know of the extension service of Colorado State Teach-

ers College. Because of this wide acquaintance and thorough knowledge of the state, the Placement Bureau logically becomes an integral part of the Extension service.

Teachers College is vitally interested in the promotion and adjustment of her alumni. To this end the Placement Bureau will endeavor to keep in close relationship with the entire alumni. The work of each graduate will be followed. An honest endeavor will be made to keep our graduates in positions where both service to the community and growth of the teacher are possible. To this end the bureau invites communication from alumni. The service we can render them will depend to a large degree upon the co-operation of all concerned.

#### GUIDING PRINCIPLES IN MAKING NOMINATIONS

1. The rights of the child are paramount.
2. Testimonials are to be truthful and discriminating.
3. As far as is humanly possible, the Bureau will endeavor to place the right individual in the right position.
4. Only one candidate will be nominated for any particular vacancy. This does not mean, however, that we are not pushing the nominee for other positions at the same time.
5. When, however, superintendents and boards of education come to Colorado State Teachers College in quest of teachers, they will be permitted to examine the records of any or all available individuals and interview any person in whom they may be interested to the intent that questions of scholarship, teaching power, and character may be decided at first hand by those who are responsible to the public for the hiring of teachers.
6. In order to be of maximum service, the Bureau will evaluate in advance, the graduates of the College, members of the Alumni Association, and such other educators as the spirit of justice and fair play make it necessary to consider in the placement of teachers.
7. The Bureau will not confine itself to graduates of Colorado State Teachers College, but in cases where two candidates seem equally strong, as measured in terms of scholarship, experience and character, preference will be given to graduates of Colorado State Teachers College.
8. When a nomination has been made to a particular superintendent or board of education and the said school authorities become interested in some other candidate through their own initiative or the initiative of the said candidate, the bureau will then make, upon request of said school officials, a statement relative to the individual in whom the school authorities have become interested.
9. The Placement Bureau will set itself the task of studying diligently the needs of the schools of Colorado and the Rocky Mountain West to the intent that nominations may the more perfectly meet local school needs.
10. The bureau pledges itself to act with no selfish, mercenary, or personal motives, and to do in each case as best it can the thing which will prove most helpful to the schools and most just to the teachers.

#### CONFIDENTIAL INFORMATION ACCOMPANYING NOMINATIONS

1. A DIGEST OF QUALIFICATIONS  
This is the Bureau's estimate based upon scholarship, personality, experience, and general college activities.
2. NOMINEE'S PERSONAL RECORD  
A brief summary of all the educational institutions attended, previous teaching experience, and an accurate list of references.

### 3. PROFESSIONAL AND EDUCATIONAL RECORD

This sheet enables a superintendent to tell at a glance the field for which the nominee is best prepared.

### 4. COPIES OF ORIGINAL RECOMMENDATIONS

The Placement Bureau assembles confidential reports concerning each graduate. The reports are based upon records made in the classroom and Training Schools. If the graduate has had experience, an experience record is obtained. Copies of these confidential reports are sent to school officials whenever the bureau nominates for a position.

Colorado State Teachers College intensively serves Colorado. During the past few years, however, students from all parts of the United States have knocked at our gates for admission. They have been admitted and thus became loyal friends of Teachers College. We now receive calls for teachers from every state in the union. Our graduates are scattered from coast to coast.

#### POSITIONS FOR WHICH WE NOMINATE

Rural	High Schools	Tests and Measurements
Grades	Kindergarten	Home Economics
Music	Normal Schools	Sub-Normal
Writing	Colleges	Principalships
Printing	Commercial	Normal Training
Drawing	Athletics	Critic Teachers
Agriculture	Physical Training	Secretaries
Library	Superintendencies	

Colorado State Teachers College recognizes teaching as a fine art. Our students are asked to select a field and work with a definite end in mind. However, there are some things which all teachers and school administrators must know to effectively take their place in the profession. Our graduates are well grounded in modern educational psychology and current educational thought. The spirit of co-operation and scientific investigation is instilled from the beginning courses until graduation. School officials seeking teachers need have no fear concerning the educational training of our graduates.

#### STATE SERVICE—NO COMMISSION

Colorado State Teachers College believes the work of the Placement Bureau is the culmination of the state's effort to train teachers. The bureau is planned to secure the best possible teacher for every boy and girl. To this end the service should be and is free. No commission is charged to either the community or the teacher.

#### THE RELIGIOUS ASSOCIATIONS

Y. W. C. A. AND Y. M. C. A.—Realizing the necessity for religious and social culture in the school, and believing that much good comes of Christian association, a large number of interested students have organized themselves into the Young Women's Christian Association and the Young Men's Christian Association. Meetings are held at various times, and persons who have given considerable thought to the life and aspirations of young people are invited to address the meetings.

THE NEWMAN CLUB—The Catholic students of the College are organized into the Newman Club, the work of which is similar to that of the other Christian organizations. This club has a membership of active young people. All three of the organizations have been co-operative in forwarding the religious work and welfare of the College.

#### STUDENT LOAN FUNDS

There are numerous loan funds, aggregating more than \$12,000, designed to help worthy students to complete courses in Colorado State Teachers College. It not infrequently happens that a promising student

meets with an unexpected loss, through sickness or other causes, which compel him either to leave school or to continue his work at the risk of low scholarship and overtaxed body and mind; unless he is able to borrow some money. It is for the purposes of meeting just such emergencies that these loan funds have been established.

Applications for loans are made to the Student Loan Committee, which is comprised of members of the faculty of the College. This committee carefully investigates the record of the applicant; and grants his petition only in case it is satisfied that he is worthy of such help, will be in a position to repay the loan within a reasonable time, and will be a credit to Colorado State Teachers College after graduation. The secretary to the Board of Trustees of the College is custodian of the funds. The student furnishes a note acceptable to the committee and makes arrangement for its payment when due.

The following are some of the loan funds:

**NORMAL STUDENTS LOAN FUND**—The money constituting this fund consists of contributions from persons, classes and organizations disposed to help in the work, and of the interest derived from loans. The freshman and sophomore classes of the College quite often contribute money left after meeting class expenditures to this fund. The freshmen class of 1921-22 contributed more than \$200 to this fund. The fund is intended particularly for those students who need some financial assistance in completing the first two years of work.

**SENIOR COLLEGE LOAN FUND**—This fund is an accumulation of money, contributed by four-year graduates and others who may be interested in creating a fund for those who desire to pursue a curriculum leading to the Bachelor of Arts degree. Already it has helped many worthy students to continue to the end of their four-year course.

**Y. W. C. A. STUDENT AID FUND**—The Young Women's Christian Association has a fund of several hundred dollars which is kept to aid students who need small sums to enable them to finish a quarter or a course. The fund is in charge of a committee comprised of the treasurer of the society, two members of its Advisory Board and a member of the faculty. Loans are made without reference to membership in the society.

**THE WILLIAM PORTER HERRICK MEMORIAL FUND**—This fund, the gift of Mrs. Ursula D. Herrick, in memory of her husband, the late William Porter Herrick, consists of the principal sum of \$5,000. The proceeds or income of said fund are to be paid over and expended by the Board of Trustees of Colorado State Teachers College of Colorado, in aid of such worthy and promising under-graduate students of the College, of either sex, as the President of said College may from time to time designate; provided, however, that no student who uses tobacco in any form or who uses intoxicating liquors of any kind as a beverage shall participate in the benefits of this fund. The sum or sums, income or proceeds so expended by the said Trustees shall be considered in the nature of a loan or loans to such students as may receive the same, and each of said recipients shall execute a note or notes promising to repay to said Trustees the amount or amounts so received within five years after graduation or quitting College, without interest; but it is the desire of said donor that no student shall be pressed for the payment of said note or notes when the same shall become due and payable, so long as the Board of Trustees shall be satisfied that the recipient is making every reasonable effort, according to his abilities, to repay the same and is not endeavoring to repudiate the obligation.

**THE GREELEY ROTARY CLUB LOAN FUND**—The Greeley Rotary Club has turned over to the Student Loan Committee of the College the sum of \$1,000 to be used as a loan fund for men students.



**HOSPITAL LOAN FUND**—The Class of 1922 turned over to the Student Loan Committee of the College the sum of \$225.00 to be used as a loan fund for those who need financial assistance in meeting hospital or medical expenses.

**THE J. C. KENDEL MUSIC LOAN FUND**—This fund was started in February, 1924, from a balance turned over by the May Music Festival Committee for that purpose and is available to music majors only. In appreciation of the efforts put forth by Mr. Kendel in conducting the May Music Festival, the committee decided to call this fund "The J. C. Kendel Music Loan Fund."

## SCHOLARSHIPS

The following regulations governing the issuance of scholarships to resident graduates of Colorado High Schools have been passed by the Scholarships Committee and became effective beginning with the School Year 1924-25. In every instance awards shall be made only to members within the first fifth of the class and upon recommendation of the principal.

### I. ACCREDITED HIGH SCHOOLS

To graduating classes of twenty-four or less, one scholarship; to classes of twenty-five to forty-nine, two scholarships; to classes of fifty to ninety-nine, three scholarships; to classes of one hundred or over, four scholarships. A major fraction of five may be regarded as the next higher multiple of five.

### II. NON-ACCREDITED HIGH SCHOOLS

A maximum of two scholarships will be issued to each non-accredited high school provisionally. If the holder passes the Entrance Test with a satisfactory score and does satisfactory work during the first two quarters in residence it becomes permanent.

A scholarship covers the incidental fee of \$24.00 a year for four academic years. It is not valid during Summer quarters. A student holding a scholarship must not receive more than one grade of "D" in a four-hour subject in any quarter. The scholarship, otherwise, becomes invalid until the student has again met this standard.

A scholarship to become valid must be used the Fall Quarter next following its issuance and will thereafter remain in force for four academic years, subject to limitations herein noted. The holder of a scholarship is not required to attend in successive quarters, however any "break" in attendance is counted as a part of the life of the scholarship. Any high school must have a minimum of three graduates to be entitled to one. A scholarship is forfeited when any of the above provisions are violated, or where the student withdraws from the college to attend another school unless satisfactory arrangements are made in advance.

## HONORARY FRATERNITIES

### KAPPA DELTA PI

Kappa Delta Pi is the international honor fraternity in education. It was founded at the University of Illinois in June, 1911, by Dr. William Chandler Bagley, now of Teachers College, Columbia University. Theta Chapter was established at Colorado State Teachers on February 28, 1920, as the eighth chapter of the fraternity and the first chapter in a teachers college.

The requirements demand that students shall have credit for ten hours scholarship, and achievement in educational work—membership in Kappa Delta Pi is open by invitation to students who fulfill certain conditions. The requirements demand that students shall have credit for ten hours in Education, shall belong to one of the upper classes, shall have been

in residence for three quarters, shall have an average of 90 per cent in all subjects, and shall possess qualities of co-operation, leadership and character.

#### PI KAPPA DELTA

HONORARY DEBATING FRATERNITY—The national honorary fraternity Pi Kappa Delta was the first honorary society to be installed in Colorado State Teachers College. It was installed in the College in the spring of 1918. The purpose of the organization is the encouragement of intercollegiate debate and oratory. Membership is limited to those who have taken part in recognized intercollegiate debates or oratorical contests, or are actively engaged in coaching such students.

#### GIFTS TO THE COLLEGE

From the beginning of the life of the College friends and organizations have been generous in making gifts of land, money, books, museum specimens, and other articles of value. The authorities of the College gratefully acknowledge their obligation to all these donors, and invite any who may feel inclined to make similar donations.

PART IV  
THE GRADUATE SCHOOL



## GRADUATE WORK

Colorado State Teachers College offers to advanced students courses above the four-year bachelor level. The fifth year of work leads to the degree of Master of Arts, and courses beyond this may be transferred to teacher training institutes granting the doctor's degree.

### THE NATURE OF GRADUATE WORK

The principal aim of work beyond the bachelor level is to develop still further a professional attitude, to increase the ability to carry on investigations in the educational field independently, and to promote the spirit of research. In keeping with this function of a teachers college, graduate work is confined largely to the professional field. It represents specialization and intensive work. As soon after enrollment as possible, the graduate student shall focus attention upon some specific problem which shall serve as the center for the organization of his work, including courses to be taken and special investigations to be conducted. No graduate credit will be given for scattered and unrelated courses.

### GRADUATE FELLOWSHIPS, SCHOLARSHIPS, AND LOAN FUNDS FOR 1925-26

Ten graduate teaching fellowships will be available for the school year 1925-26. Each fellowship carries a stipend of \$450 paid in nine equal installments. These fellowships are open to any man or woman who has an A.B. degree and who is an exceptionally capable student. Fellows are required to teach at least six hours per week and may not register for more than twelve hours of courses per quarter. Application for these fellowships should be made to the Dean of the College.

Three graduate scholarships are offered for 1925-26. The usual College fees are waived for holders of these scholarships.

#### THE PRESBYTERIAN CHURCH GRADUATE SCHOLARSHIP

The First Presbyterian Church of Greeley, aided by the Board of Christian Education, offers to a member of the graduate group a scholarship with a stipend of \$600 for the school year 1925-26. This is open to any graduate student qualified by natural ability and Christian experience as well as by scholarship to assist the local church, particularly as it endeavors to keep in touch with the Presbyterian students in the College, and to maintain classes in training for Christian leadership. The position in the church is to be that of student secretary, and half of the student's time is to be given to it.

#### THE WELD COUNTY SAVINGS BANK GRADUATE SCHOLARSHIP

The Weld County Savings Bank offers to a member of the graduate group a scholarship with a stipend of \$100 for the school year 1925-26. This is open to any young man or young woman who wishes to pursue advanced study in preparation for teaching. The scholarship is designed primarily to assist a student who is not financially able to continue college work, but scholarship and ability will be taken into consideration in the selection of the candidate.

#### DELTA PHI OMEGA GRADUATE SCHOLARSHIP

The Delta Phi Omega Sorority offers a graduate scholarship with a stipend of \$150 for the school year of 1925-26. This is open to any student who wishes to pursue advanced study in preparation for teaching. First preference will be given to a member of the sorority. The scholarship is designed primarily to assist a student who is not financially able to continue college work, but scholarship and ability will be taken into consideration in the selection of the candidate.

## SIGMA UPSILON GRADUATE LOAN FUND

The Sigma Upsilon Sorority has established a Graduate Loan Fund to be used in helping advanced students remain in college for the Degree of Master of Arts. This fund is available to any student whether a member of the sorority or not.

## P. E. O. SISTERHOOD GRADUATE LOAN FUND

Greeley Chapters I. and B. E. of the P. E. O. Sisterhood have established a Graduate Loan Fund to be used in helping advanced students remain in college for the degree of Master of Arts. This fund is available to any young man or young woman in need of financial assistance. All applications for loans should be made to the Dean of the College.

## ADMISSION TO GRADUATE WORK

Persons holding the degree of Bachelor of Arts, Philosophy, Science, or other four-year degree, from a reputable institution authorized by law to confer these degrees, and approved by this institution, may be admitted as graduate students by Colorado State Teachers College upon the presentation of official credentials, including a transcript of records of undergraduate work.

The prospective student should obtain the blank "Application for Advanced Standing" and send it to the Committee on Admission and Credits for its approval before the opening of the quarter. Such blanks may be secured by addressing The Registrar, Colorado State Teachers College, Greeley, Colorado. Original credentials including the high school record should be submitted with the application for advanced standing.

Excess Bachelor of Arts work taken in Colorado State Teachers College may be applied toward the Master of Arts degree only when arrangement is made in advance with the Dean of the College so that he may see that the work is of graduate standard and that it is in line with the specialization necessary for this degree. Such credit will be granted only to students in their fourth year who do not need all their time for the completion of the undergraduate work.

Students should offer among their undergraduate courses at least three which acquaint them with current practices in the organization and administration of public education, and one or two courses which introduce them to the literature of educational science and to the methods of investigation in the educational field. These courses must include Ed. 210, Ed. 211, and Ed. Psych. 212 or 214, or their equivalents to be determined by the Dean of the College.

Before beginning the work of the fifth year, each student must arrange with the head of his major department a three quarter program of courses which must be approved by the Dean of the College.

## FEES FOR GRADUATE COURSES

Fees in connection with the fifth, or graduate, year of work will be the same as for undergraduate work.

## THE DEGREE OF MASTER OF ARTS

1. ADMISSION TO CANDIDACY FOR THE DEGREE—Admission to graduate work does not guarantee admission to candidacy for the degree of Master of Arts. Not later than the tenth week of the first quarter's work application must be made in writing to the Dean of the College. Such admission shall be determined by a committee consisting of the President of the College, the Director of Educational Research, the head of the department in which the student is majoring, and one member of the faculty with whom the student has had work, to be chosen by the

Dean of the College. The following are the requirements in the case of each student: personal fitness, intelligence above average as determined by a standard test, the ability to use good English, both oral and written, the ability to do superior work in the field of specialization, and ability to do independent research. Also each student will be required to take a written examination upon certain books prescribed by the head of the department in which the candidate is majoring and by the heads of the departments of Education and of Educational Psychology. Such students must be given a grade above average on such examination or examinations before being admitted to candidacy for the degree.

## 2. REQUIREMENTS FOR THE DEGREE:

(1) Residence—Three quarters of work in residence are required beyond a four-year undergraduate course.

(2) Course Credits Required—A year's graduate work shall be interpreted as forty-eight quarter-hours. Thirty-eight hours credit will be given for graduate courses pursued and ten hours for research in education leading to the completion of the master's thesis. To this end, every graduate student shall enroll in Ed. Res. 223, Research in Education.

No graduate student may enroll for more than sixteen hours of work in any quarter. This regulation is essential to the maintenance of the standard of intensive work for the master's degree. In determining the maximum amount of work permitted, research upon the thesis must be included within the limit stated.

Before the degree of Master of Arts may be conferred, a student must have had at least sixty-four quarter hours of undergraduate and graduate work in his major, and not less than thirty-two hours of professional work in education and related fields such as Psychology, Educational Sociology, and Educational Biology. Where the candidate majors in Education, sixty-four quarter hours will be required, but only work in Education or Educational Psychology will be accepted for such undergraduate and graduate work.

(3) LEVEL OF WORK—In order that the standard of intensive and specialized work for the master's degree may be maintained, no graduate credit will be given for courses numbered under 100 or for scattered and unrelated courses. No credit will be given for any course taken by a graduate student in which students with less than senior college status (96 quarter hours credit) are registered.

Sixteen hours credit toward the degree of Master of Arts shall be the maximum amount allowed to be earned in a regular school year (three quarters) by any person employed on full time, except upon the recommendation of the Dean of the College.

All work for the degree of Master of Arts shall be done with distinction. Work barely passed (mark of "D" under the present grading system) shall not be considered creditable for an advanced degree in the College, and the average should be distinctly above "C".

(4) THE THESIS—Research culminating in the writing of a thesis upon some vital problem in the field of education shall be an integral part of the work for the degree of Master of Arts.

In order that progress in the research problem which the candidate has undertaken may be continuous and systematic throughout the graduate year, he shall register for Ed. Res. 223, Research in Education, each quarter of his graduate work. In the first quarter, the candidate must submit to his thesis committee for approval the topic and detailed agenda of procedure and technic for his investigation. Not later than the fourth week of the third quarter of work, the candidate must submit to his committee evidence that the research upon his thesis has been completed.

At least four weeks before the date upon which the degree is to be conferred, three copies of the thesis must be sent to the thesis committee for final judgment, and at least three weeks before the date upon which the degree is to be conferred, the completed thesis in *final* form must be approved by his committee and by the Dean of the College; and two copies must be filed in the Dean's office.

The thesis is to conform to definite standards. It must be typewritten on paper of good quality, size 8½x11 inches, and be properly bound. The arrangement of the title page is as follows:

COLORADO STATE TEACHERS COLLEGE

(Title of Thesis)

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Arts

by

(Student's Name)

(Title of Major Division)

(Date)



PART IV  
THE COURSE OF STUDY



## THE COURSE OF STUDY

*Throughout this catalog courses numbered 1-99 are primarily first and second-year subjects; 100-199 are third and fourth year. Those numbered 200 and above are graduate work.*

Colorado State Teachers College is a technical school whose sole function is to prepare teachers for the teaching profession in the same sense that medical colleges prepare physicians and surgeons, engineering schools prepare engineers, etc.

For this reason its curriculum should be sharply differentiated from that of other technical schools and also from that of the colleges of liberal arts whose aim is to give a general rather than a specific training.

The curriculum in Colorado State Teachers College is formulated on the basis of four years' work. The following departments shall prepare teachers to receive the Bachelor's degree:

Biology	Fine and Applied Arts
Commercial Arts	Geology, Physiography, and Geog-
Education	raphy
Superintendents,	History and Political Science
Principals for	Home Economics
Grades	Hygiene and Physical Education
Junior High Schools	Industrial Arts
Senior High Schools	Literature and English
Supervisors and Teachers for	Mathematics
Kindergarten-Primary	Music
Intermediate	Physical Sciences
Upper Grades	Chemistry
Rural Schools	Physics
Educational Psychology	Romance Languages and Latin
	Social Sciences

But any student who wishes to take a life certificate before the completion of a full four-year course must take such a certificate through the completion of all the core requirements and departmental requirements in one of the following curricula:

Kindergarten-Primary	Music
Intermediate Grades	Fine and Applied Arts
Upper Grades or	Manual Training
Junior High School	Commercial Education or
Rural Schools	Home Economics

This regulation is made because it is impossible to place teachers with less than four years of college training in positions in accredited high schools, except in certain of the types of work noted above. Teachers with less than four years of college training usually go into the elementary or rural schools.

A student who expects to go straight through a four-year curriculum may major in any of the departments, but except as noted above cannot get the life certificate until the full degree course is completed. One who finally expects to complete a degree course in some other department than the nine listed for the two-year life certificate may, however, begin his course as a major in one of the nine listed curricula and at the same time elect the departmental requirements of the first two years of the curriculum he finally expects to use as his major. At the end of two years he may take his life certificate with a major, for example, in Junior High School Teaching. He would at that time have completed all the core requirements, the departmental requirements of the Junior High School curriculum, and also, the departmental requirements of the first two years of his four-year major, for example. History or Geography. Then he may go out and teach for a time. When he returns to the College he may register as a History major, or a Geography major, and go on and com-

plete his four-year curriculum and receive the degree of Bachelor of Arts in the field finally chosen. During the first two years this student would register as a major in one of the nine designated departments. His adviser would be the head of that department. In the third and fourth years his adviser is the head of the department finally chosen for the Bachelor of Arts degree curriculum.

**LENGTH OF COURSE**—Each course is planned to occupy twelve quarters. A quarter is approximately twelve weeks in length. Upon the completion of the course the degree of Bachelor of Arts will be granted. The diploma is a Colorado Life Certificate. Each course is so arranged that it may be divided in the middle. The first part of the course may be completed in six quarters. The student who chooses to be graduated at the end of the two-year course receives the Colorado Life Certificate, but no degree. Students who come to the College with advanced standing, and those who gain time by doing work of exceptional quality, may shorten the course somewhat.

**THE PROFESSIONAL CORE**—Each of the courses differs somewhat from the others in the subjects required by the department, but each course contains the following subjects:

**FIRST YEAR:** Biology 1, English 4 (unless excused for proficiency), Hygiene 7, Sociology 3, Education 1, Education 5, and a Physical Exercise course each quarter.

**SECOND YEAR:** Psychology 2a and 2b, Education 2a and 2b (pre-student observation and student teaching), Education 10, and a Physical Exercise course each quarter.

**THIRD AND FOURTH YEARS:** (For majors in elementary school work, supervision, etc.) Education 102 (student teaching), Education 111, Hygiene 108, Psychology 104 and 108a, and Sociology 105.

**THIRD AND FOURTH YEARS:** (For majors expecting to become high school teachers, supervisors, and principals) Education 101, 103 (student teaching), and 111, Hygiene 108, Psychology 105 and 108b, Sociology 105, and Ed. 116.

## ATHLETICS AND MEN'S PHYSICAL EDUCATION

Leaders in education now recognize the fundamental need for athletics as an important part of any broad educational program. The demand for competent teachers, supervisors, and directors in High Schools and Colleges far exceeds the supply. This is especially true in the case of men qualified in the coaching and conduct of athletics and gymnastics. Our schools are seeking college trained men to take charge of their athletics; men who are thoroughly versed in all phases of athletic coaching and administration.

The courses for men in Athletic Coaching, Physical Education, and Administration have been arranged especially for instructors already engaged in teaching and coaching, during the regular school year; and for any others who wish to supplement the preparation they may have received in other colleges and professional schools. The courses take up all the more important problems of coaching and are designed for the purpose of fitting men more competently to take charge of athletics and gymnastics in schools and colleges throughout the country.

Students should have had experience, however limited, either in coaching, or in actual participation in the various competitive sports. It is necessary that they should be fitted for this work, and experience is a requisite. The coaching courses are not for those without experience. The school does not

guarantee to convert any applicant into a successful coach, but it does promise instruction which cannot fail to be of much value to the man who is fitted to take it.

## COURSE OF STUDY

In addition to the core subjects listed on page 56, this department requires:

FIRST YEAR: P. E. 5, P. E. 13, P. E. 52, P. E. 66, and Hyg. 1.

SECOND YEAR: P. E. 2, P. E. 2a, P. E. 55, P. E. 66, P. E. 66a, and P. E. 67.

THIRD YEAR: P. E. 113, P. E. 162, P. E. 165, and P. E. 167, Ed. Psych. 105 and 106, and Soc. 105 and 130.

FOURTH YEAR: P. E. 101, P. E. 102, P. E. 103, P. E. 108, P. E. 166, and P. E. 168, Biotics 101, Ed. 111, and Eng. 100.

13. ATHLETIC TRAINING—Winter and Summer Quarter. Two periods. Two hours.

This course aims to aid the prospective coach in gaining a knowledge of emergency treatment of the common athletic injuries; and to furnish theories of training for the various sports; massage; and treatment of sprains and bruises.

52. GYMNASTICS—Each Quarter. Three periods. One hour.

An assortment of activities are included in this course, such as, handball; tennis; heavy apparatus; tumbling; volley-ball; depending on the season.

55. PERSONAL COMBAT GAMES—Winter Quarter. Two periods. One hour. Boxing, fencing, wrestling, and other activities.

66. COLLEGE SPORTS—Each Quarter. Daily. One hour.

This course is intended for those desiring to make a place on the college or freshmen teams in the various sports in season, football, basketball, wrestling, boxing, baseball, track, and tennis.

66a. FOOTBALL FUNDAMENTALS—Fall and Spring Quarters. Three periods. Two hours.

A course designed for those who find it impossible to participate in the regular College practice, and yet wish to learn the more important fundamentals of the sport. This course is also open to beginners in football.

67. INTRA-MURAL SPORTS—Fall and Winter Quarters. Three periods. One hour.

An assortment of competitive games suitable for the men students, who are unable to take part in College sports.

165. FOOTBALL COACHING—Fall and Summer Quarters. Three periods. Two hours. Prerequisite, Football experience.

Theory of coaching a football team; rules of the game from the standpoint of player, coach and spectator; different systems of both offense and defense, with a thorough study of the strength and weakness of each system; generalship and strategy; selection of suitable equipment; selection and conditioning of players.

166. BASKETBALL COACHING—Winter and Summer Quarters. Three periods. Two hours. Prerequisite, Basketball experience.

Theory of coaching different styles of both offense and defense used by the leading coaches; goal throwing; foul throwing; signals from tip-off and out of bounds plays; value and use of the pivot, will be among the chief topics discussed.

168. TRACK COACHING—Spring and Summer Quarters. Three periods. Two hours.

Theory and practice in starting, sprinting, distance running, hurdling, jumping, vaulting, throwing the weights and the javelin. Also training and conditioning of men; management of meets; and the rules for the various events.

169. BASEBALL COACHING—Spring and Summer Quarters. Three periods. Two hours. Prerequisite, Baseball experience.

Discussion of best methods in batting; fielding; base running; pitching. Attention is given to the fundamentals; teamwork, rules, and like topics.

## BIOLOGY

The first aim of the department is to prepare teachers of biological subjects for the public schools of the state. It also endeavors to provide such training in the general principles of biology as will give students an adequate background for other professional courses, and prepare them for the common activities of life.

No one can be a safe leader in educational theory and practice who does not have some conception of the place the study of nature should have in the normal development of the child; who does not realize the large application of the principle of organic evolution to education procedure, and who fails to appreciate the power of heredity in determining the natural capacities and abilities of the pupil.

The courses in botany and zoology are planned to combine laboratory and field work with class room study wherever this is possible and desirable. For it is only through this procedure that students gain both a scientific knowledge and a large appreciation of life forms.

## COURSE OF STUDY

Courses marked \* are given also by Extension.

In addition to the core subjects listed on page 56, this department requires:

## BOTANY THE MAJOR INTEREST

FIRST YEAR: Botany 1, 2, and 3.

SECOND YEAR: Zoology 4 and 5; Chemistry 1 and 2.

THIRD YEAR: Physics 1 and 2; Botany 103; Zoology 1 and 2.

FOURTH YEAR: Biotics 101; Biology 102; Botany 101, and 102; Bacteriology 1; Geology 100.

## ZOOLOGY THE MAJOR INTEREST

FIRST YEAR: Zoology 1, 2, and 3.

SECOND YEAR: Botany 2; Chemistry 1 and 2; Zoology 5.

THIRD YEAR: Physics 1 and 2; Zoology 4; Botany 1 and 3.

FOURTH YEAR: Biotics 101; Biology 102; Geology 100; Zoology 106 and 107; Botany 103.

## BIOLOGY

\*1. EDUCATIONAL BIOLOGY—Every quarter. Three hours. Required of all Junior College students. Fee, 75 cents.

A study of protoplasm and its responses, the cell, specialization with strong emphasis upon adaptation. The whole question of nutrition from the making of foods by plants to their use in the animal body, especially man, is surveyed. Evolution, its scope, evidences and implications are considered. Heredity, Mendel's laws and their relation to innate capacities and abilities are treated.

102. THE TEACHING OF BIOLOGY—Spring Quarter. Four hours. Prerequisites, Biology 1; Botany 1, 2 and 3; Zoology 1, 2 and 4; Fee, \$1.00.

A careful consideration of the biology course in secondary schools as to content, aims and methods of presentation. The use of materials, text and reference books are considered as well as the laboratory equipment and supplies needed.

## BOTANY

1. GENERAL BOTANY—Fall Quarter. Four hours. Prerequisite, Biology 1. Fee, \$1.00.

This course includes a study of algae; such fungal forms as bread mold, yeast, rusts, smuts and mushrooms; liverworts; mosses and ferns. Throughout the course constant emphasis is placed upon their relation to man. Numerous field trips are taken to acquaint the student with plants in their native habitats as well as in the laboratory.

2. GENERAL BOTANY—Winter Quarter. Four hours. Prerequisite, Biology 1. Fee, \$1.00

This is an elementary study of the structure and function of flowering plants and their relation to man. Students who can elect but one botany course for its cultural value are advised to take this one. The course includes a study of the structure, character and functions of roots; the structure and functions of stems and their industrial applications, as the color of woods and grainings of lumber;

the nature and functions of leaves; the structure of flowers and fruits and their relation to mankind. The whole aim of this course is to give students not only a scientific knowledge of the structure and function of our common plants but also an appreciation of the large place which they hold in serving man and beautifying the earth.

3. **SYSTEMATIC BOTANY**—Spring Quarter. Four hours. Prerequisite, Biology 1. Fee, \$1.00.

A course carried on largely in the field. Its purpose is to teach the student how to identify plants, trace their structural relations and how to become acquainted with the flowers and plants in the region where he may be teaching.

101. **TAXONOMY**—Spring or Summer Quarters. Four hours. Prerequisite, Biology 1. Fee, \$1.00

The purpose of this course is to give the student a still larger acquaintance with plants in the field and their relations to one another than can be obtained through Course 3.

102. **BOTANICAL TECHNIC**—Fall Quarter. Two hours. Prerequisites, Biology 1 and Botany 2. Fee, \$1.50.

A course in which the science of collecting and preserving of botanical materials is treated. Elementary instruction in killing material, staining it, and making it up into permanent slides is given.

103. **PLANT PHYSIOLOGY**—Winter Quarter. Four hours. Prerequisites, Biology 1 and Botany 2. Fee, \$1.50.

The purpose of this course is to give the student a working knowledge of such physiological activities as absorption, translocation, photosynthesis, digestion, respiration, and transpiration. The experimental method is largely used. The student is encouraged to plan and accurately carry on these experiments. Constant stress is laid upon sources of error and modifying conditions.

201. **TAXONOMY**—Spring or Summer Quarters. Four hours. Prerequisites, Biology 1, Botany 2 and 101. Fee, \$1.00.

The purpose of this course is to give the advanced student an understanding of the morphological relations of plants and the underlying principles of their classification. The work is carried on largely in the field and results in a rather wide knowledge of local wild plants and flowers.

## ZOOLOGY

1. **INVERTEBRATE ZOOLOGY**—Fall Quarter. Four hours. Prerequisite, Biology 1, or an equivalent course. Fee, \$1.00.

The various invertebrate groups are studied in regular order. A general study of each group is supplemented by the specific study of a type form. This course is designed to give the student a knowledge of the lower animals; a necessary background for the teaching of biology.

2. **VERTEBRATE ZOOLOGY**—Winter Quarter. Four hours. Prerequisite, Biology 1, or an equivalent course. Fee, \$1.00.

This course includes a study of the chordates, and together with Zoology 1, completes the survey of the animal kingdom. Like Zoology 1, it is necessary to any student who contemplates the teaching of biology.

3. **BIRDS AND MAMMALS**—Spring Quarter. Four hours. Prerequisite, Biology 1, or an equivalent course. Fee, \$1.00.

A study of birds and mammals designed to familiarize the prospective teacher with the species found in Colorado and neighboring states. The distribution, life history, and economic status of each species will be given. Class work will be constantly illustrated by the use of museum material.

\*4. **PRACTICAL ZOOLOGY**—Spring and Summer Quarters. Four hours. Fee, 75 cents.

A general survey of the animal kingdom from the economic standpoint. Special emphasis will be placed upon the relation of each group to man. Not a technical course, but one that should prove valuable to teachers of biology or nature study. If students can elect but one course in zoology, it is suggested that this course be taken.

5. BIRD STUDY—Spring and Summer Quarters. Four hours. Fee, 75 cents.

A non-technical study of Colorado birds. The purpose of this course is to enable the prospective science teacher to recognize the commoner species. Life histories, ecology, and economic importance of birds will also be stressed. Field trips will supplement the identification of material in the laboratory.

106. PREPARATION OF MUSEUM MATERIALS—Winter Quarter. Two or four hours. Fee, \$1.00.

A study of the preparation of museum and class room specimens. Most of the work will be done individually in the laboratory. Instruction in preparing bird and mammal skins, and later on, in the mounting of birds, mammals, and fish will be given. If the student so elects, some of the work may be done in the preparation of microscopic materials.

107. ENTOMOLOGY—Fall Quarter. Four hours. Prerequisite, Biology 1, or an equivalent course. Fee, \$1.50.

A study of the insects with special reference to the commoner species. Structure, classification, and economic importance will be developed. A course for students who desire more specialized biological knowledge.

201. ADVANCED INVERTEBRATE ZOOLOGY—Fall Quarter. Two or four hours. Prerequisite, Biology 1, or an equivalent course. Fee, \$1.00.

An advanced consideration of invertebrate zoology, given particularly for graduate students. If the student has already taken Zoology 1, the course may be taken for two hours credit. In this case the work will be chiefly along the line of individual research. Students who have not taken Zoology 1 previously, may take this course for four hours credit. In the latter case they will attend the regularly scheduled lectures of Zoology 1, and carry on individual work in addition.

202. ADVANCED VERTEBRATE ZOOLOGY—Winter Quarter. Two or four hours. Prerequisite, Biology 1, or an equivalent course. Fee, \$1.00.

An advanced study of vertebrates, given primarily for the benefit of graduate students. The nature of the work is similar to that of Zoology 201. In this case the course may be taken for two hours credit if the student has previously taken Zoology 2, or for four hours credit in case the student has not previously taken Zoology 2.

204. ADVANCED PRACTICAL ZOOLOGY—Spring Quarter. Four hours. Fee, 75 cents.

This course is provided for the accommodation of graduate students who have not previously taken Zoology 4 or an equivalent course. Students registering for this course will attend the regularly scheduled lectures of Zoology 4, and will be required to do individual research in addition.

#### BIOTICS

101. HEREDITY AND EUGENICS—Winter and Summer Quarters. Four hours. Prerequisite, Biology 1.

The first half of this course deals with the physical basis of heredity, Mendel's laws, their modifications and extensions, and other principles governing the transmission of inherited characters. The second half considers the inheritance of natural abilities and capacities, the present eugenic trend of the American people, how to eliminate the defective strains of germplasm, and what measures may be taken to preserve the superior strains.

201. HEREDITY AND EUGENICS—Winter and Summer Quarters. Four hours. Prerequisite, Biology 1.

This course covers the same ground as Course 101, but additional and more advanced work is required.

#### BACTERIOLOGY

1. ELEMENTARY BACTERIOLOGY—Summer Quarter. Four hours. Prerequisite, Biology 1. Fee, \$1.50.

This course treats of bacteria, yeasts, and molds. Their classification, cultivation in cultures, activities and relation to man are considered. Especial emphasis is placed upon their relation to foods and cookery and upon the disease-producing effects of these micro-organisms.



## ELEMENTARY SCIENCE

1. ELEMENTARY SCIENCE—Fall, Spring, and Summer Quarters. Four hours. Fee, 50 cents.

This course has heretofore been known as Nature Study. Its purpose is to acquaint the grade teacher with trees, butterflies, moths, other insects, and with our most common birds, their habits and songs. Attention is also given to the aims in teaching elementary science, methods of presentation, and ways of collecting, preserving, and using materials.

## CHEMISTRY

It is the aim of this department to offer a schedule of courses which will fill the needs of the following classes of students:

A. Students taking chemistry as a requirement of the Home Economics Department. Such students will find the chemistry requirements outlined under their department.

B. Students desiring to specialize in chemistry in order to enter the chemical industries or the teaching profession. They will follow the program outlined below.

C. Students taking the new Science Course with chemistry as a minor subject. They will find the requirements in chemistry outlined under the Department of Physics or the Department of Biology.

## COURSE OF STUDY

Courses marked \* are given also by Extension.

In addition to the core subjects listed on page 56, this department requires:

FIRST YEAR: Elementary Science 1, Physics 1, 2, and 3, and Chemistry 4, 5, and 6.

SECOND YEAR: Botany 2 and Chemistry 7, 110, and 111.

THIRD YEAR: Zoology 1 and 2, Chemistry 113, 114, and 114b.

FOURTH YEAR: Chemistry 115, 115b, 116, and 117.

## CHEMISTRY

1. GENERAL CHEMISTRY—Fall and Summer Quarters. Three hours. Fee, \$3.00.

Two lectures and one laboratory period on the theory of chemistry and the non-metals.

2. GENERAL CHEMISTRY—Winter Quarter. Three hours. Fee, \$3.00.  
Two lectures and one laboratory period. A continuation of Course 1.

\*3. GENERAL CHEMISTRY—Spring Quarter. Three hours. Fee, \$3.00.  
Two lectures and one laboratory period on the chemistry of metals. A continuation of Course 2.

\*3b. HOUSEHOLD CHEMISTRY—Spring Quarter. Three hours. Fee, \$3.00.  
Prerequisite, Chemistry 1 and 2.

Two lectures and one laboratory period on chemistry in the home. Prerequisites, Chemistry 1 and 2.

4. GENERAL CHEMISTRY—Fall and Summer Quarters. Four hours. Fee, \$4.00.

This course covers the same textbook work as Course 1 does, but requires more laboratory work. Two lectures and two laboratory periods.

5. GENERAL CHEMISTRY—Winter Quarter. Four hours. Fee, \$4.00.

A more extensive course than Course 2. Two lectures and two laboratory periods. Continuation of Course 4.

\*6. GENERAL CHEMISTRY—Spring Quarter. Four hours. Fee, \$4.00.

A continuation of Course 5. Two lectures and two laboratory periods. Courses 4, 5, and 6 are required of all science students (except those specializing in biology, who may elect 1, 2, and 3 instead, and Home Economics students).

7. QUALITATIVE ANALYSIS—Any quarter. Two to eight hours. Fee, \$4.00.

A laboratory and consultation course on the separation and identification of the common elements. Prerequisites, Course 1, 2, and 3, or 4, 5, and 6.

\*108. ORGANIC CHEMISTRY—Fall and Summer Quarters. Three hours. Fee, \$3.00.

Two lectures and one laboratory period. A study of the hydrocarbons and their derivatives. Prerequisites, Chemistry, 1, 2 or 4, and 5.

\*109. ORGANIC CHEMISTRY—Winter Quarter. Three hours. Fee, \$3.00.

Prerequisites 1, 2 or 4, and 5. Recommended to students specializing in biology or physics.

110. ORGANIC CHEMISTRY—Fall and Summer Quarters. Four hours. Fee, \$4.00.

Two lectures and two laboratory periods. Same textbook work as Course 108 but more extensive laboratory work. Prerequisites, Chemistry 4 and 5.

111. ORGANIC CHEMISTRY—Winter Quarter. Four hours. Fee, \$4.00.

Two lectures and two laboratory periods. A continuation of Course 110. Prerequisites, Chemistry 4 and 5.

\*112. FOOD CHEMISTRY—Spring Quarter. Three hours. Fee, \$3.00.

Two lectures and one laboratory period. A study of food, detection of adulterants, metabolism and dietary lists. Recommended as a general cultural course. Prerequisites, 1, 2, 108, and 109.

113. FOOD CHEMISTRY—Spring Quarter. Four hours. Fee, \$4.00.

A more comprehensive course than 112. Prerequisites, 4, 5, 110, 111.

114 and 114b. QUANTITATIVE ANALYSIS—Any Quarter. Four or eight hours. Fee, \$4.00.

Gravimetric and volumetric analysis. A laboratory and consultation course. Eight or sixteen hours attendance. Prerequisites, Courses 4, 5, 6, and 7.

\*115 and 115b. INDUSTRIAL CHEMISTRY—Any Quarter. Four or eight hours. Fee, \$4.00.

In this course the student may enter upon a study of any one or more of the following chemical industries: Steel, oil, coal, water, gas, fertilizers, cement, dyes, etc. A laboratory and consultation course. Prerequisites, Courses 4, 5, 6, 7, and 114.

116. AGRICULTURAL CHEMISTRY—Any Quarter. Four hours. Fee, \$4.00.

An application of the principles of chemistry to soils, fertilizers, etc. Prerequisites, 1, 2, 3, and 7 or 4, 5, 6, and 7.

117. TEACHING OF CHEMISTRY—Any Quarter. Three hours. Fee, \$3.00.

Discussion and reports on the teaching of high school chemistry, and practice in setting up demonstration apparatus.

#### COURSES FOR GRADUATE STUDENTS

In the following courses for graduate students, the work may be the same as in corresponding senior college courses, but with extra requirements.

\*213. FOOD CHEMISTRY—Spring Quarter. Four hours. Fee, \$4.00.

A more comprehensive course than 112. Prerequisites, 4, 5, 6, 110, and 111.

214. QUANTITATIVE ANALYSIS—Any Quarter. Four to eight hours. Fee, \$4.00.

Technical analysis. A laboratory and consultation course. Eight to sixteen hours attendance. Prerequisites, Courses 4, 5, 6, 7, 114, and 114b.

\*215. INDUSTRIAL CHEMISTRY—Any Quarter. Fee, \$4.00. Four to eight hours.

In this course the student may enter upon a study of any one or more of the following chemical industries: Steel, oil, water, gas, fertilizers, cement, dyes, etc. A laboratory and lecture course. Prerequisites, Courses 4, 5, 6, 7, 114, and 114b.

216. AGRICULTURAL CHEMISTRY—Any Quarter. Four hours. Fee, \$4.00.

An application of the principles of chemistry to soils, fertilizers, etc. Prerequisites, 1, 2, 3, and 7 or 4, 5, 6, and 7.

217. TEACHING OF CHEMISTRY—Any Quarter. Three hours. Fee, \$3.00.

Discussion and reports on the teaching of high school chemistry, and practice in setting up demonstration apparatus.

\*221. ADVANCED INORGANIC CHEMISTRY—Any Quarter. Three or four hours. Fee, \$3.00.

Recitations and lectures on the most recent theories of chemistry of non-metals.

222. ADVANCED INORGANIC CHEMISTRY—Any Quarter. Three or four hours. Fee, \$3.00.

Recitations and lectures on most recent findings concerning the metals.

\*223. ADVANCED FOOD CHEMISTRY—Four to twelve hours. Fee, \$4.00.

A laboratory and consultation course. Prerequisites, Chemistry 113, 114, 114b.

225. RESEARCH WORK IN THE TEACHING OF CHEMISTRY. Hours credit to be determined.

A library reference and field survey course. Prerequisites, Chemistry 117 or 217.

## COMMERCIAL EDUCATION

The direct and controlling aim of the Department of Commercial Education is to prepare supervisors, department heads, and teachers of commercial education in the public schools. The course of study offered below and all subjects included in the course of study are offered with this basic objective in mind.

Specialization has been emphasized to the extent that a student who desires to become a specialist in the teaching of secretarial training may select a two or a four year course that will give the highest degree of specialization that it is possible to acquire in the given length of time. On the other hand specialization in the field of accounting or economics is just as possible.

Small high schools require teachers with a more general commercial training. This may be had by selecting one of the two courses of study outlined below and electing from the other at the same time. A definite selection should be made, however, and carefully followed in order that requirements for graduation may be met without loss of time.

Supervisors and department heads likewise should be equipped with a general training in commercial subjects. The head of a department, however, may prefer to specialize in some particular subject or group of subjects, and aim to have only a good working knowledge of the others. In the larger high schools specialization is desirable and many teachers of commercial subjects are specialists in certain subjects and teach only those.

The Life Certificate will be issued to those who complete the requirements of either of the two courses outlined below for the first two years and the core subjects outlined on page 56 and who have earned 96 hours of college credit. The Bachelor of Arts degree will be granted to those who have completed either of the following four-year courses and the core subjects on page 56 and who have earned 192 hours of college credit. The Master of Arts degree will be granted to those who have met the requirements set forth on page 51.

Students who have had some training in commercial education will not be required to repeat courses that are similar to those they may have had elsewhere. They will be admitted to advanced classes by satisfying instructors that they are able to carry advanced work.

#### COURSE OF STUDY

Courses marked \* are offered by extension.

In addition to the core subjects as listed on page 56, this department requires:

For teachers of Bookkeeping, Accounting, or Economics,

FIRST YEAR: C. E. 36, 37, 38, Geog. 7.

SECOND YEAR: C. E. 50, 51, 52, Economics 10.

THIRD YEAR: C. E. 155, 157, History 101, Economics 110.

FOURTH YEAR: C. E. 144, 154, 158, Economics 112.

For teachers of Secretarial Training Courses,

FIRST YEAR: C. E. 12, 13, 14, and 15.

SECOND YEAR: C. E. 3, and 4.

THIRD YEAR: C. E. 105, 106, 110.

FOURTH YEAR: Twelve hours of commercial education to be selected by the student.

No credit will be granted to majors in commercial education or to non-majors for C. E. 1 or 11. Credit will be granted to majors in commercial education and to non-majors for C. E. 2 and 12 only upon the completion of C. E. 3 and 13. Only methods in handwriting shall receive credit and this to the maximum of two hours altogether.

**\*1. PRINCIPLES OF SHORTHAND I.**—Fall and Summer Quarters. No credit.

This class meets four times a week and will be counted in the student's program as four hours in determining the student load. The purpose of this course is to give the student who has not had shorthand in high school the necessary foundation in Gregg shorthand for the secretarial course. The first ten lessons in the Gregg Shorthand Manual will be covered in this course.

**\*2. PRINCIPLES OF GREGG SHORTHAND II.**—Winter Quarter. Four hours.

Prerequisite C. E. 1 or the equivalent. This course is a continuation of C. E. 1. The Gregg Manual will be completed with this course.

**3. SECRETARIAL PRACTICE I.**—Spring and Summer Quarters. Four hours.

Prerequisite, C. E. 2 or the equivalent. This course offers a review of the principles of Gregg shorthand and is the first required course in the training of teachers of secretarial science. It will include the taking of dictation with transcriptions and some attention to arrangement and special forms. Special methods of presenting shorthand and conducting beginning dictation classes will be considered.

**\*4. METHODS IN COMMERCIAL EDUCATION—SHORTHAND**—Spring and Summer Quarters. One hour.

Prerequisites, C. E. 2 or the equivalent. The purpose of this course is to give the student special methods for the presentation of the subject of Gregg shorthand.

**\*11. PRINCIPLES OF TYPEWRITING I.** Fall and Summer Quarters. No credit. Fee \$1.00.

This class meets four times a week, and it is a preparatory course for the first course in the principles of typewriting which is required of all secretarial majors. It will be counted as four hours in determining the student's load.

**\*12. PRINCIPLES OF TYPEWRITING II.**—Winter and Summer Quarters. Four hours. Fee, \$1.00.

Prerequisite, S. E. 11 or the equivalent. A study of special business forms and tabulating.

13. PRINCIPLES OF TYPEWRITING III.—Spring and Summer Quarters. Three hours. Fee, \$1.00.

Prerequisite, C. E. 12 or the equivalent. This course includes the preparation of legal documents, complicated tabulation, and gives considerable attention to methods of acquiring speed.

14. METHODS IN COMMERCIAL EDUCATION—TYPEWRITING.—Spring and Summer Quarters. One hour.

Prerequisite, C. E. 12 or the equivalent. The purpose of this course is to give the student special methods in the teaching of typewriting.

\*15. BUSINESS REPORTS AND COMPOSITION—Spring and Summer Quarters. Four hours.

The aim of this course is to give the commercial teacher a better background for the subject of business English in high school. Emphasis is put upon the use of words in such a way that people will be induced to act. The principles of literary composition will be applied to commercial correspondence. Business situations will be analyzed, letters classified into type forms, and the requisites of each class will be exemplified by models. The psychology of the sales letter will be analyzed, and principles derived from this analysis will be applied in actual practice. Special consideration will be given to letters of application, letters of complaint, sales letters, follow-up letters, and collection letters.

\*36. HANDWRITING METHODS—Every Quarter. Two Hours.

This course combines practice and special methods for teachers and supervisors of handwriting. The class meets four times a week and no outside preparation is required. All who take this course are required to reach a standard of 80 as measured by the Zaner Handwriting Scale No. 5 before credit will be given.

\*37. BUSINESS MATHEMATICS—Fall and Summer Quarters. Four hours.

The aim of this course is to give the commercial teacher a better mathematical background for the subject of commercial arithmetic in high school. It correlates very closely with all courses in accounting, auditing, and the income tax law. The course begins with a very brief review of percentage in its simple applications. The theory of interest and investments, stocks, bonds, sinking fund, annuities, insurance, and taxes will be treated.

\*38. COMMERCIAL LAW I.—Fall and Summer Quarters. Four hours.

This course treats the subject of contracts and negotiable instruments. It is a treatment of the common law principles that apply to these topics. The Colorado Statutes and court decisions are studied in comparison with these general legal rules concerning business.

50. PRINCIPLES OF ACCOUNTING I.—Fall and Summer Quarters. Four hours.

This course is designed to serve as an introduction to the entire field of accounting. It is intended to give the student an understanding of the steps that compose what may be called the accounting process, and of that process as a whole. The financial reports, balance sheet, and statement of profit and loss are considered, and from them is developed the need for the ledger account as a means of classifying the information needed for these reports. In turn, the construction and interpretation of particular accounts, and the steps necessary in preparing the reports at the end of a period, in adjusting the accounts to show an agreement with the reports, and in "closing" the ledger are taken up. Books of original entry, such as the special journals, are discussed and illustrated. The principles considered are developed by means of class discussion and illustrative laboratory exercises. Three class periods a week will be given to discussion, and the remaining credit-hour will be a laboratory period of two hours.

51. PRINCIPLES OF ACCOUNTING II.—Winter Quarter. Four hours. Prerequisite, C. E. 50 or the equivalent.

Various types of business papers arising out of transactions are considered in their relation to the records and to the routine of the business. Summary statements of various kinds are discussed and illustrated. Types of accounting records and their development, especially as regards a partnership business, are taken up in detail. The principles considered are developed by means of class discussion and illustrative laboratory exercises. A complete set of partnership books with a minimum of bookkeeping detail are written up in this course. Three class periods a week will be given to discussion, and the remaining credit-hour will be a laboratory period of two hours.

\*52. PRINCIPLES OF ACCOUNTING III.—Spring and Summer Quarters. Four hours. Prerequisite, C. E. 51 or the equivalent.

This course is designed to cover the more advanced principles of accounting, emphasizing especially, the problems of corporation accounting. The proper evaluation of balance sheet items, as regards depreciation and the maintenance of fixed assets, is especially stressed. Principles considered are developed by means of class discussion and illustrative laboratory exercises. A complete set of corporation books with a minimum of bookkeeping detail are written up in this course. Three class periods a week will be given to discussion, and the remaining credit-hour will be a laboratory period of two hours.

\*53. SALESMANSHIP—Winter and Summer Quarters. Three hours.

Special attention is given in this course to methods of teaching, textbooks suitable for high school classes in salesmanship, and special references and aids. Selling and the prime essentials of selling are considered in this course. Attention is given to the problem of selling personal services. Sales talks are given to the class by experienced salespeople while students prepare written analyses of the processes. Students are required to prepare and give special sales talks, apply for positions, etc.

105. SECRETARIAL PRACTICE II.—Fall and Summer Quarters. Four hours.

Prerequisites, Commercial Arts 3 and 13 or their equivalents. This course is a continuation of Commercial Arts 3. Special emphasis will be put upon speed both in taking dictation and in transcribing. The handling of correspondence and filing will receive special attention.

106. SECRETARIAL SCIENCE I.—Winter and Summer Quarters. Three hours. Prerequisites, C. E. 105 and 13 or the equivalent.

The aim of this course is to familiarize the prospective teacher with the requirements of business offices in so far as these apply to the teaching of commercial subjects in the high schools where courses are being given. The course covers the field from a practical angle and is planned to help teachers to unite school and community interests. This includes a general course in the principles of filing, business graphs of all sorts, editing, proof-reading, briefing, charting, detailed activity studies, and allied subjects. The material handled deals directly with the presentation of such work to pupils. Prerequisites for the course are Commercial Education 105 and 13.

107. SECRETARIAL SCIENCE II.—Spring and Summer Quarters. Three hours. Prerequisite, C. E. 106 or the equivalent.

This course is a continuation of C. E. 106. More advanced problems will be treated dealing with the special training of teachers of secretarial work.

108. SECRETARIAL STANDARDS AND MEASUREMENTS—Three hours. Prerequisite, C. E. 105 or the equivalent.

This course is made to fit the prospective teacher for using in the classroom standard tests which have been scientifically worked out by experts. The Hoke Measurement Studies, Prognostic Tests by Adams, and other similar material are to form the basis for this study. Evaluation of material to secure the best results in manual skill and content are to be worked out by laboratory methods. Relative values of shorthand systems with historical setting of especial interest to the teacher will be considered in developing the principles of her work on a scientific basis which will take into account a correlation with professional study in other subjects. Prerequisites are C. E. 105 and 13.

109. ANALYTICAL STUDIES IN GREGG SHORTHAND—Three hours. Prerequisite, C. E. 105 or the equivalent.

The aim of the course is to work out for the prospective teacher lesson plans applicable exclusively to the presentation of shorthand. This is a specialized subject to which general plans can not be successfully applied. Studies of recent books in the field along this line are to be supplemented by the surveys in teaching problems through a series of projects. The basic texts are to be Principles of Gregg Shorthand and Analytical Lessons in Gregg Shorthand by M. D. Frink.

110. OFFICE APPLIANCES AND SPECIAL EQUIPMENT—Every Quarter. Six hours. Prerequisite, C. E. 3 and 12 or the equivalent.

The aim of this course is to acquaint the student with the handling of modern office appliances under actual office conditions. Students are required to do two consecutive hours of office work daily for five days a week, plus two additional hours to be arranged by the student. Hours for this work are to be arranged to suit the convenience of the student.

141. **ADVANCED CORPORATION ACCOUNTING**—Three hours. Prerequisite. C. E. 52 or the equivalent.

This is a thorough study of the corporation and the special accounts involved in the keeping of corporation records. A complete set of corporation books are kept introducing the voucher system of handling accounts payable. Some of the topics treated are: records and accounts peculiar to a corporation; elements of manufacturing accounts; perpetual inventory; payroll records; theories of the balance sheet; depreciation; showing of liabilities; valuation of capital stock; profits; dividends; reserves and surplus; sinking and other funds; liquidation of corporations; consolidations and mergers.

142. **ADVERTISING**—Three hours.

The origin and development of the art of advertising and its relation to our present system of distribution is emphasized in this course. It includes a study of the psychology of advertising and the characteristic features of some of the good and bad advertising to be found in magazines, newspapers, and other media. The general field of advertising is studied with some attention to scientific tests and records of results.

143. **THE INCOME TAX LAW AND REGULATIONS**—Three hours.

This course is planned with the idea that all commercial teachers should have a working knowledge of the Income Tax Law and ordinary problems growing out of its application. The latest revised law will be studied with the decisions and reports of the Treasury Department, etc., and these will be applied to practical problems for solution. It is not the purpose of this course to train income tax experts, but it should give the teacher a working knowledge of the income tax regulations that would enable him or her to help an individual make a satisfactory report.

\*144. **COMMERCIAL LAW II**.—Spring and Summer Quarters. Four hours.

The law of corporations, partnerships, real property, bailments, and bankruptcy will be treated in this course. Considerable time will be devoted to the study of the necessary legal forms and procedure in connection with these topics.

150. **BANK ACCOUNTING**—Fall Quarter. Three hours.

This includes a study of state and national banking laws, loans, discounts, commercial paper, methods and principles of banking, and savings accounts. A set of books illustrating several days of business will be written. Burroughs bookkeeping machines are used in connection with this course.

\*151. **COST ACCOUNTING**—Spring and Summer Quarters. Four hours.

A study of material cost, labor cost, overhead expense, distribution of expense, a managing expense. A set of books on manufacturing costs will be written.

154 **BUSINESS ORGANIZATIONS**—Winter Quarter. Three hours.

A substitute for Commercial Arts 150 or 151. This course treats of the basic types of business organization with special emphasis on the partnership and corporate form of conducting a business.

155. **THE ECONOMICS OF RETAILING**—Fall Quarter. Four hours.

A course in the fundamentals of the retail business. A brief history of the development of the different kinds of retail stores, salesmen, and methods of distribution. Also a treatment of some of the most important problems of retailing.

157. **METHODS IN COMMERCIAL EDUCATION**—Fall and Summer Quarters. Two hours.

The purpose of this course is to give the student a better conception of the function of commercial education together with a better appreciation of its merits and value. Special attention will be given to methods of teaching the subjects of bookkeeping and allied subjects.

158. **PROBLEMS IN BUSINESS EDUCATION**—Spring and Summer Quarters. Four hours.

This course provides for the treatment by research and study of some of the most important problems of commercial education. The following topics will be treated: State and city supervision; the commercial curriculum; the establishment of school and community cooperation in business training; job analysis, of the kind of positions that are to be filled with high school students; the kind of training demanded by the business man; the relation of the department of commercial training in the high school to the school of commerce or to the business college; present tendencies in commercial education; what should be the content of some of the commercial subjects, etc.

## 159. AUDITING—Four hours.

A study of the qualifications, duties, and responsibilities of the Certified Public Accountant, a Chartered Accountant, a Public Accountant, an Auditor or an Accountant. This course will be of interest to the student who is especially interested in accounting. It gives a better understanding of the purpose of accounts and their analysis. The methods of conducting different kinds of audits and special investigations will be studied and discussed. The course provides for a limited amount of laboratory work in the preparation of analyses and reports.

## \*211. BUSINESS ADMINISTRATION.

The principles of industrial management and the organization of the modern office. Various types of organization, the labor force, payment of the worker, records of raw material and unfinished goods, etc.

## 220. SEMINAR—Any Quarter.

An opportunity will be given for research work on problems in the field of Commerical Education. Problems to be selected in conference with the head of the department. This is planned as a conference course.

## EDUCATION

The aim of the Department of Education is to help make better teachers, principals, supervisors and superintendents. Many courses are given that are basic to all. Many other courses are highly specialized. An attempt is made to give enough general work so that every student will get a thorough foundation in the field, and enough specialized work so that he may become a specialist in some one branch. The student will find courses in the theory, the history and the philosophy of education in which clear analysis and straight thinking are of chief concern. He will also find courses that teach definite skills. These skills vary from the planning of a single lesson to the making of a curriculum or the planning of a school building.

## COURSE OF STUDY

Courses marked \* are given also by Extension.

In addition to the core subjects as listed on page 56, this department requires:

## FOR KINDERGARTEN AND PRIMARY TEACHERS

## TWO YEARS

FIRST YEAR: Ed. 3, Ed. 51, Ed. 52, Lib. Sci. 1, Art 2.

SECOND YEAR: Elem. Science 1, Art 13, Eng. 15, Ind. Arts 1 (2 hrs.), Music 10.

## FOR INTERMEDIATE TEACHERS

## TWO YEARS

FIRST YEAR: Ed. 4, Elem. Science 1, Lib. Sci. 1, Art 14.

SECOND YEAR: Geog. 12, Hist. 1 or 4 or 10 (one of these courses), Math. 8, Eng. 1, Eng. 15, Eng. 13, Music 11.

## FOR JUNIOR HIGH SCHOOL TEACHERS

## TWO YEARS

FIRST YEAR: Lib. Sci. 1, Eng. 15, Eng. 2, Hist. 1 or 2 or 4 or 10 (one of these courses), Elem. Science 1, Ed. 15.

SECOND YEAR: Ed. 113, Ed. 110, Geog. 14, Math. 108.



## FOR TEACHERS AND SUPERVISORS IN RURAL SCHOOLS

## TWO YEARS

FIRST YEAR: Ed. 21, Ed. 3, Geog. 12, Ed. 23, Math. 8, Eng. 1.

SECOND YEAR: Ed. 4, Ed. 20, either one of the following history courses 1, 2, 3, or 10, Music 12.

## FOR THIRD AND FOURTH YEAR STUDENTS IN EDUCATION

FOR MAJORS IN ELEMENTARY EDUCATION: Ed. 104, Ed. 106, Ed. 129, Ed. 134, Ed. 152, Ed. 210, Psych. 107, Biotics 101.

FOR SUPERINTENDENTS, SUPERVISORS AND PRINCIPALS: Ed. 104, Ed. 113 or 115, Ed. 108, Ed. 120, (take either Ed. 147 or 120), Ed. 129, Ed. 134, Ed. 142, Ed. 144, Ed. 147, Ed. 210, Psych. 107, Biotics 101.

## I. COURSES PRIMARILY FOR JUNIOR COLLEGE STUDENTS

\*1. AN INTRODUCTION TO EDUCATION—Required of all first-year students. Every Quarter. Three hours.

This course aims to introduce the student to the study of education. It does for education what general science does for the later study of specialized subjects in science. The course deals with teaching as a profession, educators of the past and present, and many of the major problems that are met in the field of education. The purpose of the course is to orient the student in the great field of education and prepare him for the specialized study to come later.

2a. PRE-TEACHING OBSERVATION—Every Quarter. One hour.

This course consists of two regularly scheduled observation hours each week and one conference hour the first and fourth Tuesday of each month. The student observes the class he is to teach for a quarter preceding his actual teaching. This quarter of pre-teaching observation gives the student an opportunity to gain an insight into the technic of teaching and the mechanics of class room management; a knowledge of the complete sequence of the subject matter of which he will teach only a part. Related readings and references in both content and method are required in this course. A student making a grade of less than "C" shall repeat the course.

2b. STUDENT TEACHING IN THE ELEMENTARY AND JUNIOR HIGH SCHOOL—Every Quarter. Hours according to schedule.

Required of all junior college students. A full quarter of teaching carries five hours credit, meeting five days a week with two monthly group conferences on the first and fourth Tuesday. Each student making a grade of less than "C" shall be required to repeat the course. As a prerequisite to student teaching (Ed. 2b.), each student must make at least a grade of "C" in observation (Ed. 2a.); pass satisfactorily an achievement test; Ed. 1, 5, and a method course. (See page 38.)

\*3. PRIMARY GRADE METHODS—Every Quarter. Four hours.

This course is based on the needs of the child between the ages of six and eight years. This course leads up to the selection of subject matter which functions in the child's life. To this end a brief comparison of courses of study in some of our larger city schools is made. The latest and most scientific articles on primary methods are read and discussed. Many devices for teaching beginning reading, phonics, rhythm, spelling, songs, as well as methods for dramatization of stories, multiplication table, and practice in blackboard illustrating are given.

4. INTERMEDIATE GRADE METHODS—Fall, Spring and Summer Quarters. Four hours.

The course is based on the needs of the child between the ages of ten and twelve. It will consist of (1) a review of the most significant things in child study common to children of this period; (2) a comparison of courses of study for these grades; (3) the building of a course of study; (4) methods of presenting the material of the curriculum of the intermediate grades.

5. PRINCIPLES OF TEACHING—Every Quarter. Three hours. Prerequisite Ed. 1.

This course will consist of readings, discussions and observations of class room work in the elementary training school. It will deal with such topics as types of class room procedure; standards for judging both the subject matter and class room instruction; development and use of lesson plans; socialized recitations and the project method; the ideas of enrichment, development and control of experiences and the methods appropriate to a realization of these. An extra hour is scheduled for demonstration lessons in the training school.

\*10. THE ELEMENTARY SCHOOL CURRICULUM—Every Quarter. Three hours. Prerequisites, Ed. 1 and Ed. 5. Sophomore standing.

This course will deal largely with the objectives of elementary education. The main subject of the elementary curriculum will be studied from the standpoint of objectives to be attained in each in terms of existing aims, hypotheses, investigations, and measurements. Each subject will also be studied to determine what additions and eliminations of subject matter are desirable.

15. EDUCATIONAL GUIDANCE—Winter and Summer Quarters. Three hours.

In this course a study will be made of the various agencies and methods for guiding pupils in their school work and into desirable vocational and avocational activities.

16. ELEMENTARY TRAINING COURSE FOR CAMP FIRE GIRLS LEADERSHIP—Every Quarter. One hour.

This course is intended for those who wish to become Camp Fire Guardians. Groups will be organized into regular camp fires and do the work usually required of girls in such groups.

16a. ADVANCED TRAINING COURSE FOR CAMP FIRE GIRLS LEADERSHIP—Winter, Spring and Summer Quarters. One hour.

Open to students who have had the elementary course in Camp Fire.

17. BOY SCOUT WORK—Spring and Summer Quarters. One hour.

This course is intended for those who wish to become Boy Scout Masters.

\*20. AGRICULTURAL EDUCATION—Fall, and Summer Quarters. Four hours.

This is an elementary college course, given to meet the growing feeling that since agriculture applies generally to vital facts of many sciences, especially in pointing out man's relationship to nature and society, instruction in agriculture may well be given to all students, irrespective of future life pursuits, as a training for good citizenship. This course, covering in a brief way the different field or divisions of agriculture, will serve as an introductory course and will especially meet the needs of those teachers who are preparing to teach in rural or grade schools where only one year of agriculture is taught. Particular attention is given to the planning of projects.

\*Ed. 21. RURAL SCHOOL PROBLEMS—Fall, Spring and Summer Quarters. Three hours.

This course aims to contribute directly to the practice of those who work in rural schools. Genuine problems of the rural teacher are considered and real solutions offered. It attempts to apply present day educational theory and scientific educational principles to the most difficult American educational situation, the rural school.

Ed. 22. STUDENT TEACHING IN RURAL DEMONSTRATION SCHOOL—Fall, Winter and Spring Quarters. Four hours. Prerequisites, Ed. 2a and Ed. 2b.

Students who plan teaching in rural schools should take one month of teaching in a rural school which is being used for the special training of teachers. Student teachers live at the teachers' cottage while teaching and can arrange to carry on their studies in absentia while so teaching.

Ed. 23. RURAL SCHOOL MANAGEMENT—Winter and Summer Quarters. Three hours. Prerequisite Ed. 21.

This course deals with the distinctive problems of rural teaching that are due to many grades and consequent difficulties of rural school organization. It intends to assist young rural teachers immediately and directly.

## ED. 24 THE RURAL COMMUNITY—Winter Quarter. Three hours.

This course intends to acquaint the student with the constructive factors of farm life needful for rural leadership and teaching under rural conditions, such as the school as a social center, the organization of parent-teachers clubs and other community organizations, program making for community organizations, relating the work of the school to the community life, the survey and its adaptation to the rural community. A brief study of the important characteristics of the rural community will also be made.

## \*28. SCHOOL AND HOME GARDENS—Spring and Summer Quarters. Four hours.

The topics of this course include; planning, planting, cultivating, controlling insect enemies and plant diseases; methods of propagation of vegetables and flowers; best varieties of vegetables and flowers for certain seasons; soil requirements for successful gardening; planting about home and school; use of hot-beds and cold-frames.

## \*51. LITERATURE, SONGS AND GAMES FOR KINDERGARTEN AND PRIMARY CHILDREN—Every Quarter. Four hours.

A study and classification of the different types of stories, songs and games according to their fitness for various ages and purposes.

## \*52. THE KINDERGARTEN CURRICULUM AND USE OF MATERIAL—Fall, Winter and Summer Quarters. Four hours.

A study of the educational possibilities of the natural activities of childhood.

## 100a. PROBLEMS OF EDUCATION—Summer Quarter. Four hours.

This course attempts, therefore, to bring to interested students the results of research concerning current educational problems.

## II COURSES PRIMARILY FOR SENIOR COLLEGE STUDENTS

## \*101. PRINCIPLES OF HIGH SCHOOL TEACHING—Fall and Summer Quarters. Four hours.

This course is designed to develop those principles of teaching and features of methodology which are particularly applicable to high school teaching. A text-book is used as a basis, but this is supplemented by individual reports, class discussions, and special papers. There will also be directed observation of high school teaching. Some of the topics to be considered are: characteristics of adolescence; types of disciplinary control; economical class room management; types of instruction; lesson planning and supervised study.

## 102. ADVANCED STUDENT TEACHING IN ELEMENTARY TRAINING SCHOOL—Every Quarter. Four hours.

## 102a. STUDENT SUPERVISION IN ELEMENTARY TRAINING SCHOOL—Every Quarter. Four hours.

## 102b. STUDENT SUPERVISION OF EXTRA CURRICULA ACTIVITIES IN TRAINING SCHOOL—Every Quarter. Four hours.

## 103. STUDENT TEACHING IN THE SECONDARY TRAINING SCHOOL—Every Quarter. Five hours.

This course will include conference, observations, supervision and teaching under the direction of the training teacher. (See page 38.)

## 104. THE PROJECT METHOD OF TEACHING—Spring and Summer Quarters. Four hours.

The purpose of this course is to study and define the project and project method from a critical point of view and to discuss the reorganization of the curriculum on the project basis. A study and criticism of current definitions of a project will be made, as well as the historical development of the project method.

## \*106. ELEMENTARY TYPES OF TEACHING AND LEARNING—Spring and Summer Quarters. Four hours.

An analysis of the less familiar types of teaching and learning; learning to understand social life; learning to be skillful in problem solving, silent reading, communicating ideas; learning to enjoy leisure time; learning to behave morally.

107. METHODS OF IMPROVING READING AND STUDY HABITS OF ELEMENTARY SCHOOL CHILDREN—Winter and Summer Quarters. Four hours.

In this course, a study will be made of silent reading habits and abilities in their relationship to efficient performance in the elementary school subjects. Particular emphasis will be placed upon the methods of forming those habits in silent reading which are fundamental in independent or supervised study. The following problems will be discussed; the mechanics of reading and the work of the eye in reading; measurement of silent reading ability; factors affecting silent reading ability; the treatment of cases of retardation due to poor study and silent reading habits.

108. EDUCATIONAL SUPERVISION—Spring and Summer Quarters. Four hours.

This course will be of especial value to those who expect to become superintendents, principals, or supervisors. There will be a theoretical consideration of all the major problems of supervision and, so far as possible, the student will be given an opportunity to do in a practical way the various tasks which the supervisor of instruction is called upon to do while in the field.

\*109. SUPERVISED STUDY—Given on request. Three hours.

This course will discuss the conceptions of supervised study, the various schemes of organization by which the supervision of study is administered, the principles and methods of supervised study as they apply to various school subjects, the results of the more significant investigations concerning study, and a general evaluation of what this movement means.

110. EXTRA-CURRICULA ACTIVITIES—Spring and Summer Quarters. Three hours.

This course will discuss school councils and government, athletics, debating, literary and social clubs, the school newspaper and magazine, music and dramatic activities, and civic clubs and projects that relate to pupil participation. It will consider the purposes and values of such activities in forming proper habits, attitudes and ideals, and will attempt to show wherein such activities are a necessary and valuable part of the school curriculum.

111. PHILOSOPHY OF EDUCATION—Winter and Summer Quarters. Required fourth year. Four hours.

This course is designed to study the underlying philosophy of education. It will attempt to show that education is a process of forming fundamental dispositions toward mankind; a process by which social groups maintain their continuous existence; a process by which an individual grows through gaining new meanings in his environment. The course also attempts to point out that a philosophy of education is a general theory of education, and as such, it determines the fundamental aims of education and influences method and practice, and the selection and organization of subject matter. Finally, it will attempt to point out how it determines the educational values of materials taught and the activities of the school.

112. SCHOOL HOUSE CONSTRUCTION—Fall and Summer Quarters. Two hours.

This course will deal with the practical problems in the planning and building of school houses.

\*113. ORGANIZATION AND ADMINISTRATION OF THE JUNIOR HIGH SCHOOL—Fall and Summer Quarters. Four hours. Primarily for Junior High School Majors. Senior College and Graduate Students Take Ed. 213.

In this course the following points will be considered: organization; standards for judging junior high schools; historical development; the program of studies; the daily schedule of classes; courses of study for the various subjects; the qualification of teachers, etc. After many representative junior high schools of the United States have been considered from the above-mentioned standpoints, each student will arrange a program of studies, and a course in one subject for a junior high school in some designated community.

114. PRIMARY SUPERVISION—Summer Quarter. Either half or full quarter. Two or four hours.

This course is intended to meet the needs of kindergarten and primary supervisors.

115. ORGANIZATION AND ADMINISTRATION OF THE ELEMENTARY SCHOOL—  
Winter and Summer Quarters. Four hours.

In this course the work of the elementary school will be analyzed from the standpoint of organization and administration. The following are some of the topics considered: The problem in the large: the first day of school, yard and building organization, programs and schedules, the school janitor, health and sanitary control, discipline, use of the assembly period, classifying and promoting pupils, the curriculum, planning the supervision, teachers meetings, measuring instruction, parent-teachers associations, and extra-curricular activities.

\*116. THE ORGANIZATION AND ADMINISTRATION OF A SENIOR HIGH SCHOOL—  
Spring and Summer Quarters. Four hours.

This course will deal with the senior high school from the standpoint of organization, programs, teaching, course of study, social life, athletics, and all general problems arising in the administering of a senior high school.

120. (formerly 220) EDUCATIONAL FINANCE—Spring and Summer  
Quarters. Two hours.

This course deals with budget making, taxation, financial reports, and other subjects that relate to financing the public schools. A study will also be made of cost units and financial comparisons of schools.

123. EDUCATIONAL RESEARCH FOR SENIOR COLLEGE STUDENTS—Every  
Quarter. Four hours.

Registration for this course permitted only after conference with the head of the department. This course is a seminar or conference course for qualified senior college students. Students with definite problems will carry on research under the direction of the instructor in whose field the problem lies. Only one quarter's work may be taken.

125. (formerly Ed. 25.) RURAL EDUCATION—Winter and Summer Quar-  
ters. Three hours.

A study of the general purpose and problem of rural elementary education. It considers the problem as being first elementary and then rural; or the problem of the elementary school in a rural setting. The influences of environment upon rural elementary education, the proposed purposes—retaining the rural child upon the farm—vocation efficiency—broad rural citizenship—education through "ruralized curriculum" etc., and a criticism of these proposals will be considered. The advantages of the rural school for project study, the needs for larger units in rural education than the local district, the advantages and disadvantages of "open-country" consolidation, and the preparation of the rural teacher to meet the demands of the rural situation will also be studied.

126. (formerly Ed. 26) THE PROJECT CURRICULUM FOR RURAL SCHOOLS  
—Fall Quarter. Three hours.

This course is designed to study and interpret the basic ideas implied in the concept of *project methods* as formulated by leading educators of the present time and to show their use in rural education. Comparisons are made of concrete examples of the application of the project curriculum with the traditional rural school curriculum. It includes a study of the underlying principles which control the procedure of the project curriculum and an attempt to evaluate the principles.

129. (formerly 229) CURRENT EDUCATIONAL THOUGHT—Spring and  
Summer Quarters. Four hours.

This course will consist of reviews and discussions of recent books and magazines in the light of the more important modern movements in each of the major fields of education.

\*133. HISTORY OF EDUCATION WITH SPECIAL REFERENCE TO MODERN  
TIMES—Fall Quarter. Three hours.

This course will be a general survey of the history of education. After a brief study of the contributions of the Greeks, the Romans and the Medieval church the following topics will be discussed and evaluated in terms of their influence upon modern times; the Renaissance, the Reformation, the rise of science, the development of vernacular schools, the influence of the educational reformers—Comenius, Rousseau, Pestalozzi, Herbert, Froebel, and Dewey—upon recent educational theory and practice. Finally a comparative study of the educational systems of the chief countries of the world will be made.

\*134. HISTORY OF EDUCATION IN THE UNITED STATES—Winter and Summer Quarters. Three hours.

Beginning with the old world background this course will trace the development of free public education in America up to the present time. Special emphasis will be given to a consideration of how the school subjects came to be what they are, the development of methods of teaching in terms of children's interests and capacities, and the influence of recent educational tendencies, such as the widened concept of citizenship training, the scientific study of education and the economy of time movement. Contemporary educational problems will be used as the basis of explaining the educational and cultural history of the United States.

\*142. CITY SCHOOL ADMINISTRATION—Winter and Summer Quarters. Two hours.

This course is designed primarily for students preparing themselves to be principals, supervisors or superintendents. All phases of city school administration will be dealt with. Particular emphasis will be placed on such subjects as employment, pay and promotion of teachers, and making of the school budget, the planning of a building program, and the development of a course of study.

144. SCHOOL PUBLICITY—Fall and Summer Quarters. Two hours.

This course will study such problems as school papers, bulletins, house organs, and publications for patrons. How to get material ready for the newspapers and how to handle such community projects as clean-up week, American education week, know your schools week, music week, bond elections, Parent-Teacher associations, and other community enterprises will be a part of this course. Given by the department of education and the department of English jointly.

147. EDUCATIONAL SURVEYS—Fall and Summer Quarters. Two hours.

In this course an opportunity will be given to study the technique of conducting surveys, the surveys which have been made, and the application of these surveys to educational thought and practice.

152. THE CHILD AND HIS SCHOOL—Spring and Summer Quarters. Four hours.

An interpretation of elementary education as a social process in which the child is the major factor. A study of the principles underlying the education of elementary school children.

165. BIBLE STUDY—GREAT PERSONALITIES OF THE OLD TESTAMENT—Fall Quarter. One hour.

The purpose of the course is to show the growth, through experience, of the Hebrew mind and religion.

166. BIBLE STUDY—THE PERSONALITY AND TEACHINGS OF JESUS—Winter Quarter. One hour.

A study of the personality of Jesus and the practical application of His teachings to the life of today.

167. BIBLE STUDY—PAUL AND THE GROWTH OF THE CHURCH—Spring Quarter. One hour.

A study of the letters of Paul, of the situations which called them forth, and of the beginnings of Christianity.

### III. COURSES FOR GRADUATE STUDENTS AND QUALIFIED SENIOR COLLEGE STUDENTS WITH THE CONSENT OF THE INSTRUCTOR.

(Junior College Students may NOT register for these Courses)

\*210. PROBLEMS OF THE SCHOOL CURRICULUM—Winter and Summer Quarters. Four hours. Substituted for Ed. 10 for Senior College Students.

This is an advanced course in curriculum construction. It will deal with the sources of curriculum materials, and with methods of investigation and evaluation of school courses in terms of impersonal or objective standards. Each student will be required to make a study or investigation of some aspect of the curriculum in order that he may more thoroughly understand the technic of curriculum construction.

211. CONCEPTION OF MIND IN EDUCATIONAL THEORY—Winter and Summer Quarters. Four hours. Prerequisite Ed. 111. This course will not be given, Winter, 1926.

A study of the doctrines of mind that have exercised a determining influence upon educational theory, method, and practice.

213. PROBLEMS OF THE JUNIOR HIGH SCHOOL WITH SPECIAL REFERENCE TO THE CURRICULUM—Spring and Summer Quarters. Four hours.

This course will attempt to offer practical suggestions for the reorganization of the junior high school grades. The following problems, with possible solutions based upon sound educational theory, practice, and scientific method, will be discussed; how to relate and integrate the program of the junior high school with that of the elementary and senior high schools, economy of time and learning, enrichment of the curriculum, and how to organize junior high schools for effective training in citizenship. The Rugg-Schwepe program, as embodied in The Social Science Pamphlets, will be presented and applications of their experimental curriculum procedure will be made to other subjects of the junior high school. Opportunity will be given to observe the teaching of The Social Science Pamphlets in the Training School.

216. PROBLEMS OF SECONDARY EDUCATION—Winter and Summer Quarters. Four hours.

This course is intended for graduate and advanced undergraduate students who are interested in intensive study of significant and fundamental problems in the field of secondary education. These problems will include organizing programs of study, administering student activities, financing student activities, organizing curriculum materials, planning teachers' meetings, and other related to secondary education. Intensive study and investigation will be organized along the lines of individual interest.

220. EDUCATIONAL FINANCE—This course is now numbered Ed. 120.

\*223. RESEARCH IN EDUCATION—Every Quarter. Three or four hours.

This is a seminar and conference course for graduate students who are working on their masters' theses. The Director of Educational Research will meet the Graduate Thesis Seminar three times each week and will confer with individual students upon appointment when necessary. In seminar, the proper technic to be used in educational investigations and allied topics is considered, and opportunity is given each student to report upon and discuss the details of his study.

\*224. EXPERIMENTAL EDUCATION—Either half or full Quarter. Two or four hours.

This course will involve: names, reasoning, and induction in experimentation; four historical methods of experimental inquiry; recent methods of experimentation in education; findings in experimental schools and classes; planning and educational experiment; selection of technic; finding the subjects; relevant and irrelevant variables; experimental measurements; the statistics of experimentation; interpretation of experimental data; the reliability of conclusions reached; report and publication of the results of an experiment; thoughtful reading of experimental literature; selection, making, and scoring of tests and examinations; principles of graphic and tabular representation; classification of pupils; educational diagnosis; educational and vocational guidance.

229. CURRENT EDUCATIONAL THOUGHT—This course is now numbered Ed. 129.

240. WOMEN IN ADMINISTRATION.—Spring and Summer quarters. Four hours.

A course for deans of women and advisers of girls. Especially designed for those who desire training for positions as advisers of girls and deans of women. Some degree of maturity and experience in teaching fields is required of the students. The purpose is to set up ideals and standards of such a position; to find a body of definitely useful knowledge available for such training; and to secure recognition of the professional status of people trained in the technic of dealing with human relations. Lectures, readings and reports on special investigations.

242. PROBLEMS IN EDUCATIONAL ADMINISTRATION—Fall and Winter Quarters. Two and four hours.

This course is primarily intended for superintendents and principals of schools. The problems selected for work in any quarter will vary with the interests of the group electing the course and the relative importance of the problems in present day educational administration. The following are types of problems, some of which will be studied: types of publicity for a school system; modern schoolhouse construction; selection, purchase, and distribution of textbooks, equipment, and supplies; the development and utilization of a budget; needed changes in financial accounting; needed changes in taxation; needed changes in education laws for a particular state, a plan for a self-survey of a school system; the superintendent or principal as a supervisor—what he can do to improve instruction; an adequate set of educational and financial records and reports for cities of various sizes; how to make and utilize the results of age-grade-progress studies; analysis of the janitor's job; the selection, preparation, tenure, and promotion of teachers, and the legal rights of boards of education. For students desiring it the course will afford guidance in the discovery and statement of problems suitable for work toward the advanced degrees.

## EDUCATIONAL PSYCHOLOGY

The courses of this department have been arranged with the general purpose of making the student familiar with the important contributions which psychology has made to such phases of education as school organization and administration, the aims of education, and the best means and methods of realizing these aims. The whole public school system is viewed from the standpoint of the nature and needs of the child. An attempt is made to point out what the schools should be in order to preserve the child's physical and mental health, respect his native capacities and tendencies, secure his normal development, utilize his most natural modes of learning, and promote and check up the efficiency of his responses. More specific statements of the purposes of the department are given below in the descriptions of the courses.

The department offers two curricula, the one in Psychology and the other in special Schools and Classes. The first prepares the student to teach psychology in normal schools and high schools and to fill such positions in clinical psychology and tests and measurements as are developing in connection with public school systems. The second prepares the student to take charge of special schools and classes, especially such as are designed for backward and feeble-minded children. Students who elect either of these curricula are advised to take at least six courses of the curriculum of some other department.

### COURSE OF STUDY

#### FOUR YEARS FOR MAJORS IN PSYCHOLOGY

Courses marked \* are given also by extension.

In addition to the core subjects listed on page 56, this department requires:

FIRST YEAR: Library Science 1, and Psychology 1 and 110.

SECOND YEAR: Psychology 3.

THIRD YEAR: Psychology 104, 105, 106, 107, and 109, Biotics 101 or 201.

FOURTH YEAR: Psychology 108a, 108b, 111, 212, 109 and 113.

Students who wish to major in the curriculum for teachers of special schools and classes will take a course in eugenics and a course in construction work in place of Psychology 105, 108b, and 212. They will also be held for some practice teaching in special classes.

Students who wish to specialize in the department, but find it impossible to remain at school four years, will be permitted to elect advanced courses.



\*1. CHILD HYGIENE—Required of students who specialize in physical education. Winter and Summer Quarters. Four hours.

Purposes: (a) to give the student training in the detection of physical defects; (b) to discuss the effects of physical defects upon the child's health and his physical and mental behavior and development; (c) to discuss the causes of defects, the methods of preventing them and the measures which are required for their removal; (d) to give partial preparation for the course in Clinical Psychology.

Topics: the necessity of paying attention to health; the types of effort required to improve health; air requirements for good health and efficient behavior; deformities and faulty postures; malnutrition; enlarged and diseased tonsils and adenoids; defective teeth and mouth hygiene; defective hearing; defective vision. For each of the defects just numerated there is a discussion of: the nature of the defect; its causes; its prevalence; its bad effects upon the child's behavior, happiness and physical excellence; conditions requisite for the prevention of the defect; the methods and means of detecting defects; the treatment the child should receive in view of his defects. The last two items receive especial emphasis. Methods of detecting defects are demonstrated in the classroom.

\*2a. EDUCATIONAL PSYCHOLOGY—Second year. Every Quarter. Three hours credit, four hours recitation. Required of all students.

The purposes of the course are: (a) to make the student familiar with the child's capacities, tendencies, and native responses and to show him how they and the nature and order of their development are involved in the process of educating the child; (b) to discuss such conditions of the school room and school activities as will avoid fatigue and promote work.

Topics treated: Discussion of the subject-matter, methods, and scope of psychology and its province in education; the stimulus response hypothesis; the physiological mechanism underlying a stimulus-response psychology; brief discussion of simple and complex mental processes; the origin, development, and general characteristics of instinctive activity and their significance in controlling the behavior of children; the difference between native and acquired traits; an inventory of instinctive impulses and activities and a consideration of these as they appear in the behavior of school children in such forms as: manipulation of objects, exploration and curiosity, fighting and self-assertion, formation of gangs, rivalry, sympathy and co-operation, play, ownership, collecting, fear, truancy, etc.; discussion of the emotions, their control and utilization; the dynamic role of instincts in learning; conditions which promote work and avoid fatigue.

2b. EDUCATIONAL PSYCHOLOGY—Second year. Every Quarter. Three hours credit, four hours recitation. Required of all students. Students may take 2b prior to 2a if they so desire.

Purposes of the course: (a) in connection with Psychology 2a to acquaint the student with the psychology underlying learning and instruction; (b) to prove the student's ability to control learning by making him familiar with the principles which are a description of how learning occurs and with such conditions and procedures as will greatly facilitate learning; to discuss the nature of individual differences and point out their significance for instruction, school organization, and the arrangement of school work.

The content of the course consists of: a description of the nature of learning; a classification of the kinds of learning such as motor, perceptual and memorial, and thinking; a treatment of the primary and secondary laws of learning with many examples of their operation in the different kinds of learning and in the different school subjects; the part played in learning by such other factors as imitation and ideo-motor action; general characteristics of learning such as trial and error, the course of improvement, the curve of learning and the curves of forgetting; a discussion of motor learning, perceptual learning, memorial learning and thinking as these are involved in the activities of life and the schoolroom: the requirements of effective instruction in the different kinds of learning; the problem of the transfer of training and its significance for instruction and the selection of the content of the course of study; the nature of individual differences and the significance of these differences for instruction and school organization; a brief general treatment of mental and educational measurements, personality traits, and race differences.

3. CHILD DEVELOPMENT—Second year. Spring Quarter. Four hours.

Purposes of the course: (a) to point out the child's requirements during the different stages of his physical development; (b) to describe the nature of the child's mental development and discuss what kind of behavior and activities may be expected of him in any stage of development; (c) to encourage the student to form the habit of observing the behavior of the child and to interpret the significance of such behavior; (d) to give the student a sympathetic and understanding attitude toward child life.

The following topics are treated: the purposes and methods of studying the development of children; anthropometrical measurements and the nature of the child's physical growth; the child's physical requirements in the different stages of his physical development; general characteristics of the mental development of the child; the development of the child's attention, sense-perception, memory, imagination and thinking, feelings, ideas, interests and volition; the behavior which may reasonably be expected of the child during the different stages of development of his mental processes; the psychology of lying; instruction in observation and aesthetic appreciation; children's ideals; the child's suggestibility; the nature and significance of play; the moral and religious life of the child.

104. PSYCHOLOGY OF ELEMENTARY SCHOOL SUBJECTS—Third year. Spring and Summer Quarters. Four hours. Required of students who teach and supervise Elementary and Junior High School subjects.

Purposes: (a) to give the student a basis for the evaluation of methods of instruction and the requirements of learning in the different school subjects; (b) to give him the ability to modify the methods of instruction and the conditions of learning so as to preserve an effective balance of emphasis among the mental activities involved in learning them and to adapt them to differences in the instructional needs of individual children; (c) to place before the student such procedures and conditions of learning in the different school subjects as have been discovered through experimental studies and deduced from the laws of learning and known facts about the child's capacities and tendencies; the course also is a partial preparation for the course in Clinical Psychology.

Content of the course: for each of the elementary school subjects, an analysis is made of the activities involved in learning them in order that none of the abilities which the subject is supposed to develop may be neglected, and as a preparation for a discussion of such methods and conditions of learning and teaching the school subjects as have been found to be favorable either by experimental studies or the deductive application of known psychological facts and principles; individual differences in learning the elementary school subjects; factors which have a favorable influence upon learning them. This general statement of the content of the course must suffice because it would take too much space to list the topics treated in each one of the school subjects.

105. PSYCHOLOGY OF THE HIGH SCHOOL SUBJECTS—Third year. Four hours. Required of Senior High School teachers and High School Principals. Winter and Summer Quarters.

Purposes: (a) to develop a psychological attitude in the prospective high school teacher toward both the child and his subject; (b) to demonstrate the need of co-operation on the part of the teachers of all of the different high school subjects for the benefit of the student; (c) for additional purposes see those stated under course 104.

Topics treated: presentation of the aim and requirements of the course; the importance of understanding the high school student; essential differences between the old and new high school from the psychological point of view; how to train high school students to study effectively; psychology of classroom management; experimental work on the transfer of training in high school subjects; psychological analysis of subjects taught in high school; psychology of the methods employed in teaching the high school subjects; psychology of selecting subject matter in each one; the psychology of motivation and appreciation in the high school; individual differences in aptitudes and interests.

106. CLINICAL PSYCHOLOGY—Spring Quarter, 1926. Four hours.

Purposes: to teach the student how to determine the mental status of the child with the purpose of improving the child's adaptation to his school life and life in general; (b) to show how we may learn about the child's mental status through first-hand observation, tests and experiments, a prescribed course of treatment, and the collection of hereditary, developmental and environmental data pertaining to the child; (c) to supply such preparatory information for this work as was not presented in other courses in psychology.

Topics: description of clinical psychology; the methods and objectives of clinical psychology; its inception and history in schools and higher institutions of learning; discussion of the kind of data which should be collected for the purpose of making mental diagnoses, prognoses and recommendations for treatment, a presentation and discussion of suitable blanks for the purpose of recording these data; qualifications essential for successful psycho-clinical work; the value of classification; the classification of children from the standpoints of intelligence, pedagogical retardation and acceleration, and psychological retardation and acceleration; the causes of retardation; the remainder of the course consists primarily of a treatment of the mental and physical natures of the feeble-minded and the unstable child with a discussion of such other factors as causes, prevalence, learning ability, social and racial significance, treatment, and disposal; a clinical study is made of several children for demonstration purposes.

107. MENTAL TESTS AND MEASUREMENTS—Winter and Summer Quarters. Four hours.

Purposes: (a) to familiarize the student with the various kinds of mental measurements and with the means and methods employed in making them; (b) to give the student training in the administration of the various kinds of mental tests; (c) to develop the right attitudes toward the use of mental tests; (d) to point out the social, educational, psychological, and vocational significance of mental tests; (e) to give the student some conception of the nature of the mental processes measured and of the principles of mental testing and test constructions; (f) to give partial preparation for the course in Clinical Psychology.

Topics: historical background for the development of mental testing; historical sketch of the development of mental tests; general classification of tests and measurements, including tests of inherited capacity, acquired ability and such miscellaneous tests as are designed to measure the will and temperament, the emotions, moral behavior and personality traits; intelligence tests as a means of vocational guidance; a dozen or more uses of intelligence tests in education; other uses of intelligence tests which have more or less educational significance such as differences in intelligence between the sexes, among races, communities and neighborhoods, the children from various occupational groups, and immigrants of different nationalities and between rural and city school children; the relation between intelligence on the one hand, and crime, physical characteristics, physical stigmata, and physical defects on the other; the hereditary nature of intelligence; the possibility of improving the intelligence through training, etc.; preparation for giving intelligence tests; the concept of intelligence; the principles of intelligence testing and intelligence test construction; the reliability and validity of intelligence tests.

\*108a. EDUCATIONAL TESTS AND MEASUREMENTS—Fourth year. Fall and Summer Quarters. Four hours. Required of students who are preparing to teach and supervise elementary school work including the junior high school.

Purposes: (a) to give the student an appreciation of the importance of accurate measurement in education; (b) to develop a realization of the inaccuracy of the traditional methods of measurement; (c) to give the student a working knowledge of the best instruments for measuring the outcomes of education; (d) to develop the right attitude toward the use of standardized tests.

Topics: historical sketch of the development of educational tests and measurements; the nature and classification of tests and measurements of school achievement; the general values of educational measurement; the importance of greater accuracy in educational measurement, and the requirements of greater accuracy; undesirable features of the traditional type of examination; the extent to which the traditional types of measurement should be replaced by standardized educational tests; the limitations of standardized educational tests; the newer types of examinations; their nature and value in comparison with the written examination; methods of improving the ordinary teacher's examination; discussion of the criteria for the selection of standardized educational tests and scales; instructions for giving educational tests and using quality scales; using the results of educational measurements for the purposes of classification and promotion, educational guidance, making prognoses and different degrees of diagnoses, and measuring the efficiency of schools and the methods and means of instruction employed by the schools; the use of tests as a teaching device; description and discussion of some of the standardized educational tests in each one of the elementary school subjects.

\*108b. EDUCATIONAL TESTS AND MEASUREMENTS—Fourth year. Spring and Summer Quarters. Four hours. Required of students who are preparing to teach and supervise in the senior high school.

Purposes: see Psychology 108a.

Topics: the content of the course differs from that of 108a mainly in the description and discussion of standardized tests. In 108a a study is made of the tests designed for the elementary school subjects, while in 108b a study is made of the tests designed for the subjects of the high school.

109. PSYCHO-CLINICAL PRACTICE—Fall Quarter. Two or more hours.

Purpose: to give the student practice in the kind of work treated in other courses, especially in Psychology 106. Another, practical purpose, is to improve the physical and mental conditions of the children of the Training School and remove hindrances to their school progress.

Work done: Children are examined for physical and mental defects, courses of treatment are prescribed or parents notified.

\*110. GENERAL PSYCHOLOGY—Fall and Summer Quarters. Fourth year. Four hours.

Purposes: (a) to give the student a fuller knowledge of the subject matter of the science of psychology, its problems, methods, concepts, and theories than is possible in any of the other courses offered by the department, in the hope that students may be better able to apply psychological principles to situations in which they may be helpful and have a better appreciation of the differences between psychology as a science and psychological quackery, and of the literature in other fields in which psychological concepts and theories appear or are alluded to; (b) to prepare students to teach psychology in colleges and high schools.

Topics: the content of the course is very similar to that which is found in most of the texts in general psychology. The following topics are discussed: the nature of psychology; its problems and methods; its relation to other sciences; the nature and kinds of reactions and their physiological basis; the nervous system; tendencies to reaction and their relation to motives and purposes; distinction between native and acquired traits; the nature of instincts and emotions; discussion of the various kinds of instincts and emotions; the nature of feeling; the elementary sensations of the different senses with some discussion of the nature of the sense-organs mediating them; the nature and laws of attention; the nature of intelligence; the nature of learning and habit formation; the nature of memory with some discussion of economy in memorizing; mental imagery; the nature and laws of association; the nature and kinds of perception, reasoning and imagination; the will and personality.

111. SPEECH DEFECTS—Fall Quarter, 1926. Two hours.

Purposes: to make the student realize the importance of correcting speech defects and to give instruction in the methods of correcting these defects.

Topics: classification of speech defects; description of the nature of the defects; their social, pedagogical, vocational, and personal handicaps; their prevalence; their causes and their treatment or cure; some time is devoted to classroom demonstration.

113. VOCATIONAL PSYCHOLOGY—Winter and Summer Quarters, 1927. Four hours.

Purposes: (a) to acquaint the student with the nature of individual variations in the capacity for and efficiency in various kinds of vocational work; and to point out the causes and effects of these variations and the methods of detecting them; (b) to familiarize the student with the fundamental problems of a psychological nature which confront both the employment manager and the vocational counsellor.

Topics: the field and history of vocational psychology; the difficulties and limitations of applied psychology; the aims and requirements of the course; individual differences as applied to the vocational field, their causes and effects; some treatment of statistical procedures; popular systems of vocational guidance and their fallacies; the value of the personal interview with the applicant and its psychological aspects; how to supplement the interview with tests; trade tests as developed during the recent war; tests of endurance, speed, motor control, dexterity, sensory, and perceptual capacity; uses and limitations of intelligence tests in vocational work; assisting children in self-appraisal and the choice of a suitable vocation.

212. STATISTICAL METHODS—Fall and Summer Quarters. Four hours.

Purposes: (a) to improve the student's ability to comprehend the meaning of educational and psychological literature; (b) to prepare him to make the necessary computations involved in mental and educational measurements; (c) to equip him with an important part of the knowledge necessary for the selection of the best mental and educational tests; (d) to prepare the student to make original investigations which involve a statistical technic.

Topics: the meaning of statistics and statistical methods; sketch of the development of the science of statistics; the value of statistics; common errors in the use and interpretation of statistics; the collection and classification of data; measures of central tendency such as the mode, median, and the arithmetic mean; measures of variability such as the quartile deviation, the mean deviation, and the standard deviation; measures of reliability; the application of measures of central tendency, variability; reliability to test construction and to the results of measurements in psychology and education; the measurement of relationship; the use of tabular and graphic methods.

213. CONFERENCE, SEMINAR AND LABORATORY COURSES—Any Quarter.  
Hours depending upon the amount of work done.

Purpose: to make it possible for the student to do, on problems which are of especial interest to him, more extensive and exhaustive work than was possible in the other courses in psychology.

Suggested topics: test construction; diagnostic testing; practice in giving tests and working up the results of tests; prognostic testing; intensive study of all the tests in one or more of the school subjects; problems in learning and the transfer of training; the relative effect of heredity and environment on individual differences; sex hygiene; retardation; delinquency; a study of tests of moral behavior, personality traits, the emotions, temperament and will; current psychological literature, etc.

214. ADVANCED EDUCATIONAL PSYCHOLOGY—Spring Quarter. Four hours.

\* Purposes: (a) to give the student a first hand acquaintance with the experimental literature in educational psychology; (b) to develop an appreciation of psychological methods and experimental technic; (c) to give a fuller knowledge of some of the topics which are the subject matter of the elementary courses in educational psychology.

Topics: a study of some of the psychological methods and experimental technic involved in the development of educational psychology; the nature and varieties of learning; animal learning; associative learning in man; analytical learning; selective thinking and reasoning; the nature of mental functions; learning curves; the improvement of mental functions; the amount, rate and limits of improvement; the factors and conditions of improvement; forgetting; the spread of improvement of the transfer of training; fatigue; curves of work; heredity; differences in individuals, families, sexes, and races.

215. ADVANCED EDUCATIONAL TESTS AND MEASUREMENTS—Any Quarter.  
Four hours.

Purposes: to give the student such advanced training in tests and measurements as to prepare him to construct and standardize tests, to make an intelligent selection of tests, to plan testing programs, to work up the results of measurements in a meaningful way and to give him a deeper insight into some of the problems which were briefly discussed in Psychology 108.

Topics: the nature of educational measurements; the preparation and validation of test material; the organization of test material; the preparation of instructions for giving tests; the technic of scaling tests and measuring instruments; practice in using the technic; the requirements of reliability and objectivity; the establishment of norms and their uses; planning testing programs; working up the results so as to realize the objectives of the program; how to make a critical study of a test.

## FINE ARTS

The Department of Fine Arts aims to prepare teachers to meet all the demands made upon regular grade teachers in public and private schools from the kindergarten up through the high school in all branches of art, and to train special students to act as departmental teachers and supervisors. There are several courses for special students of Fine Arts and Commercial Art. The courses are open as electives to all students of the College.

The department occupies the entire second floor of Guggenheim Hall and is well equipped. In addition to the regular equipment there is a museum of ceramics, original paintings, and reproductions of masterpieces.

### COURSE OF STUDY

Two or four-year course in Fine and Applied Arts.

In addition to the core subjects as listed on page 56, this department requires:

FIRST YEAR: Fine Arts 1, 2, 3, 3a, 4a, 14, 16, and Industrial Arts 10.

SECOND YEAR: Fine Arts 4b, 5, 6, 7, 9, 11, 12, 13, 17.

THIRD YEAR: Fine Arts 100, 101, 102, 104, 108, and six hours of art to be selected by the student.

FOURTH YEAR: Fine Arts 103, 104a, 105, and six hours of art to be selected by the student.

1. METHODS OF TEACHING FINE ARTS IN INTERMEDIATE GRADES AND JUNIOR HIGH SCHOOL—Winter Quarter. Four hours. Fee, 50 cents.

Freehand drawing, perspective, color, composition and design adapted to the needs of intermediate grades and junior high school. Mediums: pencil, charcoal, water color, chalk. Principles of teaching in connection with each unit of work.

2. METHODS OF TEACHING FINE ARTS IN PRIMARY GRADES—Fall and Spring Quarters. Four hours. Fee, 50 cents.

Freehand drawing, perspective, color, composition, and design adapted to the needs of the first four grades. Principles of teaching in connection with each unit of work.

3. FREEHAND DRAWING I.—Winter Quarter. Four hours.

Drawing in line, dark-and-light, and color. Study of the principles of composition and perspective. Reference texts: Dow's Composition, Norton's Perspective.

3a. ART STRUCTURE I.—Fall Quarter. Four hours.

An introductory course devoted to the study of basic principles in art structure. Problems in spacing, value relation, and color harmony to produce fine quality in line and pattern.

4a. ART STRUCTURE II.—Winter Quarter. Three hours.

Art structure the basis of the fine pattern. Exercises in design creating harmony through the use of structural principles. Application to textiles: print-block, tie-dye, batik, free brush stitchery.

4b. DESIGN—Each Quarter. Four hours.

Theory of design. Development of the principles of design through the study of line, mass and space relationship. The theory of color and its use in design.

5. Fall and Spring Quarters. Four hours.

A course to develop color harmony, composition and water color technique. Study of the various methods of water color painting. Appreciation of the work of the masters. Still-life and landscape suggest the subject matter for this course.

6. ART APPRECIATION—Fall and Winter Quarters. One hour.

The essential structural elements of fine arts are taken up in illustrated lectures. The purpose of the course is to increase the students' power to interpret, select, and enjoy fine art.

7. CONSTRUCTIVE DESIGN—Winter and Spring Quarters. Four hours.

Creative design and construction of problems in tooled leather, basketry, block-printing, batik, gesso. Decoration of common objects. Study of dyes and the uses of dye. Laboratory experience.

9. HISTORY OF ART—Fall Quarter. Three hours.

The evolution of art from the beginning of history; the growth of the great schools and their influences; the study of the important masters, their personalities as related to their art, and their work as an index to the time in which they lived; illustrated by a large collection of photographs and lantern slides. Lectures with related reading.

11. HISTORY OF ARCHITECTURE—Spring Quarter. One hour.

Illustrated lectures on the development of architecture; interpretations of famous buildings.

12. HOUSEHOLD ART DESIGN—Spring Quarter. Four hours.

Principles of design and color related to costumes and interior decoration. The execution of designs for interiors and costumes.

13. APPLIED ART FOR PRIMARY GRADES—Fall and Winter Quarters. Four hours. Fee, \$1.50.

This course includes paper construction, cutting, stick-printing, weaving, clay modeling, toy making, stitchery, table problems, design, and color. Methods of teaching in connection with each unit of work. The relation of art to the industries. This course is intended for teachers of the first four grades.

14. APPLIED ART FOR INTERMEDIATE AND GRAMMAR GRADES—Fall and Spring Quarters. Four hours. Fee, \$1.50.

A study of art in the industries. Application of design and color to paper construction, basketry, bookbinding; block-print, toys, clay modeling. Relation of art to other subjects of the curriculum.

16. FREEHAND DRAWING II.—Spring Quarter. Four hours.

An intensive course requiring accurate drawing and close values. Charcoal drawing from casts.

17. LETTERING AND POSTER COMPOSITION—Fall and Spring Quarters. Two hours.

The aim of this course is to familiarize the student with alphabets used in good advertisements and to give practice in color, design, and the rendering of objects in decorative form as required for poster work.

18. DRAWING AND DESIGN—Winter and Spring Quarters. Two hours.

The study of structural design and surface enrichment of furniture and crafts problems. This course is planned to meet the needs of manual training teachers.

100. SUPERVISION OF FINE ARTS EDUCATION—Spring Quarter. Two hours.

Supervision of art in public school systems; the planning of a course of study; methods of teaching; reading on related subjects.

101. DRAWING FROM THE FIGURE—Spring Quarter. Four hours.

Figure construction, composition. Study from the costumed model. Mediums: pencil, charcoal, color.

102. DESIGN AND LETTERING—Winter and Spring Quarters. Two or four hours..

Advanced lettering. Design considered in its relation to advertising art. Posters, cover designs, show cards, and other advertising problems are executed. Prerequisite, Art 17.

103. ART STRUCTURE III.—Fall and Winter Quarters. Four hours.

Advanced study of composition. Mediums: oil and water color. Execution of design for specific fine arts objects.

104. DESIGN AND COMPOSITION—Fall and Spring Quarters. Four hours.

Advanced design and color. Principles of design and ways of creating harmony in design and color.

105. OIL PAINTING I.—Winter and Spring Quarters. Four hours.

A study of methods used in developing a professional technic and an appreciation of the various types of painting; impressionism, neo-impressionism, post-impressionism, old masters, modern. Composition of still-life, landscape, and figure. Study of color properties, tone relationship.

108. POTTERY I.—Two or four hours. Fall and Winter Quarters. Fee, \$2.00.

Study and application of various processes in modeling, firing, and decorating clay objects such as bowls, vases, and tiles. The historical development of pottery making as a craft with emphasis on standards for judging the art value. Casting and cement pottery.

115. POTTERY II.—Two hours. Winter and Spring Quarters. Fee, \$2.00.

A course which stresses the decoration and glazing of pottery.

200. OIL PAINTING II.—Winter and Spring Quarters. Four hours.

An advanced course in composition and color. The work may be done outside of regular classes, to suit the convenience of the student. Regular criticisms will be given by the instructor in charge. The student must submit satisfactory evidence of having had sufficient preparation for this course.

202. RESEARCH IN FINE ARTS EDUCATION—Four hours.

This course is for students who wish to do research in connection with art subjects and problems of interest to art teachers.

## GEOLOGY, PHYSIOGRAPHY, AND GEOGRAPHY

The courses listed in this department are not review courses covering the material taught in the elementary schools. The subject matter included is treated in a professional manner with teaching as the objective.

Geography is a definite science in which the superstructure of commercial and human factors is built upon the underlying climatic and geologic causes. It is from this point of view that the work of the department is given.

### COURSE OF STUDY

Courses marked \* are given also by Extension.

Two years or four years for majors in Geology, Physiography, and Geography.

In addition to the core subjects as listed on page 56, this department requires:

FIRST YEAR: Geography 7, 8, Elementary Science 1, and History 10.

SECOND YEAR: Geography 4, 5, 12 and 52.

THIRD YEAR: Twelve hours of Geography selected by the student.

FOURTH YEAR: Eight hours of Geography selected by the student.

#### \*2. PHYSIOGRAPHY—Winter Quarter. Four hours.

The work in this course is divided between topographic work, which embraces a study of topographic and geologic maps, and, as far as possible, field trips to type regions. Four weeks of the twelve are devoted to the study of meteorology and the observation and prediction of weather phenomena. This course is a good foundation for much of the work given in elementary science and furnishes an excellent background for history and for other geography courses.

#### 4. REGIONAL GEOGRAPHY OF NORTH AMERICA—Fall Quarter. Four hours.

The continent will be studied from the standpoint of its geologic and climatic controls, and upon these will be built the economic and other human aspects. The continent will be divided regionally into climatic provinces which will be used as the starting point for the study of similar climatic provinces in other continents.

#### 5. GEOGRAPHY OF THE NEW EUROPE—Winter and Summer Quarters. Four hours.

We endeavor to understand Europe in the climatic and geologic terms of our own continent. The linguistic, economic, and other bases for the new countries of Europe will be studied. The work in this course is taken up from the social science point of view. No textbook is used because we wish to bring the subject matter up to the present time.

#### \*7. BUSINESS GEOGRAPHY—Winter Quarter. Four hours.

A course primarily designed for business majors. A study of the great product areas, the human factors in production, trade routes, reasons for location of cities, and the displacement of river by railway traffic are some of the chief topics studied. The human factors in production, for example the varying potentialities of races, health and social tradition, will also be dwelt upon.

#### 8. HUMAN GEOGRAPHY—Fall Quarter. Four hours.

The great subdivisions of mankind from the racial standpoint will be taken up, with a study of their physical and mental characteristics. The relation of man to his environment, as, for instance, desert, tropical, forest, etc., will be stressed.

#### 12. METHODS IN INTERMEDIATE GEOGRAPHY—Winter and Summer Quarters. Four hours.

This course is a lecture course in which the general principles of geography are discussed. Field trips and museum work are a part of the course. The endeavor is to give a course in the methods of presenting geography and at the same time to make the subject enough of a content course so that intermediate majors who wish to get a brief survey of the subject matter and the methods of presenting it may have a chance to do so.



14. JUNIOR HIGH SCHOOL METHODS—Spring and Summer Quarters. Four hours.

A course in subject matter and method designed for junior high majors. The course involves the treatment of the subject matter from the social science point of view. This is a method course in which method is presented, not alone, but as a part of the subject matter.

52. GEOGRAPHY OF SOUTH AMERICA—Spring Quarter. Four hours.

A course on the racial, economic, and political aspects of South American geography. After a brief general survey of the continent, the students are assigned special topics which they present to the class in the form of an illustrated lecture. An excellent megopticon lantern makes it possible to carry on this without any interference with class routine. Not given in 1925.

53. GEOGRAPHY OF ASIA—Spring Quarter. Four hours.

A course on Asia following the same line as the course on South America, Geog. 52. In the case of Asia the social and racial geographies are stressed while in South America more emphasis is placed on the commercial aspects.

100. GEOLOGY—Fall Quarter. Four hours.

Not so much a textbook course as an endeavor to get the kind of geology that will enable our Colorado teacher from mountain and plain to understand her environment in geologic terms and to incorporate this understanding in her nature study and geography teaching.

\*103. CLIMATOLOGY—Spring Quarter. Four hours.

The climates of the world with particular reference to their geographic and historic influences will be the primary elements studied in this course. The basis for dividing the world into climatic provinces—Oregonian, Californian, Canadian, Nevadan, etc., will be taken up in detail.

\*113. MATHEMATICAL GEOGRAPHY—Fall Quarter. Three hours.

A recitation course designed to cover such problems as proofs of the earth's rotation and revolution, the tides, the international date line, standard time belts, calendars, etc.

\*122. BIOGEOGRAPHY—Spring Quarter. Four hours.

The geographic distribution of plants and animals, as determined by climate and soil. The great world plant provinces—as, for example, the selvas hot deserts and taiga tundra are taken up. Animal life in so far as it takes on peculiar forms or habits of life in these varying habitats will be considered. The effect of island isolation on animal and plant forms will be discussed.

130. THE ISLANDS OF THE SEA—Fall Quarter. One hour.

A study of the various ways islands are formed as well as their relation to the continents in a biologic and social sense. Geographies often omit a study of outlying islands because they are chiefly concerned with the continents. This course is designed to fill this gap in the student's geographic knowledge—a gap that needs to be filled because of the strategic and historic importance of many island groups.

150. GEOGRAPHY OF COLORADO—Winter and Summer Quarters. Four hours.

A lecture course on Colorado geography touching the physiographic features of the state, the influence of the geologic past upon these features, weather phases and climate of Colorado, the main geographic controls in animal and plant distribution, Colorado man, past and present, and his distribution, the industries of the state, and the geographic controls of industry.

## HISTORY AND POLITICAL SCIENCE

This department offers courses in the two fields, history and political science, of such nature that they meet the needs of teachers in elementary and high schools. The courses are arranged to cover the materials and methods which are most helpful in presenting the subjects of history, civics and the social sciences.

In nearly every phase of school work the teacher utilizes the subject matter of history, either directly in teaching or as supplementary material. History furnishes the background for an appreciation of the varied interests of the school; it is the basis of much of our thinking; and more and more it is assuming a prominent place in our daily experiences.

The increasing interest in civics and citizenship is marked. All phases of governmental activity are growing in importance. These features of our experience are reflected in the school programs. The courses offered in this field are of practical value to teachers.

#### COURSE OF STUDY

Courses marked \* are given also by Extension.

In addition to the core subjects listed on page 56, this department requires:

**FIRST YEAR:** Political Science 1, History 27, and one course selected from each of the following groups: (1) History 1 or 10; (2) History 2, 3, or 4.

**SECOND YEAR:** History 5, 6, and 13; Political Science 2.

**THIRD YEAR:** Twelve hours of History and Political Science selected by the student.

**FOURTH YEAR:** Twelve hours of History and Political Science selected by the student.

In addition to the above at least twelve hours of Sociology, Economics, and Geography should be selected by the student. This work may be distributed over the four years.

Students who plan to go on with graduate work are advised to acquire a good reading knowledge of French before completing their work for the bachelor's degree. All students are advised so to arrange their programs that they will have other subjects, besides their major that they can teach, if required to do so.

#### HISTORY

\*1. **AMERICAN HISTORY, 1700-1800**—Fall and Spring Quarters. Four hours.

Social and economic conditions at the close of the first century of colonization; types of colonial government; relations with the mother country; the development of self government; conquest of French North America; new schemes of imperial control; causes of the Revolution; foreign relations; finances; the loyalists; formation of a permanent government; establishing the new government.

\*2. **AMERICAN HISTORY, NATIONAL DEVELOPMENT, 1820-1865**—Winter Quarter. Four hours.

Consolidation of the new West; the tariff controversy; financial readjustment; removal of the Indians beyond the Mississippi; westward expansion; Jacksonian democracy; the slavery controversy; secession and civil war; saving the Union; foreign relations; economics of the Civil War.

\*3. **RECONSTRUCTION AND THE NEW UNITED STATES**—Winter and Spring Quarters. Four hours.

Problems of reconstruction; radical ideas in Congress; the negro problem in the South; carpet bag rule; rebuilding of political parties; railroad and commercial expansion; the United States as a world power; the new era of industrial consolidation; regulating industry; Roosevelt and Wilson Americanism; the World War.

4. **WESTERN AMERICAN HISTORY**—Winter Quarter. Four hours.

The westward movement as an historical process. Causes which led to migration from the eastern states. The occupation of the region between the Alleghenies and the Mississippi. The land policy of the United States. Reaction of the West upon national policies. Expansion into Florida, Louisiana, and the Oregon country. Acquisition of Texas and war with Mexico. Discovery of gold in California and Colorado and the resultant gold rush. Settlement of Utah, and special features of the history of Colorado. Coming of the new west and passing of the old frontier conditions.

**\*5. EARLY MODERN EUROPE—Fall Quarter. Four hours.**

Phases of the later Mediaeval period that vitally affected the development of the nations of western Europe. Development of important nations. The Reformation with its results upon both Catholic and Protestant churches. The new spirit of education and missionary zeal. Beginning of the expansion of European nations to other continents and the growth of colonial empires. National and religious rivalry in the seventeenth and eighteenth centuries. Growth of democratic ideas of government. Causes leading to the French Revolution. The revolutionary and Napoleonic eras in Europe with their resultant political, social, and economic changes.

**\*6. MODERN EUROPEAN HISTORY—Winter Quarter. Four hours.**

This is a continuation of Course 5. The Congress of Vienna and its attempt to restore Europe to what it was before the French Revolution. The new balance of powers. Continued growth of democracy. Social and political results of the spread of the industrial revolution. New spirit of radical socialism. Conflict between the new and the old ideas of science and religion. Continued growth of political democracy. Rise of Russia, Prussia, and Italy as important national states. Renewed colonial expansion, and the national rivalries that resulted from it. The Balkans and their problems. Break-up of the balance of power. New alliances. The World War. Versailles and since.

**\*10. SOCIAL AND INDUSTRIAL HISTORY OF THE UNITED STATES—Fall and Spring Quarters. Four hours.**

The current social and industrial conditions in the United States will be traced from their beginnings; European conditions which furnish traceable influences will be considered. Some of the subjects are the natural resources; the influence of cheap land; the effect of invention, machinery, and science; the development of agriculture and manufacture; the rise of the great industries; capitalism, business combination, and labor organization; the efforts of labor to better conditions.

**\*13. THE TEACHING OF HISTORY AND CIVICS IN THE ELEMENTARY SCHOOL—Spring Quarter. Three hours.**

The development of history instruction in the schools; the aims and values of history instruction; the courses of study; methods and materials for the several grades; testing results; school problems related to history, such as, the place of history in the curriculum, and the relation of history to other subjects. Prerequisite, at least one subject matter course in American History.

**27. CONTEMPORARY HISTORY—Fall Quarter. Two hours.**

This course deals with the world problems that have developed since the World War. Topics are selected that are of current interest and studied in the light of their historical development. These topics vary from year to year. Each year brings in some new problems that are pressing for solution and sees others eliminated that have temporarily been adjusted. Topics are selected from events in the United States, in South America, in Asia, and in Europe that touch the Americans in some important way. Much use will be made of current periodicals.

**101. COMMERCIAL AND FINANCIAL HISTORY OF THE UNITED STATES—Spring Quarter. Four hours.**

English commerce, its ideals, its regulation, and its effect upon colonial development on the continent of America. Chief characteristics of colonial commerce. Effect of the Revolution upon American trade. Encouragement of commerce by the new national government. Currency and banking reforms and their effect upon the trade of the United States. Effect of foreign relations upon the growth of shipping, foreign trade, and domestic commerce. The Civil War and its effect upon manufacturing, foreign commerce, currency and banking, and our carrying trade. Consolidation and government supervision. New adjustments that came with the World War and the commercial consequences that have followed. This course is especially designed to meet the needs of those who are expecting to teach commercial courses.

**\*102. ANCIENT SOCIAL HISTORY—Four hours. Not given 1925-1926.**

This is a survey of the development of society among ancient peoples. Examples will be chosen from the social and legal codes of the Hebrews, the Assyrians, and the Egyptians. Special attention will be given to houses, temples, religious ideas, clothing, furniture, social customs, slavery, and the position of women in the above nations and in Greece and Rome. The Greek colonies. Reasons for a conflict between Greece and Persia. Athenian and Spartan civilization. Social and educational conditions at Athens at the time of Pericles. The Alexandrian conquests and the spread of Greek civilization and culture. The post-Alexandrian Greek culture. The rise of Rome. Its control over the Mediterranean regions. Occupations, religious ideas, effect of slavery, methods of taxation, roads, commerce, marriage, divorce, and general social life of the early Roman Empire. Some of the causes of national decay. This course deals especially with the concrete material that is frequently used in the grades. It also covers the material that high school instructors find most difficult to teach in the courses in Ancient History and World History.

104. THE LITERATURE OF AMERICAN HISTORY—Summer Quarter, 1925, Spring Quarter, 1926. Two hours.

A survey of the materials available for the study of American History in the public schools; the chief collections of source materials, the more important general accounts; biography; bibliographical aids; special and local histories; textbooks and their authors; the selection of a good working library.

\*107. THE BRITISH EMPIRE—Four hours. Not given 1925-1926.

The acquisition of the great colonies; commercial relations prior to 1800; development of self government; missionary movements of the nineteenth century; secret diplomacy and expansion in Asia and Africa; India; the Empire in Africa; the Empire during the World War; efforts to bring about improved imperial organization.

108. THE AMERICAN REVOLUTION—Winter Quarter. Four hours.

This course will include a careful study of the relationship—governmental, social, economic, and political—existing between the American Colonies and the British government; the development of self government; the beginning of a permanent Indian policy; judicial procedure and the judicial disallowance of colonial legislation; the commercial legislation affecting the colonies; colonial and British ideas of representation; the causes of the Revolution. Much use will be made of source materials.

109. SECESSION, CIVIL WAR, AND RECONSTRUCTION. 1850-1870—Summer Quarter, 1925. Winter Quarter, 1926. Four hours.

This is a detailed library course. The general conditions of slave life and the slavery system. The great compromises made in 1850. Operation of the Fugitive slave law. Effect of the slavery agitation upon political parties. Repeal of the Missouri Compromise. The Dred Scott Decision and its effect upon political ideas. Lecomptonism and the fight of Douglas to retain his leadership in the Democratic party. The election of 1860. Secession. Problems of the war; getting a fleet, foreign relations, financial troubles, emancipation, developing our man power, effects of the blockade. Conditions in the south after the war. The ideas of freedom among the negroes. Problems of reconstruction. State labor legislation in the South. Conflict between the executive and Congress. Carpet bag rule and what it meant. Actual processes of reconstruction. Resumption of white supremacy in the governments of the southern states.

\*116. SPANISH-AMERICAN HISTORY—Four hours. Not given 1925-1926.

A course designed to furnish a background for understanding the growing relations between the United States and the republics to the south. In tracing the experiences of the Latin-American people, attention is given to the work of Spain, to the securing of independence, to the social, political, and economic growth, to international relations and the Monroe Doctrine, to Panama, and the purchase of the Danish West Indies, and to the new Pan-Americanism.

117. THE TEACHING OF HISTORY AND CIVICS IN HIGH SCHOOLS—Fall Quarter. Three hours.

The development of instruction in these subjects in high school; their place in the high school program; aims and values of instruction; problems connected with the teaching of these subjects; the relation between history and civics teaching. Modern courses of study; evaluating results. Prerequisite, one course in History.

\*124. HISTORY OF THE FAR EAST—Spring Quarter. Four hours.

This course is designed to enable teachers to understand the problems of the Far East. It includes a survey of the modern history of Japan and China; the growth of western ideas; the development of Japan as a first class power; the conflict of interests in China; Japan's ambitions and their relation to our own interests. The development of self government in China and its difficulties. It also includes a survey of British occupation in India; the relation of the British to the native races; economic, industrial, and educational reforms in India and their results; the growth of self government; and the national aspirations of the people of India. Throughout this course the relation of these various problems to the United States is emphasized.

215. RESEARCH IN HISTORY—Offered on application.

Students doing graduate work in the fields of History or Political Science may arrange for time and topics as may be desired. Research problems of interest to such students both in the field of subject matter and methods of instruction will be taken up for consideration.

## POLITICAL SCIENCE

**\*1. GOVERNMENT OF THE UNITED STATES—Fall Quarter. Four hours.**

A detailed study of the origin of the federal government; the selection and powers of the president; congress and its relations to the other departments; the federal judiciary; conduct of elections; the actual work of the national government; foreign relations; the preservation of peace and the enforcement of law; the police power and social legislation; relations to the state and local governments.

**\*2. STATE GOVERNMENT—Winter Quarter. Four hours.**

The relation of state government to the national government. Common features of state constitutions. The field of state legislation. Operation of the state government and its importance to the individual. The enforcement of laws. Local government and its significance to the individual. State and local finances. Popular participation in governmental activities. Sources of information for a study of state and local government. Plans for making state and local government more efficient. Colorado government will be used constantly for illustrative purposes.

**3. MUNICIPAL GOVERNMENT—Spring Quarter. Three hours.**

The growth of cities; their relation to trade and industry; state control over cities; the development of the American city; services to the people; city planning; the commission form of government; the city manager; other recent movements.

**101. AMERICAN DIPLOMACY—Winter Quarter. Four hours.**

Foreign relations under the Federalists; establishment of an American foreign policy; Jefferson and the acquisition of Louisiana; arbitration of boundary disputes; the Monroe Doctrine; the open door policy; cooperation with other powers in the settling of international problems in Asia, Africa, and Europe; control of immigration; the Hague Conferences; diplomatic organization and procedure; the recognition of new governments; the World Court; the League of Nations; the Washington Conference.

**\*102. INTERNATIONAL RELATIONS—Fall Quarter. Four hours.**

In this course there is a study of the principles governing the relations of civilized nations, which includes the problems of citizenship, the position of aliens and of alien enemies, the rights of nations with respect to war, neutrality, and intervention, and the regard for treaties. American ideals, Pan-Americanism, and the League of Nations.

**103. POLITICAL SCIENCE—Four hours. Not offered, 1925-1926.**

This is an introduction to the principles of the various political organizations. The theories and forms of government, constitutions, and ideals of citizenship are included. The course should be of special interest and value as explanatory of the current political thought relative to democracy and to the radicalism that is expressed in bolshevism.

## HOME ECONOMICS

The Home Economics Course not only trains teachers of Home Economics, but also trains homemakers in the selection, use and care of materials for the home. It has as an ideal the establishment of sane standards of living, including the economic, social and esthetic sides of life.

It is now the policy of this department to recommend for elementary school positions those students who have had the work in high school and two years of creditable college work in the subject. This seems advisable because so many students are dependent on their own efforts to supplement scholarships or assistance given by parents.

Students entering the Home Economics department without previous training in the high school will be required to take H. S. 1b and H. S. 2b before any credit is given.

## COURSE OF STUDY

Courses marked \* are given also by Extension.

In addition to the core subjects listed on page 56, this department requires:

FIRST YEAR: H. A. 1, H. A. 3, H. A. 4, and H. A. 4a; Home Ec. Ed. 1; Chem. 1, Chem. 2, Chem. 3; Bact. 1.

SECOND YEAR: H. A. 5, H. A. 6, H. Sc. 1, H. Sc. 2, H. Sc. 3 and H. Sc. 7; Eng. 15 or Eng. 16.

THIRD YEAR: Chem. 108, Chem. 109, Chem. 112; H. A. 102, H. A. 108, H. A. 109; H. Sc. 104.

FOURTH YEAR: H. A. 112; H. Sc. 103, H. Sc. 105, H. Sc. 106, H. Sc. 108; Home Ec. Ed. 111, Home Ec. 101.

## HOUSEHOLD SCIENCE

\*1a. FOODS AND COOKERY—Fall and Summer Quarters. Four hours. Fee, \$3.00.

Household Science 1, 2 and 3 are planned as consecutive courses. The courses include the study of foods from the standpoints of production, manufacture, composition, nutritive value, and cost. Food legislation is considered. Field trips are made to local food factories. A survey is made of the principles of cookery and their applications in the preparation of numerous typical dishes. Well balanced meals are planned and served at different costs per capita. Emphasis is placed upon the nutritive needs of the various members of the family group.

1b. A similar course adapted to students who have had no previous training in high school.

2. FOODS AND COOKERY—Winter Quarter. Four hours. Fee \$3.00. A continuation of 1a.

3. FOODS AND COOKERY—Spring and Summer Quarters. Four hours. Fee, \$3.50. A continuation of H. Sc. 2.

4. ELEMENTARY NUTRITION—Fall Quarter. Four hours.

A course designed for non-majors. No chemistry required. The fundamental principles of food selection in relation to body needs are considered in this course.

\*7. HOUSEHOLD MANAGEMENT—Every Quarter. Lecture course. Two hours. Practical course—Residence in cottage one-half term. Two hours. Required of all graduates. Prerequisites—Food and Cookery 1a, 2a, and 3.

A course for housekeepers and teachers of the subject by means of class discussion and related practical work in the cottage, applying scientific and economic principles to the problems of the modern housewife. Such topics as the following are discussed from the ideal and practical standpoint: the organization and administration of the household; apportionment of time; motion studies as applied to household activities; menus; household efficiency; the budget and its apportionment; household accounts; household service; home life and its standards.

102. HISTORY OF COOKERY—Winter Quarter. Two hours.

An historical study of the development of equipment, cooking processes and food habits from primitive to modern times. The causes of change in food habits and methods of cooking.

103. DIETETICS—Fall and Summer Quarters. Four hours. Fee, \$3.00.

The completion of chemistry is prerequisite. The course deals with the principles which govern the choice of food under varying conditions such as age, occupation, health and disease. Diets are planned and prepared to meet the needs of individuals from infancy to old age, also family diets which fulfill the requirements of each member with due consideration as to cost.

104a. DEMONSTRATION COOKERY—Spring and Summer Quarters. Four hours. Fee \$3.50.

This course presupposes at least three quarters of previous training in cookery. It is planned to broaden the students' experience by affording a greater range of applications; to increase skill and confidence and to fit students to do community work as demonstrators.

104b. CATERING—Spring and Summer Quarters. Three hours. Fee \$1.00.

105a. CHILD CARE—Winter and Summer Quarters. Two hours.

The subject matter of the course includes a study of prenatal care; the physical care of children from infancy through adolescence. The work of various agencies which are promoting child welfare and methods of organizing and conducting such work in schools and communities are included.

105b. DIETS IN DISEASE—Winter and Summer Quarters. Two hours. Fee \$1.50.

A study of nutrition as affected by disease. Diets for typical diseases are planned and prepared. Prerequisite: H. Sc. 103, Dietetics.

106. HOME NURSING—Fall and Summer Quarters. Four hours. Fee \$1.00.

Care of sick room and patient in the home. Study of contagious diseases, care of helpless patient, care of children and children's diseases. Making home-made articles for nursing. The diet of patient, preparing food for tray for different diseases. How to make the trays attractive to children as well as adults. Bandaging and First Aid.

108. HOUSING AND HOUSE SANITATION—Spring and Summer Quarters. Four hours.

This course deals with the housing problem as it relates to morals, manners and health. Some time will be given to modern ideals of comfort and cleanliness. The effect of the automobile on housing and housekeeping is taken note of. Methods of control of housing and recent housing laws will be studied.

200. SEMINAR.

Graduate work may be arranged for in this course, dependent on previous training. The credit is to be agreed on when the time to be spent on the work is determined.

## HOUSEHOLD ARTS

1. TEXTILES—Fall and Summer Quarters. Three hours.

The study of the four chief fibers used in household fabrics. The chief purpose of the course is to develop good taste and correct judgment in the consumer. Methods of teaching the subject are emphasized. This course is prerequisite to H. A. 6.

3a. GARMENT MAKING—Fall Quarter. Three hours.

The fundamentals of plain sewing taught as they should be presented in high school. This course is for students who have had no sewing in high school. Under-garments, middie and child's dress are completed in the course. The study of textiles should precede this course or should be taken during the same quarter.

3b. GARMENT MAKING—Fall Quarter. Three hours.

In methods much the same as H. A. 3a but adapted to the needs of students who have had previous training. In this the technic of sewing is stressed and in addition methods of teaching, the work as developed in the elementary school. Outlines of course suited to each grade. The study of the individual child and the adapting of courses to community.

4. MILLINERY—Fall, Spring, and Summer Quarters. Four hours. Fee \$2.50.

This course includes a discussion of practical and artistic principles of millinery; designing and modeling hats of various types in paper and crinoline; making of willow, wire, and buckram frames; the use of velvet, silk, and straw in hat making.

\*5. DRAFTING AND PATTERN DESIGNING—Winter and Summer Quarters. Four hours. Fee 50c.

This course is prerequisite to H. A. 6. The course includes drafting of all fundamental patterns to accurate measurements of the figure. Designing original patterns that may be drafted to individual measurements. Modeling patterns with tissue paper on the figure. These patterns are used in H. A. 6.

6. ELEMENTARY DRESSMAKING—Spring Quarter. Four hours.

This course is primarily for majors who have had all their work here. The selection and making of an appropriate dress for afternoon and street wear. Made in linen or cotton fabric. Designing and making a sport outfit, wool skirt and appropriate blouse. This is for majors only. The patterns made in H. A. 5 are used in this class. A similar course is offered for majors who have had their preparatory work elsewhere.

8. DRESSMAKING.

A similar course to H. A. 6, offered to others than majors. This course is arranged to meet the increasing demands of residents in Greeley, and relatives of students who come to Greeley and wish to take special college classes. The garments made in this class are largely adapted to the needs of the individual.

102. APPLIED DESIGN—Winter and Summer Quarters. Four hours.

The study of color and design as applied to household fabrics, such as bed and table linen, curtains, etc. The study of different kinds of thread used in this work; proportion and balance in design. The application and design in crochet, tatting, knitting, cross-stitching, French embroidery, Roman cut work. The designing and working out of monograms and applying to household linen. The application of the fancy stitches to problems suited to each of the grades.

108. COSTUME DESIGN—Fall and Summer Quarters. Four hours. Fee 50c.

This is a study of art principles as applied to the standard and the individual figure. The fashion figure is used as a means of analyzing defects in the lines of individuals. The best lines found in historic dress are copied and modified to meet the needs of the times. Work in color is adapted to specific needs of the students. This course is required of Senior College majors in this department.

109. ADVANCED DRESSMAKING—Winter Quarter. Four hours. Fee 50c.

In this course we put into practice the accumulated experience of all the preceding household arts courses. It is planned so as to increase confidence by the use of difficult problems both in quality of materials used, and in finishes and decoration. A dress of fine wool or silk material is made. The work is almost entirely hand work.

110. ADVANCED TEXTILES—Winter Quarter. Two hours.

In addition to the lectures given in this course two hours in Textile Chemistry is offered. A fee of \$1.50 is charged when the Chemistry is taken.

The lecture course includes a study of fine laces, tapestry, embroideries, and oriental rugs.

112. HOME DECORATION—Spring and Summer Quarters. Four hours.

The application of art principles to interior decoration. This course is studied from the standpoint of the artistic and practical side of the home. The study of the home as a unit; color harmony; line and proportion. Floor and wall finishing and covering. Window decoration, shades, curtains and draperies. The study of furniture and how to buy wisely. The room as a unit, placing of furniture to create balance. Selection of suitable pictures and how to hang them.

200. SEMINAR.

This work is to be arranged for graduate students who come prepared to take up some specific line of experiment or research. The credit will be determined by the time spent in the work.

HOME ECONOMICS ED. 1—Winter and Spring Quarters. Three hours.

The methods, subject matter and equipment used in teaching household science, and household arts in the elementary grades.

HOME ECONOMICS ED. 111—Fall and Summer Quarters. Four hours.

The methods, subject matter, equipment, texts, reference books and other sources of help every teacher of home economics should be familiar with for secondary work.



HOME ECONOMICS 101. THE HOME—Fall and Summer Quarters. Two hours.

This course gives some of the problems that relate to every individual who expects to have a home or share in making better homes. "New Homes for Old" is its motto. Text: "Successful Family Life on a Moderate Income," Abel.

## HYGIENE AND PHYSICAL EDUCATION

One aim of education is vigorous aggressive health. This department's function is to assist in the realization of this aim through the following measures:

1. Health examinations of all students and specific hygienic instruction based on the findings in each case.
2. Personal health conferences with medical advisers for the purpose of assisting students to form wise health habits and correct faulty habits.
3. Promotion of health through directed physical activity, and through instruction in informational hygiene.

The department also provides a four year major course for those preparing for positions as teachers and supervisors of physical education or as athletic coaches. As more than one-half of all the states have recently passed compulsory physical education laws, requiring definite programs of physical education for all school children, the demand for trained teachers in this field exceeds the present supply.

The department is equipped with the necessary examination and class rooms, instructional apparatus, gymnasia, athletic fields, and playgrounds to accomplish the functions outlined above.

All first and second year students are required to take an active (exercise) course each quarter in residence. Where physical disability makes it inadvisable to participate in the regularly organized class activities, work in a corrective class, or other special regimen, depending on the needs of the student, is prescribed. *No one is excused from this requirement.*

A regulation gymnasium uniform is required for the activity courses. Satisfactory work cannot be done in regular street or school clothes. Students should not purchase suits before coming to Greeley, as they may not conform with the regulation uniform.

A four-year course is offered for which the Bachelor of Arts degree is granted. Students expecting to qualify for the life certificate to teach in the elementary schools of Colorado at the end of two years should major in primary and kindergarten or intermediate grade work and minor in Physical Education. If the life certificate is desired only upon the completion of the four year course, a major in physical education may be carried during the entire four years. The following tables outline the courses offered.

The courses listed below are divided into:

- I. Informational Courses and
- II. Practical or Activity Courses.

Of the courses in the informational group (Group I), Hyg. I is required of all students during the first year, and Hyg. 108 during the senior college years. Other courses in this group are intended primarily for physical education majors, but may be elected by students in other departments.

The activity courses (Group II) will satisfy the general college requirements for physical education.

## COURSE OF STUDY

In addition to the core subjects listed on page 56, the following courses are required of students expecting to graduate with physical education as a major.

## FOR WOMEN MAJORING IN PHYSICAL EDUCATION

FIRST YEAR: Hyg. and P. E. 5, P. E. 50a, 51, 53, 53a, 56, 57, 62, Hyg. 1, Lib. Sci. 1.

SECOND YEAR: Hyg. and P. E. 2, 2a, 12, P. E. 64a, 64b, 64c, Hyg. 108, Ed. Psych. 1, Mus. 14, H. E. 4.

THIRD YEAR: Hyg. and P. E. 111, 113, P. E. 150, 158, 162, Anthropol. 100.

FOURTH YEAR: Hyg. and P. E. 101, 102, 103, 106, P. E. 164, 167. Ed. Psych. 107, Biot. 101.

## FOR MEN MAJORING IN PHYSICAL EDUCATION

FIRST YEAR: Hyg. and P. E. 5, 13, P. E. 52, 66, (3 quarters); Hyg. 1, Lib. Sci. 1.

SECOND YEAR: Hyg. and P. E. 2, 2a, 66a, P. E. 55, 66 or 67, (3 quarters); Ed. Psych. 1.

THIRD YEAR: Hyg. and P. E. 108, 113, 165, 166, P. E. 162, Anthropol. 100 or Soc. 130. Ed. Psych. 107.

FOURTH YEAR: Hyg. and P. E. 101, 102, 103, 168, 169, P. E. 66 (3 quarters); Biot. 101, Eng. 100.

## GROUP I—INFORMATIONAL COURSE

1. INDIVIDUAL AND SOCIAL HYGIENE—Each Quarter. Three periods. Three hours

A first year course covering some of the essentials of personal and community hygiene. The course will aim to secure better personal health habits; give an outline of some of the broader fundamental aspects of public or social hygiene; and indicate some of the aims and methods of teaching hygiene in the public schools.

✓ 2. ANATOMY—Fall Quarter. Four periods. Four hours.

General anatomy with special emphasis upon the osteology, arthrology and myology. Use is made of the skeleton, mannikin, and anatomical atlases with some dissections and demonstrations upon the cat or dog.

✓ 2a. APPLIED ANATOMY AND KINESIOLOGY—Winter Quarter. Three periods. Three hours.

A continuation of No. 2 with special emphasis upon the action of muscles in exercises of different kinds. Bowen and McKenzie's Applied Anatomy and Kinesiology is the text and this is supplemented by references to other standard authorities.

✓ 5. HISTORY OF PHYSICAL EDUCATION—Spring Quarter. Two periods. Two hours.

The place given to physical education in the life of different nations. The beginning of modern physical education; rise of the play and recreation movement; recent developments and status of physical education in public schools, colleges and universities.

9. CHILD AND SCHOOL HYGIENE—Winter Quarter. Four periods. Four hours.

A course in Child and Educational Hygiene. (See Educational Psychology 1.)

✓ 12. FIRST AID—Winter and Summer Quarters. Two periods. Two hours.

A course covering the usual subject matter on the right thing to do.

✓ 101. PHYSIOLOGY—Fall Quarter. Three periods. Three hours.

Lectures, demonstrations and recitations from text and general references on human physiology. A course for physical education students but open to others who expect to teach physiology.

✓102. **PHYSIOLOGY OF EXERCISE**—Winter Quarter. Three periods. Three hours.

A continuation of No. 101 with special emphasis on muscle-nerve physiology and the effects of muscular activity upon the various organs of the body.

✓103. **ANTHROPOMETRY AND PHYSICAL EXAMINATIONS**—Winter Quarter. Fourth year. Four periods. Four hours.

A lecture, recitation, practice course. Principles and methods of making physical measurements, the determination of norms for different age groups; application of principles to physical education problems; the detection and correction of common physical defects; signs and symptoms of different infections. Required of Physical Education majors; open to others who have some biology.

105. **REMEDIAL GYMNASTICS**—Spring Quarter. Two periods. Two hours.

A course covering application of remedial, corrective, or individual gymnastics to different type cases. Theory and practice. Prerequisites P. E. 2 and 2a.

106. **RESEARCH IN PHYSICAL EDUCATION**—Fall Quarter. Five hours.

Before graduation, senior students select a problem for research, the outcome of which must be an acceptable essay or thesis. Required for graduation with physical education as a major subject.

108. **EDUCATIONAL HYGIENE**—Each Quarter. Three periods. Two hours.

A senior college course dealing with the problems of health instruction and health training of children. A general knowledge of hygiene is assumed. The course will deal primarily with the problems of effective instruction during the progress of the child through the school.

110. **OCCUPATIONAL HYGIENE**—Two periods. Two hours.

Gives chief consideration to the health hazards of different occupations and the means of prevention. Has informational and practical value to the teacher who desires to be informed on health subjects.

✓111. **PUBLIC HEALTH**—Three periods. Three hours.

This course deals with community, state, national, and international health organizations and problems. An informational course of importance to all teachers. Required of Physical Education majors during third or fourth year.

✓113. **ADMINISTRATION OF PHYSICAL EDUCATION**—Fall Quarter. Two periods. Two hours.

The general organization and administration of a department of physical education and athletics. Aims, types of activities and courses; personnel; relation to medical advisory work and health service; athletics, and like topics.

## GROUP II. EXERCISE COURSES

Students who are registering for the first time are required to enroll in some physical exercise course each quarter during the first two years. Courses numbered under 100 in general are the activity courses, fulfilling this requirement.

✓50a. **GYMNASTIC DANCING**—Spring Quarter. Three periods. One hour. No prerequisites.

A course for Physical Education students.

✓51. **LIGHT GYMNASTICS (WOMEN)**—Winter Quarter. Three periods. One hour.

✓53. **GYMNASTICS**—Fall Quarter. Five periods. Two hours.

A major activity and reference course for women during the first year.

54. **GYMNASTICS**—Winter Quarter. Five periods. Two hours.

A continuation of No. 53. For women major students in Physical Education.

✓ 56. SINGING GAMES AND ELEMENTARY FOLK DANCING—Either half or full quarter. Three periods. One-half or one hour.

A course for those desiring rhythmic material for the lower grades.

✓ 57. FOLK AND NATIONAL DANCES—Each Quarter. Three periods. One hour.

A selected list of folk and national dances suitable for school and playground use, especially for upper grade and high school groups.

58. ESTHETIC DANCING—Fall, Winter and Summer Quarters. Three periods.

Technic of the dance; the development of bodily co-ordination and rhythmic responsiveness are the aims of the course.

59. CLASSICAL AND NATURAL DANCING—Winter Quarter. Three periods. One hour. Advanced and technic and classical dances. Prerequisite course 58.

60. INTERPRETIVE AND NATURAL DANCING—Spring Quarter. Three periods. One hour. Prerequisite course 59.

61. SCHOOL GYMNASTICS—Each Quarter. Three periods. One hour.

Class organization and conduct, marching, free, dumb-bell, wand, and Indian club drills, principles of selection and arrangement of exercises, practice in organizing and leading drills, working out daily programs for different grades under school conditions.

✓ 62. PLAYS AND GAMES—Each Quarter. Three periods. One hour.

✓ 64. ATHLETICS FOR WOMEN—Each Quarter. Three periods. One hour.  
A course in group and team games. Play material suitable for upper grades and high schools will be presented.

65. RECREATION COURSE—Summer Quarter. Three periods, each half quarter. One-half or one hour.

Group games, tennis and swimming are emphasized. Special fees for tennis and swimming.

68. CORRECTIVE GYMNASTICS.

A course for those who are not able to take the regular class work. A special regimen, depending on the disability, is worked out for each individual case. Students are admitted to this course only upon recommendation of medical advisers or by the director of physical education.

69. SPECIAL COURSE—Each Quarter.

For students whose outside work earning a living make it impractical to take the regular work, an irregular work course is provided, no-credit. Special permission from Dean of College or the Director or Phys. Ed. department necessary for admission.

✓ 150. CHARACTERISTIC DANCING—Winter Quarter. Three periods. One hour. Prerequisites, Nos. 57 and 58.

A course for Majors in Physical Education.

✓ 158. DANCING METHODS—Spring Quarter. Five periods. Three hours.

A course for students majoring in Physical Education.

✓ 162. PLAYS AND GAMES—Fall Quarter. Five periods. Three hours.

Third year major course. A selected list of games and activities suitable for intermediate grades and the vacation playground. A lecture discussion and practice course. Two lectures and three practice periods each week. Theories and applications of play in modern education; play and athletics from an educational point of view are among the topics considered. A third year course for students majoring in Physical Education but open to others interested in this phase of school work.

164. ATHLETICS (WOMEN)—Fall Quarter. A fourth year course for majors in Physical Education. Five periods. Three hours.

This course will deal with the rules, development of skill, and the coaching of sports and games suitable for upper grade and high school girls.

167. ATHLETIC COACHING PRACTICE—Each Quarter. Third or fourth year. Five periods. Two hours.

A course for qualified students desiring additional practical experience in coaching various sports under supervision.

## INDUSTRIAL ARTS

The Industrial Arts Department includes work in woodworking, drafting, printing, bookbinding, and metal craft work. These departments are well equipped. They occupy the first and second floors of Guggenheim Hall of Industrial Arts. The rooms are large, well ventilated, and well lighted. The students in these classes are never crowded for room or hindered in their work by lack of equipment. Our equipment is of the latest and best type, and is always kept in first-class condition.

The first aim of the department is to prepare teachers for elementary and secondary schools. The courses are varied, and are organized along two lines. The practical or technical phases of the subjects and the educational phases give an opportunity for study along technical, theoretical, and historic lines. An excellent Training Department housed in the Training School Building gives full opportunity to put into practice, in teaching, the ideas presented in the various courses.

## COURSE OF STUDY

Courses marked \* are given by Extension.

Two, three or four years for major in Industrial Arts. In addition to the core subjects as listed on page 56, this department requires:

**FIRST YEAR:** Ind. Arts 11, 12 and at least 12 hours in addition in two of the following fields: Woodworking, printing, art metal, drafting, book-binding.

**SECOND YEAR:** Ind. Arts 5, Art 11, two hours in a selected course in Fine Arts and 12 hours in two of the fields listed in first year.

**THIRD YEAR:** Ind. Arts 104, 117 and at least 32 hours of work in two of the fields listed in the first year.

**FOURTH YEAR:** Ind. Arts 105, 118, and at least 48 hours in two of the fields named in the first year.

## INDUSTRIAL ARTS MAJORS

1. Students not prepared to do regular beginning collegiate courses will be required to do extra work in special sections.
2. Credit for extra work in special sections shall be withheld until work is completed in a second quarter of each subject.

## NON-MAJORS

Non-Majors in Industrial Arts are not subject to Section 2 above.

**INDUSTRIAL ARTS I.**—Technic and Theory of Woodworking. Every Quarter. Two or four hours. Fee \$1.00 or \$2.00.

This course is especially arranged for primary and kindergarten majors and deals with such types of work as will be found most useful in either the kindergarten or in the primary grades.

**INDUSTRIAL ARTS Ia.**—Technic and Theory of Woodworking I. Fall, Winter, and Summer Quarters. Four hours. Fee \$2.00.

This course is arranged for beginners in woodworking who intend to major in the industrial field or those who wish to take the work as an elective. The purpose of the course is to give the student a fair knowledge of woodworking tools and a comprehensive idea of methods of construction. The construction of simple pieces of furniture is made the basis of this course.

**2. TECHNIC AND THEORY OF WOODWORKING II.**—Every Quarter. Four hours. Fee \$2.00.

This course is a continuation of Course 1 and is designed for advanced students and majors. More advanced phases of woodworking are presented in technical problem form.

3. WOODWORKING FOR ELEMENTARY AND SECONDARY SCHOOLS—Fall and Spring Quarters. Four hours.

This is a methods course and deals with such topics as equipment, materials used, where and what to buy, kind of work to be undertaken in the different grades, the preparation and presentation of projects, the making of suitable drawings, and the proper mathematics to be used in woodworking.

4. TOY CONSTRUCTION—On request. Four hours. Fee \$2.00.

The purpose of this course is to train the teacher in the construction of toys, bird houses, etc. The making of original designs will be emphasized. This course should appeal to those taking kindergarten and grade work.

\*5. PRINCIPLES OF TEACHING PRACTICAL ART SUBJECTS—Fall and Spring Quarters. Three hours.

The aim of this course is to give a better understanding of the underlying principles essential in teaching, and involves a study of the class room, laboratory, shop and studio methods and practice. In general, the topics discussed will be what is to be taught in the practical arts field, the illustrative materials essential for good teaching, and the method of attack in the teaching of a single lesson or series of lessons, type and illustrative lessons, and the place of the arts in the curriculum of the public schools.

6. REPAIR AND EQUIPMENT CONSTRUCTION—On request. Four hours.

This course has for its base the building of various types of equipment and the use of power machines in working out these problems. This is an especially valuable course for those who wish to emphasize the large phases of vocational education.

8a. ART METAL—Fall and Winter Quarters. Four hours. Fee \$2.00.

This course has in mind the designing and creation of simple, artistic forms in copper, brass, and German silver.

8b. ART METAL—Winter and Spring Quarters. Four hours. Fee \$2.00.

A continuation of 8a. The course in general includes the designing and executing of simple, artistic jewelry pieces, such as monograms, simple settings of precious stones, and the development of advanced artistic forms in copper.

\*10. MECHANICAL DRAWING—Fall and Spring Quarters. Two or four hours. For art majors. Fee \$1.00 or \$2.00.

This course is designed to give a knowledge of the use of drawing equipment and materials. Problems presented include geometrical drawing, elements of projection, development of surface, isometric and oblique projections, simple working drawings and lettering. This course is planned for beginners who have had no technical drawing.

11. PROJECTIONS, SHADE AND SHADOW—Fall Quarter. Four hours. Fee, \$1.00.

The purpose of this course is to give a student a working knowledge of the fundamentals of orthographic projection as applied to points, lines, planes, solids, shade and shadow, and applications.

\*12. PRINCIPLES OF ARCHITECTURAL DRAWING I.—Fall Quarter. Four hours. Fee \$1.00.

This course includes the making of complete designs of simple one-story cottages, together with details and specifications of same.

13. PRINCIPLES OF ARCHITECTURAL DRAWING II.—Winter Quarter. Four hours. Fee \$1.00.

This course is a continuation of Course 12 and deals with the drawing of plans of cement, brick and stone structures, culminating in complete plans and specifications for resident and public buildings.

14. CARE AND MANAGEMENT—On request. Three hours.

This course is designed to train students to care for, repair and adjust hand and power tools of the woodworking department.

19. WOOD TURNING—Winter Quarter. Four hours. Fee \$1.00.

The aim of this course is to give the student a fair knowledge of the wood-working lathe, its care, use and possibilities. Different types of problems will be worked out, such as cylindrical work, working to scale, turning duplicate parts, turning and assembling, the making of handles and attaching them to the proper tools. Special attention will be given to the making of drawings such as are used in ordinary wood turning.

31a. ELEMENTARY PRINTING—Every Quarter. Two hours. Fee \$1.00.

A course intended to acquaint the student with the various tools and materials of a print shop and to teach him the fundamentals of plain type composition, as he carries simple jobs through the various stages from composition to making ready and putting on the press.

31b. ELEMENTARY PRINTING—Every quarter. Four hours. Fee \$1.00.

Continued work in fundamentals as applied to more complicated pieces of printing, involving rule work, borders, ornaments, etc.

31c. ELEMENTARY PRINTING—Every Quarter. Four hours. Fee \$1.00.

Balance, proportion, simplicity, harmony, etc., as applied to the designing and producing of good printing.

32a. INTERMEDIATE PRINTING—Every Quarter. Two hours. Fee \$1.00.

Added stress upon principles of good design and workmanship with a view to making the student more proficient in producing artistic work. An intensive study of typographic design in laying out and printing cards, tickets, letter heads, posters, etc.

32b. INTERMEDIATE PRINTING—Every Quarter. Four hours. Fee \$1.00.

Production of title pages, covers, menus, etc.

32c. INTERMEDIATE PRINTING—Every Quarter. Four hours. Fee \$1.00.

Continued practice in producing more pretentious pieces of work of the classes named in 2a and 2b.

41a. ELEMENTARY BOOKBINDING—Fall and Spring Quarters. Four hours. Fee \$1.00.

This course aims to introduce the following: tools, machines, materials and uses, collating and preparing sheets for sewing, sewing on tape and cord, preparing end sheets, trimming, gluing, rounding and backing, headbanding, banding and preparing backs for covers, selecting cover materials, planning and making covers, and all steps necessary in binding of all kinds including full cloth, buckram, paper, spring or loose back, with plain and fancy edges. Beside the fundamental technic of bookbinding, a variety of individual projects are undertaken, such as memorandum books, writing pads, leather cases, boxes, cloth portfolios, and kodak albums.

41b. ELEMENTARY BOOKBINDING—Fall and Winter Quarters. Four hours. Fee \$1.00.

A continuation of bookbinding 41a.

41c. ELEMENTARY BOOKBINDING—Fall and Spring Quarters. Four hours. Fee \$1.00.

A continuation of bookbinding 41b.

42a. INTERMEDIATE BOOKBINDING—Winter Quarter. Four hours. Fee \$1.00.

This course includes the binding of books in half leather, half morocco, cowhide, calf, sheep, and fancy leathers. Some of the type projects undertaken are the making of travelers' full leather writing cases, music cases and a variety of other art leather pieces.

42b. INTERMEDIATE BOOKBINDING—Spring Quarter. Four hours. Fee \$1.00.

A continuation of bookbinding 42a.

42c. INTERMEDIATE BOOKBINDING—Winter Quarter. Four hours. Fee \$1.00.

A continuation of bookbinding 42b.

100. WOODSHOP PROBLEMS—On request. Four hours. Fee \$2.00.

The course is designed to furnish an opportunity for students to become acquainted with the more advanced phases of technical shop practice as they may be worked out in school or factory.

\*104. PRE-VOCATIONAL EDUCATION—Winter Quarter. Three hours.

The purpose of this course is to discuss the educational needs of pupils in school, based on the community environment, vocational opportunities, and demand; recognizing that vocational needs vary with community conditions, and that vocational work fundamental and helpful in one community might be very unfit and unnecessary in another. We generally make a survey of the vocational activities of a nearby community. The entire course is a discussion of special, government, state, and community school problems in vocational fields that we may learn something of the methods of attack used in planning special pre-vocational work, especially the Junior High School problem.

105. ADVANCED ARCHITECTURAL DRAWING—Spring Quarter. Four hours. Fee \$1.00.

The course is designed to give the student a knowledge of great historic materials and their application in modern buildings. A study of columns, capitals, pediments, buttresses, arches, vaults, and their application in building will be stressed through this entire course. The work is intensive rather than extensive in its fundamental aspects.

109a. ART METAL—Fall Quarter. Four hours. Fee \$2.00.

The base for this course is the designing, making and finishing of artistic jewelry in semi-precious and precious metals; also simple artistic jewelry, with all the steps that are fundamental in stone setting and finishing.

109b. ART METAL—Winter and Spring Quarters. Four hours. Fee \$2.00.

A continuation of 109a, with the applications in teaching of jewelry work in the public schools. Advanced problems in design as applied to set metal, wire work, chasing, and repousse.

117. ELEMENTS OF MACHINE DESIGN I—Winter Quarter. Four hours. Fee \$1.00.

This course includes sketches, drawings and tracings of simple parts, such as collars, face plates, screw center, clamps, brackets, couplings, simple bearings, and pulleys. Standardized proportions are used in all drawings.

118. ELEMENTS OF MACHINE DESIGN II—Spring Quarter. Four hours. Fee \$1.00.

A study is made of the transmission of motion by belts, pulleys, gears, and cams. Sketches, details and assembled drawings are made of valves, vises, lathes, band saws, motors and gas or steam engines.

120. ADVANCED WOODTURNING—On request. Four hours. Fee \$2.00.

The topics emphasized in this course will include woods best suited for various work, glue, varnish, shellac, dowels, draft, shrinkage and finish. The practical work will consist of patterns for hollow castings, building up and segment work.

121. ADVANCED CABINET MAKING—On request. Four hours. Fee \$2.00.

The course is planned to cover advanced phases of cabinet work, including paneling, dovetailing, secret nailing and key joining. These technical processes will be worked out on individual projects.

124. MACHINE WORK—On request. Four hours.

This course is designed to give the student a general knowledge of the care and operation of woodworking machinery. The setting of cutters and their manipulation embraces the general basis of this course.



125. CLASS MANAGEMENT—On request. Three hours.

The purpose of this course is to give the student a thorough knowledge of the handling of an advanced class in Woodworking and also give him an opportunity to gain a better understanding of the handling of high grade material than could be gained by working in elementary or secondary classes. Hours to be arranged with individual students.

133a. ADVANCED PRINTING—Every quarter. Four hours. Fee \$1.00.

Advanced work in the complete designing and producing of printed matter, with a study of plates, papers, and inks. Advanced imposition and press work.

133b. ADVANCED PRINTING—Every Quarter. Four hours. Fee \$1.00.

Special work in cutting and printing of linoleum blocks. Hand-lettering and its application to printing.

134a. PRACTICAL NEWSPAPER WORK IN PRINTING—Every Quarter. Four hours.

The various processes incident to the printing of a newspaper will be performed by the student in this course, with stress upon good design in "ads" and make-up.

135. COST ACCOUNTING IN PRINTING—Every Quarter. Two hours.

Estimating and work dealing with the cost of printing.

136. SHOP MANAGEMENT IN PRINTING—Every Quarter. Two hours.

Keeping of records and accounts. Purchase of materials. Planning and laying out of equipment. Students will be encouraged to contribute and work out original ideas intended to broaden the scope of the shop's work and to increase its efficiency.

143a. ADVANCED LEATHER CRAFT AND ART WORK—Fall Quarter. Four hours. Fee \$1.00.

143b. ADVANCED LEATHER CRAFT ART WORK—Winter Quarter. Two hours. Fee \$1.00.

The technic involved in this course includes special work in lettering in gold and other materials and foils, tooling and use of stamping machine in applied design. In general, the course is a continuation of previous courses with additional technic and advanced projects in full leather bindings with raised panels, gilt, fancy, starch, and agate edges, finishing in antique and gold, hand-lettering.

144. SHOP MANAGEMENT IN BOOKBINDING—On request. Two hours.

This course deals with the organization and arrangement of a shop. Planning of the technical work in regard to particular pieces, the laying out of designs, selection of materials and methods of construction.

145. SECRETARIAL SCIENCE IN BOOKBINDING—On request. Four hours. Elective.

Keeping shop records. Selection and purchasing of all types of materials and equipment necessary for school bindery. Estimating cost of production and general shop expense.

201. SEMINAR—On request. Four hours.

Individual research in the field of practical arts. Problems to be selected upon consultation.

This is a conference course. Conference hours will be arranged to meet the needs of students.

## LIBRARY SCIENCE

The main Library of the College contains about 58,200 volumes with a large picture collection and all equipment for a very complete library. There is also a children's branch containing about 4,500 volumes for the use of the Training Schools. Good facilities are offered for a class in library training. The following courses are offered which with the exception of the first are

intended for part of the third and fourth year's work leading toward the degree of Bachelor of Arts.

The following electives are suggestive unless already covered:

Typewriting 11 and 12.

Art 4b, 6, 9, and 17.

Languages; Twelve hours of French, German, or Latin.

Education 51.

Literature and English 6, 8, 9, and 10.

Bookbinding, Eight hours.

#### COURSE OF STUDY

In addition to the core subjects offered on page 56, the following, are required for library majors.

1. **ELEMENTARY LIBRARY COURSE**—Each Quarter. One hour. No credit given except to first year students.

An introductory course intended to familiarize the student with the arrangement of the books and general classification scheme of the library. A brief study is made of the catalogs and various indexes; also the standard books of reference, dictionaries, encyclopedias, etc., the purpose being to acquaint the student with the most ready means of using the library.

102. **RECEIPT AND PREPARATION OF BOOKS**—Fall Quarter Two hours.

This course includes checking bills, collating, mechanical preparation of books for the shelves, care of books, physical make-up of the book, paper, binding, illustrating, aids and methods in book selection, etc. A good form of library handwriting must be attained in this course.

103. **CLASSIFICATION AND CATALOGUING**—Winter Quarter. Three hours.

A study of the principles of classification. The decimal system particularly. Classification of books, pamphlets, pictures, and the varied items that may be obtained for the school library. The dictionary catalog, alphabetizing, Library of Congress cards, shelf lists, arrangement of books on shelves.

104. **REFERENCE WORK**—Spring Quarter. Four hours.

The subject covers a study of the standard works of reference, such as the principal encyclopedias, dictionaries, atlases, and reference manuals of various kinds. Bibliographies and reading lists, indexes and aids, public documents. Practical questions and problems assigned.

105. **PERIODICALS AND BINDING**—By request. Two hours.

Selection and purchase, checking in, relation to printed indexes, filing. Periodicals for certain definite lines. Methods of acquiring in schools. Use—current and bound. Collating. Selection and preparation for bindery. The binding of books.

106. **SCHOOL LIBRARIES**—By request. Fall Quarter. Three hours.

Organization, relation between the public library and the school. The field of each. Story telling, evaluation of children's literature. Illustrators.

107. **ADMINISTRATION AND HISTORY OF LIBRARIES, TRAVELING LIBRARIES, COUNTY LIBRARIES**—By request. Two hours.

108. **PRACTICAL WORK IN THE LIBRARY**—By request. Five hours. Time required, two hours a day, plus optional work by the student.

This is allowed only to those who have taken courses 2, 3, and 4, and calls for certain responsibility on the part of the student.

#### LITERATURE AND ENGLISH

The English courses in a teachers college should be complete and sufficient for all the needs of public school teachers. Students who expect to become high school teachers of English will find in Colorado State Teachers College all the courses they need in the field of English.

Courses in composition, oral and written; in oral English, public speaking, and dramatic literature; in the teaching of English in the elementary and the secondary school; in grammar and the teaching of grammar; in etymology, and in the cultural phases of literature are offered as electives for students who expect to become grade teachers or who are pursuing some other group course than English and wish to elect these from the English Department.

Some of the elective courses for third and fourth-year students will be offered once every two years. Majors in English should plan their work in such a way as to take the fullest advantage of the alternating courses.

Colorado State Teachers College requires all its students to take an examination in the fundamentals of written English. This is designated the English 4 Exemption Test. Those who secure a grade below 75 per cent are required to take one quarter of English 4 work. This class work gives opportunities for review of grammar, but also contains work in composition and in methods that is professionalized and collegiate. Experience has shown, however, that in mixed groups students who are extremely deficient in the use of English fail to improve sufficiently to pass the exemption test at the end of a quarter's study. It is evident, then, that such students should have opportunities to study specifically those matters of grammar in which their habits are incorrect.

On February 19, 1924, the faculty voted as follows: All College students shall be classified according to their standing in the English 4 Exemption Test. Those in the highest quartile shall be excused from taking the class work in English 4 and shall be eligible to take English 20 (Intermediate Composition). Those in the second and third quartile shall be required to take English 4 in class. Those in the lowest quartile shall be required to take work in English composition and grammar of secondary grade, without college credit.

#### COURSE OF STUDY

Courses marked \* are given also by Extension.

Two years or four years for majors in Literature and English.

In addition to the core subjects as listed on page 56, this department requires:

FIRST YEAR: Library Science 1, and English 3, 4, 8, 9, 10, and 11.

(Students may be excused from English 4 by passing the English 4 Exemption Test. This is given at 2 p. m. on the day after Registration Day in Room 214. Fee, 25 cents.)

SECOND YEAR: English 1, 2, 6, and 16.

THIRD YEAR: English 105 and 106 and eight hours of English selected by the student.

FOURTH YEAR: Twelve hours of English selected by the student.

\*1. MATERIAL AND METHODS IN READING AND LITERATURE—Every Quarter. Four hours.

A survey of children's literature and a study of motivation in the field of reading, oral and silent, for children; the consideration of principles governing the choice of literature in the grades; practice in the organization and presentation of type units, including dramatization and other vitalizing exercises. A somewhat flexible course, affording opportunity for intensive work within the scope of any grade or grades, according to the individual need or preference.

2. TEACHING OF WRITTEN ENGLISH—Fall, Winter and Summer Quarters. Four hours.

This course takes up the problems of teaching formal English, both spoken and written, in the intermediate grades and the junior high school. The functional teaching of grammar is included.

3. PUBLIC SPEAKING AND ORAL COMPOSITION—Every Quarter. Three hours.

The endeavor of this course is to establish the student in habits of accurate speech, and to encourage fluency, vigor, and the logical marshaling of his thought in discourse of varied types, including exposition, description, narrative, oratory, argumentation, free dramatization.

4. SPEAKING AND WRITING ENGLISH—Required of all students unless they pass the English 4 Exemption Test. Every Quarter. Three hours.

Minimum essentials of oral and written composition. Content and method of functional grammar. Theory and practice of composition of collegiate grade.

\*6. AMERICAN LITERATURE—Fall, Spring, and Summer Quarters. Four hours.

A course in American literature following the plan of Courses 8, 9, and 10 in English literature.

\*8. THE HISTORY OF ENGLISH LITERATURE—Fall Quarter. Four hours.

A reading course following the development of our literature from 670 to 1625.

\*9. THE HISTORY OF ENGLISH LITERATURE—Winter Quarter. Four hours.

A reading course following the development of our literature from 1625 to 1798.

\*10. THE HISTORY OF ENGLISH LITERATURE—Spring and Summer Quarters. Four Hours.

A reading course following the development of our literature from 1798 to 1900.

11. THE ENGLISH LANGUAGE—Winter, Spring and Summer Quarters. Four hours.

Historical development of the English language. Etymologies, word origins, connotations, etc.

12. VOICE CULTURE—Fall and Spring Quarters. Four hours.

Technical drill for freedom, flexibility, and expressiveness of voice. Exercises for clear-cut, accurate articulation. Interpretation of units of literature adapted, by their range of thought and feeling, to develop modulation, color, and variety of vocal response.

None of this drill is mechanical; even the technical exercise is controlled by a variety of concepts embodying the qualities sought.

13. THE ART OF STORY TELLING—Winter, Spring, and Summer Quarters. Three hours.

The study of the main types of narrative, with emphasis upon diction and manner suitable for each. Practice in the art of story telling. Open only to Intermediate and Rural School majors.

14. DRAMATIC ART—Fall Quarter. Four hours.

The technic of the drama. The analysis and group interpretation of plays. The content of the course varies from year to year. Open only to students who have taken or are taking English 3. (See also English 114.)

15. TYPES OF LITERATURE—Every Quarter. Three hours.

A reading course looking toward an appreciation of literature and covering all the types of literature that can be made interesting to young people and formative of good taste in reading. This includes English, American, and foreign literature which has become classic. But no matter how "classic" it is, it still must be attractive. The types covered will be lyric, narrative, and epic poetry, drama, essay, story, novel, letters, and biography. Open only to Kindergarten, Primary, and Junior High School majors.

16. CONTEMPORARY LITERATURE—Every Quarter. Four hours.

A second appreciation course similar to English 15, but dealing with the literature of not more than ten years back. Most teachers of literature leave the impression that literature must age like fiddles and wine before it is fit for human consumption. Such is not the case. Much good literature is being produced every year. After students leave school, it is just this current literature that they will be reading, if they read at all. We want to help them to form a discriminating taste for reading and to acquire a liking for reading, so that they will be alive to what the world is thinking, feeling, doing, and saying after they leave college.

17. COMEDY: A LITERARY TYPE—Summer Quarter. Four hours.

The consideration of comedy as a type of drama, with intensive and comparative study of a Shakspearean comedy. The group interpretation of a Shakspearean comedy on the campus. Sometimes, when the class is large, other programs of standard plays are also given.

18. DEBATING—Fall Quarter. Two hours.

A practice course in debating open to any student interested in interclass and intercollegiate debating. The teams for the intercollegiate debates are chosen at the end of the quarter from the students enrolled in this group.

19. DEBATING—Winter Quarter. Three hours.

Those students who were selected for the intercollegiate debaté teams will comprise the classes in English 19, one for men and one for women. The work will consist of the preparation for the debates.

\*20. ADVANCED COMPOSITION—Spring and Summer Quarters. Prerequisite, English 4, Four hours.

This course is planned for students who have passed English 4 and wish to get further practice in the usual forms of composition and do not care to go into the newspaper writing provided for in the courses numbered 100, 101, and 102.

\*31. THE SHORT STORY—Spring and Summer Quarters. Four hours.

A study of typical modern short stories to observe the technical methods of modern short story writers and the themes they have embodied in the magazine fiction of the present. The course is based upon Mr. Cross' book, "The Short Story," supplemented by O'Brien's "The Best Short Stories" and other recent volumes. Current magazine stories are also used. Offered next in Summer, 1926.

100. JOURNALISTIC WRITING—Fall Quarter. Three hours. A first course in journalism.

A course in advanced English composition, based upon newspaper and magazine work. This course is designed primarily in the interest of those majoring in English who expect to teach journalism in the high schools or may be called on to act as sponsors or advisers for school papers. Every type of composition used in practical news and magazine writing is used in this course.

101. JOURNALISTIC WRITING—Winter Quarter. Prerequisite, English 100. Three hours.

A continuation of English 100. A course in advanced English composition based upon newspapers and magazine work. Every type of composition used in practical news and journalistic writing is used in the course.

102. JOURNALISTIC WRITING—Spring and Summer Quarters. Prerequisite, English 100, 101. Three hours.

A continuation of English 101.

103. ADVANCED PUBLIC SPEAKING—Winter Quarter. Three hours.

A senior college course for students who wish to get more practice under direction than is given in English 3. Open only to those students who have had elementary public speaking in this college or elsewhere.

105. ORAL ENGLISH IN THE HIGH SCHOOL—Fall and Summer Quarters. Three hours.

The discussion of practical problems concerning the direction of oral English in the secondary school, oral composition, literary society and debating activities, festivals, dramatics, etc.

106. THE TEACHING OF ENGLISH IN THE HIGH SCHOOL—Fall and Summer Quarters. Three hours.

Principles for the selection of literature for senior high school pupils considered critically; illustrative studies in the treatment of selective pieces; study of types of composition work for high schools, with illustrative practice in writing.

107. COMPARATIVE LITERATURE—Greek and Latin. Fall Quarter. Four hours. Offered next in 1926.

A survey of the main contributions of classical culture to world literature. The reading in English translation of Homeric epics and the dramas of Aeschylus, Sophocles, and Euripides.

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108. COMPARATIVE LITERATURE—Italian, Spanish and French. Winter Quarter. Four hours. Offered next in 1927.

A study of literary elements and influences deriving from Mediæval and Renaissance cultures; a review of the trends of modern romance literatures; a careful reading in translation of outstanding classics, notably Dante's "Divine Comedy."

109. COMPARATIVE LITERATURE—German, Scandinavian and Russian, Spring Quarter. Four hours. Offered next in 1927.

A comparison of Teutonic epic material with Greek and Romance epic; a survey of the significant contributions in the literature of Germanic and Russian peoples; the careful study of Goethe's "Faust."

114. ADVANCED DRAMATIC ART—Winter Quarter. Four hours. Prerequisite, English 14.

A lecture and laboratory course designed primarily for teachers and students who intend to engage in the work of play production, either in the schools or in Little Theatre or Children's Theatre work. It is planned to give the student a general knowledge of theatrical technic, including staging, lighting, and the art of make-up; and of play rehearsal including casting and directing. Consideration is also given to the choice of material for amateur theatricals.

116. THE FESTIVAL—Summer Quarter. Three hours.

The study of historical or racial festival, its origin, forms, and various elements. Research and original work in outlining unified festival plans for schools or communities, reflecting some significant event or idea, or some phase of civilization.

120. LYRIC POETRY—Winter and Summer Quarters. Four hours. Offered next in 1926.

A comparative study of types, theme, spirit, and technic of standard English lyrics, with an attempt to estimate the significance of contemporary tendencies in poetry.

121. NINETEENTH CENTURY POETRY—Fall Quarter. Four hours. Offered next in 1925.

A study of English poetry from Wordsworth to Tennyson, including Coleridge, Byron, Shelley, Keats, and the lesser writers from 1798 to 1832.

122. VICTORIAN POETRY—Spring and Summer Quarters. Four hours. Offered next in 1926.

Tennyson and Browning, and the general choir of English poets from 1832 to 1900.

\*125. NINETEENTH CENTURY PROSE—Fall and Summer Quarters. Four hours. Offered next in 1926.

Consideration of the serious prose writing, chiefly critical and literary, of the leaders of thought in the nineteenth century.

126. THE INFORMAL ESSAY—Fall and Summer Quarters. Three hours. Offered next in 1925.

A study of the familiar essay for the purpose of determining the nature and form of this delightful phase of literary composition. The method in this course is similar to that pursued in the short story; namely, a reading of a number of typical essays as laboratory material for a study of technic and theme.

\*127. SHAKESPEARE'S COMEDIES—Fall and Summer Quarters. Four hours. Offered next in 1925.

The life of Shakspeare and a literary study of his comedies, with a proper amount of attention to the method of teaching Shakspeare in high schools.

128. SHAKESPEARE'S HISTORIES—Winter Quarter. Four hours. Offered next in 1926.

A continuation of the study of Shakspeare begun in English 127.

129. SHAKESPEARE'S TRAGEDIES—Spring and Summer Quarters. Four hours. Offered next in 1926.

The completion of the year's work in Shakspeare.

130. ELIZABETHAN DRAMA EXCLUSIVE OF SHAKESPERE—Fall Quarter. Four hours. Offered next in 1926.

A knowledge of the dramatic literature of the early seventeenth century is incomplete without an acquaintance with the contemporaries and successors of Shakespeare from about 1585 to the closing of the theatres in 1642. The principal dramatists, with one or more of the typical plays of each, are studied in this course.

\*132. THE DEVELOPMENT OF THE NOVEL—Winter Quarter. Four hours. Offered next in 1927.

The development, technic, and significance of the novel.

\*133. THE RECENT NOVEL—Spring and Summer Quarters. Four hours.

The reading of ten typical novels of the past five years for the purpose of observing the trend of serious fiction and of studying the social, educational, and life problems with which the novelists are dealing.

\*134. MODERN PLAYS—Winter and Summer Quarters. Four hours.

Reading and class discussion of plays that best represent the characteristics, thought-current, and the dramatic structure of our time.

160. LITERATURE OF THE BIBLE—Winter and Summer Quarters. Three hours.

This course gives a general view of the literature of the Bible from the Period of Exile. It continues with the study of the work of Jeremiah, the book of Ezekiel and the writings of the other great Prophets. The New Testament is studied from the point of view of the origin and purpose of each of its books. Special references will be given to the Pauline Epistles and the Book of Acts.

230. RESEARCH IN ENGLISH.

This is a graduate seminar provided to take up problems in the teaching of English such as require investigation by graduate students working upon theses in the department of Literature and English. The amount of credit depends upon the work successfully completed.

## MATHEMATICS

All courses in the department are given with a keen appreciation of the modern demand for vitalization of school work. In consequence, the material is presented in such a way as to furnish as many points of contact with real life as possible, and to give the student a comprehensive grasp of the principles of the subject under consideration.

### COURSE OF STUDY

Courses marked \* are given also by Extension.

In addition to the core subjects listed on page 56, this department requires:

FIRST YEAR: Mathematics 2, 5, and 6.

SECOND YEAR: Mathematics 7, 8, 9, or 108.

THIRD YEAR: Geography 113, Mathematics 100, 100a, or 100b, 101, 102.

FOURTH YEAR: Sixteen hours of Mathematics selected by the student.

\*1. SOLID GEOMETRY—Spring and Summer Quarters. Four hours.

The ordinary propositions and exercises of this subject are given. Special attention is given to practical applications.

\*2. PLANE TRIGONOMETRY—Fall, Spring, and Summer Quarters. Four hours.

The solution of the right triangle with numerous practical applications secured by the use of surveyors' instruments in the field; the development of the formulas leading up to the solution of the oblique triangle.

4. SURVEYING—Spring Quarter. Four hours.

In this course the student becomes familiar with the ordinary instruments of the surveyor; the transit, the compass, the level, etc. He takes up such practical problems as running a line of levels for an irrigation ditch, establishing a sidewalk grade, and measuring land.

\*5. COLLEGE ALGEBRA—Fall, Spring, and Summer Quarters. Four hours.

This course opens with a thorough review of elementary algebra with a view to giving a clear knowledge of the principles of the subject. It continues with permutations and combinations, the progressions, and the function and its graph.

\*6. COLLEGE ALGEBRA—Winter and Summer Quarters. Four hours.

A continuation of Course 5 dealing with logarithms, variables and limits, theory of equations, and infinite series. Throughout, the needs of the prospective teacher are constantly kept in view.

\*7. ANALYTIC GEOMETRY—Fall and Summer Quarters. Four hours. Prerequisite, Math. 2.

This course opens to the student, in a small way, the great field of higher mathematics. It also connects closely with the subjects or graphs in algebra and forms the basis of the work in the calculus.

8. THE TEACHING OF ARITHMETIC—Fall, Winter, and Summer Quarters. Two hours.

This course deals primarily with the modern movements and methods in the teaching of arithmetic. A brief history of the development of the subject and of the methods used in the past is given. The real problems of the classroom are taken up and discussed with a view to giving the student something definite that she can use when she gets into a school of her own.

\*9. THE TEACHING OF ARITHMETIC—Spring Quarter. Four hours.

This course will follow the same lines as Course 8, but in greater detail. It will also give more attention to the development of the principles of itself.

\*100. THE TEACHING OF SECONDARY MATHEMATICS—Fall Quarter. Four hours.

This course is designed to place before the prospective teacher the best educational thought of the day relating to high school algebra, geometry, and trigonometry. Consideration is given to the educational value of these subjects, to the recent improvements in teaching them, and to all problems arising in the work of the modern teacher of secondary mathematics.

100a. THE TEACHING OF ALGEBRA—Winter and Summer Quarters. Two hours.

This course deals with the practical problems which every modern teacher of algebra must solve, such as the purpose of algebra, its place in the curriculum, the principles used in the subject, and the best methods of teaching it.

100b. GEOMETRY FOR TEACHERS—Winter and Summer Quarters. Two hours.

This course aims at the extension of the student's knowledge of the field of plane geometry as well as the presentation of the best methods of teaching geometry.

\*101. DIFFERENTIAL CALCULUS—Winter and Summer Quarters. Four hours.

Prerequisites: Math. 2, 5, 6, and 7. An introduction to the powerful subject of the calculus. While care is taken to see that the formal sides of the subject is mastered, many problems of a practical nature are introduced from the realms of geometry, physics, and mechanics.

\*102. INTEGRAL CALCULUS—Spring and Summer Quarters. Four hours.

Prerequisites: Math. 2, 5, 6, 7, and 101. This course takes up the ordinary formulas for integration and the commoner applications of the integral calculus.

\*103. THEORY OF EQUATIONS—Fall Quarter. Four hours.

Prerequisites: Math. 2, 5, 6, and 7. The course deals with the graph, complex number, cubic and quartic equations, symmetric functions, and determinants.



106. DESCRIPTIVE ASTRONOMY—Winter and Summer Quarters. Four hours.

This course gives an introduction to the fascinating study of astronomy. It gives the idea of the principles, methods, and results of the science; shows the steps by which the remarkable achievements in it have been attained; and covers the recent investigations respecting the origin and development of the solar system.

108. JUNIOR HIGH SCHOOL MATHEMATICS—Spring and Summer Quarters. Two hours.

The almost universal adoption of the junior high school plan has given a great stimulus to the study of the character of the work in the common branches that should be pursued in the seventh, eighth, and ninth grades. This course attempts to solve the problems that arise concerning the mathematics in these grades.

\*200. ADVANCED CALCULUS—Winter Quarter. Four hours.

Prerequisites: Math. 2, 5, 6, 7, 101, 102. A discussion of problems given over largely to applications of the calculus.

\*201. DIFFERENTIAL EQUATIONS—Spring Quarter. Four hours.

Prerequisites: Math. 2, 5, 6, 7, 101, 102. A discussion of problems which lead to differential equations and of the standard methods of their solution.

202. ADVANCED INTEGRAL CALCULUS—Spring Quarter. Four hours.

Prerequisites: 2, 5, 6, 7, 101, 102. In this course the work of the preceding course in integral calculus is rounded out and extended.

## MUSIC

The Department of Music is maintained primarily in order that teachers may be thoroughly trained to teach music in the public schools. The student life of the College is influenced directly by the large part music plays in all the student activities. It is necessary to maintain a large and highly trained music faculty in order properly to educate the public school music supervisor. Thus, it becomes possible to offer high-class instruction to those who are interested in the study of vocal and instrumental music. Send for special music bulletin.

Student recitals are given which provide the students an opportunity to appear in public recitals. During the school year an oratorio is given by the College Chorus, and the Glee Clubs of the institution give an opera each spring.

The Greeley Philharmonic Orchestra is a symphony orchestra of fifty members, comprised of talent of the school and city, which gives monthly concerts. The standard symphonic compositions are studied and played. Advanced students capable of playing the music used by the organization are eligible to join upon invitation of the director.

The College orchestra and band offer excellent training for those interested.

The course of study is planned on a four-year basis, although a two-year course may be taken. College credit is given for applied music under the following conditions:

1. An examination must be passed by all students who desire credit for applied music to show that they have completed the work of the second grade of the instrument, including voice, in which they apply for further work. Second grade work must be equal to the following standard: sonatines and pieces from Kuhlraw, Kullak, Clementi and Bach. Twelve little preludes and pieces suited to the individual student. All forms of technical exercises, scales, trills, chords, arpeggios, double thirds, and octaves. Knowledge of tone production, phrasing, rudiments of harmony, use of pedal, and sight playing. Pieces by Mozart, Haydn, Bach, Beethoven.

2. A full year's work (three quarters) must be taken before credit shall be allowed.

3. College credit will be given for proper work in all instruments except the following: saxophone, ukelele, banjo, guitar, mandolin, fife, and single percussion instruments.

4. Beginning work in any instrument, except those mentioned in "3", will receive college credit when the examination in piano is passed to show the completion of two grades of work.

5. One hour of credit is given for not less than one lesson a week with practice under the instruction of a member of the music department of the College faculty. Two lessons a week in the same instrument shall not receive additional credit.

#### FOR MAJORS IN MUSIC

Prerequisite examination must be taken in piano work.

The maximum credit will be twelve hours in the two years' course and twenty-four hours in the four years' course.

#### FOR NON-MAJORS IN MUSIC

The maximum credit is three hours a year, six hours in the two-years' course, and twelve hours in the four years' course.

The five requirements applied to all students who wish to take lessons in applied music do not preclude beginning work in voice or piano or any other instruments, but in general they remove college credit from elementary work.

Band and orchestral instruments are rented at \$2.00 per quarter.

Courses marked \* are given also by Extension.

In addition to the core subjects listed on page 56, this department requires for majors in public school music:

FIRST YEAR: 1, 2, 20, 22, 40, 101.

SECOND YEAR: 3, 4, 10, 11, 21, 23, 40, 101.

THIRD YEAR: 40, 100, 101, 103, 104, Ed. 2c.

FOURTH YEAR: 40, 101, 105, 106, 107, 108, 114, 120, 122.

All public school music majors are required to become members of the college chorus and orchestra. This may be taken with or without credit. All majors in the public school music course must pass a third grade test on the piano and must be able to sing with an agreeable quality. Consult the head of the department.

#### 1a. SIGHT SINGING—Every Quarter. Three hours.

This course is offered each quarter of the regular year and the first half of the summer quarter. It is a non-credit course prerequisite to Mus. 1b. Students who pass a proficiency test in sight singing at the beginning of the quarter will register at once for Mus. 1b. Rudiments of music such as staff, key signature, time signature, clef signature and major, minor and chromatic scales are explained, and the larger portion of time is given over to the actual drill in sight singing.

#### 1b. ADVANCED SIGHT SINGING—Fall Quarter. Two hours.

This course is offered in the fall quarter and is given for the benefit of music students who expect to become supervisors of music. Choral music of a high type will be read and studied with special reference to speed, accuracy and expression. Required of all music majors.

#### 2. TONE THINKING AND MELODY WRITING—Spring and Summer Quarters. Three hours.

It is expected that students will become proficient in writing melodies in all kinds of rhythms. A great deal of dictation is done. Required of music majors. Prerequisite Music 1b.

#### 3. INTRODUCTORY HARMONY—Fall and Summer Quarters. Three hours.

This is a study consisting of the construction, classification and the progression of chords, and is put into practical use in the harmonization of melodies. Required of music majors. Prerequisite Music 2.

4. INTERMEDIATE HARMONY—Winter and Summer Quarters. Three hours. Continuation of Music 3. Required of music majors.

5. ADVANCED HARMONY—Spring Quarter. Three hours.

A continuation of Music 4, taking up the higher discords and modulations. Required of music majors.

10. KINDERGARTEN—PRIMARY METHODS—Fall, Spring and Summer Quarters. Three hours.

The sensory period. Methods for kindergarten, first, second, and third grades. Care of the child voice. Its range. The less musical child. The teaching of rote songs. Development of rhythm through free and suggested expression. The toy orchestra. Repertoire of songs for home and school use, with publishers. A graded course in music appreciation is desirable so that kindergarten and primary teachers may be able to play simple accompaniments on the piano. Prerequisite Music 1.

11. INTERMEDIATE METHODS—Winter and Summer Quarters. Three hours.

The associative or drill period. Methods for fourth, fifth and sixth grades. The round. Part-singing. Chromatics. Intervals. Tone drills. Sight Singing. Building of major and minor scales on keyboard. Written notation. Simple song analysis. Repertoire of appropriate rote songs. Familiar songs for memorizing. Materials for music appreciation. Prerequisite Music 1.

12. RUBAL SCHOOL MUSIC—Winter Quarter. Three hours.

Materials and methods of presentation. Classification of voices. School programs. Drill. Simple folk-dances and singing games. The teaching of music appreciation. Mimetic play. Christmas caroling. Conducting the community sing. The music contest. Its development and manner of judging. The music project. Survey of various state courses in rural school music.

\*20. HISTORY OF ANCIENT AND MEDIEVAL MUSIC. Fall and Summer Quarters. Three hours.

A cultural course which deals with the development of ancient and medieval music and musicians up to and including Beethoven, through the presentation of music by these different composers. This subject is made an interesting course. Required of music majors.

\*21. MODERN COMPOSERS—Winter and Summer Quarters. Three hours.

A continuation of music 20. The lives and music of the great masters since Beethoven will be studied. Through the aid of the phonograph the student will become acquainted with the different styles of these composers' compositions. Required of all music majors. Prerequisite Music 20.

22. MUSIC APPRECIATION—Fall, Spring, and Summer Quarters. Three hours.

A course open to all who want to acquire a greater love for good music. The lives of many of the great artists and composers are taken up in this course. Records of bands, orchestras, choruses, soloists, etc., are taken up with the purpose in view of acquainting the student with the best music and teaching him how to appreciate it.

23. MUSICAL LITERATURE—Winter and Summer Quarters. Three hours.

A listening course wherein the student is taught to distinguish between the various forms of composition. A thorough knowledge of dance forms, song forms, etc., will be obtained.

30. INDIVIDUAL VOCAL LESSONS—Every Quarter. One hour. Fee \$1.50.

Correct tone production, refined diction and intelligent interpretation of songs from classical and modern composers.

31. INDIVIDUAL PIANO LESSONS—Every Quarter. One hour. Fee \$1.25 and \$1.50.

High class instruction is offered to both beginners and advanced students using the standard technical works of Czerny, Clementi and others as well as the compositions of Beethoven, Bach, Schumann, Chopin and other classical and modern composers.

32. INDIVIDUAL VIOLIN LESSONS—Every Quarter. One hour. Fee \$1.50.

The work will be outlined according to the ability of the student. Only the best of teaching material is used and the bowing and finger technic is carefully supervised.

33. **INDIVIDUAL PIPE ORGAN LESSONS**—Every Quarter. One hour.  
Fee \$1.50.

Work is given in pipe organ to those students who have had enough piano instruction to be able to play Bach Two Part Inventions. The instruction starts with a thorough foundation in organ technic followed by study of Bach organ works. Mendelssohn Sonatas, Guilmant, Rheinberger, Widor and other organ composers of like standing in the musical world.

35. **INDIVIDUAL LESSONS FOR BRASS AND REED INSTRUMENTS**—Every Quarter. One hour. Fee \$1.25.

Each instrument is carefully taught by a competent instructor and special attention is given to beginners.

36. **INDIVIDUAL 'CELLO LESSONS**—Every Quarter. One hour. Fee \$1.25.

Modern methods are used and a thorough course is given presenting the best music literature for the 'cello.

40. **BEGINNERS ORCHESTRA**—Every Quarter. One hour.

Beginners on orchestral instruments who have progressed sufficiently will find this an opportunity for ensemble rehearsal under competent direction.

41. **MEN'S GLEE CLUB**—Winter Quarter. One hour.

Entrance upon examination. This club prepares a program and makes an extended tour of Colorado and of near-by states.

42. **SCHUMANN GLEE CLUB**—Every Quarter. One hour.

Entrance upon invitation after examination. This club is composed of forty female voices and takes a prominent part in the presentation of the annual oratorio and opera. A concert is given each spring quarter.

43. **ADVANCED ORCHESTRA**—Every Quarter. One hour.

Only those are admitted to this orchestra who have had experience. Entrance upon examination only. All members must be present when called upon to play for College activities.

44. **ADVANCED BAND**—Every Quarter. One hour.

The college band is maintained in order that experienced band men may have an opportunity to continue rehearsing under able direction. The College band plays for all College activities and all members are expected to be present when the band is called upon to perform.

101. **COLLEGE CHORUS**—Fall Quarter. One hour.

Worth while music and standard choruses are studied and this chorus assists in giving the annual oratorio. Open to all students. Fall quarter only.

103. **COUNTERPOINT**—Fall and Summer Quarters. Two hours.

The rules of harmony are here applied to polyphonic writing. Required of majors in music. Prerequisite Music 4.

104. **ADVANCED COUNTERPOINT**—Winter Quarter. Two hours.

Continuation of Music 103. Required of majors in music.

105. **BEGINNING ORCHESTRATION**—Fall and Summer Quarters. Three hours.

A study is made of the several instruments of the symphony orchestra. Their pitch and quality of tone are studied singly and in combination. Beginning arranging for orchestra is begun. Prerequisite, Music 104.

106. **ADVANCED ORCHESTRATION**—Winter Quarter. Three hours.

Continuation of Music 105. Required for a degree in music.

107. **FORM ANALYSIS**—Winter Quarter. Two hours.

Analysis will be made of the smaller forms in music, also of symphonies from Haydn down to the present. Prerequisites Music 104 and 106. Required of majors in music.

108. **ADVANCED FORM ANALYSIS**—Spring Quarter. Two hours.

Continuation of Music 107. Required of majors in music.

110. SUPERVISOR'S COURSE—Spring and Summer Quarters. Three hours.  
Survey of development of public school music. Its leaders. Comparison and discussion of various music series, and texts. Duties and responsibilities of the supervisor. Teachers' meetings, typical outlines for music work. Public school music surveys. Tests and measurements. Instrumental class methods. The adolescent voice. Materials for glee clubs and choruses. The school orchestra. The music memory contest. State music contests. Music magazines. Required of music majors. Prerequisites Music 1b, 2, 3, 4, 10, 11.

111. CONDUCTING BY ASSIGNMENT—All Quarters. Two hours.

114. METHODS IN CONDUCTING—Spring and Summer Quarters. Two hours.  
The technic of the baton is obtained through the actual use of the same and music in all forms is studied with special reference to the directors' problems.

120. SCHOOL ENTERTAINMENT—Spring and Summer Quarters. Two hours.  
A materials class for programs on all occasions: Thanksgiving, Christmas, Commencement, etc.

122. APPRECIATION FOR THE CONCERT GOER—Winter and Summer Quarters. One hour.  
Different phases of the subject of music will be discussed and illustrated including composers, style in music, construction of symphonies and opera and it will be shown how different composers effected the advance and development of music.

130. INDIVIDUAL VOCAL LESSONS AND METHODS—Every Quarter. One hour. Fee \$1.50.  
A method of approach in tone building will be discussed with special reference to the teachers' problem.

131. INDIVIDUAL PIANO LESSONS AND METHODS—Every Quarter. One hour. Fee \$1.25 and \$1.50.  
An advanced course in piano playing with suggestions and helps for teaching the instrument.

132. INDIVIDUAL VIOLIN LESSONS AND METHODS—Every Quarter. One hour. Fee \$1.50.  
Teaching problems will be discussed and classified teaching material will be suggested, making this a valuable course to the student preparing himself for teaching the violin.

133. INDIVIDUAL PIPE ORGAN LESSONS AND METHODS—Every Quarter. Fee \$1.50.  
An advanced course in organ playing combined with instruction in teaching the instrument.

134. INDIVIDUAL 'CELLO LESSONS AND METHODS—Every Quarter. One hour. Fee \$1.25.  
Discussions will be held with special regard to the methods pursued in teaching the 'cello.

200. RESEARCH IN PUBLIC SCHOOL MUSIC—Four hours.

## PHYSICS

The various courses to be given by the Physics Department have a double purpose in view: first, to give the student an adequate knowledge of theoretical and applied physics; second, to develop in close cooperation with the students more efficient methods of teaching this subject in secondary school and college. Although the former is essential, the latter constitutes the problem proper in a teachers college.

In our century of intense industrialism, the role of physical science has become of such importance that its place in the public school curriculum ought to be carefully reconsidered. The Physics Department of Colorado State Teachers College is, therefore, facing the two-sided problem:

1. What ought to be the purpose and organization of physics teaching in a progressive school?

2. What ought to be the best organization of physics teaching under existing conditions?

These two sides of the problem will constantly be kept in view in all courses given by the Physics Department.

#### COURSE OF STUDY

Two years or four years for majors in Physics.

In addition to the core subjects, as listed on page 56, this department of Physics requires:

FIRST YEAR: Physics 1, 2 and 3; Chemistry 1, 2 and 3.

SECOND YEAR: Physics 11, 14 and 15; Math. 2, 5 and 6.

THIRD YEAR: Physics 20, 107 and 108; Math. 7, 101 and 102.

FOURTH YEAR: Physics 111 and 121; Math. 103.

1. MECHANICS AND HEAT—Fall Quarter. Four hours. Fee \$3.00.

An elementary course. Lectures and discussion including one three hour laboratory period.

2. ELECTRICITY AND MAGNETISM—Winter Quarter. Four hours. Fee \$3.00.

A continuation of Physics 1.

3. SOUND AND LIGHT—Spring Quarter. Four hours. Fee \$3.00.

A continuation of Physics 1 and 2.

10. HOUSEHOLD PHYSICS—(For household Students)—Spring Quarter. Four hours. Fee \$3.00.

Physical laws applied to the needs of the household or to the life of the community at large will be emphasized in a series of topics and projects taken from the immediate environment.

11. HEAT—ADVANCED COURSE—Fall Quarter. Four hours. Fee \$3.00.

This course will include a simple exposition of different theories of the nature of heat, its effect upon matter, its physiological and climatic effects; its relation to other forms of energy, and, finally, the application of a few fundamental principles of thermodynamics to gas and steam engines.

14. SOUND—ADVANCED COURSE—Winter Quarter. Four hours. Fee \$3.00.

This course will deal with the nature of sound, the laws of its propagation, reflection, interference, and re-enforcement as well as their application to musical and technical instruments.

15. LIGHT—ADVANCED COURSE—Spring Quarter. Four hours. Fee \$3.00.

An elementary exposition of Huyghens' theory of light will make the light phenomena more intelligible. The study of mirrors, lenses, and prisms will lead toward experiments and projects on such instruments as the microscope, telescope, spectroscope, as well as to the study of photography and color photography.

20. ORGANIZATION OF PROJECTS IN ELEMENTARY PHYSICS—Four hours.

This course is of importance to prospective science teachers. The course is based upon projects including demonstration and laboratory experiments.

103. ELECTRICAL PHENOMENA AND RADIO COMMUNICATION—Fall Quarter. Four hours. Fee \$3.00.

A course for prospective physics teachers. Lectures and laboratory. Oscillatory circuits, vacuum tubes, radiation, telegraphy and telephony. (Prerequisite Physics 2).

107. THE HISTORY OF EPOCH-MAKING DISCOVERIES IN PHYSICS—Winter Quarter. Two hours.

The purpose of this course is to bring out the historical conditions under which the great discoveries were accomplished. The struggle that the natural philosophers have had to carry out in all ages against their contemporaries, imbued either with traditional superstition or with prejudice, their unyielding and often heroic determination to vanquish and subdue the forces of Nature for the benefit of mankind, ought to form one of the corner-stones in the teaching of history in the public schools.

108. METHOD OF TEACHING PHYSICS IN ELEMENTARY AND HIGH SCHOOLS—Fall Quarter. Four hours. Fee \$3.00.

This course is intended for teachers of both Physics and General Science. Its main purpose is the organization of projects, experiments, and "red-letter" lessons in elementary physics.

111. PROJECTS BASED UPON THE STUDY OF THE AUTOMOBILE—Winter Quarter. Four hours. Fee \$3.00.

This course although practical, will not enter into the narrow technicalities of the trade school course. The reason why this course is given, lies primarily not in the importance acquired by the automobile in our every day life, but in the multiplicity of physical principles involved in the gasoline engine upon which many interesting experiments and projects can be organized.

121. PROJECTS BASED UPON THE STUDY OF DIRECT AND ALTERNATING CURRENTS—(Prerequisite: Physics 2 and 103). Spring Quarter. Four hours. Fee, \$3.00.

This course will enable the prospective teacher not only to understand the working of electrical instruments and machinery, but to organize electrical experiments which will act most stimulatingly upon the imagination of the young. The courses will be accompanied by problems, experiments and projects on D. C. and A. C. generators, motors, telephone, telegraph, wireless, etc.

## ROMANCE LANGUAGES AND LATIN

The Department of Romance Languages and Latin offers five years of instruction in French and Spanish and three years instruction in Latin.

Other languages, Italian and Portuguese, may be offered when ten or more students request such instruction.

All courses are taught according to the direct method and in all advanced classes but little English is used.

Courses numbered 131 in all languages are taught chiefly in English. It is expected that a student beginning a course in languages during the Fall Quarter will continue this course during the year.

Students in beginning French or Spanish are expected to complete 12 hours work before receiving any credit.

On February 19, 1924, the Faculty voted as follows:

College credit for foreign language subjects shall be given under the following conditions:

### MAJORS IN FOREIGN LANGUAGES

1. College credit for beginning foreign language work, covering three quarters, shall be given only on the completion of a second year's work in the same language.

2. Full credit shall be given for beginning foreign language, subject to the conditions of 1, when such work is completed within the first six quarters of the student's residence; one-half credit when completed within the next three quarters; and no credit when completed after the ninth quarter of residence.

In order that credit may be properly recorded in the Registrar's office, Romance Language majors should have their programs for each quarter's work specially approved by the Registrar.

## ANY STUDENTS

1. Collegiate grade beginning language work shall materially exceed in amount the elementary language work that is offered in secondary schools.

## COURSE OF STUDY

Courses marked \* are given also by Extension.

In addition to the core subjects listed on page 56, this department requires:

## SPANISH

1. **ELEMENTARY SPANISH**—Fall and Summer Quarters. Four hours.  
Wagner's Spanish Grammar. Ray's Elementary Spanish Reader. Writing from dictation and practice in speaking.
2. **ELEMENTARY SPANISH**—Winter Quarter. Four hours.  
Wagner's Grammar complete. Hill's Spanish Tales for Beginners. Short themes on Spanish life. Considerable practice in speaking Spanish.
3. **ELEMENTARY SPANISH**—Spring Quarter. Four hours.  
Carrasco's La Mariposa Blanca and Broomhall's Spoken Spanish. Original short themes on Spanish-American life.
5. **INTERMEDIATE SPANISH**—Fall and Summer Quarters. Four hours.  
Prerequisite: Courses 1, 2, and 3 or two years of high school Spanish. Composition, conversation and extensive reading. Cool's Spanish Composition; Benavente's Tres Comedias; Escrich's Amparo. Conducted chiefly in Spanish.
7. **INTERMEDIATE SPANISH**—Winter Quarter. Four hours.  
Daily themes selected from every day facts. Valdes' La Hermana San Sulpicio; Caballero's Un Servilon y un Liberalito; Cuentos Mexicanos, by Johnson.
9. **INTERMEDIATE SPANISH**—Spring Quarter. Four hours.  
Alarcon's El Sombrero de Tres Picos, El Final de Norma, Novelas Cortas y El Niño de la Bola and one other selected work by Alarcon for outside reading. Conducted in Spanish.
105. **ADVANCED SPANISH**—Fall and Summer Quarters. Four hours.  
Spanish drama of the 17th, 18th and 19th centuries. Prerequisites: Two years of college Spanish, or three years of high school Spanish. Five of the following to be read in class, and five outside of class: Lope de Vega's La Moza de Cantaro and La Estrella de Sevilla; Tirso de Molina's La Prudencia en la Mujer and El Burlador de Sevilla; Alarcon's La Verdad Sospecha; Moreto's El Desden con el Desden; Calderon's La Vida es Sueño and El Magico Prodigioso; Hartzenschuch's Los Amantes de Teruel and Tamayo's Un Drama Nuevo.
107. **ADVANCED SPANISH**—Winter Quarter. Four hours.  
Galdos's Doña Perfecta and Marianela; Bardin's Leyendas Mexicanas; Bazan's El Tesoro de Gaston. Crawford's Spanish Composition.
109. **ADVANCED SPANISH**—Spring Quarter. Four hours.  
The History of Spanish Literature, by Fitz-Maurice-Kelley; Havelock Ellis' The Spul of Spain; Cervantes Novelas Ejemplares; Rueda's La Hija de Montezuma. History of Spanish-American Literature, by Gamboa.
225. **GRADUATE SPANISH**—Fall and Summer Quarters. Four hours.  
Selections from Mesonero Romanos; Romera-Navarro's La America Española; Ford's old Spanish Readings; Juan de Valdes' Dialogo de la Lengua. A knowledge of Latin, French, German, and Italian of great advantage in this course, but not required.
227. **GRADUATE SPANISH**—Winter Quarter. Four hours.  
A critical study of the life and works of Cervantes, Velez Guevara, Corrauas and Quevedo. Selections from Don Quijote, El Diablo Cojuelo, Amar sin Saber a Quien, and Quien es Ella? Original themes on the passing of Latin words into Spanish.



131. THE TEACHING OF SPANISH IN HIGH SCHOOLS—Summer and Spring Quarters. Four hours.

All the most recent methods available for this work will be reviewed. Some fifty of the best known texts now in use in both high schools and colleges will be examined, and "resumens" made by members of the class. A series of 20 lectures illustrated by lantern slides of all the countries of Spanish speech; Spain, Cuba, Porto Rico, Central America, Mexico, and all the countries of South America except Brazil.

FRENCH

1. ELEMENTARY FRENCH—Fall and Summer Quarters. Four hours.

McKenzie and Hamilton's French Grammar and Meras' *Le Premier Livre*.

2. ELEMENTARY FRENCH—Winter Quarter. Four hours.

Grammar completed and Meras *le Premier* and *le Second Livre* completed.

3. ELEMENTARY FRENCH—Spring Quarter. Four hours.

*La Perle Noir*, by Kurz; *Rosalie and Le Chauffeur*, by Maurey, *Contes de Daudet*. Practice in speaking and writing French.

5. INTERMEDIATE FRENCH—Fall and Summer Quarters. Four hours.

*La Vie Boheme*, by Van Horne; *Gautier's Jettatura*; *Greville's Dosia* and *Halevy's Una Mariage d'Amour*.

7. INTERMEDIATE FRENCH—Winter Quarter. Four hours.

Hugo's *Gavroche*, *La Chute* and *Cosette*. French Prose Composition, by Koren. Daily themes on French Life.

9. INTERMEDIATE FRENCH—Spring Quarter. Four hours.

Labiche and Martin's *La Poudre aux Yeux*, *Le Voyage de Monsieur Perrichon*, *Les Petits Oiseaux*, *Moi*. Themes on the French comedy of the 16th, 17th and 18th centuries.

105. ADVANCED FRENCH—Fall and Summer Quarters. Four hours.

Moliere's *Les Femmes Savantes*, *L'Avare*, *Le Tartuffe* and *Le Misanthrope*.

107. ADVANCED FRENCH—Winter Quarter. Four hours.

Rousseau's *L'Etat de Guerre*, Pages Choisis and *Extraits en Prose*. *Rostand's Cyrano de Bergerac* and *L'Aiglon*. Conducted in French.

109. ADVANCED FRENCH—Spring Quarter. Four hours.

Racine's *Andromaque*, *Athalie*, *Esther* and *Mithriades*. History of the French Classic drama of Corneille, Racine and other writers, Racine, Voltaire, Corneille, Moliere, Le Sage, La Fontaine and Boileau, being the ones considered.

225. GRADUATE FRENCH—Fall Quarter. Four hours.

History of the Romantic movement. Selected works from Hugo, Coppee, Merimee and De Musset. Discussions of literary forms and critical points in grammar. (Offered on request only.)

227. GRADUATE FRENCH—Winter Quarter. Four hours.

Selection for graduate students in French from old French readings: *Aucassin et Nicolette*, and *La Chanson de Roland*. (Offered on request only.)

131. TEACHING OF FRENCH IN HIGH SCHOOLS—Summer Quarter. Four hours.

A careful study of all the latest methods now in use in the study of French. Many standard texts to be reviewed.

LATIN

10. FRESHMAN COLLEGE LATIN—Fall and Summer Quarters. Four hours.

Cicero's *Essays on Old Age and Friendship*. Latin Prose and Mythology.

12. FRESHMAN COLLEGE LATIN—Winter Quarter. Four hours.

Livy, Books 21 and 22. Latin Prose.

14. FRESHMAN COLLEGE LATIN—Spring Quarter. Four hours.

Horace, *Odes* and *Epodes*, and Readings from Latin Lyric Poets.

10. ADVANCED COLLEGE LATIN—Fall and Summer Quarters. Four hours. Selected works from Seneca, and Pliny, the Younger.

112. ADVANCED COLLEGE LATIN—Winter Quarter. Four hours. The Germania and Agricola of Tacitus and Selected works from Pliny, the Elder.

131. THE TEACHING OF LATIN—Summer Quarter. Four hours.

A study and criticism of various textbooks. Lectures on the scope and aim of Latin study. Teacher's equipment and reference library, and methods of teaching. Discussions of the difficulties which may confront a teacher of Latin. A critical study of the subjunctive mood and the essentials of classical philology. (Offered on request Fall or Winter quarters.)

## SOCIOLOGY, ANTHROPOLOGY, AND ECONOMICS

This department offers the following series of courses in Sociology, Anthropology, and Economics, to which other courses will be added from time to time. These courses are designed primarily to prepare the student for educational service as teacher, supervisor, or administrator. They are arranged and conducted so as to provide a desirable preparation for the successful teaching of the social sciences, and for those who combine teaching with social work. An unusually fine collection of anthropological and sociological material is available for the use of classes. A full four year course is offered.

### COURSE OF STUDY

Courses marked \* are given also by Extension.

Two years or four years for majors in Sociology. In addition to the core subjects as shown on page 56, this department requires:

FIRST YEAR: Sociology 1, Sociology 10, History 10.

SECOND YEAR: Biotics 101, Anthropology 100, Geology 100.

THIRD YEAR: Twelve hours of Sociology selected by the student.

FOURTH YEAR: Twelve hours of Sociology selected by the student.

### SOCIOLOGY

1. INTRODUCTION TO THE SOCIAL SCIENCES—Fall, Winter, and Spring Quarters. Four hours.

This course begins with a brief history of the natural sciences in order to provide a background for the study of the nature and scope of the social sciences. Each science is given such consideration as will enable the student to perceive what it is and the field it covers. On the completion of the course, the student should be in possession of the knowledge that will enable him to choose the particular line or lines of study he prefers to follow. It is an orientation course. It should be taken, if possible, the first year. A printed syllabus is used.

3. EDUCATIONAL SOCIOLOGY—Each Quarter. Three hours.

This course deals with sociology from the point of view of education, and presents the sociological ideas, laws, and principles necessary to the successful practice of teaching.

18. RURAL SOCIOLOGY—Fall and Spring Quarters. Four hours.

A constructive study of country life, economic activities, social organizations, schools, clubs, churches, social centers, and modern efforts and successes in rural progress. The course is intended primarily for rural teachers, but is of value for all students of rural social conditions and needs.

\*105. THE PRINCIPLES OF SOCIOLOGY—Fall, Spring, and Summer Quarters. Four hours. Required of third year students.

This course is a study of the scope and history of sociology, sketches of the leading contributors to this science, and an exposition of its main principles as set forth systematically in a selected text. Lectures, readings, and reports.

120. SOCIAL SURVEYS AND SOCIAL STATISTICS—Spring Quarter. Three hours.

The objective of this course is to acquaint students with the technic of social surveys and to enable them to interpret scientifically the data of such surveys through the application of statistical methods. Teachers are frequently called upon to make or to assist in making social and educational surveys. This course should be of direct practical value in securing accurate information from such surveys, and in interpreting the information so secured.

130. SOCIAL PSYCHOLOGY—Fall, Winter, and Summer Quarters. Four hours.

A study of suggestion and imitation, crowds, mobs, fads, fashions, booms, crises, conventionality, custom, conflict, public opinion, leadership, and like topics. Text and syllabus.

\*132. THE FAMILY—Winter, Spring, and Summer Quarters. Four hours.

A study of the evolution of the family with emphasis on the modern situation. Particular attention will be paid to the relationship of the family to education and industry.

\*134. CHILD WELFARE—Fall and Winter Quarters. Two hours.

A study of child accounting involving the problems of child labor, juvenile delinquency, the gifted child, and all problems arising from social maladjustment.

209. SEMINAR IN SOCIOLOGY—When requested by five or more students. Four hours.

Only graduate students, or those capable of doing graduate work, will be admitted to this course. The exact nature of the work will be determined after consultation with the class, but it will probably be a study of the means, methods, and possibilities of the conscious improvement of society. Required of majors in Sociology.

### ANTHROPOLOGY

100. GENERAL ANTHROPOLOGY—Fall Quarter. Four hours.

Primitive people, their physical characteristics, beliefs, customs, arts, industries, forms of government, religions; the evolution of the sciences and the arts, language, religion, law, government. This course is illustrated by concrete material. It is an introduction to, and a preparation for, the courses that follow, as well as for all courses in the social sciences.

\*101. THE ORIGIN AND ANTIQUITY OF MAN—Fall, Winter, and Summer Quarters. Four hours.

This course endeavors to present the knowledge that has been accumulated with respect to fossil man, with such scientific inference as seems to be warranted by the facts thus far discovered.

102. EARLY CIVILIZATION—Spring and Summer Quarters. Four hours.

Types of early civilization are studied, including those of Europe, Mexico, Peru, and North America. In this course exclusive use is made of a fine collection of material illustrative of early American art and industry.

### ECONOMICS

\*10. ELEMENTARY ECONOMICS—Fall Quarter. Three hours.

This is a course designed to give a practical knowledge of the common ideas, laws, terms, and principles, of economics that are essential to good citizenship, and also to present an analysis of the basic factors on which the production of all wealth depends. It is a preparatory course in the general subject of economics and for courses 110 and 112.

110. PRINCIPLES OF ECONOMICS—Winter and Summer Quarters. Four hours.

A general course based upon one of the recognized texts in the subject. Attention is devoted chiefly to the phenomena of production, distribution, and exchange with the view of preparing the student for the intelligent discussion of the various present day economic problems such as immigration, the tariff, currency reform, taxation, insurance, and like topics.

112. LABOR AND SOCIETY—Winter Quarter. Four hours.

A study of the relation of the work and the life of the laboring classes, their development, place, privileges, and rights in society, and the relation of workers to systems of industrial administration. Specially commended to teachers of commercial and industrial education and to students of economics.

200. SOCIAL WASTE—Spring Quarter.

A course in social as distinguished from political economy. The principles of social waste are discussed, and the social waste resulting from vice, crime, disease, unemployment, the present use and abuse of our natural resources, and like causes.



PART IV

PROGRAM FOR THE THREE QUARTERS



## INSTRUCTIONS CONCERNING REGISTRATION

*Note*.—Take this copy of CATALOG and YEAR BOOK with you when you register.

1. TIME AND PLACE FOR REGISTRATION.—All registration takes place in the Gymnasium from 8:00 to 12:00 and from 1:00 to 4:00, Tuesday, September 29.

2. ORDER OF REGISTRATION.—Do *only two things* on Registration Day:

(a) Fill out the Registration Card (personal data) with PEN and present it for registration material.

(b) Fill out the Temporary Enrollment Card with PENCIL and have it signed by your Faculty Adviser. This card will admit you to class the first week ONLY. It must be signed by each of your teachers before permanent registration.

The Temporary Card must be exchanged for Permanent Cards at the Registrar's office. This exchange should be completed by 5:00 P.M. of the last day for permanent registration. Permanent Cards, AUDITED BY THE ACCOUNTANT and APPROVED BY THE REGISTRAR, must be presented to your teachers not later than the date thus arranged. All students who have not complied with the provision on or before this date will be dropped from class. However, DO NOT ATTEMPT THIS EXCHANGE UNTIL YOU AND YOUR TEACHERS ARE COMPLETELY SATISFIED WITH YOUR SCHEDULE. Be sure to get a copy of further instructions to be given out on Registration Day.

3. STUDENT PROGRAM SIXTEEN HOURS.—The normal program of a student is sixteen hours. Students whose outside work takes up a considerable part of their time should enroll for twelve to fifteen hours. Any student may make up a program of fifteen, sixteen, or seventeen hours; but if seventeen hours are taken in one quarter, fifteen must be taken at a later quarter, so that any three consecutive quarters dating from matriculation may not average more than sixteen hours. Those wishing to take seventeen or eighteen hours regularly must take the Extra Hour Test, given at 1:30 P. M. on Registration Day—Room 214, Administration Building. No schedules will be approved for more than eighteen hours under any condition.

4. LATE REGISTRATION.—A fee of \$1.00 is charged for registration after 4:00 P. M. the regular day. This fee is also exacted of students who register after the final date for permanent registration. Students more than two days late will have their programs cut in proportion to the time they miss from recitations.

5. **ALL COURSES FOR CREDIT.**—There are no non-credit courses except a special activity course designed for those unable to take the active courses. This is taken by students who have been examined by the college physicians and exempted from active exercise. Students who take this course must present a certificate of recommendation from one of the College physicians and register for the course as for any other subject.

6. **PHYSICAL EDUCATION.**—All freshmen and sophomores, including the unclassified students who expect later to become classified, are required to take an **ACTIVE EXERCISE** course in physical education each quarter in residence.

7. **PHYSICAL AND DENTAL EXAMINATIONS.**—An annual health examination is required for each student. Unclassified students are **NOT** exempt from this requirement.

8. Old Ed. 8 is now designated as Ed. 1. Old Ed. 1 is now designated Ed. 5. Note this carefully in registering.

9. **BIOLOGY AND SOCIOLOGY.**—Sociology 3 cannot be taken by any student who has not had Biology 2.

10. **EDUCATION 1** (Formerly Ed. 8, Introduction to Education) must be taken by all candidates for graduation who have not already had the course, unless properly exempted.

11. **ENGLISH 4** is required of all candidates for graduation no matter what English courses they may have had elsewhere in high school or college, unless they are excused after passing the English Exemption Test. This test is given at the opening of each quarter. Time and place to be announced.

12. Students who have been admitted to the College before October 1, 1923, should determine to their satisfaction that such admission is in accordance with regulations which have been in effect since that date. Students should determine also if they are affected by the new requirements for graduation which went into effect September 1, 1924.



NOTE:—Class rooms not designated in the Program will be assigned on Registration Day. Read carefully pages immediately preceding.

## PROGRAM OF THE THREE QUARTERS

### FALL QUARTER

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
<b>I. 8:00 to 8:50</b>					
Art 13	Primary Art Methods	MTWTF	4	Klee	G-200
Biol 1	Educational Biology	MTThF	3	Fitzpatrick	301
C. E. 11	Principles of Typewriting I.	MTThF	0	Knies	210
C. E. 50	Prin. of Accounting I.	MTWTh	4	Colvin	214
Ed. 1	Introduction to Education	MTTh	3	Ganders	
Ed. 4	Intermediate Methods	MTWTh	4	Van Meter	
Ed. 126	Project Curric. for Rural School	MWF	3	Hargrove	
Eng. 1	Mat. & Meth. in Reading and Literature	MTWTh	4	Tobey	
Eng. 4	Speaking and Writing English	MTWTh	3	Kavich	
Eng. 106	Teaching of English in High School	MWF	3	Hawes	
Hist. 103	The Reformation	MTWTh	4	Dickerson	
H. A. 1	Textiles	MTTh	3	Wiebking	HE-304
H. Sci. 4	Nutrition	MTWTh	4	Jean	HE-306
Hyg. & P. E. 2	Anatomy	MWF	3	Long	
Ind. Arts 1	Elementary Woodworking	MTWTh	2		
Ind. A. 1a	Tech. & Theo. of Woodkg. (2 pds.)	MTWTh	4	Foulk	G-1
Ind. A. 8a	Art Metal	MTWTh	4	Hadden	G-105
Ind. A. 31a	Elem. Printing (2 periods)	MTWTh	4	Bishop	G-104
Ind. A. 32a	Interm. Printing (2 periods)	MTWTh	4	Bishop	G-104
Math. 100	Teaching Secondary Math.	MTThF	4	Finley	304
Mus. 40	Beginning Orchestra	TTh	1	Thomas	Con. 12
Phys. 1	General Physics (Lab by Appt.)	MTTh	4	Valentine	HE-106
P. E. 58	Esthetic Dancing	MWF	1	Keyes	
P. E. 58	Esthetic Dancing	MTTh	1	Keyes	
Psych. 108a	Educational Tests. & Meas.	MTWTh	4	Heilman	
Soc. 1	Intro. to the Social Sciences	MTWTh	4	Binnewies	
Soc. 3	Educational Sociology	MTTh	3	Howerth	
Span. 1	First Year Spanish	MTWTh	4	Du Poncet	

FALL QUARTER

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
<b>II. 9:00 to 9:50</b>					
Art 4b	Design	MTThF	4	Hill	G-200
Art 6	Art Appreciation	W	1	Baker	G-200
Art 11	History of Architecture	Th	1	Hadden	G-105
Chem. 108	Organic Chemistry (Lab. by Appt)	MW	3	Bowers	300
Chem. 110	Organic Chemistry (Lab. by Appt)	MW	4	Bowers	300
C. E. 158	Prob. in Commercial Education	MTWTh	4	Colvin	214
Ed. 1	Introduction to Education	WThF	3	Mahan	
Ed. 21	Rural School Problems	TWF			
Ed. 242	Prob. of Educ. Adm. (2 periods)	Sat.	2	Ganders	
Eng. 6	American Literature	TWThF	4	Tobey	
Eng. 127	Shakspere's Comedies	MTThF	4	Oakden	
Hist. 5	Early Modern Europe	MTWTh	4	Permenter	
H. A. 1	Textiles	MTThF	3	Wiebking	HE-304
H. Sci. 7	Household Management (Theory)	ThF	2	Clasbey	HE-305
H. Sci. 7	Household Management (Practice)	Daily	3	Clasbey	Cottage
Hyg. 1	Indiv. & Social Hygiene	TWF	3	Long	
Ind. A. 1	Elementary Woodworking	MTWTh	2		
Lib. Sci. 102	Receipt and Prep. of Books	TTh	2	Carter	
Lib. Sci. 106	School Libraries	MWF	3	Carter	
Mus. 3	Introductory Harmony	MWF	3	Thomas	Con.
Mus. 22	Appreciation	TWF	3	Opp	Con.
P. E. 52	Physical Education (Men)	TWF	1	Cooper	Field
P. E. 56	Rhythmic & Singing Games	TWF	1	Keyes	6
P. E. 64	Sophomore Athletics	MWF	1	Cave	Field
P. E. 64	Sophomore Athletics	TThF	1	Cave	Field
P. E. 106	Research	T	2-5	Long	
Psych. 2b	Educational Psychology	MTWTh	3	Heilman	
Soc. 105	Principles of Sociology	MTWTh	4	Binnewies	
Span. 5	Intermediate Spanish	TWThF	4	Du Poncet	

### III. 10:00 to 10:50

Art 13	Primary Art Methods	MTThF	4	Klee	G-200
Art 14	Interm. & Jr. High Art Methods	MTThF	4	Lowe	G-204

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
Art 104	Design and Composition	MTThF	4	Hill	G-203
Art 104a	Design and Composition	MTThF	4	Hill	G-203
Biol. 1	Educational Biology	MTThF	3	Fitzpatrick	301
C. E. 37	Commercial Mathematics	MTThF	4	Colvin	214
Ed. 1	Introduction to Education	MThF	3	Hargrove	
Ed. 3	Primary Methods	MTThF	4	Rosenquist	
Ed. 10	Elem. School Curriculum	MTTh	3	Rugg	
Ed. 133	Hist. of Modern Education	MThF	3	Mahan	
Ed. 242	Problems of Education Administration (2 periods)	Sat. 9-11		Ganders	
Eng. 3	Public Speaking and Oral Composition	MTTh	3	Randall	
Eng. 105	Oral English in High School	MTTh	3	Tobey	
Eng. 126	The Informal Essay	MTTh	3	Oakden	
Geog. 100	Geology	MTThF	4	Barker	
H. A. 3a	Garment Making (2 periods)	MTThF	3	Wiebking	HE-304
H. A. 108	Costume Design	MTThF	4	Roudebush	HE-301
H. Sci. 103	Dietetics (2 periods)	MTThF	4	Pickett	HE-207
Ind. A. 5	Prin. of Teaching Prac. Arts Sub.	MTWTh	4	Hadden	G-105
Ind. A. 6	Repair and Equipment Construction (2 periods)	MTWTh	4	Foulk	G-1
Ind. A. 11	Projections Shade and Shadow	MTThF	4	Hadden	
Ind. A. 41a	Elementary Bookbinding (2 periods)	MTWTh	4	Schaefer	G-100
Ind. A. 42a	Intermediate Bookbinding (2 periods)	MTWTh	4	Schaefer	G-100
Lib. Sci. 1	Elementary Library Course	T	1	Carter	
Lib. Sci. 1	Elementary Library Course	Th	1	Carter	
Math. 8	Teaching of Arithmetic	MF	2	Finley	
Math. 108	Junior High Mathematics	TTh	2	Finley	
Mus. 20	Ancient History	MThF	3	Opp	Con.
Mus. 103	Counterpoint	MTh	2	Thomas	Con.
Phys. 11	Heat	MTh	4	Valentine	HE-106
P. E. 62	Outdoor Games	MThF	1	Keyes	6
P. E. 64	Freshman Athletics	TThF	1	Cave	Field
P. E. 162	Plays and Games	MTThF	2	Long	Field
Pol. Sci. 1	Government of the United States	MTThF	4	Dickerson	
Psych. 2b	Educational Psychology	MTThF	3	Heilman	

FALL QUARTER

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
Psych. 109	Psycho-clinical Practice (2 periods)	MTF	1-2	Hamill	
Span. 105	Advanced Spanish	MTThF	4	Du Poncet	
<b>IV. 11:00 to 11:50</b>					
Art 2	Fine Arts Method for Primary	MTWTh	4	Baker	
Biol. 1	Educational Biology	MTWTh	3	Jean	301
Chem. 1	Inorganic Chemistry (Lab by appointment)	MW	3	Bowers	300
Chem. 1	Inorganic Chemistry (Lab by appointment)	TTh	3	Bowers	300
Chem. 4	Inorganic Chemistry (Lab by appointment)	MW	4	Bowers	300
Chem. 4	Inorganic Chemistry (Lab by appointment)	TTh	4	Bowers	300
C. E. 110	Office Appliances	Daily	6	Knies	210
C. E. 141	Advanced Corporation Accounting	MTWTh	4	Colvin	214
Ed. 1	Introduction to Education	TThF	3		
Ed. 5	Principles of Teaching	MWThF	3	Mahan	
Ed. 113	Organization & Administration of a Junior H. S.	MTWTh	4	Rugg	
Eng. 8	History of English Literature	MTThF	4	Oakden	
Eng. 121	Nineteenth Century Poetry	MTWTh	4	Tobey	
French 109	Advanced French	MTWTh	4	Du Poncet	
Geog. 4	Regional Geography of North America	MTThF	4	Barker	
Hist. 27	Contemporary History	WF	2	Dickerson	
Hist. 117	Teaching of History in High School	MTTh	3	Dickerson	
Hyg. 1	Individual and Social Hygiene	MWF	3	Long	
Ind. A. 12	Principles of Architectural Drawing I.	MTWTh	4	Hadden	G-105
Math. 7	Analytic Geometry	MTThF	4	Finley	
Mus. 1a	Sight Singing	MWF	3	Cline	Con.
Mus. 1b	Sight Singing	TTh	2	Cline	Con.
P. E. 50a	Gymnastic Dancing	TThF	1	Cave	Gym.
P. E. 52	Physical Education (Men)	MWF	1	Cooper	Field
P. E. 57	Folk and National Dancing	MWF	1	Keyes	6
P. E. 64	Upper Classmen Athletics	MWF	1	Cave	Field
Psych. 212	Statistical Methods	MTWTh	4	Heilman	
Soc. 100	General Anthropology	MTWTh	4	Howerth	
Soc. 130	Social Psychology	MTWTh	4	Binnewies	
Span. 225	Graduate Spanish	MTWTh	3	Du Poncet	

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
<b>V. 1:00 to 1:50</b>					
Art 3a	Art Structure I.	MTThF	4	Baker	G-203
Art 5	Water Color Painting	MTWTh	4	Hill	G-203
Biol. 1	Educational Biology	MTWTh	3	Jean	301
Chem. 7	Qualitative Chemistry	MTWTh	2-4	Bowers	302
C. E. 36	Penmanship Methods	MTThF	2	Bedinger	214
C. E. 110	Office Appliances	Daily	6		210
Ed. 1	Introduction to Education	TThF	3		
Ed. 10	Elementary School Curriculum	MTTh	3	Rugg	
Ed. 16	Elementary Training Course-Campfire	M	1	Lee	
Ed. 52	Kindergarten Curriculum and Use of Materials	MTWTh	4	Lyford	
Eng. 14	Dramatic Art	MTThF	4	Randall	
Eng. 16	Contemporary Literature	MTThF	4	Oakden	
French 1	First Year French	MTWTh	4		
Geog. 113	Mathematical Geography	MTTh	3	Barker	
Geog. 130	Islands of the Sea	W	1	Barker	
Hist. 1	American History 1700-1800	MWThF	4	Permenter	
H. E. 111	Teaching Home Economics	TWThF	4	Roudebush	HE-207
H. Sci. 1	Foods and Cookery (2 periods)	MTThF	4	Pickett	HE-207
H. Sci. 106	Home Nursing	MTThF	4	Wiebking	306
Ind. A. 14	Care and Management		3	Fouk	G-1
Ind. A. 31b	Elementary Printing (2 periods)	MTWTh	4	Bishop	G-104
Ind. A. 41b	Elementary Bookbinding (2 periods)	MTWTh	4	Schaefer	G-100
Ind. A. 42b	Inter. Bookbinding (2 periods)	MTWTh	4	Schaefer	G-100
Math. 2	Trigonometry	MTThF	4		
P. E. 166	Football Coaching	MWF	2	Cooper	
Soc. 101	Origin and Antiquity of Man	MTWTh	4	Howerth	
Zoology 1	Invertebrate Zoology	MTThF	4	Fitzpatrick	303

FALL QUARTER

**VI. 2:00 to 2:50**

Art 7	Constructive Design	MTWTh	4	Baker	
Art 103	Art Structure III.	MTThF	4	Hill	
Biol. 1	Educational Biology	MTWF	3		301
Bot. 1	General Botany	MTWTh	4	Jean	303

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
Chem. 114	Quantitative Chemistry	MTWTh	4	Bowers	302
C. E. 38	Commercial Law I.	MTThF	4	Bedinger	214
C. E. 105	Secretarial Practice II.	MWThF	4	Merriman	213
C. E. 110	Office Appliances	Daily	6		210
Ed. 1	Introduction to Education	WThF	3	Mahan	
Ed. 20	Agricultural Education	TWThF	4	Hargrove	
Ed. 51	Story Telling, etc. for Kindergarten	MTWTh	4	Lyford	
Ed. 101	Principles of Teaching in the High School	MTThF	4	Blue	
Ed. 112	Schoolhouse Construction	MT	2	Ganders	
Ed. 123	Educational Research for Seniors	Arrange	4	Rugg	
Ed. 144	School Publicity	ThF	2	Shaw-Ganders	
Eng. 12	Voice Culture	MTThF	4	Randall	202
Eng. 15	Types of Literature	MTTh	3	Cross	L. T.
Eng. 100	Journalistic Writing	MWTh	3	Shaw	100
French 5	Second Year French	MTWTh	4		
Geog. 8	Human Geography	MTThF	4	Barker	
H. A. 3b	Garment Making (2 periods)	MTWTh	3	Jean	304
Hyg. 1	Individual and Social Hygiene	MWF	3	Long	
Hyg. & P. E. 108	Educational Hygiene	MWF	2	Bryson	
Math. 103	Theory of Equations	MTThF	4	Finley	
Mus. 10	Primary Methods	MWF	3	Roesner	
Phys. 103	Radio	MTWTh	4	Valentine	HE-106
P. E. 64	Sophomore Athletics	MWF	1	Cave	Field
Pol. Sci. 102	International Relations	MTWTh	4	Dickerson	
Psych. 110	General Psychology	MTWF	4	Hamill	
Soc. 3	Educational Sociology	MTTh	3	Howerth	

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COLORADO STATE TEACHERS COLLEGE

## VII. 3:00 to 3:50

Art 18	Drawing and Design	MT	2	Hill	G-203
Bot. 102	Botanical Technic	MW	2	Jean	303
C. E. 110	Office Appliances	MTWF	6		210
Ed. 1	Introduction to Education	MTF	3	Ganders	
Ed. 223	Research in Education	MTW	3	Whitney	
El. Sci. 1	Elementary Science	MTWF	4		301

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
Eng. 2	Teaching of Written English	MTWTF	4	Johnson	T-3
Eng. 4	Speaking and Writing English	MTWTF	3	Randall	202
Hist. 10	Social and Industrial History of the United States	MTWTF	4	Permenter	
H. A. 4	Millinery (2 periods)	MTWTF	4	Roudebush	301
H. Sci. 1	Foods and Cookery (2 periods)	MTThF	4	Pickett	207
Ind. A. 41c	Elementary Bookbinding (2 periods)	MTWTh	4	Schaefer	G-100
Ind. A. 42c	Intermediate Bookbinding (2 periods)	MTWTh	4	Schaefer	G-100
Latin 10	Freshman College Latin	MTWTF	4		
Math. 5	College Algebra	MTThF	4		
Mus. 11	Intermediate Methods	MWF	3	Roesner	
P. E. 50	Characteristic Dancing	MWF	1	Keyes	6
P. E. 64	Freshman Athletics	MWF	1	Cave	Field
P. E. 66	Football Practice	Daily	1-2	Cooper	Field
P. E. 68	Corrective Gymnastics	MWF	0	Cave	6
Psych. 2a	Educational Psychology	MTWTF	3	Hamill	
Soc. 3	Educational Sociology	MTW	3	Howerth	

### VIII. 4:00 to 4:50

Art. 108	Pottery I.	MWThF	4	Lowe	G-204
Art 115	Pottery II.	WTh	2	Lowe	G-204
Chem. 117	Teaching of Chemistry	MWTh	3	Bowers	300
C. E. 1	Principles of Shorthand I.	MWThF	0	Merriman	213
C. E. 110	Office Appliances	Daily	6		210
Ed. 1	Introduction to Education	WThF	3	Mahan	
Ed. 165	Bible Study	M	1	Church	
Eng. 4	Speaking and Writing English	MTWTh	3	Kavich	100
Eng. 18	Debating	MW	2	Randall	202
Ind. A. 1	Elementary Woodworking	MTWTh	2		
Latin 110	Advanced Latin	MWThF	4		
Mus. 42	Schumann Club	MW	1	Cline	Con.
Mus. 43	Advanced Orchestra	MTh	1	Thomas	Con.
Mus. 44	Advanced Band	WF	1	Thomas	Con.
P. E. 57	Folk and National Dancing	MWF	1	Keyes	6
P. E. 57	Folk and National Dancing (Freshmen only)	MTTh	1	Keyes	6

FALL QUARTER

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
P. E. 64	Upper Classmen Athletics	MWF	1	Cave	Field
Phys. 108	Methods of General Science	MWThF	4	Valentine	HE-106
Psych. 2a	Educational Psychology	MTWF	3	Hamill	
Soc. 10	Elementary Economics	MWTh	3	Binnewies	
Soc. 134	Social Statistics	WF	2	Binnewies	

**IX. 7:00 P. M.**

Mus. 101	College Chorus	MTh	1	Cline	
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## WINTER QUARTER

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
<b>I. 8:00 to 8:50</b>					
Art 13	Primary Art Methods	MTWTF	4	Klee	
Biol. 1	Educational Biology	MTWTh	3	Jean	301
C. E. 12	Principles of Typewriting II.	MTThF	4	Knies	210
C. E. 51	Principles of Accounting II.	MTWTh	4	Colvin	214
Ed. 1	Introduction to Education	MTTh	3	Hargrove	
Ed. 15	Educational Guidance	TThF	3	Mahan	
Ed. 115	Organization & Administration of an Elem. School	MTWTF	4	Ganders	
Eng. 4	Speaking and Writing English	MTWTh	3		
Eng. 103	Advanced Public Speaking	MTTh	3	Randall	
Hist. 108	American Revolution	MTWTh	4	Dickerson	
Hyg. & P. E. 102	Kinesiology	MWF	3	Long	
Ind. Arts 1	Elementary Woodworking	MTWTh	2		
Ind. A. 2	Tech. and Theory of Woodworking (2 periods)	MTWTh	4	Foulk	G-1
Ind. A. 8b	Art Metal	MTWTh	4	Hadden	G-101
Ind. A. 31b	Elementary Printing (2 Periods)	MTWTh	4	Bishop	G-104
Ind. A. 32b	Intermediate Printing (2 Periods)	MTWTh	4	Bishop	G-104
Ind. A. 109a	Art Metal	MTWTh	4	Hadden	G-101
Math. 106	Astronomy	MTThF	4	Finley	
Mus. 40	Beginning Orchestra	TTh	1	Thomas	Con.
Mus. 105	Orchestration	MWF	3	Cline	Con.
Phys. 2	General Physics (Lab by Appointment)	MTTh	4	Valentine	H-106
P. E. 58	Esthetic Dancing	MWF	1	Keyes	6
P. E. 64	Freshman Athletics	MWF	1	Cave	Gym.
P. E. 64	Freshman Athletics	TThF	1	Cave	Gym.
Psych. 1	Child Hygiene	MTWTh	4	Heilman	
Soc. 3	Educational Sociology	MTTh	3	Howerth	
Span. 2	First Year Spanish	MTWTh	4	Du Poncet	

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
<b>II. 9:00 to 9:50</b>					
Art 2	Fine Arts Methods for Primary	TWThF	4	Klee	
Art 3	Freehand Drawing I.	TWThF	4	Hill	
Art 11	History of Architecture	Th	1	Hadden	G-101
Art 18	Drawing and Design	TTh	2	Hill	
Art 108	Pottery	MTThF	4	Lowe	
Art 115	Pottery and Glazing	TTh	2	Lowe	
Biot. 101	Heredity and Eugenics	MTWTh	4	Jean	301
Chem. 109	Organic Chemistry (Lab by Appointment)	MW	3	Bowers	300
Chem. 111	Organic Chemistry (Lab by Appointment)	MW	4	Bowers	300
C. E. 150	Bank Accounting	MTW	3	Colvin	214
Ed. 5	Principles of Teaching	MTWTh	3	Mahan	
Ed. 23	Rural School Management	MTTh	3	Hargrove	
Ed. 242	Problems of Education Administration (2 Periods)	Sat. 9-11	2	Ganders	
Eng. 16	Contemporary Literature	TWThF	4	Newman	
Eng. 114	Advanced Dramatic Art	MTThF	4	Randall	
Eng. 128	Shakspeare's Histories	MTThF	4	Oakden	
Hist. 6	Modern European History	TWThF	4	Permenter	
H. E. Ed. 1	Methods in Elementary H. E. Teaching	MTW	3	Clasbey	HE-305
H. Sci. 7	Household Management (Theory)	ThF	2	Clasbey	HE-305
H. Sci. 7	Household Management (Practice)	Daily	3	Clasbey	Cottage
H. Sci. 104a	Child Care (First Half Quarter)	MTThF	2	Pickett	HE-207
H. Sci. 104b	Diets in Disease (Second Half Quarter)	MTThF	2	Pickett	HE-207
Hyg. 1	Individual and Social Hygiene	WThF	3	Long	
Hyg. 110	Occupational Hygiene	TTh	2	Long	
Ind. A. 1	Elementary Woodworking	MTWTh	2		
Ind. A. 104	Pre-Vocational Education	MWF	3	Hadden	G-101
Lib. Sci. 103	Classification and Cataloging	MWF	3	Carter	
Lib. Sci. 105	Periodicals and Binding	TTh	2	Carter	
Mus. 1a	Sight Singing	TWF	2	Cline	Con.
Mus. 4	Intermediate Harmony	MWF	3	Thomas	Con.
Mus. 23	Musical Literature	MWF	3	Opp	Con.
P. E. 52	Physical Education (Men)	TWF	1	Cooper	Gym.
P. E. 57	Folk and National Dancing	TWF	1	Keyes	6

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
P. E. 64	Sophomore Athletics	MWF	1	Cave	Gym.
P. E. 64	Sophomore Athletics	TThF	1	Cave	Gym.
Psych. 107	Mental Tests and Measurements	MTWTh	4	Heilman	
Soc. 112	Labor and Society	MTWTh	4	Howerth	
Span. 7	Second Year Spanish	TWThF	4	Du Poncet	

### III. 10:00 to 10:50

Art 1	Fine Arts Methods for Intermediate and Junior High Schools	MTThF	4	Lowe	G-101
Art 101	Drawing from Life	MTThF	4	Hill	
Biol. 1	Educational Biology	MTThF	3	Fitzpatrick	301
C. E. 143	Income Tax Accounting	MTTh	3	Colvin	214
Ed. 3	Primary Methods	MTThF	4	Dulin	
Ed. 5	Principles of Teaching	MTThF	3	Mahan	
Ed. 125	Rural Education	MTTh	3	Hargrove	
Ed. 142	City School Administration	MTThF	4	Ganders	
Ed. 242	Problems of Ed. Administration (2 Periods)	Sat. 9-11	2	Ganders	
Eng. 11	The English Language	MTThF	4	Cross	100
Eng. 15	Types of Literature	MTTh	3	Oakden	L. Th.
Eng. 160	Literature of the Bible	MTTh	3	Church	202
Geog. 5	Geography of the New Europe	MTThF	4	Barker	
H. A. 5	Pattern Making (2 Periods)	TWThF	4	Roudebush	HE-301
H. Sci. 2	Foods and Cookery (2 Periods)	MTThF	4	Pickett	HE-207
Hyg. & P. E. 12	First Aid	MTF	2	Cooper	
Hyg. & P. E. 113	Administration of Physical Education	TTh	2	Long	
Ind. A. 13	Principles of Architectural Drawing II.	MTWTh	4	Hadden	G-105
Ind. A. 19	Wood Turning (2 Periods)	MTWTh	4	Foulk	G-1
Ind. A. 41a	Elementary Bookbinding	MTWTh	4	Schaefer	G-100
Ind. A. 143a	Advanced Leather Craft and Art Work	MTWTh	4	Schaefer	G-100
Lib. Sci. 1	Elementary Library Course	T	1	Carter	
Lib. Sci. 1	Elementary Library Course	Th	1	Carter	
Math. 8	Teaching of Arithmetic	MF	2	Finley	
Math. 100a	Teaching of Algebra	TTh	2	Finley	
Mus. 21	Modern Composers	MThF	3	Opp	Con.

WINTER QUARTER

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
Mus. 104	Counterpoint	MTh	2	Thomas	Con.
Mus. 122	Appreciation for Concert-Goer	T	1	Southard	Con.
Phys. 14	Sound	MTh	4	Valentine	HE-106
P. E. 51	Light Gymnastics	MTTh	1	Keyes	6
P. E. 64	Sophomore Athletics	TThF	1	Cave	Gym.
Pol. Sci. 2	State Government	MTThF	4	Dickerson	
Psych. 2b	Educational Psychology	MTThF	3	Heilman	
Soc. 3	Educational Sociology	MTTh	3	Howerth	
Span. 107	Advanced Spanish	MTThF	4	Du Poncet	

#### IV. 11:00 to 11:50

Art 13	Fine Arts Methods for Primary	MTThF	4	Baker	
Bot. 103	Plant Physiology	MTWTh	4	Jean	303
Chem. 2	Inorganic Chemistry (Lab by Appointment)	MW	3	Bowers	300
Chem. 2	Inorganic Chemistry (Lab by Appointment)	Th	2	Bowers	300
Chem. 5	Inorganic Chemistry (Lab by Appointment)	MW	4	Bowers	300
Chem. 5	Inorganic Chemistry (Lab by Appointment)	TTh	4	Bowers	300
C. E. 110	Office Appliances	Daily	6	Colvin	212
C. E. 157	Methods in Commerical Education	MW	2	Colvin	214
Ed. 5	Principles of Teaching	MTWTh	3	Mahan	
Ed. 24	The Rural Community	MTTh	3	Hargrove	
Ed. 107	Methods of Improving Reading	MWThF	4	Davis	
Ed. 111	Philosophy of Education	MTThF	4	Ganders	
Eng. 4	Speaking and Writing English	MTWTh	3	Kavich	202
Eng. 9	The History of English Literature	MTThF	4	Oakden	100
Geog. 12	Methods in Intermediate Geography	MTThF	4	Barker	
Hist. 2	American History—National Development	MTWTh	4	Permenter	
H. A. 102	Applied Design	MTThF	4	Wiebking	HE-304
Hyg. 1	Individual and Social Hygiene	MWF	3	Long	
Ind. A. 117	Elements of Machine Design	MTWTh	4	Hadden	G-105
Math. 101	Differential Calculus	MTThF	4	Finley	
Mus. 107	Form Analysis	MWF	3	Thomas	Con.
Mus. 120	School Entertainments	MW	2	Cline	

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
P. E. 5	History of Physical Education	TTh	2	Keyes	
P. E. 52	Physical Education (Men)	MWF	1	Cooper	Gym.
P. E. 59	Natural Dancing	MWF	1	Keyes	6
P. E. 64	Upper Classmen Athletics	MWF	1	Cave	Gym.
P. E. 64	Upper Classmen Athletics	TThF	1	Cave	Gym.
Psych. 2b	Educational Psychology	MTWTh	3	Heilman	
Soc. 101		MTWTh	4	Howerth	
Span. 227	Graduate Spanish	MTWTh	3	Du Poncet	
Zool. 106	Preparation of Biological Materials (Lab by Appt.)	MTThF	2-3-4	Fitzpatrick	

### V. 1:00 to 1:50

Art 105	Oil Painting I.	MTWTh	4	Hill	
Art 200	Oil Painting II.	MTWTh	4	Hill	
Biol. 1	Educational Biology	MTThF	3	Fitzpatrick	301
Bot. 2	General Botany	MTWTh	4	Jean	303
Chem. 7	Qualitative Chemistry	MTWTh	2-4	Bowers	302
C. E. 36	Penmanship Methods	MTThF	2	Bedinger	214
C. E. 110	Office Appliances	Daily	6	Colvin	210
Ed. 5	Principles of Teaching	MTThF	3	Ganders	
Ed. 16	Elementary Camp Fire Course	M	1	Lee	
Ed. 16a	Advanced Camp Fire Course	T	1	Lee	
Ed. 52	Kindergarten Curriculum and Use of Materials	MTWTh	4	Lyford	
Ed. 210	Problems of the School Curriculum	MTTh	3	Rugg	
Eng. 1	Material and Method in Reading and Literature	MTWTh	4	Tobey	202
Eng. 120	Lyric Poetry	MTThF	4	Oakden	100
French 2	First Year French	MTWTh	4		
Geog. 7	Business Geography	MTThF	4	Barker	
Hist. 4	Western American History	MTWF	4	Dickerson	
H. A. 3	Garment Making (2 Periods)	MTThF	3	Wiebking	HE-304
H. Sci. 1b	Foods and Cookery (2 Periods)	MTThF	4	Pickett	HE-207
H. Sci. 108	The House and Sanitation	MTW	3	Roudebush	HE-207
Ind. A. 32c	Intermediate Printing (2 Periods)	MTWTh	4	Bishop	G-104
Ind. A. 42a	Intermediate Bookbinding	MTWTh	4	Schaefer	G-100

WINTER QUARTER

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
Ind. A. 124	Machine Work ((2 Periods)	MTWTh	3	Foulk	G-7
Ind. A. 133b	Advanced Printing (2 Periods)	MTWTh	4	Bishop	G-104
Ind. A. 143b	Advanced Leather Craft	MTWTh	4	Schaefer	G-100
Math. 100b	Geometry for Teachers	TTh	2		
Mus. 12	Rural School Methods	MWF	3	Roesner	Con.
P. E. 167	Basketball Coaching	MWF	2	Cooper	
Psych. 113	Vocational Psychology	MTWF	4	Hamill	
Soc. 3	Educational Sociology	MTTh	3	Howerth	
<b>VI. 2:00 to 2:50</b>					
Art 4a	Art Structure II.	MTThF	4	Baker	
Biol. 1	Educational Biology	MTWF	3		301
Chem. 114b	Quantitative Chemistry	MTWTh	4	Bowers	302
C. E. 53	Salesmanship	MThF	3	Bedinger	214
C. E. 106	Secretarial Science I.	MWF	3	Merriman	213
C. E. 110	Office Appliances	Daily	6		210
Ed. 5	Principles of Teaching	MTWTh	3	Mahan	
Ed. 51	Story Telling, etc. for Kindergarten	MTWTh	4	Lyford	
Ed. 134	History of Education in the United States	MTTh	3	Rugg	
Ed. 216	Problems of Secondary Education	MTThF	4	Blue	
Eng. 3	Public Speaking and Oral Composition	MTTh	3	Tobey	202
Eng. 101	Journalistic Writing	MTTh	3	Shaw	100
French 7	Second Year French	MTWTh	4		
Geog. 150	Geography of Colorado	MTThF	4	Barker	
H. A. 5	Pattern Making (2 Periods)	MTWTh	4	Roudebush	HE-301
Hyg. 1	Individual and Social Hygiene	MWF	3	Long	
Hyg. & P. E. 108	Educational Hygiene	MWF	2	Bryson	
Math. 200	Advanced Calculus	MTThF	4	Finley	
Mus. 10	Primary Methods	MWF	3	Roesner	
Phys. 111	Automobile	MTWTh	4	Valentine	HE-106
Pol. Sci. 101	American Diplomacy	MTWTh	4	Dickerson	
Psych. 2a	Educational Psychology	MTWF	3	Hamill	
Soc. 110	Principles of Economics	MTWTh	4	Binnewies	
Zool. 2	Vertebrate Zoology	MTThF	4	Fitzpatrick	303

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
<b>VII. 3:00 to 3:50</b>					
Art 6	Art Appreciation	F	1	Baker	
Art 9	Art History	MTW	4	Baker	
Art 17	Lettering and Poster Composition	MT	2	Hill	G-203
Art 102	Design and Lettering	MTWF	2-4	Hill	
Biol. 1	Educational Biology	MTWF	3		301
C. E. 36	Penmanship Methods	MTWF	2	Bedinger	214
C. E. 110	Office Appliances	MTWF	6		210
Ed. 10	Elementary School Curriculum	MTW	3	Rugg	
Ed. 223	Research in Education for Graduate Students	MTW	3	Whitney	
Eng. 2	Teaching of Written English	MTThF	4	Johnson	T-3
Eng. 13	The Art of Story Telling	MTW	3	Tobey	202
Eng. 19	Debating (Women)	MTWF	4	Randall	100
Geog. 2	Physiography	MTThF	4	Barker	
H. A. 109	Advanced Dressmaking (Double Period)	MTWF	4	Wiebking	HE-304
Hist. 10	Social and Industrial History of the United States	MTWF	4	Permenter	
Hyg. & P. E. 101	Physiology	MWF	3	Long	
Ind. A. 42b	Intermediate Bookbinding	MTWTh	4	Schaefer	G-100
Ind. A. 143a	Advanced Leather Craft	MTWTh	4	Schaefer	G-100
Latin 12	Freshman College Latin	MTWF	4		
Math. 6	College Algebra	MTWF	4		
Mus. 11	Intermediate Methods	MWF	3	Roesner	
Phys. 120	Projects in Physics	MTWF	4	Valentine	HE-106
P. E. 50	Characteristic Dancing	MWF	1	Keyes	
P. E. 55	Wrestling	Daily	1	Cooper	
P. E. 66b	Basketball Practice	Daily	1-2	Cooper	Gym.
P. E. 68	Corrective Gymnastics	MWF	0	Cave	6
Psych. 105	Psychology of Senior High School Subjects	MTWF	4	Hamill	
Soc. 132	The Family	MTTh	3	Binnewies	

WINTER QUARTER

**VIII. 4:00 to 4:50**

Chem. 116	Agricultural Chemistry	MTTh	4	Bowers	300
C. E. 2	Principles of Shorthand II.	MWThF	4	Merriman	213
C. E. 110	Office Appliances	Daily	6	Colvin	210

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Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
Ed. 123	Educational Research for Senior College Students	Arrange	4	Rugg	
Ed. 166	Bible Study	M	1	Church	
Eng. 3	Public Speaking and Oral Compositions	MTW	3	Tobey	202
Eng. 19	Debating (Men)	MTWTh	3	Randall	100
French 107	Advanced French	MTWTh	4	Du Poncet	
Latin 112	Advanced Latin	MWThF	4		
Mus. 42	Schumann Club	MW	1	Cline	
Mus. 43	Advanced Band	MTh	1	Thomas	
Mus. 44	Advanced Band	WF	1	Thomas	
P. E. 56	Rhythmic and Singing Games	MWF	1	Keyes	6
P. E. 56	Rhythmic and Singing Games (Freshmen only)	MTh	1	Keyes	6
P. E. 64	Hiking	MWF	1	Cave	Gym.
Phys. 107	History of Physics	MTh	2	Valentine	HE-106
Psych. 2a	Educational Psychology	MTWF	3	Hamill	
Soc. 130	Social Psychology	MTWTh	4	Binnewies	
Soc. 134		WF	2	Binnewies	
<b>7:00 P. M.</b>					
Mus. 41	Men's Glee Club	MTh	1	Cline	



## SPRING QUARTER

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
<b>I. 8:00 to 8:50</b>					
Art 12	Household Art Design	MWThF	4		G-200
Biol. 1	Educational Biology	MTWTh	3	Jean	301
C. E. 13	Principles of Typewriting III.	MTF	3	Knies	210
C. E. 14	Methods of Teaching Typewriting	Th	1	Knies	210
C. E. 52	Principles of Accounting III.	MTWTh	4	Colvin	214
Ed. 3	Primary Methods	MTWTh	4		
Ed. 4	Intermediate Methods	MTWTh	4	McCowen	
Ed. 106	Types of Teaching and Learning	MTThF	4	Ganders	
Eng. 3	Public Speaking and Oral Composition	MTTh	3	Randall	100
Eng. 6	American Literature	MTWTh	4	Tobey	202
Hist. 109	Slavery, Secession, Reconstruction	MTWTh	4	Dickerson	
H. A. 6	Elementary Dressmaking (2 Periods)	MTThF	4	Wiebking	HE-304
H. Sci. 104	Demonstration Cookery (2 Periods)	MTThF	4	Pickett	HE-207
Hyg. & P. E. 101	Physiology of Exercise	MWF	3	Long	
Ind. A 1	Elementary Woodworking	MTWTh	2		
Ind. A 1a	Tech. and Theory of Woodworking (2 Periods)	MTWTh	4	Foulk	G-1
Ind. A 31c	Elementary Printing (2 Periods)	MTWTh	4	Bishop	G-104
Ind. A 32c	Intermediate Printing (2 Periods)	MTWTh	4	Bishop	G-104
Ind. A 109b	Art Metal	MTWTh	4	Hadden	G-101
Math. 9	Teaching of Arithmetic	MTThF	4	Finley	
Mus. 40	Beginning Orchestra	TTh	1	Thomas	Con.
Mus. 106	Orchestration	MWF	3	Cline	Con.
Phys. 3	General Physics (Lab by Appointment)	MTTh	4	Valentine	HE-106
P. E. 60	Interpretive Dancing	MWF	1	Keyes	6
P. E. 62	Plays and Games	MWF	1	Cave	Field
P. E. 102b	Remedial Gymnastics	TTh	2	Cave	6
Psych. 214	Advanced Educational Psychology	MTWTh	4	Heilman	
Soc. 132	The Family	MTTh	3	Binnewies	
Span. 3	First Year Spanish	MTWTh	4	Du Poncet	
Zool. 5	Bird Study	MTThF	4	Fitzpatrick	

SPRING QUARTER

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
<b>II. 9:00 to 9:50</b>					
Art 11	History of Architecture	Th	1	Hadden	G-105
Art 16	Freehand Drawing II.	TWThF	4	Hill	G-203
Art 100	Supervision of Fine Arts Education	TTh	2	Baker	G-203
Art 101	Drawing from Life	MTWTh	4	Hill	G-203
Art 108	Pottery	MTThF	4	Lowe	G-204
Art 115	Pottery and Glazing	TTh	2	Lowe	G-204
Biol. 102	Teaching of Biology	MTWTh	4	Jean	
Chem. 112	Food Chemistry (Lab by Appointment)	MW	3	Bowers	300
Chem. 113	Food Chemistry (Lab by Appointment)	MW	4	Bowers	300
C. E. 159	Auditing	MTWTh	4	Colvin	214
Ed. 5	Principles of Teaching	TWThF	3	Hargrove	
Ed. 120	Educational Finance	MT	2	Ganders	
Ed. 240	Women in Administration	MTWTh	4	Newman	
Eng. 4	Speaking and Writing English	TWThF	3	Randall	100
Eng. 20	Advanced Composition	MTWTh	4	Oaken	100A
Eng. 122	Victorian Poetry	MTWTh	4	Tobey	202
Hist. 101	Commercial and Financial History of United States	TWThF	4	Dickerson	
H. E. Ed. 1	Methods of Teaching Elementary H. Ecs.	MTW	3	Roudebush	HE-305
H. Sci. 7	Household Management (Practice)	Daily	3	Roudebush	HE-305
Hyg. 1	Individual and Social Hygiene	WThF	3	Long	
Hyg. & P. E. 106	Research	T	2-5	Long	
Ind. A. 1	Elementary Woodworking	MTWTh	2		
Ind. A. 5	Principles of Teaching Practical Arts Subjects	MTWTh	4	Hadden	G-105
Lib. Sci. 104	Reference Work	TWThF	4	Carter	
Math. 201	Differential Equations	MTThF	4	Finley	
Mus. 5	Advanced Harmony	MWF	3	Thomas	Con.
Mus. 22	Appreciation	TWF	3	Opp	Con.
P. E. 50	Characteristic Dancing	TWF	1	Keyes	6
P. E. 52	Physical Education (Men)	TWF	1	Cooper	Field
P. E. 64	Sophomore Athletics	MWF	1	Cave	Field
P. E. 64	Sophomore Athletics	TThF	1	Cave	Field
Psych. 104	Psychology of Elementary School Subjects	MTWTh	4	Heilman	
Soc. 3	Educational Sociology	TWTh	3	Howerth	
Span. 9	Second Year Spanish	TWThF	4	Du Poncet	

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
<b>III. 10:00 to 10:50</b>					
Art 14	Industrial Arts Methods for Intermediate and Junior High School	MTThF	4	Lowe	G-204
Art 17	Lettering and Poster Composition	MT	2	Hill	G-200
Art 102	Design and Lettering	MTThF	2-4	Hill	G-200
Art 104	Design and Composition	MTThF	4	Hill	G-200
Biol. 1	Educational Biology	MTThF	3	Fitzpatrick	301
C. E. 151	Cost Accounting	MTThF	4	Colvin	214
Ed. 5	Principles of Teaching	MTThF	3	Mahan	
Ed. 28	School and Home Gardens	TThF	3	Hargrove	
Ed. 108	Educational Supervision	MTThF	4	Ganders	
Ed. 110	Extra-Curricular Activities	MTTh	3	Rugg	
Eng. 13	Art of Story Telling	MTTh	3	Tobey	202
Eng. 129	Shakspere's Tragedies	MTThF	4	Oakden	100
Geog. 103	Climatology	MTThF	4	Barker	
Hist. 124	History of the Far East	MTThF	4	Permenter	
H. A. 6	Elementary Dressmaking (2 Periods)	MTThF	4	Wiebking	HE-304
H. Sci. 3	Cookery and Table Service (2 Periods)	MTThF	4	Picket	HE-207
Ind. A 3	Woodworking for Elementary & Secondary Schools	MTWTh	4	Fouk	
Ind. A 41c	Elementary Bookbinding (2 Periods)	MTWTh	4	Schaefer	G-100
Ind. A. 105	Advanced Architectural Design	MTWTh	4	Hadden	G-105
Ind. A. 143b	Advanced Leather Art Work (2 Periods)	MTWTh	4	Schaefer	G-100
Lib. Sci. 1	Elementary Library Course	T	1	Carter	
Lib. Sci. 1	Elementary Library Course	Th	1	Carter	
Math. 4	Surveying (2 Periods)	TTh	4	Finley	
Mus. 2	Tone Thinking and Melody Writing	MTThF	3	Opp	Con.
Mus. 114	Methods in Conducting	TTh	2	Cline	Con.
Phys. 15	Light	MTh	4	Valentine	HE-106
P. E. 56	Rhythmic and Singing Games	MTTh	1	Keyes	6
P. E. 64	Freshman Athletics	TThF	1	Cave	Field
Pol. Sci. 3	Municipal Government	MTTh	3	Dickerson	
Psych. 2b	Educational Psychology	MTThF	3	Heilman	
Soc. 120		MTTh	3	Binnewies	
Soc. 209	Seminar in Sociology	MTThF	4	Howerth	
Span. 109	Advanced Spanish	MTThF	4	Du Poncet	

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
<b>IV. 11:00 to 11:50</b>					
Art 13	Industrial Arts Methods for Primary	MTWTF	4	Klee	G-204
Art 18	Drawing and Design	TTh	2	Hill	G-203
Biol. 1	Educational Biology	MTWTh	3	Jean	301
Chem. 3	Inorganic Chemistry (Lab by Appointment)	TTh	3	Bowers	300
Chem. 3b	Household Chemistry (Lab by Appointment)	MW	3-4	Bowers	300
Chem. 6	Inorganic Chemistry (Lab by Appointment)	TTh	4	Bowers	300
C. E. 155	Economics of Retailing	MTWTh	4	Colvin	214
Ed. 5	Principles of Teaching	MTThF	3	Mahan	
Ed. 10	Elementary School Curriculum	MTTh	3	Rugg	
Ed. 129	Current Educational Thought	MTThF	4	Ganders	
Eng. 1	Material and Methods in Reading and Literature	MTWTh	4	Tobey	202
Eng. 10	History of English Literature	MTWTh	4	Oakden	100
French 109	Advanced French	MTWTh	4	Du Poncet	
Geog. 14	Junior High School Methods	MTThF	4	Barker	
Hist. 3	Reconstruction and the New United States	MTThF	4	Permenter	
H. E. 101	The Home	TTh	2	Roudebush	HE-301
Ind. A 118	Elements of Machine Design	MTWTh	4	Hadden	G-105
Mus. 1a	Sight Singing	MWF	3	Cline	
Mus. 108	Advanced Form Analysis	MWF	3	Thomas	Con.
P. E. 52	Physical Education (Men)	MWF	1	Cooper	Field
P. E. 62	Plays and Games	TThF	1	Cave	Field
P. E. 64	Upper Classmen Athletics	MWF	1	Cave	Field
P. E. 104	Athletics for Women	MTWTF	2	Long	Field
P. E. 158	Dancing Methods	Daily	2	Keyes	6
Psych. 2b	Educational Psychology	MTWTh	3	Heilman	
Soc. 3	Educational Sociology	MTTh	3	Howerth	
Span. 131	Teaching of Spanish	MTWTh	3	Du Poncet	
Zool. 4	Practical Zoology	MTThF	4	Fitzpatrick	
<b>V. 1:00 to 1:50</b>					
Art 2	Fine Arts Methods for Primary	MTThF	4	Baker	G-200
Art 5	Water Color Painting	MTWTh	4	Hill	G-203
Art 105	Oil Painting I.	MTWTh	4	Hill	G-203
Art 200	Oil Painting II.	MTWTh	4	Hill	G-203

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
Biol. 1	Educational Biology	MTThF	3	Fitzpatrick	301
Bot. 3	Systematic Botany	MTWTh	4	Jean	303
Chem. 7	Qualitative Chemistry	MTWTh	2-4	Bowers	302
C. E. 36	Penmanship Methods	MTThF	2	Bedinger	214
C. E. 110	Office Appliances	Daily	6		210
Ed. 5	Principles of Teaching	MTThF	3	Ganders	
Ed. 16	Elementary Campfire Course	M	1	Lee	
Ed. 16a	Advanced Campfire Course	T	1	Lee	
Ed. 152	The Child and His School	MTWTh	4	Lyford	
Ed. 213	Problems of the Junior High School	MTTh	3	Rugg	
Eng. 12	Voice Culture	MTWTh	4	Randall	202
Eng. 133	The Recent Novel	MTWTh	4	Oakden	100
French 3	First Year French	MTWTh	4		
Geog. 52	Geography of South America	MTThF	4	Barker	
Hist. 13	Teaching of History in Elementary School	TWTh	3	Dickerson	
Hist. 104	Literature of American History	MF	2	Dickerson	
H. A. 4	Millinery (2 Periods)	MTWTh	4	Roudebush	HE-301
H. A. 112	Home Decoration	MTThF	4	Wiebking	HE-304
H. Sci. 3	Foods and Table Service (2 Periods)	MTThF	4	Pickett	HE-207
Hyg. 1	Individual and Social Hygiene	MWF	3	Long	
Ind. A 12	Advanced Cabinet Making (2 Periods)	MTWTh	4	Foulk	G-1
Ind. A 31a	Elementary Printing (2 Periods)	MTWTh	4	Bishop	G-104
Ind. A 42a	Intermediate Bookbinding (2 Periods)	MTWTh	4	Schaefer	G-100
Ind. A 33b	Advanced Printing (2 Periods)	MTWTh	4	Bishop	G-104
Ind. A 143a	Advanced Leather Crafts (2 Periods)	MTWTh	4	Schaefer	G-100
Mus. 110	Supervisors' Course	MWF	3	Roesner	
P. E. 168	Baseball Coaching	MWF	2	Cooper	
P. E. 169	Track Coaching	TTh	2	Cooper	
Psych. 3	Child Development	MTWF	4	Hamill	
Soc. 1	Introduction to the Social Sciences	MTWTh	4	Binnewies	
<b>VI. 2:00 to 2:50</b>					
Art 4b	Design	MTWTh	4	Hill	G-105
Art 7	Constructive Design	MTThF	4	Baker	G-204
Chem. 221	Advanced Inorganic Chemistry	TTh	3-4	Bowers	300
C. E. 107	Secretarial Science II.	MWF	3	Merriman	213

SPRING QUARTER

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
C. E. 110	Office Appliances	Daily	6		210
C. E. 144	Commercial Law II.	MTThF	4	Bedinger	214
Ed. 5	Principles of Teaching	MTThF	3	Mahan	
Ed. 17	Boy Scout Work	M	1	Moore	
Ed. 21	Rural School Problems	TThF	3	Hargrove	
Ed. 51	Story Telling, etc. for Kindergarten	MTWTh	4	Lyford	
Ed. 116	Organization and Administration of a Senior High School	MTThF	4	Blue	
Ed. 123	Educational Research for Seniors	Arrange	4	Rugg	
El. Sci. 1	Elementary Science	MTWF	4		301
Eng. 4	Speaking and Writing English	MTWTh	3	Randall	202
Eng. 11	The English Language	MTWTh	4	Cross	100
Eng. 102	Journalistic Writing	MWTh	3	Shaw	100
French 9	Second Year French	MWTh	3		
Geog. 122	Biogeography	MTThF	4	Barker	
Hist. 10	Social and Industrial History of the United States	MWThF	4	Permenter	
Hyg. & P. E. 108	Educational Hygiene	MWF	2	Bryson	
Math. 102	Integral Calculus	MTThF	4	Finley	
Mus. 10	Primary Methods	MWF	3	Roesner	
Phys. 121	Electricity	MTWTh	4	Valentine	HE-106
P. E. 64	Sophomore Athletics	MWF	1	Cave	Field
Psych. 2a	Educational Psychology	MTWF	3	Hamill	
Soc. 102	Early Civilization	MTWTh	4	Howerth	
Soc. 105	Principles of Sociology	MTWTh	4	Binnewies	
<b>VII. 3:00 to 3:50</b>					
Biol. 1	Educational Biology	MTWF	3		301
C. E. 36	Penmanship Methods	MTWF	2	Bedinger	214
C. E. 110	Office Appliances	MTWF	6		210
Ed. 1	Introduction to Education	MTW	3	Mahan	
Ed. 5	Principles of Teaching	MTWF	3	Hargrove	
Ed. 223	Research in Education for Graduates	MTW	3	Whitney	T-16
Eng. 4	Speaking and Writing English	MTWF	3	Kavich	202
Eng. 15	Types of Literature	MTW	3	Cross	
Hist. 1	American History 1700-1800	MTWF	4	Permenter	

Time and Cat. Number	Description	Days	Qr. Hours	Teacher	Room
H. Sci. 7	Household Management (Theory)	MT	2	Roudebush	HE-301
Hyg. 1	Individual and Social Hygiene	MWF	3	Long	
Ind. A 41a	Elementary Bookbinding (2 Periods)	MTWTh	4	Schaefer	G-100
Ind. A 143b	Advanced Leather Crafts (2 Periods)	MTWTh	4	Schaefer	G-100
Latin 14	Freshman College Latin	MTWF	4		
Math. 5	College Algebra	MTWF	4		
Mus. 11	Intermediate Methods	MWF	3	Roesner	
P. E. 61	School Gymnastics	MWF	1	Keyes	6
P. E. 64	Freshman Athletics	MWF	1	Cave	Field
P. E. 66	Baseball Practice	Daily	1-2	Cooper	Field
P. E. 68	Corrective Gymnastics	MWF	0	Cave	o
Psych. 2a	Educational Psychology	MTWF	3	Hamill	
Psych. 108b	Educational Tests and Measurements	MTWF	4	Hamill	
Soc. 3	Educational Sociology	MTW	3	Howerth	

### VIII. 4:00 to 4:50

Chem. 115b	Industrial Chemistry	MTWTh	4	Bowers	300
C. E. 3	Secretarial Practice I.	MWThF	4	Merriman	213
C. E. 110	Office Appliances	Daily	6	Colvin	210
Ed. 104	Project Method of Teaching	MWThF	4	Mahan	
Ed. 167	Bible Study	M	1	Church	
Eng. 4	Speaking and Writing English	MTWTh	3	Kavich	202
Eng. 16	Contemporary Literature	MTWTh	4	Newman	L. T.
Latin 114	Advanced Latin	MWThF	3		
Math. 1	Solid Geometry	MWThF	4		
Mus. 42	Schumann Club	MW	1	Cline	Con.
Mus. 43	Advanced Orchestra	MTh	1	Thomas	Con.
Mus. 44	Advanced Band	WF	1	Thomas	Con.
P. E. 57	Folk and National Dancing	MWF	1	Keyes	6
P. E. 57	Folk and National Dancing (Freshmen only)	MTh	1	Keyes	6
P. E. 64	Upper Classmen Athletics	MWF	1	Cave	6
Phys. 10	Household Physics	MTThF	4	Valentine	HE-106
Psych. 2a	Educational Psychology	MTWF	3	Hamill	

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