# WELLESLEY COLLEGE BULLETIN 

CALENDAR<br>1919-1920

## WELLESLEY, MASSACHUSETTS

JANUARY, 1920

```
40%%4.% 
DEPARTMENT OF HYOIENE AND PHYSICAL EDUCATION W思LL
WELL
```

PUBLISHED BY THE COLLEGE IN JANUARY, MAY, JUNE, NOVEMBER, DECEMBER

Entered as second-class matter Deceraber 20, 1911, at the post-office, Wellesley, Massachusetts, under Act of Congress of July 16, 1894.

# WELLESLEY COLLEGE CALENDAR 

1919-1920

## CORRESPONDENCE

All inquiries regarding admission should be addressed to the Secretary to the Board of Admission.

Applications for general information should be addressed to Mrss Mary Caswell. As Secretary of the Appointment Bureau, Miss CASWELL is also prepared to furnish full and confidential information in regard to the qualifications, character, and experience of former students of the College as candidates for teaching and other vocations. Former students of the College who wish situations have the aid of the Appointment Bureau.

## TABLE OF CONTENTS




## GALENDAR

## Academic Year 1919-1920

Examinations . . . . . . September 15-18, ig19.
Academic year begins . . . . . Monday, September 22.
Holiday, Thanksgiving Day, November 27.
Recess from 12.30 P. M. Wednesday, December I7, I919, until 12.30 p. M. Wednesday, January 7, 1920.

Registration closes for all students at 12.30 P. M. Wednesday, January 7.
Second Semester begins . . . . Monday, February 9.
Recess from 12.30 P. m. Friday, March 26, until 12.30 P. M. Tuesday, April 6.
Registration closes for all students at 12.30 P. m. Tuesday, April 6.
Comutencement . . . . . . Monday, June 14.
Alumne Day . . . . . . Tuesday, June 15.

## Academic Year 1920-1921

Examinations
September 20-23, 1920.
Registration closes for new students at́ io p. M. Monday, September 20.
Registration closes for all other students at Io P. M. Friday, September 24.

Halls of Residence open for new students at 9 A. m. Monday, September 20.

Halls of Residence open for all other students at 2 p. m. Thursday, September 23.
Academic year begins . . . . . Monday, September 27.
Holiday, Thanksgiving Day, November 25.
Recess from 12.30 P.m. Thursday, December I6, I920, until 12.30 p.m. Wednesday, January 5, 1921.

Registration closes for all students at 12.30 P. M. Wednesday, January 5.
Second Semester begins . . . . Monday, February 14.
Recess from 12.30 P. M. Thursday, March 24, until 12.30 P. m. Tuesday, April 5.
Registration closes for all students at 12.30 P. M. Tuesday, April 5.
Commencement . . . . . . Tuesday, June 2 r.
Alumne Day . . . . . . Wednesday, June 22.

## BOARD OF TRUSTEES

EDWIN FARNHAM GREENE, B.A. ..... Boston.President of the Board.
WILLIAM HENRY LINCOLN Brookline.
Vice President.
SARAH LAWRENCE Boston.
Secretary.
LEWIS KENNEDY MORSE, B.A., LL.B Boston.Treasurer.
WILLIAM FAIRFIELD WARREN, S.T.D., LL.D. . Brookline.
LILIAN HORSFORD FARLOW . . . . . Cambridge.
EDWIN HALE ABBOT, LL.B. Cambridge.
LOUISE McCOY NORTH, M.A. Madison, N.J.
ANDREW FISKE, Ph.D. ..... Boston.
GEORGE EDWIN HORR, D.D., LL.D. . . Newton Centre.
GEORGE HOWE DAVENPORT Boston.WILLIAM EDWARDS HUNTINGTON, S.T.D., LL.D.,Newton Centre.
WILLIAM BLODGET, B.A. .....  Chestnut Hill.
Caroline hazard, M.A., Litt.D., LL.D. . Peace Dale, R.I.GEORGE HERBERT PALMER, M.A., Litt.D., L.H.D., LL.D.,Cambridge.
RUTH SHARPLESS GOODWIN, B.A. . . Philadelphia, Pa.
EUGENE V. R. THAYER, B.A. . . . . Nerw York City.
GALEN L. STONE ..... Brookline.
PAUL HENRY HANUS, S.B., LL.D. . . . . Cambridge.CANDACE CATHERINE STIMSON, B.S. . New York City.ALICE UPTON PEARMAIN, M.A. . . . . . Boston.
BELLE SHERWIN, B.S. . . . . . . . Willoughby, $O$.
CHARLOTTE HOWARD CONANT, B.A. . . . . Natick.
ALFRED LAWRENCE AIKEN, B.A. . . . . . Worcester.
DAVID LINN EDSALL, M.D. . . . . . Cambridge.
ELLEN FitZ PENDLETON, M.A., Litt.D.. LL.D.,
(ex officio) Wellesley College.

## EXECUTIVE COMMITTEE

Edwin Farnham Greene, B.A., Chairman.
Andrew Fiske, Ph.D. Lewis Kennedy Morse, B.A.,
George Howe Davenport. LL.B. (ex officio).
Galen L. Stone. Ellen Fitz Pendleton, M.A., Canpace Catherine Stimson, B.S. Litt.D., LL.D. (ex officio).

FINANCE COMMITTEE

William Blodget, B.A. Galen L. Stone.
Edwin Farnham Greene, B.A. Lewis Kennedy Morse, B.A., Eugene V. R. Thayer, B.A. LL.B. (ex officio).

## COMMITTEE ON BUILDINGS

George Howe Davenport, Chairman.

Sarah Lawrence.
William Blodget, B.A.
Alice Upton Pearmain, M.A. Edwin Farnhaik Greene, B.A. Lewis Kennedy Morse, B.A., LL.B.

## COMMITTEE ON GROUNDS

Caroline Hazard, M.A., Litt.D., LL.D., Chairman
Lilian Horsford Farlow. Eilen Fitz Pendleton, M.A., Belle Sherwin, B.S.
Galen L. Stone.

Litt.D., LL.D.
Lewis Kennedy Morse, B.A.,LL.B.

## COMMITTEE ON LIBRARY

Trustee Members
George Herbert Palmer, M.A., Ellen Fitz Pendleton, M.A.,

Litt.D., L.H.D., LL.D.
Lilian Horsford Farlow.

Litt.D., LL.D. (ex officio).
Lewis Kennedy Morse, B.A.,LL.B.

## Faculty Members

Mary Whiton Caleins, M.A., Alice Huntington Bushee, M.A.
Litt.D., LL.D. Margaret Hastings Jackson.
John Charles Duncan, Ph.D. Ethel Dane Roberts, B.A., Mabel Elisabeth Hodder, Ph.D. B.L.S. (ex officio).

# OFFICERS OF INSTRUCTION AND GOVERNMENT ${ }^{\text {I }}$ 

ELLEN FitZ PENDLETON, M.A., Litr.D., LL.D., President.
SARAH FRANCES WHITING, Sc.D., Professor of Physics and Astronomy, Emeritus.
mary alice willcox, Ph.D., Professor of Zoology, Emeritus.
ANGIE CLARA CHAPIN, M.A., Professor of Greek Language and Literature, Emeritus.
Katharine lee bates, M.A., Litt.D., Professor of English Literature.
ALICE VAN VECHTEN BROWN, Clara Bertram Kimball Professor of Art.
MARY WHITON CALKINS, M.A., Litt.D., LL.D., Professor of Philosophy and Psychology.
ELLEN LOUISA BURRELL, B.A., Professor of Pure Mathematics, Emeritus.
HAMILTON CRAWFORD MACDOUGALL, Mus.D., Professor of Music.
ELIZABETH KIMBALL KENDALL, M.A., LL.B., Professor of History.
adeline belle hawes, M.A., Professor of Latin Language and Literature.
MARGARETHE MÜLLER, Professor of German Language and Literature.
SOPHIE CHANTAL HART, M.A., Professor of Rhetoric and Composition.
Margaret clay ferguson, Ph.D., Professor of Botany.
ELIZA HALL KENDRICK, Pe.D., Helen Day Gould Professor of Biblical History.
ELIZABETH FLORETTE FISHER, B.S.,
Professor of Geology and Geography.

[^0]amy morris homans, M.A., Professor of Hygiene, Emeritus.
MARGARET HASTINGS JACKSON,
Professor of Italian and Curator of the Frances Pearsons Plimpton Library of Italian Literature.
MALVINA BENNETT, M.A., Professor of Reading and Speaking.
ARTHUR ORLO NORTON, M.A.,
Professor of the History and Principles of Education.
LOUISE SHERWOOD McDOWELL, Ph.D., Professor of Physics.
LOUIS PERDRIAU, Lic. Ès L.,
Professor of French Language and Literature.
anna Jane McKeag, Ph.D., LL.D.,
Professor of the History and Principles of Education.
EVA CHANDLER, B.A., Professor of Mathematics.
MARY SOPHIA CASE, B.A.,
Professor of Philosophy.
VIDA DUTTON SCUDDER, M.A., Professor of English Literature.
katharine may edwardS, Ph.D., Professor of Greek and Comparative Philology.
CHARLOTTE ALMIRA BRAGG, B.S., Associate Professor of Chemistry.
MARGARET POLLOCK SHERWOOD, Ph.D., Professor of English Literature.
ADELAIDE IMOGENE LOCKE, B.A., S.T.B., Associate Professor of Biblical History.
helen abbot merrill, Ph.D., Professor of Mathematics.
MARIAN ELIZABETH HUBBARD, B.S., Professor of Zoology.
alice walton, Ph.D.,
Professor of Latin and Archæology.
eleanor acheson mcCulloch Gamble, Ph.D.,
Professor of Psychology and Director of the Psychological Laboratory.
alice vinton waite, M.A., Professor of English Language and Literature. Dean.
Clarence grant hamilton, M.A., Professor of Music.
LAURA EMMA LOCKWOOD, Ph.D., Associate Professor of English Language.
martha hale shackford, Ph.D., Professor of English Literature.
Caroline rebecca fletcher, M.A., Associate Professor of Latin.
JULIA SWIFT ORVIS, Ph.D., Professor of History.
natalie wipplinger, Pr.D., Associate Professor of German.
GRACE EVANGELINE DAVIS, M.A., Associate Professor of Physics.
ROXANA HAYWARD VIVIAN, Ph.D., Professor of Mathematics and Director of the Department of Hygiene.
CHARLES LOWELL YOUNG, B.A., Associate Professor of English Literature.
EDNA VIRGINIA MOFFETT, Ph.D., Associate Professor of History.
CAROLINE BURLING THOMPSON, Ph.D., Professor of Zoology.
martha pike Conant, Pr.D., Associate Professor of English Literature.
emma marie scholl, Ph.D., Associate Professor of German.
agnes frances perkins, m.a., Associate Professor of Rhetoric and Composition.
mabel elisabeth hodder, Ph.D., Professor of History.
LAETITIA MORRIS SNOW, Рн.D., Associate Professor of Botany.
WILLIAM SKARSTROM, M.D., Professor of Hygiene.

JOSEPHINE HARDING BATCHELDER, M.A., Associate Professor of Rhetoric and Composition.

ANNA PRICHITT YOUNGMAN, ${ }^{2}$ Ph.D., Associate Professor of Economics.

CLARA ELIZA SMITH, Рн.D., Associate Professor of Mathematics.
eugene clarence howe, Pr.D., Associate Professor of Hygiene.
AMY KELLY, M.A., Associate Professor of English Language and Composition.
JOHN CHARLES DUNCAN, Ph.D., Professor of Astronomy and Director of the Whitin Observatory.

JULIA ELEANOR MOODY, Рн.D., Associate Professor of Zoology.
alice ida Perry WOOD, Ph.D., Associate Professor of English Literature.
MARY CAMPBELL BLISS, M.A., Assistant Professor of Botany.
ALICE HUNTINGTON BUSHEE, M.A., Associate Professor of Spanish.
DONALD SKEELE TUCKER, M.A., Assistant Professor of Economics.
EDWARD ELY CURTIS, Рн.D., Assistant Professor of History.
ELIZABETH WHEELER MANWARING, B.A., Assistant Professor of Rhetoric and Composition.
HELEN SOMERSBY FRENCH, Pr.D., Assistant Professor of Chemistry.
MURIEL ANNE STREIBERT,3 B.A., B.D., Assistant Professor of Biblical History.
ALFRED DWIGHT SHEFFIELD, M.A., Assistant Professor of Rhetoric and Composition.
mabel annie stone, m.A., Assistant Professor of Botany.
LaURA ALANDIS hibbard, Ph.D., Associate Professor of English Literature.

[^1] ${ }_{3}$ Absent on leave.

MARY JEAN LANIER, B.S., Associate Professor of Geology and Geography.
OLIVE DUTCHER, M.A., B.D.,
Associate Professor of Biblical History.
Frances Lowater, Ph.D., Assistant Professor of Physics.
EUNICE CLARA SMITH-GOARD, M.A., Assistant Professor of French.
MABEL MINERVA YOUNG, Ph.D., Assistant Professor of Mathematics.
alice maria ottley, ${ }^{3}$ M.A., Assistant Professor of Botany.
MYRTILL AAVERY, B.L.S., M.A., Assistant Professor of Art.
Jane ISAbEL NEWELL, Ph.D., Associate Professor of Economics and Sociology.
HOWARD EDWARD PULLING, Ph.D., Assistant Professor of Botany.
marguerite willcox, Ph.D., Assistant Professor of Chemistry.
DONALD REED TAFT, M.A., Assistant Professor of Economics and Sociology.
LUCIE BERNARD, Agrégée des Lettres, Visiting Professor of French.
HETTY SHEPARD WHEELER, ${ }^{3}$ M.A., Instructor in Musical Theory.
HELENE BUHLERT MAGEE, ${ }^{3}$ M.A., Instructor in Rhetoric and Composition.
EMILY JOSEPHINE HURD, Instructor in Pianoforte.
ALBERT THOMAS FOSTER, Instructor in Violin.
mary florence curtis, Ph.D., Instructor in Mathematics.
ANNIE KIMBALL TUELL, M.A., Instructor in English Literature.

[^2]BLANCHE FRANCIS BROCKLEBANK, Instructor in Pianoforte.
anna bertha miller, Pr.D.,
Instructor in Latin.
EDITH MARGARET SMAILL,
Instructor in Reading and Speaking.
EDNA BARRETT MANSHIP, Instructor in Hygiene.
Lennie Phoebe copeland, Pr.D., Instructor in Mathematics.
MARGARET JOHNSON, Instructor in Hygienc.
MATHILDE BOUTRON-DAMAZY, B. ÈS I., Instructor in French.
LOUISE HORTENSE SNOWDEN, B.S., Instructor in History.
BERTHA KNICKERBOCKER STRAIGHT, B.A., Instructor in Art.
KATHARINE FORBES LIDDELL, B.A., Instructor in Rhetoric and Composition.
loUise pettibone smith, Ph.D., Instructor in Biblical History.
SEAL THOMPSON, M.A., Instructor in Biblical History.
elizabeth halsey, Ph.B., Instructor in Hygiene.
horace bidwell english, Ph.D., Instructor in Philosophy and Psychology.
JUDITH BLOW WILLIAMS, Pr.D., Instructor in History.
RALPH SPRINGER SMALLEY, Instructor in Violoncello.
ANGELA PALOMO, B.A., Instructor in Spanish.
MARY SOPHIE HAAGENSEN, Instructor in Hygiene.
MARGARET TERRELL PARKER, B.S., Instructor in Geology and Geography.

## LUCY WILSON, Ph.D.,

 Instructor in Physics and Psychology.CAROLINE ELIZA VOSE, M.A., Instructor in Rhetoric and Composition.
FLORA ISABEL MACKINNON,4 M.A., Instructor in Philosophy.
DOROTHY WARNER DENNIS, B.A., Instructor in French.
ADA MAY COE, B.A., Instructor in Spanish.
LILLIAN ELOISE BAKER, M.A., Instructor in Chemistry.
EMMA LUELLA FISK, B.A., Instructor in Botany.

FLORENCE BEARD BRACQ, M.A., Instructor in French.
JOSEPH GOUDREAULT, Instructor in Vocal Music.
marGaret alger hayden, M.A., Instructor in Zoology.
JOSEPH LYONS SNIDER, M.A., Instructor in Economics.
MARY UNDERHILL, B.A., Instructor in Rhetoric and Composition.
Mary bowen brainerd, Ph.D., Instructor in English Literature.
MARTHE PUGNY, Instructor in French.

REGINA EMIMA STOCKHAUSEN, M.A., Instructor in Botany.
HELEN BARTON, B.A., Instructor in Mathematics.
Marion Elizabeth Stark, M.A., Instructor in Mathematics.
RUTH ELVIRA CLARK, Litt.D., Instructor in French.

4 Appointed for the second semester only.

MIRIAM ISABEL DEAN, M.A., Instructor in Botany. RAYMOND CLARK ROBINSON, Instructor in Musical Theory.
GRACE LOCKTON, B.A., B.D., Instructor in Biblical History.
ALFRED CHESTER HANFORD, M.A.,
Instructor in History.
MARY LENA WADSWORTH, Instructor in Reading and Speaking.
ALFREDA MOSSCROP, B.A.,
Instructor in Hygiene.
ANNA BAKER YATES, M.A., Instructor in Physiology and Zoology.
ETHEL MARY YOUNG, ${ }^{5}$
Instructor in Water Color.
HARRY EDWARD BROWN, B.A., Instructor in Hygiene.
ELSIE MAY LEWIS, M.A., Instructor in Zoology.
MARY REES MULLINER, M.D., Instructor in Hygiene.
LUCILE ROUSH, B.A., Assistant in Botany.
MINNIE RUHMPOHL, B.A., Assistant in Physics.
FANNY GARRISON, B.A., Assistant in Hygiene.
RUTH MARGERY ADDOMS, B.A., Assistant in Botany.
WINIFRED HENRIETTA FRANZ, B.S., Assistant in Chemistry.
ETHEL MARGARET JOHNSON, B.S., Assistant in Chemistry.
EVELYN MAE CATHCART, B.A., Assistant in Hygiene.
HELEN MUNROE, B.A., Assistant in Art.
${ }^{5}$ Appointed for the winter term only.
miriam louise merrittr, Mus.B., Assistant in Music.
Margaret esther Elliott, B.S., Assistant in Zoology.
ALICE MOUSSET, Assistant in French.
ALBERT PITTS MORSE, Curator of Zoology Museum and Lecturer in Entomology.
SUSAN GREY AKERS, B.A., Librarian of Mary Hemenway Hall.
KATHARINE BULLARD DUNCAN, Curator of Whitin Observatory.
EDITH JENNETT GRIMES, B.A., Curator of Botany Laboratories.
GLADYS ADAMS TURNBACH, B.A., Art Museum Assistant in Charge.
edward erastus bancroft, M.a., M.D., Consulting Physician.
MABEL AUSTIN SOUTHARD, M.D., Lecturer on Special Hygiene.
ELIZA JACOBUS NEWKIRK, M.A., Lecturer in History of Architecture.
HENRY SAXTON ADAMS, B.A.S., Lecturer in Landscape Gardening and Horticulture.
hervey woodburn Shimer, Ph.D., Sc.D., Lecturer in Geology.
GORDON BOIT WELLMAN, Th.D., Lecturer in Biblical History.
ETHEL DANE ROBERTS, B.A., B.L.S., Librarian.
ANTOINETTE BRIGHAM PUTNAM METCALF, M.A., Associate and Reference Librarian.
LILLA WEED, M.A., Associate Librarian.
HELEN MOORE LAWS, B.A., Cataloguer.

BEATRICE ALLARD, B.A., Alice Freeman Palmer Fellow.

## OFFICERS OF ADMINISTRATION

ELLEN FITZ PENDLETON, M.A., Litr.D., LL.D., President.
ALICE VINTON WAITE, M.A., Dean. Professor of Enylish Language and Literature.
EDITH SOUTHER TUFTS, M.A., Dean of Residence.
KATHARINE PIATT RAYMOND, B.S., M.D., Resident Physician.

MARY CASWELL, Secretary to the President.
MARY FRAZER SMITH, B.A., College Recorder.
MARIE LOUISE STOCKWELL, B.A., Assistant Secretary to the President.
FRANCES LOUISE KNAPP, B.A., Secretary to the Board of Admission.
Marian gibbs milne, B.A., Secretary to the Dean.
BERTHA LYDIA CASWELL, Purchasing Agent.
EVELYN AMELIA MUNROE, B.A., Cashier.
CHARLOTTE SCOTT WHITON, Purveyor.
MARY SNOW, Head of Washington House.
HELEN WILLARD LYMAN, B.A., Head of Stone Hali.
HARRIET LESTER, Head of Shafer Hall.
MABEL PRIEST DANIEL, B.A., Head of Cazenove Hall.

JULIA WOODHULL SMITH, Head of Wilder Hall.

EFFIE JANE BUELL, Head of Pomeroy Hall.
CHARLOTTE HENDERSON CHADDERDON, Head of Claflin Hall.
ELIZABETH BURROUGHS WHEELER, Head of Eliot House.
KATHARINE HARRIS, Head of Webb House.
FANNIE PADDOCK MILLER, Head of the Elms and Joslin House
alice Lillian mcgregor, Head of Beebe Hall.
harriet hatton maynard, Head of Townsend House.
ALICE VARNEY WARD, Head of Tower Court.
MARTHA FAY CLARKE, Head of Leighton House.
MARY HUBBARD MORSE RICHARDSON, Head of the Homestead.
JESSIE ANN ENGLES, Head of Crofton House and Ridgeway Refectory.
JOSEFA VICTORIA RANTZIA STALLKNECHT, Head of Lovewell House.
VIOLA FLORENCE SNYDER, Head of Noanett House.
ADALINE FOOTE HAWLEY, B.A., Head of the Birches.
ELVIRA GENEVIEVE BRANDEAU, Head of Wood House.
FRANCES RAYNOR MEAKER, Head of Norumbega House.
MARY HALE YOUNG, B.S., Head of Fiske House.
HELEN SEYMOUR CLIFTON, Head of Freeman House.

ANNA Bertha miller, Ph.D., Head of Harris House.
FLORENCE IRENE TUCKER, B.A., Assistant to the Purveyor.
LEILA BURT NYE, Manager of Post Office.
AMY HARDING NYE, Manager of the Information Bureau.

HENRY HERBERT AUSTIN, B.S., Superintendent of the College Plant.
FREDERICK DUTTON WOODS, B.S., Superintendent of Grounds.

## STANDING COMMITTEES

Board of Admission.-Misses Bragg, Smith-Goard, Walton (Chairman), Young; the Dean ex officio.

Connittee on Graduate Instruction.-Misses Ferguson, Hibbard, Hubbard, Kendrick, McKeag (Chairman), Miller; the Dean ex officio.

Library Committee.-Misses Roberts (Chairman), Bushee, Calkins, Jackson; Mrs. Hodder; Mr. Duncan; the President and Librarians ex officio.

Committee on Instruction.-Dean Waite (Chairman ex officio), Misses Hart, Moody, Snow, Wipplinger; Mrs. Hodder; Mr. Norton.

Committee on Academic Requests.-Dean Waite (Chairman ex oficio), Misses Batchelder, Davis, Dutcher, Edwards, French; Mr. Tucker.

Committee on Constitutions.-Miss Wood; Messrs. Curtis (Chairman), Sheffield.

Faculty Members in Senate of College Governiment Asso-ciation.-President Pendleton, ex officio; Misses Hart, Lanier, Manwaring, Tufts.

# WELLESLEY COLLEGE 

Wellesley, Massachusetts

## FOUNDATION AND PURPOSE

Wellesley College was established for the purpose of furnishing to young women who desire to obtain a liberal education such advantages and facilities as are enjoyed in institutions of the highest grade. The first building of the College, erected and equipped under the supervision and through the personal means of the founder, was opened to students in 1875, with the announced purpose "of giving to young women opportunities for education equivalent to those usually provided in colleges for young men." Throughout bis work the founder aimed to put into visible form his ideal of the higher education for women, "the supreme development and unfolding of every power and faculty."

By the charter, granted by the Commonwealth of Massachusetts, "the corporation of Wellesley College is authorized to grant such honorary testimonials, and confer such honors, degrees, and diplomas, as are granted or conferred by any University, College, or Seminary of learning in this Commonwealth; and the diplomas so granted shall entitle the possessors to the immunities and privileges allowed, by usage or statute, to the possessors of like diplomas from any University, College, or Seminary of learning in this Commonwealth."

In accordance with the spirit of the founder, the College is undenominational, but distinctively Christian in its influence, discipline, and instruction.

The members of the College meet daily for morning prayers in the beautiful chapel presented in 1899 by Miss Elizabeth G. Houghton and Mr. Clement S. Houghton as a memorial to their father. Services on Sunday are conducted in this chapel by preachers of different denominations. At all these services and at vespers on Sunday, the singing is led by a trained choir of students under the direction of the professor of music.

The Wellesley College Christian Association, organized to foster religious life and interest in social reforms and in home and foreign missions, meets weekly for prayer and religious instruction.

The department of Biblical History affords the systematic study of the Bible required of all students.

## ADMISSION

Applications for admission should be made upon forms which will be furnished by the Secretary to the Board of Admission on request. An application fee of ten dollars is required from all candidates for admission, and no application is recorded until this fee is received (see page 150 ). It is desirable that applications should be made several years in advance, since the date of application is used as a basis in assigning rooms in college houses. Moreover, since the number of new students admitted is limited by the capacity of lecture rooms, it is necessary to close the application list for any given year at a date which varies from year to year. Candidates are liable to find the application list closed if they do not make their applications more than a year in advance of the time at which they propose to enter.

## admission to the freshman class

Students are admitted by examination in all subjects (see pages 40-42) or by the New Plan (see pages 43-45).
Every candidate for a degree must offer for admission in the subjects given on page 26 , fifteen units of credit. A unit represents a year's study in any subject constituting approximately a quarter of the full year's work.
A place on the list of candidates for admission will not be reserved for an applicant whose credentials filed in July do not satisfactorily cover twelve of the fifteen units required for admission. The Board of Admission require examination in September in all units not satisfactorily covered, and reserve the right to exclude any candidate whose preparation is in their judgment so defective as to debar her from carrying successfully the work of the freshman year.

Of the fifteen "units" required for admission eleven are prescribed as follows:-
English . . 3 units* $\quad$ Latin . . . 4 units
History . . ${ }^{\text {unit }} \quad$ Mathematics . 3 units

The remaining four units may be distributed in any one of the three following ways:-

1. 3 units in French or German or Greek combined with
r unit in one of the following subjects:-

| Botany. | $\dagger$ History. |
| :--- | :---: |
| Chemistry. | Music. |
| Greel | Physics. |

2. 2 units each in two of the following subjects:-

French.
German.
Greek.
Spanish.
3. 2 units in French or German or Greek or Spanish combined with
2 units made up of 1 unit each in two of the following subjects:-

Botany. Chemistry. Greek.
$\dagger$ History.
Music.
Physics.

Under certain conditions an additional unit in any of the subjects named above may be counted for admission in place of a unit in science or music, or a second unit in history.

A candidate for admission must be at least sixteen years of age, and must present satisfactory evidence of good moral character and good health. A statement from the applicant's physician to the effect that she is organically sound and in good health, together with a certificate of vaccination must be filed with the Secretary to the Board of Admission before June first of the year in which admission is sought. Each candidate before she is formally accepted is given a thorough physical examination. The College reserves the right to reject any. candidate if the results of this examination in the opinion of the medical staff justify such action or to accept the candidate only on the understanding that she will take five years to complete the course.

The student who has met all entrance requirements is qualified for immediate matriculation for the Baccalaureate degree in Arts. All communications concerning admission

[^3]should be addressed to the Secretary to the Board of Admission, Wellesley College, Wellesley, Mass.

## DEFINITION OF REQUIREMENTS

The number enclosed in parentheses following the subject indicates the number of units assigned to that subject; that is, the number of years with five recitations a week which will normally be required in the secondary school for adequate preparation in the subject.

## ENGLISH (3)

The study of English in school has two main objects: (I) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence, and appreciation, and the development of the habit of reading good literature with enjoyment.

## Grammar and Composition.

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school; and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, sentences, and paragraphs should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise letter-writing, narration, description, and easy exposition and argument. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from her reading in literature. Finally, special instruction in language and composition should be accompanied by concerted effort of teachers in all branches to cultivate in the student the habit of using. good English in her recitations and various exercises, whether oral or written.

To meet the requirement in Composition, there should be practice in writing equivalent to weekly themes the first two years, and fortnightly themes the last two years of the preparatory course. Themes should be accompanied by simple outlines. The following books are suggested: Scott and Denney's Composition-Rhetoric; Neal's Thought Building in Composition; Robins and Perkins's Introduction to the Study of Rhetoric supplemented by Herrick and Damon's Composition and Rhetoric; Shackford and Judson's Composition-Rhetoric-Literature; Manly and Rickert's The Writing of English.

## Literature.

The second object is sought by means of the reading and study of a number of books, from which may be framed a progressive course in literature covering four years. The student should be trained in reading aloud and be encouraged to commit to memory notable passages both in verse and in prose. As an aid to literary appreciation, she is further advised to acquaint herself with the most important facts in the lives of the authors whose works she reads and with their place in literary history. A few of these books should be read with special care, greater stress being laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions.

## A. Reading.

The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature, by giving her a firsthand knowledge of some of its best specimens. She should read the books carefully, but her attention should not be so fixed upon details that she fails to appreciate the main purpose and charm of what she reads.

Suggestions for books to be read by students who intend to take the comprehensive examination include the following list with some additions. Knowledge of the subject-matter of particular books is not necessary for this type of examination, but the requisite ability cannot be gained without a systematic and progressive study of good literature.

With a view to some freedom of choice, the books provided for reading are arranged in the following groups, from each of which at least two selections are to be made, except as otherwise provided under Group I.
Group I. Classics in Translation. The Old Testament, at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther; the Odyssey, with the omission, if desired, of Books I-V, XV, and XVI; the Eneid; the Odyssey and the Eneid should be read in English translations of recognized literary excellence.
Group II. Drama. Shakespeare: Merchant of Venice, As You Like It, Julius Casar.

Group III. Prose Fiction. Dickens: A Tale of Two Cities; George Eliot: Silas Marner; Scott: Quentin Durward; Hawthorne: The House of the Seven Gables.

Group IV. Essays, Biography, etc. Addison and Steele: The Sir Roger de Coverlcy Papers; Irving: The Sketch Book-selections covering about 175 pages; Macaulay: Lord Clive; Parkman: The Oregon Trail.

Group V. Poetry. Tennyson: The Coming of Arthur, Gareth and Lynette, Lancelot and Elaine, The Passing of Arthur; Browning: Cavalier Tunes, The Lost Leader, How they Brought the Good News from Ghent to Aix, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French

Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa-Down in the City, The Italian in England, The Patriot, The Pied Piper, "De Gusti-bus"-, Instans Tyrannus; Scott: The Lady of the Lake; Coleridge: The Ancient Mariner; Arnold: Sohrab and Rustum.
B. Study.

This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions. The books provided for study are arranged in four groups from each of which one selection is to be made.

Group I. Drama. Shakespeare: Macbeth, or Hamlet.
Group II. Poetry. Milton: L'Allegro, Il Penseroso, Comus; Book IV of Palgrave's Golden Treasury (First Series), with special attention to Wordsworth, Keats, and Shelley.

Group III. Oratory. Burke: Speech on Conciliation with America; Washington's Farewell Address; Webster's First Bunker Hill Oration; Lincoln's Gettysburg Address.

Group IV. Essays. Macaulay: Life of Johnson; Carlyle: Essay on Burns, with a brief selection from Burns's Poems.

## HISTORY (1 or 2) <br> Prescribed Unit

A full year course in one of the following subjects:-
(1) Ancient History, including a brief introductory study of the earlier nations, but with special emphasis on Greek History to the death of Alexander, and on Roman History to the death of Charlemagne.
(2) English History, with due regard to social and political development.
(3) American History, with the elements of Civil Government.

Candidates are advised to offer the course in Ancient History as a part of their preparation.

In the subject chosen, the student should acquire accurate knowledge of the history as presented in a standard text-book of not less than 300 pages, and should read such fuller authorities as may be available, in amount not less than 500 pages. Some practice in drawing maps to illustrate territorial changes, in making digests of lectures and reading, and in preparing verbal or written reports on subjects assigned for individual investigation is essential to successful work. For further suggestions about preparation students are referred to Document 93 of the College Entrance Examination Board.

## Elective Unit

A candidate may offer one of the three subjects mentioned above as a second unit in History, provided that one of the two units offered is Ancient History, and that the work for the
second unit is done during the last two years of the preparatory course.

MATHEMATICS (3)
Algebra.-Factors, Common Divisors and Multiples, Ratio and Proportion, Theory of Exponents including Imaginaries, Radicals and Equations involving Radicals, Inequalities, Quadratic Equations (including the theory), Binomial Theorem, Arithmetic and Geometric Progressions.

Plane Geometry.-As found in Chauvenet, or its equivalent.
Deficiency in preparation usually results from one or more of the following causes: the use of text-books which are too elementary, insufficient time spent in preparation, neglect of exercises in original demonstration in Geometry, and of reviews in both Algebra and Geometry. It is strongly urged that there be constant exercise in original demonstration in Geometry, with frequent written examinations in both Algebra and Geometry, the problems proposed being drawn from other sources than the text-books.

## LATIN (4)

Candidates should be familiar with the forms and syntax of the language and possess a vocabulary sufficient to translate Latin into idiomatic English and English into correct Latin. They should also be able to translate at sight Latin prose and poetry of moderate difficulty and to read Latin prose and verse according to the Roman method of pronunciation with strict attention to vowel quantities. To attain such proficiency not less than five forty-minute periods a week for four years should be given to the study of Latin. The amount of prepared reading should not be less than four books of Cæsar's Gallic War, seven Orations of Cicero (counting the Manilian Law as two) and six books of Vergil's Æneid. The reading may be selected from other works of the above authors or Nepos, Sallust and Ovid, but must include the pro Archia and two other Orations of Cicero and two books of the Æneid.

It is of special importance that practice in writing easy Latin at sight should be continued throughout the entire period of preparation in connection with the reading of the Latin authors. In the last year special attention should be given to translating continuous English into Latin both in the prepared and sight work.

## Suggestions Concerning Preparation

Exercises in translation at sight should begin in school with the first lessons in which Latin sentences of any length occur, and should continue throughout the course with sufficient frequency to insure correct methods of work on the part of the student. From the outset particular attention
should be given to developing the ability to take in the meaning of each word-and so, gradually, of the whole sentence-just as it stands; the sentence should be read and understood in the order of the original, with full appreciation of the force of each word as it comes, so far as this can be known or inferred from that which has preceded, and from the form and the position of the word itself. The habit of reading in this way should be encouraged and cultivated as the best preparation for all the translating that the student has to do. No translation, however, should be a mechanical metaphrase. Nor should it be a mere loose paraphrase. The full meaning of the passage to be translated, gathered in the way described above, should finally be expressed in clear and natural English.

A written examination cannot test the ear or tongue, but proper instruction in any language will necessarily include the training of both. The school work in Latin, therefore, should include much reading aloud, writing from dictation, and translation from the teacher's reading. Learning suitable passages by heart is also very useful, and should be more practiced.

The work in composition should give the 'student a better understanding of the Latin she is reading at the time, and greater facility in reading.

The teachers of Latin in the preparatory schools are urged to insist upon the use of good English in translation.

The study of Greek is strongly recommended to candidates who plan to elect courses in Latin in college.

Ability to read at sight easy French or German prose is of great advantage to all classical students.

## GREEK (1 or 2 or 3)

## 2 Unit Requirement

During the two years the student should acquire a knowledge of the language sufficient to enable her
(I) To translate at sight simple passages of Attic prose, and to answer questions on ordinary forms and constructions.
(2) To translate into Greek a passage of connected English narrative, based on Xenophon.
(3) To read Greek aloud with correct pronunciation and with full expression of the sense of the passage.

## PRESCRIBED STUDY

(1) Grammar: Inflections; simpler rules for composition and derivation of words: use of cases; construction of sentences, with particular regard to the use and meanings of the moods.
(2) Prose Composition: Regular practice in writing or speaking Greek, with at least twenty written exercises, including some connected passages.
(3) Three books of Xenophon's Anabasis, or its equivalent.

## Suggestions Concerning Preparation

The acquiring of a good working vocabulary should begin with the first lesson, and constant practice in the use of the more common words should be kept up throughout the course. The students should learn to recognize the words by hearing as well as by sight, and should be able to use them in speech as well as in writing.

Writing Greek from dictation, learning short passages by heart, and putting simple English sentences into Greek orally, or answering in Greek simple questions asked in Greek serve not only to fix vocabulary and forms in the students' mind, but also to give them a feeling for the natural Greek form of expression.

## 3 Unit Requirement

In addition to the preparation for the 2 unit requirement stated above, the student must be able to translate at sight a passage from Homer, to read it with a correct expression of the rhythm, and to answer a few questions on the Homeric forms and on the subject-matter.

## PRESCRIBED STUDY

Three books of Homer's Iliad.
Prose Composition: Continued practice in translation into Attic prose of connected passages of English.

## 1 Unit Requirement

This requirement may be met by the completion of a oneyear course, five hours a week, as given in any of the good Beginners' Greek Books. Careful attention should be given to the suggestions made above under the 2 unit requirement concerning methods of work.

It should be noted that, in general, students presenting the one unit of Greek for admission are not prepared to enter any course in Greek offered in Wellesley College. But students who have completed all of Allen's First Year of Greek (the Additional Selections for Reading are not required) will be admitted to course I4 (Plato and Homer).

The teachers of Greek in the preparatory schools are urged to insist upon the use of good English in translation.

Ability to read at sight easy French or German prose is of great advantage to all classical students.

## FRENCH (2 or 3)

The requirements follow the recommendations of the Modern Language Association embodied in Document No. 93 of the College Entrance Examination Board.

See pages 34,35 for suggestions concerning preparation in the case of students expecting to enter Wellesley College.

## 2 Unit Requirement

(Termed " $A$, Elementary," by the College Entrance Examination Board.)

## THE ALM OF THE INSTRUCTION

At the end of the elementary course the pupil should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of everyday life or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar as defined below.

## THE WORK TO BE DONE.

During the first year the work should comprise:-
(r) Careful drill in pronunciation.
(2) The rudiments of grammar, including the inflection of the regular and the more common irregular verbs, the plural nouns, the inflection of adjectives, participles, and pronouns; the use of personal pronouns, common adverbs, prepositions, and conjunctions; the order of words in the sentence, and the elementary rules of syntax.
(3) Abundant easy exercises, designed not only to fix in the memory the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression.
(4) The reading of from 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English) and in reproducing from memory sentences previously read.
(5) Writing French from dictation.

During the second year the work should comprise:-
(I) The reading of from 250 to 400 pages of easy modern prose in the form of stories, plays, or historical or biographical sketches.
(2) Constant practice, as in the previous year, in translating into French easy variations upon the texts read.
(3) Frequent abstracts, sometimes oral and sometimes written, of portions of the text already read.
(4) Writing French from dictation.
(5) Continued drill upon the rudiments of grammar, with constant application in the construction of sentences.
(6) Mastery of the forms and use of pronouns, pronominal adjectives, of all but the rare irregular verb forms, and of the simpler uses of the conditional and subjunctive.

## 3 Unit Requirement

(Termed " $B$, Intermediate," by the College Entrance Examination Board.)

THE AIM OF THE INSTRUCTION
At the end of the intermediate course the pupil should be able to read at sight ordinary French prose or simple poetry, to translate into French a connected passage of English based on the text read, and to answer questions involving a more thorough knowledge of syntax than is expected in the elementary course.

## THE WORK TO BE DONE

This should comprise the reading of from 400 to 600 pages* of French of ordinary difficulty, a portion to be in the dramatic form $\ddagger$; constant practice in giving French paraphrases, abstracts or reproductions from memory of selected portions of the matter read; the study of a grammar of moderate completeness; writing from dictation. $\dagger$

## Suggestions Concerning Preparation for the 2 and 3 Unit Requirements

r. Emphasis should be laid on the correct daily use of the spoken language in the class room, on the correct and intelligent reading of French (apart from translation) and on direct composition, including the writing of short themes in French.
2. From the outset particular attention should be given to developing the ability to take in the meaning of each word-and so, gradually, of the whole sentence-just as it stands; the sentence should be read and understood in the order of the original, with full appreciation of the force of each word as it comes, so far as this can be known or inferred from that which has preceded, and from the form and the position of the word itself. The habit of reading in this way should be encouraged and cultivated as the best preparation for all the work that the student has to do.
3. It is particularly urged that the reading be chosen from mineteenth century writcrs of prose, verse, and drama, and if possible from more than five authors.

The texts suggested are:-
(I) For the 2 unit requirement: Laboulaye: Contes bleus; Daudet: Trois Contes Choisis; France: Abeille; Malot: Sans Famille; de la Brète:

[^4]Mon Oncle et Mon Curé; Enault: Le Chien du Capitaine; Legouvé et Labiche: La Cigale chez les Fourmis; Daudet: Choix d'Extraits, or Le Petit Chose; Vigny: La Canne de Jonc; Augier: Le Gendre de M. Poirier; Foncin: Le Pays de France, or Lavisse: Histoire de France, IIe année (Armand Colin, Paris).
(2) For the 3 unit requirement: Lamartine: Scènes de la Rérolution française; Maupassant: Huit Contes Choisis; About: Le Roi des Montagnes; Balzac: Le Curé de Tours; Colin: Contes et Saynètes; Colin: Advanced Sight Translation; Sandeau: Mlle. de la Seiglière; Scribe et Legouvé: Bataille de Dames.

## GERMAN (2 or 3)

The requirements follow the recommendations of the Modern Language Association embodied in Document No. 93 of the College Entrance Examination Board.

See pages 36 and 37 for suggestions concerning preparation in the case of students expecting to enter Wellesley College.

## 2 Unit Requirement

(Termed " $A$, Elementary," by the College Entrance Examination Board.)

During the first year the work should comprise:-
(I) Careful drill upon pronunciation.
(2) The memorizing and frequent repetition of easy colloquial sentences.
(3) Drill upon the rudiments of grammar, that is, upon the inflection of the articles, of such nouns as belong to the language of everyday life, of adjectives, pronouns, weak verbs, and the more usual strong verbs, also upon the use of the more common prepositions, the simpler uses of the modal auxiliaries, and the elementary rules of syntax and word order.
(4) Abundant easy exercises designed not only to fix in mind the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression.
(5) The reading of from 75 to 100 pages* of graduated texts from a reader, with constant practice in translating into German easy variations upon sentences selected from the reading lesson (the teacher giving the English), and in the reproduction from memory of sentences previously read.

During the second year the work should comprise:-
(I) The reading of from 150 to 200 pages* of literature in the form of easy stories and plays.
(2) Accompanying practice, as before, in the translation into German of easy variations upon the matter read and also in the
*See "Suggestions Concerning Preparation," on pages 36,37.
off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easy selected passages.
(3) Continued drill upon the rudiments of the grammar, directed to the ends of enabling the pupil, first, to use her knowledge with facility in the formation of sentences, and, secondly, to state her knowledge correctly in the technical language of grammar.

## 3 Unit Requirement

(Termed " $B$, Intermediate," by the College Entrance Examination Board.)

## THE WORK TO BE DONE

The work should comprise in addition to the elementary course, $\dagger$ the reading of about 400 pages* of moderately difficult prose and poetry, with constant practice in giving, sometimes orally and sometimes in writing, paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; also grammatical drill upon the less usual strong verbs, the use of articles, cases, auxiliaries of all kinds, tenses and modes (with special reference to the infinitive and subjunctive), and likewise upon word-order and word-formation.

## Suggestions Concerning Preparation for the 2 and 3 Unit Requirements

I. The books selected for class study should be thoroughly German in character and content. Intensive work on a comparatively small number of pages is preferred to a more superficial study of a larger number of pages.

For the 2 unit requirement the number of pages read in class should, in general, not exceed 300; but in no case should the amount be less than 225 pages. Not more than 100 of these pages should be taken from readers arranged especially for beginners.
For the 3 unit requirement not more than 600 pages in all (i.e., 300 in addition to the maximum amount for the 2 unit requirement) should, in general, be read; but never less than 500 pages. Not more than one work of the classical period of German Literature should be included. Besides this intensive reading, some rapid home reading of easier texts (roo pages or more) is strongly urged.
2. The results desired can not be obtained if a considerable portion of the time is spent on translation from German into English, or vice versa.
3. Features that should not be neglected are:-
a. Vocabulary.-The careful study of a goodly number of common words and expressions drawn chiefly from the texts read.

[^5]b. Frequent practice in the oral and written use of the language without the medium of English. This should consist partly in answering in German questions put in German, based on all the texts read intensively in class, partly in reproducing in German, without the aid of questions, the contents of these texts (Freie Reproduktion).

## SPANISH (2)

The requirements follow the recommendations of the Modern Language Association embodied in Document No. 93 of the College Entrance Examination Board.

See page 38 for suggestions concerning preparation in the case of students expecting to enter Wellesley College.

THE AIM OF THE INSTRUCTION
At the end of the elementary course the pupil should be able to pronounce Spanish accurately, to read at sight easy Spanish prose, to put into Spanish simple English sentences taken from the language of everyday life or based upon a portion of the Spanish text read, and to answer questions on the rudiments of the grammar, as indicated below.

## THE WORK TO BE DONE

During the first year the work should comprise:
(1) Careful drill in pronunciation.
(2) The rudiments of grammar, including the conjugation of the regular and the more common irregular verbs, the inflection of nouns, adjectives and pronouns and the elementary rules of syntax.
(3) Exercises containing illustrations of the principles of grammar.
(4) The careful reading and accurate rendering into good English of about 100 pages of easy prose and verse, with translation into Spanish of easy variations of the sentences read.
(5) Writing Spanish from dictation.

During the second year the work should comprise:
(I) The reading of about 200 pages of prose and verse.
(2) Practice in translating Spanish into English, and English variations of the text into Spanish.
(3) Continued study of the elements of grammar and syntax.
(4) Mastery of all but the rare irregular verb forms and of the simpler uses of the modes and tenses.
(5) Writing Spanish from dictation.
(6) Memorizing of easy short poems.

The emphasis should be placed on careful, thorough work with much repetition rather than upon rapid reading.

## Suggestions Concerning Preparation

I. Grammar. In addition to the verb drill, the following points should be emphasized: difference between ser and estar; use and position of pronouns; prepositions required with different verbs and adjectives; use of subjunctive and infinitive.
2. In reading, two ideas should be kept in mind: (a) accurate translation especially of idiomatic expressions: (b) a gradual development of the power to think in Spanish, by requiring the student to explain the meaning of words and phrases in Spanish and give variations of text also in Spanish.
3. From the beginning the student should gradually become accustomed to the use of the spoken language in the class room, training the ear by means of short talks on different subjects given by the teacher and the tongue by the different methods already suggested. Original work in composition should also be required.
The texts suggested are:-
A collection of easy short stories and lyrics carefully graded; Pérez Escrich, Fortuna; Ramos Carrión y Vital Aza, Zaraguieta; Tres Comedias Modernas; Pedro de Alarcón, El Capitan Veneno; Juan Valera, El pajaro verde; Palacio Valdés, José; José Selgas, La mariposa blanca; Carolina Marcial Dorado, España Pintoresca; the selected short stories of Pedro de Alarcón or Antonio de Trueba.

## BOTANY (1)

The requirement may be met in one of two ways.
A. By the course outlined in the Report of the College Entrance Examination Board, Document No. 93.

The course should cover:-
(r) The general principles of plant anatomy, morphology, physiology, and ecology.
(2) A general knowledge of the great groups or phyla of plants.

In the second part of the course students should not only become familiar with the primary subdivisions of the great groups, but should be able to trace the evolution of plant forms by means of a comparative study of representative plants in the various groups.
$B$. By covering the main features in the course as outlined in the Laboratory Guide for the Introductory Course in Wellesley College. Copies of these Guides may be secured if desired through the office of the Board of Admission of Wellesley College.

Individual laboratory work by the students is essential and
should receive at least double the amount of time given to lecture and recitation. Records of the laboratory work, properly certified by the teacher, in which stress is laid upon diagrammatically accurate drawing and precise expressive description, must be presented on or before June fifteenth.

## CHEMISTRY (1)

The requirement is met by the course outlined in the Report of the College Entrance Examination Board, Document No. 93.

The student should perform experiments in the laboratory to illustrate the properties of the most important elements, both metallic and non-metallic, and their compounds, and it is strongly recommended that a few of these experiments should be of a quantitative nature. Work in qualitative analysis is not recommended.
Laboratory notebooks need not be submitted to the College for examination.

## PHYSICS (1)

The requirement is met by the course outlined in the Report of the College Entrance Examination Board, Document No. 93.

Laboratory notebooks need not be submitted to the College for examination.

MUSIC (1)
The requirement in Music (Harmony) is met by Music $B$ (Harmony) outlined in the Report of the College Entrance Examination Board, Document No. 93, or by examination at Wellesley College on the following:-

Knowledge of the following chords:
All the triads in the major key.
All the triads in the minor key.
The inversions of all triads.
The dominant seventh chord and its inversions.
The diminished seventh chord and its inversions.
Knowledge of all scales, major, minor (harmonic and melodic), and chromatic, with their proper notation.

Knowledge of the proper way of making a manuscript.
(See "How to Write Music" by Harris, published by the H. W. Gray Co., New York.)

Knowledge of figured bass.
This will be demonstrated by adding Soprano, Alto, and Tenor to a given figured bass.
Note.-Students who have never studied Figured Bass will be given an Unfigured Bass to harmonize.

Knowledge of harmonizing a melody.
This will be tested by harmonizing a given melody, adding Alto, Tenor, and Bass.
Emphasis should be placed on the harmonization of melody.

## METHODS OF ADMISSION

## Old Plan: Examinations in all Subjects

Candidates must take all examinations in June except such as by permission may be postponed until September. The admission examinations conducted at Wellesley College in June are the examinations of the College Entrance Examination Board of which Wellesley College is a member. These examinations will be held June $2 \mathrm{I}-26$, 1920.

The College Entrance Examination Board will furnish a list of other places at which these examinations will be held.

Students entering by the old plan may take either the ordinary or the comprehensive examinations of the College Entrance Examination Board as indicated in the following list:

| Subject | No. of Units | College Board Examinations |  |
| :---: | :---: | :---: | :---: |
|  |  | Ordinary | Comprehensive |
| English | 3 | $\begin{cases}\mathrm{I}^{*} & \text { Grammar and } \\ & \text { Composition } \\ 2 & \text { Literature }\end{cases}$ | Cp. English |
| History | 1 2 | $\left\{\begin{array}{cc} \text { A } & \text { Ancient History } \\ \text { or } \\ \mathrm{D} & \text { English History } \\ \text { or } \\ \mathrm{E} \text { or G American History } \\ \text { A with } \mathrm{D}^{*} \text { or } \mathrm{E}^{*} \text { or } \mathrm{G}^{*} \end{array}\right.$ | Cp. Ancient or English or American <br> Cp. Ancient with English or American |
| Mathematics | 3 | $\begin{cases}\text { A* } & \text { Elementary Algebra } \\ \text { C } & \text { Complete } \\ \text { Plane Geometry }\end{cases}$ | Cp. Elementary Mathematics |


| Subject | $\begin{aligned} & \text { No. or } \\ & \text { UNitrs } \end{aligned}$ | College Board Examinations |  |
| :---: | :---: | :---: | :---: |
|  |  | Ordinary | Comprehensive |
| Latin | 4 | $\begin{cases}4 & \text { Cicero and Sight } \\ \text { Translation of Prose } \\ 5 & \text { Vergil and Sight } \\ \text { Translation of Poetry } \\ \text { 6* } & \text { Advanced Prose } \\ & \text { Composition }\end{cases}$ | Cp. 4 Four-year Latin |
| Greek | ${ }^{1} \dagger$ | $\left\{\begin{array}{l}\mathrm{Ar}^{*} \text { Grammar } \\ \mathrm{F}^{*} \quad \text { Prose Composition } \\ \mathrm{BG}^{*} \text { Xenophon and Sight } \\ \text { Translation of Attic }\end{array}\right.$ Prose $\left\{\begin{array}{l}\mathrm{AI}, \mathrm{F}^{*}, \mathrm{BG} \text {, and } \\ \mathrm{CH} \begin{array}{c}\text { Homer and Sight } \\ \text { Translation of Poetry }\end{array}\end{array}\right.$ | Cp. 2 Two-year Greek <br> Cp. 3 Three-year Greek |
| French | 2 3 | A* Elementary (First and Second years) <br> B* $\underset{\text { year) }}{\text { Intermediate (Third }}$ | Cp. 2 Two-year French <br> Cp. 3 Three-year French |
| German | 2 3 | A* Elementary (First and Second years) <br> B* Intermediate (Third year) | Cp. 2 Two-year German <br> Cp. 3 Three-yearGerman |
| Spanish | $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | Spanish* | Cp. 2 Two-year Spanish Cp. 3 Three-yearSpanish |
| Botany | 1 | Botany* |  |
| Chemistry | 1 | Chemistry* | Cp. Chemistry |
| Physics | 1 | Physics* | Cp. Physics |
| Harmony | 1 | Harmony* |  |

[^6]All applications for examination, and all other inquiries must be addressed to the Secretary of the College Entrance Examination Board, 43I West rigth St., New York, N.Y. Applications must be made upon a blank form to be obtained from the Secretary of the College Entrance Examination Board.

A list of places at which the examinations are to be held in June, 1920, will be published about March I. In order that they may receive proper consideration, requests that the examinations be held at particular points should be transmitted to the Secretary of the Board not later than February $I$.

Applications for examination at points in the United States east of the Mississippi River (also at Minneapolis, St. Louis, and other points on the Mississippi River), must be received by the Secretary on or before Monday, May 31, 1920; applications for admission to examination elsewhere in the United States or in Canada must be received on or before Monday, May 24, 1920; and applications for examination at points outside the United States and Canada must be received on or before Monday, May io, 1920.
Applications received later than the dates named will be accepted when it is possible to arrange for the examination of the candidates concerned, but only upon payment of six dollars in addition to the usual examination fee. Candidates filing belated applications do so at their own risk.

The examination fee is six dollars for all candidates examined at points in the United States and Canada, and twenty dollars for all candidates examined at points outside of the United States and Canada. The fee should be remitted by postal order, express order, or draft on New York to the order of the College Entrance Examination Board.

Full information concerning the scope and character of each of the examinations may be found in Document 93, published by the College Entrance Examination Board. This may be obtained by sending ten cents in stamps to the College Entrance Examination Board.

## REGENTS EXAMINATIONS

Regents examinations with a rating of 75 per cent may be offered under certain conditions in place of the examinations of the College Entrance Examination Board. Credits must be presented on the card verified by the State Board of Regents. The requirement for examinations in final subjects (see note page 41) applies to students who offer Regents examinations for admission.

## SEPTEMBER EXAMINATIONS

Admission examinations are offered at Wellesley College in September as heretofore. Mount Holyoke College, Vassar College, Smith College, and Wellesley College will jointly con-
duct examinations in Chicago, September 20 to 23, 1920. The comprehensive examinations of the College Entrance Examination Board will be used in September for all candidates. Students who fail in preliminary examinations in June may not repeat examinations in the same subjects in September. Application for September examinations must be made to the Secretary of the Board of Admission of Wellesley College by September first. Each candidate will be charged an examination fee of six dollars.
SCHEDULE OF EXAMINATIONS
SEPTEMBER, 1920
Monday, September 20
9-12 A. M. English.
2- 5 P. M. Chemistry, Physics.
Tuesday, September 2 I
9-12 A. M. Latin.
2- 5 P. M. French.
Wednesday, September 22
9-12 A. M. Mathematics.
2-5 P. м. German, Spanish.
Thursday, September 23
9-12 A. m. History.
2- 5 P. M. Greek.
Botany, Music.

## NEW PLAN OF ADMISSION

It is believed that this new type of admission combines the best elements of the certificate system and of the examination system in that it requires the school record and estimate of character, and also demands examinations designed to test the candidate's intellectual power, not alone her memory of prescribed facts. Furthermore, the method offers the applicant the fullest opportunity to show her ability in subjects in which she believes herself best qualified.

The plan offers a uniform method of admission for the four women's colleges which have adopted the plan, and gives the
school entire freedom in the sequence of its work, making no requirements of certain subjects in the last year.

The examinations required in this plan are of the type known as comprehensive examinations offered by the College Entrance Examination Board.

The new method depends on two kinds of evidence:
I. Evidence submitted by the school, consisting of
a. A school report covering the entire record of subjects and grades for four years.
b. A statement from the school principal including an estimate of the applicant's scholarly interests, special ability, and character.
2. Evidence submitted by the candidate, consisting of

Four comprehensive examinations, selected from each of the following groups:
(1) English or History, selected by the applicant.
(2) A foreign language, selected by the applicant.
(3) Mathematics, or Chemistry, or Physics, selected by the applicant.
(4) A fourth subject, designated by the applicant from the subjects which may be offered for admission. This choice must be approved by the Committee on Admission of the respective colleges.

These four examinations must be taken at one time.
At least two examinations must cover more than two admission units each.

In each subject chosen the comprehensive examination covering all the units offered by her for admission must be taken by the applicant.

It is desirable that applicants furnish school records and state the subjects selected for examination before January fifteenth of the year in which the examinations are to be taken.

The Committee on Admission of the individual college must give its permission, based upon the evidence submitted by the school, before the applicant may take the examinations. The comprehensive examinations set by the College Entrance Examination Board are judged by readers appointed by this Board, and forwarded to the individual college for final decision by the college Committee on Admission.

Under the new plan the candidate, if admitted to college, will be admitted free from all conditions. Failure to meet
completely the standard in both kinds of evidence required will not necessarily involve rejection of the applicant; the Committee may accept unusual excellence in one part of the credentials submitted as offsetting unsatisfactory evidence or even failure in another part. If the candidate fails of admission in June she will not be debarred from taking examinations under the old system in September, but she may not take the comprehensive examinations for admission under the new plan before June of the following year.

Comprehensive examinations according to the new plan are given by the College Entrance Examination Board. Information concerning the character and scope of the examinations will be found in Document 93 of the College Entrance Examination Board.

## ADMISSION TO ADVANCED STANDING

Applications should be made upon forms which will be furnished on request. An application fee of ten dollars is required, and no application is recorded until this fee is received (see page 150). The number of students to be admitted to advanced standing is limited. Applicants whose credentials admit them to junior rank will take precedence of applicants for the freshman class in the assignment of rooms.

## Requirements.

I. These candidates must present letters of honorable dismissal from the college previously attended.
2. They must meet in full all the admission requirements of Wellesley College.

Candidates from institutions which admit students by certificate, must meet the admission requirements by passing admission examinations, except those who enter from colleges on the accredited list (see below) and whose college grades average 80 or above.
3. Each candidate must submit by March first the official record of her admission work, the official record of her college work to the end of the first semester of the year in which admission is sought, and a marked copy of the catalogue of the college previously attended indicating the admission subjects and the courses for which credit is desired; by July first, the letter of honorable dismissal and the official record for the last semester's college work.
4. No candidate may be admitted unless her credentials show that at least half of her work has been carried at a grade above the lowest passing mark, or whose credentials show her to be conditioned in even one college subject.
5. Candidates for the B.A. degree are required to spend at least two years in residence, one of which must be the senior year.

Acceptance of Work.
I. Credit without examinations will be granted for courses approved by the Wellesley Departments when satisfactory credentials have been received from colleges accredited by the Wellesley Faculty.

Advanced standing for college work without examinations is granted only to students who have completed at least one year in a college or university of high rank; otherwise advanced standing may be obtained only by examination.
2. Work presented from colleges not on the accredited list must be tested by such examinations as the departments concerned shall indicate in order to secure credit for the courses offered.
3. The acceptance of work is provisional. In case the character of a student's resident work in any subject is such as to create doubt as to the quality of that which preceded, the College reserves the right to revoke at any time any credit assigned and to exact examination in the same.

## Examinations.

I. College credit for advanced work completed in preparatory schools, or in colleges not accredited by Wellesley College, may be obtained only after the courses have been approved and the candidate has passed satisfactory examinations at Wellesley. The examinations of the College Entrance Examination Board in advanced subjects are not accepted for college credit.
2. All examinations on courses offered for advanced credit must be taken at Wellesley at the time of the college examinations in June or September. Special arrangement must be made for admission to these examinations, and applications must be received by May fifteenth or September first respectively.
3. Students are not permitted to gain credit for work done privately while in residence at Wellesley College, unless written consent to the arrangement is obtained in advanced from the
chairman of the department concerned, and from the Dean of the College.

## Honor Group for Advanced Standing.

For applicants wishing to enter advanced classes, who may be too late to secure registration on the regular list, a small Honor Group has been formed. In order to be recognized as a candidate for the Honor Group for Advanced Standing, a student must present evidence in the previous school and college records and in letters from former instructors that she is a student of excellent ability and unusual promise. The decision as to the successful applicants for admission to the Honor Group for Advanced Standing will be made in the summer of the year of entrance, after the reports from the various colleges have been received.

All correspondence should be addressed to the College Recorder.

## ADMISSION OF CANDIDATES FOR THE M.A. DEGREE

Candidates for the degree of Master of Arts must be graduates of Wellesley College or of other institutions of satisfactory standing, and must present adequate credentials as to their ability to carry on the work for the M.A. degree.

Applications for admission as graduate students should be made upon forms which will be furnished by the College Recorder on request. It is desirable that the application be sent by May first of the year in which the student proposes to enter. It should be accompanied by records of standing, and, if possible, by papers and reports of work.

A matriculation fee of five dollars is payable when a student is accepted as a candidate for the Master's degree. The amount of this fee will be deducted from the diploma fee of twenty-five dollars payable when the degree is received.

Thirty scholarships, as described on page 154 , are open to accepted candidates for the M.A. degree, not residing in college buildings.*

Circulars containing full information for graduate students will be sent on application to the College Recorder. For requirements for the M.A. degree see page 148 .

[^7]
## ADMISSION OF STUDENTS NOT CANDIDATES FOR A DEGREE

Applicants who give satisfactory evidence of ability to pursue advanced courses of study may be admitted at the discretion of the Board of Admission, provided that they satisfy the requirements of the departments which they propose to enter. It will be noted that opportunities of prosecuting work along special lines are thus open to persons of experience and success in teaching who possess the requisite qualifications for admission to college classes.

Applicants of less maturity and acquirement are not ordinarily admitted, but if such desire admission they must expect to meet by examination the requirements prescribed for admission to the freshman class, or a full equivalent for them and to satisfy such additional requirements as are prescribed by the departments which they propose to enter. Specific statements of these requirements in Music will be found on page 130; in Hygiene on page 105.

All courses, graduate as well as undergraduate, are open to special students, subject to the conditions stated by the various departments; but every such student is expected to choose a primary subject to which she should devote the greater part of her time. A student who creditably completes a prescribed group of courses will be granted a certificate.

As the capacity of halls of residence is not sufficient for candidates for degrees, special students cannot be lodged in the college buildings. Comfortable homes may be found in the village at about the same expense as in college houses.

All correspondence should be addressed to the Secretary to the Board of Admission.

## COURSES OF INSTRUCTION

The following Courses of Instruction are offered by the several departments. The College reserves the right to withdraw the offer of any course not chosen by at least six students.

All courses are classified in grades I, II, III; grade I including elementary courses and grade III the most advanced courses. The Roman numeral following the title of a course indicates the grade to which it belongs.

CLASSICAL ARCHEOLOGY
Professor: Alice ivalton, Ph.D.

1. History of Classical Sculpture (Art 2). III.

Open to juniors and seniors who have completed two full courses in either Art, or Greck, or Latin, or who have completed one full coursc and are taking a second in any of these three departments. Three hours a week for a year.

Miss Walton.
The course will present the principles of Greek and Roman Sculpture, as developed from the earliest beginnings through the Great Periods into the Roman, with references to the minor arts, such as vase painting, coins, and so forth, as they are related to the main development. The work of the fifth and fourth centuries will be especially emphasized.
$4 \ddagger$. History of Greek Pottery. III. (Not given in igig-ig20.)
Open to students who have completed course I and have studied Greek for one year. Three hours a week for the first semester.

Miss Walton.
The course will include the sequence of decorative styles and the principles of design in vase painting with especial emphasis upon the great period of the fifth century. Constant reference will be made to the collection of vases in the Boston Museum of Fine Arts.
$5 \ddagger$. Greek and Roman Coins. III. (Not given in 1919-Iq2o.)
Opcn to students who have completed course 4. Three hours a week for the second semester.

Miss Walton.
Greek coin types will be considered especially for their artistic quality, Roman coins for their historical value.
$\ddagger$ Archaology $4^{-5}$ and Latin $5^{-18}$ are not usually given in the same year.

AR'T<br>Professor: alice Van Vechten Brown.<br>Assistant Professor: Myrtilla Avery, b.l.s., M.A.<br>instructors: Bertha Knickerbocker Straight, B.A. Ethel Mary Young. ${ }^{5}$<br>Lecturers: eliza Jacobus Newkirk, M.A.<br>Alice Walton, Ph.D.,<br>PROFESSOR OF ARCHEOLOGY.<br>Assistant: helen Munroe, b.a.<br>Museum Assistant in Charge : Gladys Adams Turnbach, B.A.<br>Assistant Cataloguer: Margaret Roseman Scherer, b.A.

1. History of Architecture from the Classic Period through the Renaissance. II.
Open to students who have compleled course 12. Three hours a week for a year.

Miss Neivkirk.
The aim of this course is to give a general view of the development of styles and a thorough understanding of their essential elements, both constructive and decorative.

First semester: Introduction to the subject and history of architecture from the classic to the Gothic period.

Second semester: Architecture of the Gothic and Renaissance periods.

Text-book: Kimball and Edgell, A History of Architecture.
2. History of Classical Sculpture (Archæology i). III.

Open to juniors and seniors who have completed two full courses in either Art, or Greek, or Latin, or who have completed one full course and are taking a second in any one of lhese lhree departments. Three hours a week for a year.

Miss Walton.
The course will present the principles of Greek and Roman Sculpture, as developed from the earliest beginnings through the Great Periods into the Roman, with references to the minor arts, such as vase painting, coins, and so forth, as they are related to the main development. The work of the fifth and fourth centuries will be especially emphasized in 1919-1920.

Text-book: E. A. Gardner, Handbook of Greek Sculplure. Visits to the Boston Museum of Fine Arts.
3. History of Italian Painting through the Fifteenth Century. II.

Open to students who have completed course 12. Three hours a week 'or a year.

Miss Brown.

A general review of movements and schools with special emphasis upon the following artists: Giotto, Duccio, The Lorenzetti, Masaccio, Botticelli, Perugino, Piero della Francesca, Mantegna, The Bellini. A text-book is required.
4. History of Renaissance Architecture. III.

Open to students who have completed course I. Three hours a week for the first semester.

Miss Newkirk.
A critical study of the works of important architects of the Italian Renaissance.
6. Theory of Decoration. III.

Open to students who have completed course 4 or course 16. Three hours a week for the second semester.

Miss Straight.
The aim of this course is to develop a basis for taste and to formulate its underlying principles; to examine different theories of art, and to apply critically the general principles of decoration to various phases of art both ancient and modern.

The laboratory method will be used at the discretion of the Instructor, including constructive criticism of examples. Visits to Boston Museums.
7. Special Studies in the Art of the Middle Ages. III.

Open to students who have completed or are taking course 2 or 10 or 4.6 or 16.6. Three hours a week for a year.

Miss Avery.
Studies of the art of the Middle Ages as expressed especially in the minor arts, as ivories, metal-work, the goldsmith's art, enamel, jewelry, wood, glass, textiles; including iconography and interrelations both historical and technical. Visits to Boston galleries are arranged for this course, and when possible to the Metropolitan Museum of New York.
10. History of Italian Painting during the High Renaissance. III. Open to students who have completed course 3. Three hours a week for a year.

Miss Brown.
In this course critical study will be given to the position and quality of the following artists: Leonardo, Michelangelo, Raphael, Correggio, Giorgione, Titian, Tintoretto, and Veronese. Close study of photographs is required, and an understanding of the
methods used by Crowe and Cavalcaselle, Morelli, Berenson and other critics. A text-book is required. Museum visits.
12. Introductory Course in the History of Art. I.

Open to freshmen, sophomores, and juniors. Prerequisite to all other courses except course I3. Three hours a week for a year.

Miss Avery.
This course, while complete in itself, offers a review of the general development of architecture, sculpture and painting as a foundation for further election, and aims to develop an appreciation of æsthetic values by means of a close study of photographs and of the works themselves, through the laboratory method.

Modeling and other forms of practical work as laboratory study is required of freshmen and is recommended for sophomores and juniors. Those who prefer not to do practical work will study special points in the photographs or other reproductions, under direction.
13. Outline Course in the History of Art. II.

Open to seniors only. Three hours a week for a year. No prerequisites.
Miss Avery.
This course furnishes an outline of the general development of styles in Architecture, Sculpture, and Painting (excluding the Far East), and aims to develop observation and æsthetic appreciation as well as to relate important monuments to their contemporary civilization.

Visits to Museums.
17. Medieval Sculpture and Allied Arts. II. (Not offered in igig1920.)

Open to students who have completed course I2. Three hours a week for a year.

Miss Avery.
The purpose of this course is to make the connection between Ancient and Renaissance Art. Study is especially given to Mediæval Sculpture in France and Italy. Mos ics, frescoes, miniatures and other forms of the figure arts will be considered in relation to the development of the Romanesque and Gothic periods. Visits to Boston Collections are expected in this course.
18. Graduate Course in Italiay Painting. III. (Not offered in 1919-1920.)
19. Certain Periods in Northern Art. III. (Not offered in igig1920.)

## Studio Practice

5. Studio Practice. I.

Open to sophomores, juniors, and seniors. No prerequisites. Three hours a week for the first semester.* (Nine hours of studio practice.)

Miss Brown, Miss Newkirk.
Drawing, sketching, color-work, modeling.
14. Studio Practice. II.

Open to students who have completed course 5. Three hours a week for the second semester.* (Nine hours of studio practice.)

Miss Brown, Mrs. Young.
Water color; painting in oil.
16. Studio Practice. II.

Open by permission of the department to juniors and seniors who have completed course 14. Three hours a week for the first semester.* (Nine hours of studio practice.)

Miss Straight.
Design.
General Notes.-Practical work may be taken independently of the History of Art and will count toward the degree if one or more courses in the History of Art are taken before graduation. After one course in the History of Art has been completed, three hours of practical work as indicated in 5, 14, 16, above, equivalent to nine hours of practice, may count toward the degree; four and one-half hours of practical work, equivalent to thirteen and onehalf hours of practice, may so count, if six hours in the History of Art have been completed. This practical work is arranged to develop such qualities of observation and appreciation as are necessary to the critical study of Art History.

Previous preparation in drawing is not required.
Students in art courses are required to use laboratory methods, examining and comparing, sketching or describing the photographs used in illustration.
Written description may be substituted for laboratory drawing.
N. B. Any student who desires to give yearly the time of one full course to studio work throughout her college course may do so by spending five years in college before taking her degree, instead of four.
The art library is open to students from 8.00 to 5.30 daily, and from 7.15 to 9.15 on announced evenings.

[^8]
## ASTRONOMY

Professor: John Charles Duncan, Ph.D.<br>Graduate Assistants: Frieda Bertha Ruprecht Osgood, B.a.<br>Dorothy Weinschenk, b.A.<br>Curator: Katharine Bullard Duncan.

1. Descriptive Astronomy. I.

Open to all undergraduates. Three hours a week for a year.
Mr. Duncan, Miss Osgood, Miss Weinschenk.
A general survey of the facts of Astronomy, of the methods by which they are obtained and of the theories that account for them; facts with which every educated person should be familiar, in order to understand the astronomical allusions occurring in literature and to be alive to the beauty of the order that is about us.
2. Uranography. I.

Open to seniors and graduate students. One hour a week for a year.
Mr. Duncan.

This course will be given Thursday evenings at 7.30 o'clock. On clear evenings, naked eye study of the constellations and telescopic observations of the moon, planets, and other objects of interest. On cloudy evenings, study of photographs, maps, and apparatus illustrating the motions of the heavenly bodies.
3. Advanced General Astronomy. II. (Not offered in igi9-1920.)

Open to students who have completed course I and who have completed or are taking a course in Physics or Chemistry. Three hours a week for a year.

Practice with the equatorial telescope, and consultation of original memoirs in the detailed study of modern discoveries in reference to the solar system, variable stars, and stellar spectroscopy.
4. Observatory Ppactice. II. (Not offered in 1919-1920.)

Open to students who have completed course I. Three hours a week for a year.

Mr. Duncan.

Practical work in the astronomy of position. Time, longitude, latitude, star catalogues, mean and apparent place. Use of the sextant, transit and other instruments of the observatory. Simple computations.
5. Astrophysics. III.

Open to students who have completed a course in Differential Calculus and either a course in Astronomy or one in Optics. Three hours a week for a year.

Mr. Duncan.
Astronomical spectroscopy, photography, and photometry. The laws of radiation. Solar and sidereal physics; stellar motions.
6. Determination of Orbits. III. (Not offered in igig-1920.)

Open to students who have completed A stronomy I and a year of Calculus. Three hours a week for a year.

Mr. Duncan.
Determination, from three observations, of the elliptic and parabolic orbits of bodies in the solar system. Orbits of visual and spectroscopic binary stars. Theory and practice.
7. Celestial Mechanics. III. (Not offered in 1919-1920.)

Open to students who have completed Differential and Integral Calculus. Three hours a week for a year.

Mr. Duncan.
The attraction of bodies of various forms under Newton's law of gravitation. The problems of two and of three bodies. Perturbations.
8. Observatory Practice. II.

Open to students who have completed course $I$. One hour a week for a year. By special permission, two or three hours a week for a year.

Mr. Duncan.
Use of the observatory equipment in work not covered by Course 4. The specific subjects will vary from year to year with such changing conditions as the configuration of the planets, the appearance of new stars and comets, the occurrence of eclipses, etc. The course may be taken repeatedly.

# BIBLICAL HISTORY, LITERATURE, AND INTERPRETATION 

Professor: Eliza Hall Kendrick, Ph.D.<br>Associate Professors: Adelaide Imogene Locke, B.A., S.T.B. Olive Dutcher, M.A., B.D.<br>Assistant Professor: Muriel anne Streibert, ${ }^{3}$ B.A., B.D.<br>Lecturer: Gordon Boit Wellman, Th.D.<br>instructors: Louise Pettieone Smith, Ph.D. SEAL Thompson, M.A. Grace Lockton, B.A., B.D.

The requirement for a degree will be met by taking 1, 2, and a semester course in the New Testament, either 4 or 5 .
1.2. The Development of Thought in the Old Testament. I.

Required of sophomores. Course 1 , three hours first semester. Course 2, three hours second semester. Course I will be offered also in the second semester, and course 2 in the first semester.

> Miss Locke, Miss Dutcher, Mr. Wellman, Miss Saith, Miss Lockton.

It is the purpose of this course to offer studies in the development of religion and ethics in the Old Testament. There will be included such historical study of Hebrew national life and such presentation of the literary problems connected with the Old Testament as are necessary to make intelligible the development of thought.
4. The Life of Christ. II.

Open to students who have completed courses $I$ and 2. Three hours a week either semester.

Miss Kendrick,
Mr. Wellman, Miss Thompson.
Aim: (1) To study the environment of Christ in the government, institutions, manner of life, ideals, and literature of the Jewish people of his time.
(2) To follow the unfolding of his life from the historical point of view.
(3) To study the teachings of Christ: (a) in their historical connections as far as possible; (b) topically.
(4) To become acquainted with the leading problems regarding the person and work of Christ, with different points of view and with the best literature on the subject.
${ }^{3}$ Absent on leave.
8. The Apostolic Age. II.

Open to students who have completed course 4. Three hours a week for the second semester.

Miss Kendrick, Miss Thompson.
It is the purpose of this course to offer studies in the essential teachings of Christianity as represented by the several New Testament writers outside of the authors of the Synoptic Gospels. There will be included such historical study of New Testament times and such presentation of the questions connected with New Testament Introduction as are necessary to make intelligible the development of Christian thought.
5. Greek Testament. Text Study of the Synoptic Gospels. II.

Open to students who have completed courses I and 2 and Greek I. Three hours a week for the first semester.

Miss Kendrick.
6. Greek Testament. Spechal Study of the Gospel of John. II. Open to students who have completed course 5. Three hours a week for the second semester.

Miss Kendrice.
9. History of Religions. III.

Open to students who have completed the required courses in Biblical History. Three hours a week for a year.

Miss Locke.
Introductory study of primitive religions followed by an outline comparative study of the rise and development of the leading historic faiths.
11. Elementary Hebrew. III.

Open to juniors and seniors. Three hours a week for a year.
Miss Smith.
The elements of Hebrew grammar, with practice in translation and the memorizing of a vocabulary. Reading of selections from the Old Testament.

At the end of the course the student should be able to read simple Hebrew and to use the language in the study of the Old Testament.
14. Second Year Hebrew. III. (Not offered in 1919-1920.)

Open to students who have completed course II. Three hours a week for a year.

Miss Sintth.
Reading from the Prophets. Study of Hebrew syntax. The elements of text criticism.
15. Interpretations of Christianity. III.

Open to seniors. Thrce hours a week for a year.
Miss Kendrick.
The aim of this course will be to trace in the devotional and controversial literature of certain of the most important periods of the Christian Church, from the beginning to the present day, varying conceptions of the essentials of Christianity, to consider the effect upon these conceptions of some of the most important currents of thought of the period studied and to make constant comparison with New Testament religion.

```
BOTANY
Professor: Margaret Clay Ferguson, Ph.D.
Associate Professor: Laetitia Morris Snow, Ph.D.
Assistant Professors: Mary Campbell Bliss, M.A. Mabel Annie Stone, M.A. Alice Maria Ottley, \({ }^{3}\) M.A. howard Edward Pulling, Ph.D.
instructors: Emma Luella Fisk, B.A.
Regina emma Stockhausen, M.A. Miriam Isabel Dean, M.A.
Lecturer: Henry Saxton Adams, B.A.S.
Assistants: Lucile Roush, B.A. Ruth Margery Addoms, B.A.
Curator: Edith Jennett Grimes, B.A.
laboratory Assistant: Elizabeth Frances Shipman, B.A.
Graduate Assistant: Rita Ellen Pond, B.A.
```

5. Plant Studies. I.

Open to freshmen, sophomores, and juniors. Three hours a week for a year.

Miss Ferguson, Miss Bliss, Miss Stone, Miss Fisk, Miss Stockhausen, Miss Roush, Miss Addoms.
This course is designed to bring the student into sympathy with the plant world, to cultivate the power of careful observation, to give a knowledge of the fundamental principles of plant life and plant breeding, and of the general principles of floriculture. The course is developed on purely scientific lines, but, at the same time, it seeks so to relate our study of plants to all life as to give the student that familiar and intimate acquaintance with her living environment which makes for the broadest culture of to-day.
${ }^{3}$ Absent on leave.

The structure and development of certain plants are studied from seed germination to fruit formation, and the more simple problems connected with the adjustment of plants to their surroundings are investigated. Students are trained to know the herbaceous plants in their spring condition, to recognize the early flowers, and to know our common trees both in their winter and in their summer aspect.
4. General Bacteriology. II.

Open to students who have completed one full course in Botany or Chemistry or Zoology. To count toward a twelve hour major, but not toward a six or nine hour major. Three hours a week for a semester; offered in both semesters.

Miss Snow, Miss Dean
This course is devoted to a consideration of bacteria, yeasts, and moulds in their relation to the affairs of daily life; special emphasis will be placed on the importance of these organisms in the household, their connection with water and milk supplies, and with the preservation of foods. The bacteria of the soil will be studied from the point of view of their importance in the cycle of nature.
7. Plant Problems. III.

Open to graduate students and, by permission of the department, to seniors. Three or six hours a week for a year.

> Miss Ferguson, Miss Snow, Miss Bliss, Miss Stone, Mr. Pulling.

This is primarily a laboratory course, but a definite weekly appointment is made with each student for a report of the papers read and of the progress of her study; and a final paper or thesis embodying the results of her investigations is required. A special problem in one of the following subjects is assigned to each student: (1) Embryology and Genetics; (2) Histology and tissue studies from the standpoint of phylogeny; (3) Physiology and Experimental morphology; (4) Taxonomy of the Phanerogams; (5) Taxonomy of the Cryptogams.

The amount of time for reading in Cambridge varies with the nature of the problem investigated.
14. Botanical Seminar. III.

Required of graduate students, and open to seniors by permission of the department. One hour a week for a year.

Miss Ferguson.

Reading and discussion of current botanical literature, reports of problems under investigation, studies in the historical development of some phase of botanical knowledge.
16. General Evolution of the Plant Kingdom. II.

Open to students who have completed course 5 or its equivalent and to juniors and seniors without prerequisite. Three hours a week for the first semester.

Miss Ferguson, Miss Snow, Miss Stone, Mr. Pulling.
A study of the general principles and theories of evolution; the origin of life; and the progressive development in plant forms from simple one-celled individuals to the most modern and highly specialized plants. The course will also include a brief study of the cell as the morphological and physiological unit of plant life and as the bearer of hereditary characters.
17. Taxonomy and Geographical Distribution of the Pteridophytes and Spermatophytes. II.
Open to students who have completed course 16. (In I9IG-Ig20 open also to students who have completed course I under the old plan.) Three hours a week for the second semester.

Miss Roush.
A consideration of the classification and natural relationships of the Ferns and Seed-plants, based on the study of the local flora in the field and in the laboratory, with the use of manuals and practice in the construction of keys. The course will also include some consideration of the facts and problems of plant geography.
18. Comparative Morphology and Taxonomy of the Alge, Liverworts, and Mosses. II.
Open to students who have completed course I6. (In 1919-1920 open also to students who have completed course I under the old plan.) Three hours a week either semester.

Miss Stone.
This course treats of the structure and classification of the Algæ, Liverworts, and Mosses; of their occurrence in nature, their adaptation to the environment, and their significance in evolution.
19. Morphology and Physiology of Garden Plants. II.

Open to students who have completed course I6. (In 19I9-Ig20 open also to students who have completed course I under the old plan, and to seniors who have completed course 5.) Three hours a week either semester.

Mr. Adams, Miss Fisk.
The physiology of plants is studied in this course as a background for their cultivation in garden and greenhouse. This includes the
problems of propagation, nutrition and the plant's response to various external factors.
The forms and textures of plants are considered with special reference to their floristic and artistic values.

Lectures are supplemented by work in the greenhouse and field.
20. Field Ecology. III.

Open to juniors and seniors who have completed course 16. (In 1919-1920 open also to students who have completed course I undcr the old plan.) Three hours a week for the second semester.

Miss Snow.
The course is designed to acquaint the student with the natural grouping of plants on the earth. It will include a brief consideration of plant formations, which are a response to climatic conditions, and a more detailed study of local plant associations which have resulted from physiographic changes. An average of one appointment a week will be devoted to field-work.
21. Evolution of Plant Tissues. III.

Open to juniors and seniors who have completed course 16. (In 1919-1920 open also to students who have completed course I under the old plan.) Three hours a week for the second semester.

Miss Bliss.
A brief consideration of the micro-chemistry of the cell wall and a detailed comparative study of the tissues of the lower and higher vascular plants in relation to evolution. This will be followed by a consideration of present day plant structures as influenced by environment.
22. Comparative Morphology of the Ferns, Gymnosperms, and Angiosperas. III. (Not given in 1919-1920.)

Open to juniors and seniors who have completed course 16. (In IgIg-1920 open also to students who have completed course I under the old plan.) Three hours a week for the second semester. Miss Ferguson, Miss Stone.

This course considers the origin, development, and structure of vascular plants from the standpoint of evolution. Special attention is placed on tracing the steps in the development of vegetative and reproductive organs, and on a consideration of the homologies of sporogenous, reproductive, and embryological parts. The genetic relationships of plants, both fossil and living, are carefully considered.

Students will become acquainted with the technique of plant histology and embryology by preparing a considerable proportion of the microscopic slides used in the classroom.
23. Plant Physiology. III.

Open to students who have completed, and to juniors and seniors who are taking, course 16. (In IgIg-Ig20 open to students who have completed course I under the old plan.) Three hours a week for a year.

Mr. Puliing.
Experiments, lectures, discussions, and readings designed to acquaint the student with the higher plants as working organisms. The experiments embody problems in, to a greater extent than demonstrations of, the fundamental activities of the higher plants in relation to their environment. It is planned that increased precision in laboratory manipulation shall keep pace with the student's growing knowledge of physiological methods.
24. Comparative Morphology and Taxonomy of the Fungi and Lichens. III.

Open to students who have completed course 16. (In 1919-1g20 open to students who have completed course $I$ under the old plan.) Three hours a week for the first semester.

Mr. Pulling.
This course will give as thorough a knowledge of the Fungi as time permits. Practice will be given in the identification of the commoner Fungi and Lichens. Special emphasis will be placed upon the mushrooms and their allies, and upon Fungi as a cause of plant diseases.
25. The Plants and Problems of Economic Botany. III. (Not offered in 1919-1920.)
Open to students who have completed course 16. Threc hours a weck for the first semester.

Miss Snow.
This course aims to bring to the student a realization of the importance of the plant kingdom in modern civilization. Selected studies will be made from the plants of agriculture, horticulture, forestry, medicine, textile industries, etc. Plants will be considered not only from the standpoints of their production, distribution, and preservation, but also with reference to their past development and their future improvement and conservation. Adequate emphasis
will be placed upon the technique involved and an opportunity will be given to visit various establishments whose work has special significance for this course.
26. Landscape Gardening. III.

Open to juniors and seniors who have completed or are taking course 19. Three hours a week for the second semester. Mr. Adams, Miss Fisk.

A preliminary study of the principles of design as applied to the problems of landscape gardening. Lectures upon the history and theory of the subject are supplemented by the study of both large and small estates in the vicinity of Boston, and by laboratory practice in the drafting of original plans and the consideration of actual problems.
27. Cytology, Genetics, and Experimental Evolution. III.

Open to seniors, and by permission of the department to juniors, who have completed twio full years of Botany. (In 1919-1920 open to students who have completed course I under the old plan.) Three hours a week for a year.

Miss Ferguson, Miss Pond.
Studies in the structure of the cell; the phenomena of cell division; the constitution of the reproductive cells with special reference to the theories of heredity and evolution. The relation between definite cell structures and visible plant characteristics will be determined by a study of their inheritance in cross breeding and in mutation. At the beginning of the year each student will be assigned a practical problem in plant breeding as a basis for the study of the behavior of pure lines in hybridization and the origin and transmission of characters.

## 28. Advanced Bacteriology. III.

Open to students who have completed Botany 4 , and have completed or are taking a course in Chemistry. Three hours a week for a semester; offered in both semesters.

> Miss Snow.

In this course special attention will be devoted to a study of the following topics: The relationships and variability of bacteria, quantitative methods of bacteriological examination of water supplies, advanced problems in soil bacteria, pathogenic bacteria, etc. These topics will be treated in such a way as to give the student familiarity with those diagnostic and cultural methods by which alone these organisms can be studied.

## CHEMISTRY

Associate Professor: Charlotte Almira Bragg, B.S.<br>Assistant Professors: Helen Somersby French, Ph.D. Marguerite Willcox, Ph.D.<br>instructor: Lillian Eloise Baker, m.A.<br>Assistants: Winifred Henrietta Franz, B.S.<br>Ethel Margaret Johnson, B.S.

1. Elementary Chemistry. Lectures and Laboratory Work. I. Open to all undergraduates. Three hours a week for a year.

Miss Bragg, Miss Baker, Miss Franz.
Course I is for beginners in Chemistry, and is intended to familiarize the student with the important properties of the elements and their compounds, with their modes of preparation, and with such tests as shall lead up to the study of systematic Qualitative Analysis; also to present the laws governing chemical reactions, the meaning of chemical equations, and the more recent theories adopted in the science.
2. Qualitative Analysis. II.

Open to students who have completed course I or 4. Three hours a week for the first semester.

Miss Willcox.
The lectures of this course deal with the theory of solutions and the laws of chemical and physical equilibrium as a basis for analytical work, with special applications to the work of the laboratory. The separation and the characteristic reactions of the important metals and acids are learned by the analysis of solutions of known composition, and the work is constantly tested by the analysis of unknown substances.
3. Qualitative Analysis. III.

Open to students who have completed course 2. Three hours a week for the second semester.

Miss Willcox.
4. General Chemistry. I.

Open to students who have completed the admission requirement or its equivalent. Three hours a week for a year.

Miss French, Miss Johnson.
The course aims to give a thorough knowledge of the fundamental principles of the science, and to take up, so far as time allows, subjects of interest and importance in daily life.
5. Quantitative Analysis. II.

Open to students who have completed course 2. Three hours a week for the second semester.

Miss Wilicox.
This course is designed to give training in manipulation in gravimetric and volumetric analysis. The theories discussed in course 2 are applied to the work of the laboratory, and problems related to the work are included in the class discussions.
6. Food and Nutrition. III.

Open to students who have completed courses $1,2,5$, and 7. Three hours a week for the first semester.

Miss Baker.
7. Organic Chemistry, with Laboratory Work in Organic Preparations. III.
Ofen to juniors and seniors who have comfleted or are taking courses 2 and 5 and, by special permission, to seniors who have completed course I or course 4. Three hours a week for a year.

Miss. French, Miss Johnson.
8. Theoretical and Physical Chemistry. III.

Open to seniors who have completed or are taking course 7. Three hours a week for the second semester.

Miss French.
9. Laboratory Work in Physical Chemistry. III. (Not offered in 1919-1920.)
Open to seniors and graduates who have completed or are taking course 8. Three hours a week for a semester.
10. Quantitative Analysis. III.

Open to students who have completed courses 2 and 5 . Three hours $a$ week for the first semester.

Miss Willcox.
12. Advanced Laboratory Course: Organic Preparations. III.

Open to students who have completed course 7. Three hours a week for the first semester.

Miss French.
13. Chemistry in its Applications to Daily Life. II.

Open to students who have completed course I or course 4. Three hours a week for the first semester.

Miss French.
The subject-matter of the course will include such topics as the chemistry of illuminants, of photography, of soaps; pure air and
pure water, how recognized and how obtained; the modern problems of dye-stuffs and of various other chemical industries; and the question of pure, economical, and nourishing food.

Lectures, with illustrative experiments. No laboratory work.
This course will not count toward a major in Chemistry.
14. Chemistry in its Applications to Other Sciences. II. (Not given in 1919-1920.)
Open to students who have completed course $I$ or course 4. Three hours a week for the second semester.

Miss French.
This course will include certain subjects from Physical Chemistry, as Absorption, Osmosis, Thermo-chemistry, Electrolytes, Colloids, Radio-activity; some chapters from Organic Chemistry, including the Fats, Carbohydrates and Proteids; together with a review of such parts of Inorganic Chemistry as might be of special use in the study of other sciences.

Lectures, with illustrative experiments. No laboratory work.
This course will not count toward a major in Chemistry.
15. Inorganic Chemistry. III.

Open to students who have completed courses 1 or 4, 2 and 5, and 7. Three hours a week for the second semester.

Miss Bragg.
16. Physiological Chemistry. III. (Not given in 1919-1920.) Open to students who have completed course 7. Three hours a week for the first semester.

Miss Baker.

## ECONOMICS AND SOCIOLOGY

associate Professors: Anna Prichitt Youngman, ${ }^{2}$ Ph.d. Jane Isabel Newell, Ph.D.<br>Assistant Professors: Donald Skeele Tucker, M.A. Donald Reed taft, M.A. instructor: Joseph Lyons Snider, M.A. Assistant: Ann Maria Mitchell, B.S.

1. Elements of Economics. I.

Open to sophomores, juniors, and seniors, but intended primarily for sophomores and juniors. Three hours a week for a year.

Mr. Tucker, Mr. Snider.
An introductory course designed to give the student acquaintance with economic facts and training in economic reasoning. Illus-
${ }^{2}$ Absent on leave in Government Service.
trations will be drawn from actual observation of the conditions determining prices, land values, wages, profits, and standards of living. In the second semester, certain legislative problems relating to currency, banking, the tariff, etc., will be discussed in class.
2. Economic History of the United States. II.

Open to students who have completed course 1 or course 15. Three hours a week for the second semester.

Miss Newell.
A study of our national development in its material and social aspects, with especial emphasis upon the development of business combinations and of trade unions.
3. Economic History of England. I. (Not offered in 1919-1920.)

Open without prerequisite to sophomores, juniors, and seniors. Three hours a week for the second semester.

This course will include a survey of the chief economic changes in English history, but especial attention will be devoted to the period since the industrial revolution.
4. Socialism and Social Reform. III.

Open to students who have completed course I or courses 15-13. Three hours a week for the first semester.

Miss Newell.
A critical study of the theoretical bases, ultimate purposes, and present methods of progressivism, single tax, co-operation, anarchism, syndicalism, trade unionism, and the several forms of socialism.
5. Railroads: Rates and Regulation. III. (Not given in igig1920.)

Open to students who have completed course I or courses 15-13. Three hours a week for the first semester.

Mr. Tucker.
A brief survey of some of the fiscal, economic, and social problems arising from our modern means of transportation.
6. Social Economics. III.

Open to seniors (and by special permission to juniors) who have completed course I or courses 15-13. Three hours a week for the first semester.

Miss Newell.
A study of the dependent, defective, and delinquent classes, accompanied by discussion of methods of dealing with each.
7. Social Economics. III.

Open to seniors (and by special permission to juniors) who have completed course I or courses 15-13. Three hours a week for the second semester.

Miss Newell.
A discussion of problems of community life, and of methods of meeting certain normal social needs, such as housing, sanitation, education, and recreation.
8. The Modern Labor Movement. III.

Open to students who have completed course I or courses 15-I3. Three hours a week for the second semester.

Mr. Taft.
A study of modern industrial problems with special attention to the viewpoint of the employer and that of organized labor.
9. An Introduction to General Sociology. II.

Open to seniors and by special permission to juniors. Three hours a week for a year.

Miss Newell.
An introduction to the study of society-its development and its present structure and functioning.
It is proposed to take up: (a) the environmental, biological, psychological, and technological factors conditioning society; (b) social relations among backward peoples; (c) facts and theories of social organization with especial reference to present conditions.
10. Immigration. II.

Open to students who have completed course I or course 15. Three hours a week for the second semester.

Mr. Taft.
A study of immigration into the United States, the race elements represented, and their geographical distribution; the social, political, and economic influence of our foreign populations; the history of restrictive legislation, and the arrangements thus far provided for the reception and care of aliens.
11. General Principles of Taxation. III.

Open to students who have completed course I or courses 15-I3. Three hours a week for the second semester.

Mr. Tucker.
This course will deal with the principles of taxation with special reference to conditions in the United States. Each student will
be required to make a study of the tax system of some one state or municipality.
12. Corporate Organization and Control. III. (Not offered in 1919-1920.)
Open to students who have completed course I or courses 15-13. Three hours a week for the second semester.

Miss Youngman.
The development of large scale production and the growth of corporate business; characteristic forms of industrial combination; state and federal regulatory legislation and judicial decisions relating thereto; alleged advantages and evils of industrial combination; proposed remedies for the latter.
13. Economic Development. II.

Open only to students who have completed course 15. Three hours a week for the second semester.

Mr. Tucker.
A survey of the chief stages of economic life, in an effort to understand the development of the institutions which characterize our present-day money economy. Especial emphasis will be laid on the distinctive features of modern industrialism.
15. Introduction to Economic Life. II.

Open to seniors and juniors. Three hours a week for the first semester.
Mr. Taft.
A brief survey of modern economic life with especial reference to the working of the money economy. The topics considered will include production, its factors and limits; money and banking, the determination of the value of money, the fixing of prices and the forces determining wages, salaries, and other incomes.
16. Money and Banking. III.

Open to students who have completed course I or courses 15-13. Three hours a week for the first semester.

Mr. Tucker.
The course deals mainly with the principles of money and banking, but it is also designed to give the student some acquaintance with the history and chief characteristics of typical modern systems of banking.
17. Economics of Consumption. II. (Not given in 19i9-1920.)

Open to students who have completed course I or course 15. Three hours a week for the first semester.

This course will deal with both theoretical and practical aspects of the use of wealth. Some or all of the following topics will be discussed: the division of public and private incomes between use as capital and use for immediate consumption (functions and limits of saving), "Iagel's law," standards of living, workingmen's budgets and the minimum wage, Veblen's theory of conspicuous consumption, the rôle and social limits of luxury, final utility and its relation to expenditure. The function of women in directing household expenditure will be considered throughout.
20. Industrial and Social Legislation. III.

Open to sudents who have completed course I or courses 15-13. Three hours a week for the first semester.

Mr. Taft.
A study of industrial and social conditions and their regulation by means of legislation.

## EDUCATION

Professors: Arthur Orlo Norton, M.A.
anna Jane McKeag, Ph.D., LL.D.
6. Introductory Course in Education. II.

Open to juniors who have completed or who are taking the required course in Philosophy, and to seniors. Three hours a week for a year. Mr. Nordon, Miss McKeag.
This course is organized to meet the needs not only of prospective teachers but also of all who are interested in the intelligent direction of education as a phase of social service. Its purpose is to give a general survey of the practices, theories, and problems of modern education.

The work of the course is illustrated throughout the year by visits to assigned schools for the observation of children and of classroom practice, by examples of school work, and by lantern slides.
2. Advanced Course in the History of Education. III.

Open to seniors who have completed or are taking Education 6, and to graduates. Three hours a week for a year.

Mr. Norton.
From the point of view of this course modern education appears as the outcome of a long series of historic events, the effects of
which are visible in the ideals, studies, modes of teaching, and organization of our present schools, colleges, and universities. The purpose of the year's work is to study in some detail the most important events in the history of European and American education, and their effects on the present course of educational affairs.
The lectures are constantly illustrated by original manuscripts, facsimiles, early editions of noted text-books, and similar historical documents, by translations from the sources, and by numerous lantern slides.
3. Problems in Education. III. (Not given in igig-1920.)

Open to graduates who have completed a full course in Education. Three hours a week for a year.

The subject-matter of this course will vary from year to year in accordance with the equipment and needs of students. The topics for study will be chosen from the field of experimental or statistical investigation or from that of the general science of education.
4. Secondary Education. III.

Open by permission to seniors who have completed a full course in Education, and to graduates. Three hours a week for a year.

## Miss McKeag.

The history and principles of secondary education, with special reference to the high schools of the United States. A study will be made of approved methods of teaching English, foreign languages, sciences, mathematics, and history in high schools. Opportunity will be given for observation of the work of specially successful high school teachers in the subject which the student expects to teach.
In connection with this course the department of Education requires from graduates a semester of systematic practice teaching in a high school, to be done as independent work, under the guidance of the department and with the co-operation of the principal of the high school. Practice in teaching is not open to undergraduates.
9. Elementary Education: History, Theory, Practice, and Problems. III. (Not offered in 1919-1920.)
Open to graduates who have completed Philosophy i, or an equivalent, and one full course in Education. Three hours a week for a year.

Course 9 includes a brief survey of the history of elementary education in the United States, a detailed study of present elementary school practice, a critical discussion of the principles which underlie
that practice, and the investigation of selected problems in elementary education.

The purpose of the course is to give to cach student a knowledge of existing conditions and problems, some facility in handling the tools and methods of practical research in this field, and ability to formulate her views as to the ideas, scope, and work of the elementary schools.
5. Principles and Problems of Religious Education. III. (Not given in 1919-1920.)
Open to seniors who have completed the first semester of Education 6. Three hours a week for the second semester.

The aims of religious education in the light of the fundamental characteristics and present tendencies of Christianity. The religious development of the individual. The selection and use of Biblical material for different ages. The Sunday school: its organization, curricula, and methods of teaching; its relation to the home.
10. Principles and Methods of Teaching French in Secondary Schools. III. (Not given in 1919-1920.)
Open in 1919-1920 to seniors who have completed or are taking French 4, and who have also completed the first semester of Education 6. Three hours a week for the second semester.

The aim of this course is to teach the students how to impart to their pupils, in the shortest possible time, a speaking, understanding, reading, and writing knowledge of French. After a survey of the general difficulties arising from English habits of thought and of expression already formed, the instructor will deal with the several aspects of modern language work, such as the teaching of vocabulary, of grammar, of composition and of translation, the selection and use of books, the correction and elimination of errors, the equipment of the teacher and of her department in the high school.
$7 \ddagger$. The History, Theory, and Problems of the Kindergarten. III. (Not given in 1919-1920.)
Open to graduates who have completed Philosophy I or an equivalent, and one full course in Education. (Courses 7 and 8 must ordinarily be taken together.) Four hours a week for a year.

The reconstruction of educational theories in the eighteenth and early nineteenth centuries. The relation of this reconstruction to the work of Froebel. The origins and history of the kinder-

[^9]garten movement in Europe and America. Exposition and criticism of the theory of kindergarten practice. Other forms of subprimary education: the Waverley plan, the Montessori methods; their relation to kindergarten practice. The kindergarten and the primary school.
8. Kindergarten Practice: Materials, Methods, Exercises, Technique. III. (Not given in 1919-1920.)

Open to graduates who have completed Philosophy 1 , or an equivalent, and one full course in Education (see note below). Four hours a week for a year.

Course 8 deals in general with practical applications of the theory given in course 7 . It includes on the one hand a detailed study of the materials, devices, exercises, and methods of the kindergarten, and on the other, extensive observation of their use, with practice in teaching.

Note.-Courses 7 and 8 must ordinarily be taken together. They will occupy two thirds of the student's time for the year. Students who are preparing to conduct kindergartens or kindergarten training classes are required to take a third course, usually in Education, to be determined on consultation with the head of the department of Education. Ability to play on the piano the music of kindergarten songs and games is a prerequisite of these courses.

## ENGLISH

## I. English Literature

Professors: Katharine Lee Bates, M.A., Litt.d.
Vida Dutton Scudder, M.A.
Margaret Pollock Sherwood, Ph.D.
Alice Vinton Waite, M.A.
Martha Hale Shackford, Ph.D.
Assooiate Professors: Laura Emma Lockwood, Ph.D.
Charles Lowell Young, B.A.
Martha Pike Conant, Ph.D.
Alice Ida Perry Wood, Ph.D.
Laura Alandis Hibbard, Ph.D.
Assistant Professor: Elizabeth Wheeler Manwaring, B.a.
Instructors: Annie Kimball Tuell, M.A.
Mary Bowen Brainerd, Ph.D.

1. Outline History of English Literature. I.

Open to freshmen, sophomores, and juniors. Three hours a week for a year.

Miss Tuell, Miss Wood, Miss Hibbard, Mrs. Brainerd.

The course traces the essential outlines of English literary history, presents the leading types of prose and poetry, and gives training in critical appreciation. The work is conducted by lectures and by studies of selected masterpieces.
2. American Literature. II.

Open to students, except freshmen, who have completed or are taking course $I$, and to all seniors. Three hours a week for a year.

Mr. Young.
The course attempts to give a comprehensive account of American literature. It studies the Colonial and Revolutionary sources of American idealism, the rise of imaginative literature in the Middle States, the florescence of Puritan culture in New England, the achievement of democratic nationality in the mid-nineteenth century, the literature of the country at large after the Civil War, and the most recent departures in life and literature.
3. The Elizabethan Lyric. II.

Open to students, except freshmen, who have completed or are taking course $I$. Three hours a week for the first semester.

Miss Conant.
Elizabethan lyric poetry is considered as the form, after the drama, most characteristic of the Shakespearean era. Attention is given to English lyric tradition, inherited from mediæval lyrics, folk-songs, carols, May Day songs; and stimulated by the artistic songs and sonnets of the Italian Renaissance.
4. Milton. II.

Open to students, except freshmen, who have completed or are taking course I. Three hours a week for a year.

Miss Lockwood.
The primary object of the course is the critical study of Milton as a master in lyric, epic, and dramatic poetry, and as a writer of notable prose. The character and genius of the poet are considered as influenced by the political and religious conflict of the times. Special emphasis is placed on the comparison of Milton's work with that of other great writers who have used the same literary forms.
5. The Literary History of Prose Forms in the Essay. II. (Not offered in 1919-1920.)
Open to students, except freshmein, who have completed or are taking course I. Three hours a weeh for the second semester.

The course considers the development of essay literature from the formal classicism of Bacon, through the satire of Swift, Defoe,
and the pamphleteers, to the familiar essay of Addison, Goldsmith, and Lamb, and the character essay in Leigh Hunt, Landor, and Thackeray.
6. Victorian Prose. III.

Open to juniors and seniors who have completed course I, and have completed or are taking a full year course, or two semester courses, of grade II. Three hours a week for a year.

Miss Scudder, Mrs. Brainerd.
The course attempts to appreciate, with due reference to the historical background, the distinctive values of Victorian prose. The stress in classroom is laid on Dickens, Thackeray, Newman, Carlyle, Macaulay, Arnold, George Eliot, Meredith, and Ruskin.
7. English Poetry of the Nineteenth Century. III.

Open to juniors and seniors who have completed course 1 , and have completed or are taking a full year course, or two semester courses, of grade II. Thrce hours a week for a year.

Miss Sherwood.
The course considers the work of the great Georgian and Victorian poets in their relation to one another and to contemporary thought. Extended study is given to Wordsworth and Coleridge; Shelley and Keats; Tennyson and Browning; with briefer readings from Byron, Scott, Landor, Clough, Arnold, Rossetti, Morris, and Swinburne.
8. English Literature of the Fourteenth Century. II.

Open to students, except freshmen, who have completed or are taking course I; to sophomores who have completed English Composition I with credit and who plan a major concluding with course Io; to juniors who plan a major concluding with course io. Three hours a week for a year.

Miss Shackford.
The course centres in a study of Chaucer's development as a poet. Attention is paid to his chief Latin, French, and Italian sources, and to contemporary English literature which illustrates the life and ideals of the Middle Ages. Special study is made of a few metrical romances and of Piers Plowman.
9. Shakespeare. III.

Open to juniors and seniors who have completed course I, and have completed or are taking a full year course, or two semester courses, of grade II; also to juniors who are beginning their major with course 8. Three hours a week for a year.

Miss Bates.
Shakespeare's plays and sonnets will all be read and discussed, and a few selected plays will be closely studied. The Tudor and Stuart times, and Shakespeare's life and art, as changing with the times, will form the background of the work.
10. Historical Development of English Literature. III.

Open to graduates, and required of seniors who are majoring in English Literature and have not had course 1 . Three hours a week for a year.

Miss Scudder.
The course proposes a study of consecutive masterpieces chosen to illustrate the development of English literature from the time of Beowulf to the end of the Victorian age. It aims to focus attention upon successive phases of national thought and life as expressed in salient and representative books.
11. Modern Authors. III.

Open to graduates, and to approved seniors who have completed two full courses in the department. Three hours a weck for a year.

Miss Shackford.
Two or more authors are chosen each year for special study. For I919-I920 the choice is Wordsworth, Keats, and Browning.
12. Medieval English Literature. III.

Open to graduates, and to approved seniors who have completed two full courses (not including course 8) in the department. Three hours a week for a year.

Miss Hibbard.
The course introduces students to the types of literature growing out of the social and religious movements of the thirteenth and fourteenth centuries. Extended study is given to the works of Chaucer and to the problems in criticism and scholarship to which they give rise.
13. Social Ideals in English Letters. III.

Open to seniors who have completed two full courses in English Literature or Economics or History, or who have completed one full course in any of these departments and are taking another course. Three hours a week for a year.

Miss Scudder.

The course studies the expression in English literature of social compunction, social criticism, and social ideals. It covers a swift survey from the time of Piers Plowman to that of Blake, and a closer consideration of the literature of the nineteenth and twentieth centuries in its social bearing.
14. English Masterpieces. II.

Open only to seniors who have completed no full course in the department, or course I only. Three hours a week for a year.

Miss Conant.
The course is intended to develop a sympathetic appreciation of literature through the study of chosen masterpieces. The work includes readings from Wordsworth, Coleridge, Shelley, Carlyle, Ruskin, Arnold, Browning, Shakespeare, Scott, Jane Austen, and Thackeray; also, if time permits, from modern drama and recent verse.
15. Driden and Pope. II. (Not offered in 1919-1920.)

Open to students who have completed or are taking course I. Three hours a week for a year.

The course centres in the personality, work, and influence of Dryden and of Pope, while including a knowledge of important contemporary writers, and the social, political, and historical background.
16. Tendencies of Twentieth Century Poetry. III.

Open only to juniors and seniors who have already completed two full courses in the department. One hour a week for a year.

Miss Bates.
The course proposes to point out the special significance, as related to the English tradition, of the work of certain contemporary poets, English and American, especially those who have won distinction since 1900.
17. Developalent of English Prose Fiction to 1830. II. (Not offered in 1919-1920.)
Open to all siudents who have completed or are taking course 1 . Three hours a week for the first semester.

The work extends from the chivalric romance through the six-teenth-century experiments with new types of fiction, and the eighteenth-century development of the novel, to selected masterpieces of Jane Austen and of Scott.
18. The British Ballad. II. (Not offered in i919-1920.)

Open to students, except freshmen, who have completed or are taking course I. Three hours a week for the first semester.

Miss Hibbard.

The course studies the English and Scottish popular ballad and the modern literary ballad. Special attention wili be given to folk lore elements in the ballad and to the significance of the recent revival of interest in folk dance and story.
19. Poetics. II.

Open to students, except freshmen, who have completed or are taking course I, and also to students who are majoring in English Composition. One hour a week for a year.

Miss Manwaring.
The course has for its object such study of the laws of English versification as may secure for the general student of literature a keener and more intelligent appreciation of poetic expression, and for students interested in verse composition opportunity for experiment and criticism.
20. Spenser. II.

Open to students, except freshmen, who have completed or are taking course I. Three hours a weck for the second semester.

Miss Conant.
The course proposes a study of Spenser, with special reference to his position as a Renaissance type. The Faeric Queene and minor poems will be studied as Renaissance forms with some attention to sources in classic and continental literatures.
21. Introduction to Arthurian Romance. II.

Open to students, except freshmen, who have completed or are taking course I. Three hours a week for the year.

Miss Hibbard.
The course studies in the first semester the Arthurian Chronicles, Marie de France and Chrétien de Troies in translation, with close reading of Malory's Mortc Darthur and with general lectures. In the second semester, the work deals with the cycles of Merlin, Tristan, Gawain, Lancelot and the Grail; the English metrical Arthurian romances and, as time permits, modern forms of the Arthurian story.
22. English Romanticisar. III.

Open to graduates, and to approved seniors who have completed two full courses in the department. Three hours a week for a year.

Miss Sherwood.

A study of the Romantic Movement in England, from its beginnings in the eighteenth century, on through the work of the early nineteenth century poets. Certain phases of the relation of English to German literature and to French literature during the period of reaction are studied.
23. Critical Studies in Englisíh Drama. III. (Not given in 19191920.)

Open to graduates and to approved seniors. Three hours a week for a year.

Miss Bates.
The course attempts to give graduate training in literary investigation. To each student is assigned some special problem of source, authorship, or the like, which she pursues till her conclusion is reached, reporting progress from week to week in the seminar.
24. Speclal Studies in Aiferican Literature. III. (Not given in 1919-1920.)
Open to juniors and seniors who have completed course I and have completc.l, or are taking, a full course of grade II (not course 2) in the department. Three hours a week for a year.

Mr. Young.
The course studies the interpretation of American life in the national literature.
25. Beginnting of the English Renaissance from Caxton to Spenser. III.

Open to graduates, and to approved seniors who have completed tion ${ }_{f}$ full courses in the department. Three hours a week for a year.

Miss Conant.
The course aims to give graduate training, and so to present the beginnings of the English Renaissance that the student may rightly estimate the achievements of the great Elizabethans.
26. History of English Drama. II.

Open to students who have completed or are taking course I. Three hours a weck for a year.

Miss Wood.
The course traces the history of English drama from the beginnings in folk-plays and the liturgy of the Church, through the Miracles and Moralities, the Elizabethan dramatists, and the comedy and tragedy of the seventeenth and the eighteenth centuries, to the final development into contemporary forms.
27. Contemporary Drama. III.

Open to students who have completed or are taking a full course of grade III in the department. Two hours a week for a year.

Miss Waite.
The modern English drama is considered in relation to parallel European drama.

## II. English Composition

Professor: Sophie Chantal Hart, M.A.<br>Associate Professors: Agnes Frances Perkins, M.A. Josephine Harding Batchelder, M.A. Amy Kelly, M.A.<br>Assistant Professors : Elizabeth Wheeler Manwaring, B.A. Alfred Dwight Sheffield, M.A.<br>Instructors: Helene Buhlert Magee, ${ }^{3}$ M.A. Katherine Forbes Liddell, B.A. Annie Kimball Tuell, M.a. Caroline Eliza Vose, m.A. MARY UNDERHILL, B.A.

$1 \ddagger$. General Survey. I.
Required of freshmen. Three hours a week for a year.

> Miss Perkins, Miss Batchelder, Miss Kelly, Mr. Sheffield, Miss Liddell, Miss Tuell, Miss Vose, Miss Underhill.

First semester: expository writing, with emphasis on structure. Weekly themes. Second semester: expository writing, critical and interpretative; description; simple narrative. Fortnightly themes or their equivalent.
2. Intermediate Course in Expository Writing. I.

Required of students who have made $D$ grade in the second semester of course 1 . Three hours a week for one semesier.

Miss Vose.
3. Argumentation and Debates. II.

Open to sophomores and juniors who have completed course 1. Three hours a week for a year.

Miss Kelly.
Debates throughout the year.
${ }^{3}$ Absent on leave.
$\ddagger$ If a student submits papers notably deficient in English as part of her work, in any department, she will incur a condition in English Composition, whether or not she has completed the requirement in English Composition.
5. Oral Exposition. II.

Open to sophomores and juniors who have completed course I. Three hours a week for the first semester.

Mr. Sheffield.
The analysis of contemporary subjects, and the preparation of written outlines and of speeches based upon them.
7. Special Types of Oral Exposition. II.

Open to sophomores and juniors who have completed course I. Thrce hours a week for the second semester.

Mr. Sheffield.
This course is ${ }^{\circ}$ a continuation of course 5 .
The work deals with the methods of organization and presentation in group discussion.
8. Advanced Expository Writing. II.

Open to sophomores and juniors who have completed course I. Three hours a week for the first semester.

Miss Perkins, Miss Batchelder.
A critical study of the abstract, the editorial, the review, the special article, as exemplified in the newspaper and the weekly periodical. Fortnightly themes.
9. Advanced Expository Writing. II.

Open to sophomores and juniors who have completed course I. Three hours a week for the second semester.

Miss Perkins, Miss Batchelder.
This course is a continuation of course 8. The essay form, biography, the critical review, the sketch, the interpretative study of prose style. Fortnightly themes or their equivalent.
6. Narrative Writing. III

Open to juniors and seniors who have completed course I. Two hours a week for the first semester.

Miss Manwaring.
Four narratives, approximately 1,800 words each. Study of principles and forms of narrative writing, including analysis of one novel.
12. Short Themes. III.

Open to juniors and seniors who have completed course I, and to sophomores who have completed course 5 or course 8. "Two hours a week for the second semester.

Miss Manwaring.
This course is a continuation of course 6 .
Practice in writing briefly on many sorts of subjects to increase suppleness and precision of style, with especial consideration of diction and sentence form and rhythm.

Short themes. Reading and class discussion of the theory and practice of various writers.
10. The Theory and History of Criticism. . III.

Open to juniors and seniors. One hour a week for a year.
Miss Hart.
Lectures on the critical theory of Plato and Aristotle and on the more important English and French critics.
16. Advanced Course in. English Composition. III.

Open to seniors whig have completed course 3, 5.7, 8.9, or 6.12. Three hours a week for a year.

Miss Hart.
Studies in exposition, description, and narration, with one piece of dramatization or an original play. Frequent practice in writing.

## III. English Language

Associate Professor: Laura Emma Lockwood, Ph.D. Professor: Alice Vinton Waite, M.A.
Associate Professor: Amy Kelly, M.A.
Assistant Professor: Alfred Dwight Sheffield, M.A.

1. Old English. II. (Not given in 1919-1920.)

Open to juniors, seniors, and approved sophomores, who have completed a year of language in college. Three hours a week for a year. Mr. Sheffield.
A study of the grammar and vocabulary of Old English. The reading of Beowull and of selections from old English poetry and prose.
2. Old and Middle English. III. (Not offered in r919-1920.)

Open to juniors, seniors, and graduates who have completed course 1. Three hours a week for a year.

Miss Kelly.

First semester: the reading of the poetry of Cynewulf and of selections from the Riddles. Second semester: the study of the Middle English dialects based upon Emerson's Middle English Reader. The reading of the romances of Havelock, King Horn, Emare, and The Siege of Troy.
3. History of the English Language. III. (Not given in 1919-1920.) Open to juniors and seniors. Three hours a week for a year.

Miss Waite.
Origin and structure of the English Language in vocabulary, grammatical inflections, and syntax as the basis of modern usage.
4. Seminar in Old English. III.

Open to graduates, and to seniors by permission of the department. Three hours a week for a year.

Miss Lockwood.
A study of Old English inflections, phonology, and syntax. The reading of the best pieces of literature in Old English prose and poetry. A particular problem in either literature or language is assigned to each student for investigation.

FRENCH

Professor: Louis Perdriau, Lic. ès L.<br>Visiting Professor: Lucie Bernard, Agrégée des Lettres.<br>Assistant Professor: Eunice Clara Smith-Goard, m.a. (Chairman).<br>instructors: Mathilde boutron-Damazy, B. ès L. Dorothy Warner Dennis, B.A. Florence Beard Bracq, M.A. Marthe Pugny. ruth Elvira Clark, litt.D.<br>\section*{Assistant: Alice Mousset.}

All courses beginning with course I are conducted in French.
$1 \ddagger$ Elementary Course. French phonetics, grammar, composition, reading, exercises in speaking, and dictation. I. Open to all undergraduates. Three hours a week for a year.

Miss Dennis, Míss Brace.
The course includes ( I ) a practical study of French pronunciation with phonetic drill; (2) the practical study of French grammar; (3) readings on French life and French institutions.
$\ddagger$ First-year French may not be counted toward the B.A. degree if taken after the sophomore year, nor second year French if taken after the junior year. French I and German I may not both be counted toward the B.A. degree.
$2 \ddagger$. Intermediate Course. French phonetics, syntax, composition, reading from contemporary authors of note; exercises in speaking; writing from dictation. I.
Open to all students who have completed course $I$ or the two unit admission requirement in French. Three hours a week for a year.

Miss Dennis, Miss BracQ, Miss Mousset.
The course includes (I) a practical study of French pronunciation with phonetic drill; (2) a systematic review of syntax introductory to theme writing and oral narrative; (3) selected readings, prepared and sight, from modern writers.
3. French Phonetics, Grammar, and Composition. I.

Open to students who have met the three unit admission requirement in French. This course may not be elected without course 5, except by permission of the department. One hour a week for a year.

Miss Smith-Goard, Miss Pugny, Miss Clark.
The course includes (1) a practical study of French pronunciation with phonetic drill; (2) a study of the French language based on a series of Leçons de langue française; (3) weekly written exercises based on the class work.
5. Outline History of French Literature. I.

Open to students who have met the three unit admission requirement in French. This course may not be elected without course 3, except by permission of the department. Two hours a week for a year.

Miss Smith-Goard, Miss Pugny, Miss Clark.
The aim of this course is to give the students a very general view of the history of French literature from the seventeenth century to the present time, and thus to encourage and prepare students to take up more specialized studies in more advanced courses.

The course is based on a short Histoire de la littérature française, and on the reading and explanation of short representative selections from the authors studied.
24. French Phonetics, Grammar, and Composition. II.

Open to students who have completed course 2. This course may not be elected without course 29, except by permission of the department. One hour a week for a year.

Miss Damazy, Miss Bernard, Miss Clark.

$\ddagger$ First-year French may not be counted toward the B.A. degree if taken after the sophomore year, nor second-year French if taken after the junior year. French I and German I may not both be counted toward the B.A. degree.

The course includes (1) practical study of French pronunciation with phonetic drill; (2) a study of the French language based on a series of Lȩ̧ons de langue française; (3) weekly written exercises based on the class work.
29. History of French Literature. II.

Open to students who have completed course 2. This course may not be elected without course 24, except by permission of the department. Two hours a week for a year.

Miss Damazy, Miss Bernard, Miss Clark.
The aim of the course is to show briefly the evolution of French literature from the Renaissance to the present time. It is based on a short Histoire de la littérature française, the reading and explanation of representative short texts.
7. Practical Phonetics with Advanced Grammar and Composition. II.

Open to stidents who have completed courses 3 and 5, or 24 and 29. One hour a week for a year.

Miss Clark.
The course consists of a series of lessons in practical phonetics and advanced grammar, with weekly written or oral exercises based on the lessons.
12. The Classical Period of French Literature. II.

Open to students who have completed courses 3 and 5, or courses 24 and 29. Three hours a week for a year.

Mr. Perdriau, Miss Damazy, Miss Bernard.
As an introduction to this course, a short study will be made of the origin of French classicism in the Renaissance movement of the sixteenth century; but the main object of the course will be the study of the evolution of French classical literature during the seventeenth century, in the works of the great dramatists and prose writers: Descartes, Corneille, Racine, Molière, La Fontaine, Boileau, Mme. de Sevigné, Pascal, La Bruyère.
13. Conversation and Journal Club. II.

Open to students who have completed or who are taking course 12. One hour a week for a year.

Miss Smith-Goard.
Oral and written reports, reviews and discussion of important magazine articles, current events. The aim of the course is twofold: practice in the use of the spoken language, and a brief study of the France of to-day and of French institutions.
4. Intensive Reading and Advanced Composition. III.

Open to students who have completed course 12, also to seniors taking course 12. Three hours a week for a year.

Miss Bernard.
Together with the intensive reading of short passages widely varied in character the plan of this course includes grammar, oral and written composition, and practical phonetics for continued training in pronunciation. French "lecture expliquée" methods, emphasis on oral work.
9. Literature of the French Revolution. III.

Open to students who have completed course 12. Three hours a week for the first semester.

Miss Damazy.

This course aims to give a comprehensive view of the literature of the French Revolution as exemplified in certain representative philosophers and orators: Voltaire, J. J. Rousseau, Diderot, Mirabeau, Robespierre, etc.
A special study will be made of the origin of romanticism as found in the work of Rousseau and his disciples in France and abroad.
10. The Romantic and the Realistic Periods of the Nineteenth Century. III.
Open to students who have completed course 9 . Three hours a week for the second semester.

Miss Damazy.
This course treats of French romanticism as expressed in the works of the masters of its various forms-criticism, drama, lyric, novel. The writers studied include: A. de Musset, A. Lamartine, A. de Vigny, V. Hugo, A. Dumas, H. de Balzac, G. Sand, G. Flaubert, Taine, Renan, etc.
15. Contemporary French Literature from the beginning of the Naturalistic Period to the Present Time. III.
Open to juniors and seniors who have completed course 12. Three hours a week for a year.

Mr. Perdriau.
The object of this course is to give to advanced students general information about the contemporary French novelists, poets, dramatists, critics, and philosophers. The authors studied as representative of the contemporary French period are: E. Zola, G. de Maupassant, A. Daudet, P. Loti, P. Bourget, A. France, M. Barrès, Baudelaire, Leconte de Lisle, J. M. de Heredia, F. Coppée, Sully-

Prudhomme, P. Verlaine, H. de Régnier, Madame de Noailles; M. Maeterlinck, E. Rostand; F. Brunetière, J. Lemaître; H. Poincaré, H. Bergson, and the war-writers.
30. Studies in Style. III. (Not offered in igi9-1920.)

Open to students who have completed course 7. One hour a week for a year.

This course is related to course 15 .
11. Old French and Old French Literature. III. (Not offered in 1919-1920.)
Open to graduates and to seniors by permission of the department. Three hours a week for a year.
Phonology with reading of La Vie de St. Alexis, La Chanson de Roland, Aucassin et Nicolete, Chrétien de Troyes. Gaston Paris: Extraits des Chroniqueurs frangais. Selections from Constans: Chrestomathie de l'ancien frangais. The history of the French language is traced from its origin to the present time, and illustrated by texts read. For reference, Darmesteter: Grammaire Historique; Gaston Paris: Manuel de la littérature française du moyen $\hat{a}_{S E}$; also standard works on the subject in the college library. Lectures, critical reading.
20. Old Provençal. III. (Not offered in 1919-1920.)

Open to graduate students only.
This course is complementary to course II. Together these courses mark the synchronic lines of development of the langue d'oil and the langue d'oc.

The department is prepared to direct research work for graduate students ir special subjects in Old French and Old French literature, also in modern French language and literature.

## GEOLOGY AND GEOGRAPHY

Professor: Elizabeth Florette Fisher, B.S.
Associate Professor: Mary Jean Lanier, B.S.
instructor: Margaret Terrell Parker, B.S.
Lecturer: Hervey Woodburn Shimer, Ph.D., Sc.D.
Graduate Assistant: Florence Whitbeck, B.A.
Laboratory Assistant: Esther Rippard Trethaway, B.A.

## I. Geography

8. Physiography. I.

Open to freshmen and sophomores. Three hours a week for a year. Miss Fisher, Miss Parker, Miss Whitbeck.

This course is designed to give an understanding of the physical features of the land and ocean, which affect life. The origin and significance of land forms will be so treated as to explain the development of rivers, glaciers, valleys, plains, plateaus, and mountains, and to point out the changes which these forms are undergoing to-day. It gives some account of the rocks and soils that are characteristic of the different land forms.

Lectures and recitations accompanied by parallel studies in the laboratory and field.
3. Industrial and Commercial Geography. II.

Open to juniors and seniors, and to sophomores who have completed a year of science in college. Three hours a week for a year.

## Miss Lanier.

This course treats of the influence of the geographic factors of - the physical environment on man, his industry, and his needs; the production of various commodities which supply the needs of man, and the transportation of these commodities. The course includes the treatment of the climatic factors-temperature, moisture, winds, storms, and weather-and their influence upon various soils and the production of crops; the natural resources for water supply; the effect of young and mature streams upon settlement and industry; the uses and problems of inland waterways; life on plains, plateaus, and mountains; the importance of shoreline topography in transportation; the location and growth of cities, and of state and national boundaries. Emphasis will be placed upon the influence of geographic factors in history.

Lectures and recitations. Laboratory and field work, equivalent to two hours a week.

A student who has completed or is taking course i may take the second semester of course 3 .
6. Geographic Influences in the Development of the United States. III.
Open to juniors and seniors who have completed course I or course 3, or, under special conditions, to juniors and seniors who have completed course 8 and have done work in history. Three hours a week for the first semester.

Miss Fisher.
Regional geography of the United States in its physical, economic, commercial, and historical aspects, including a study of the relation of the continent to the world as a whole, and the influence of its natural resources upon its industrial development and upon the course of American History.
7. Geographic Influences in the Development of Europe. III. Open to juniors and seniors who have completed course I or course 3, or, under special conditions, to juniors and seniors who have completed course 8 and have done work in history. Three hours a week for the second semester.

Miss Lanier.
Regional geography of Europe in its physical, economic, commercial, and historical aspects, including a study of the relation of the continent to the world as a whole, and the influence of its natural reşources upon its industrial and historical development.
9. Conservation of our Natural Resources. II.

Open to juniors and seniors. To count toward a major in the department but not toward the science requirement. Three hours a week for the second semester.

Miss Fisher.
The natural resources of the United States and their influence upon national development. This course aims to study soils, forests, mineral resources, etc.,-their exploitation and their conservation. A detailed study of the work of reducing erosion, reclaiming swamp and arid lands, and developing scientific agriculture and forestry; problems of water supply, control cf water power, and use of inland waterways; questions of economic efficiency in mining processes and the use of mineral fuels and metals.
10. Industrial and Commercial Geography of South America. III.

Open to juniors and seniors who have completed course I or course 3, or, under special conditions, to juniors and seniors who have completed course 8 and have done work in history. Three hours a week for the first semester.

Miss Lanier.
The physical features, climates, and resources of the continent; their effects on the development and prospects of the several countries. Special attention is given to geographic influences on trade between the United States and South America.

## II. Geology

1. Geology. II.

Open to juniors and seniors, and to sophomores who have completed a year of science in coilege. Three hours a week for a year.

Miss Parker.
The work of the atmosphere, rivers, glaciers, oceans, volcanoes, and earthquakes in modifying the surface of the earth. Records of
the work accomplished as shown in rocks. Evolutionary development of the earth and its inhabitants as revealed in these structures and interpreted by these forces. Lectures and recitations. Laboratory and field work equivalent to two hours a week.

A student who has completed or is taking course 3 may take the second semester of course I .
$2 \ddagger$. Mineralogy. II. (Not offered in 1919-1920.)
Open to juniors and seniors, and to sophomores who have completed a year of science in college. Three hours a week for the first semester.

Lectures and laboratory work. Characteristics and origin of the more important mineral species. The course includes blow pipe analysis and crystallography. A reference collection is always available for students' use.
$4 \ddagger$. Field Geology. III.
Open to students who have completed course 1 , course 3, or courses 2 and 5. Thrce hours a week for a year.

Mr. Shimer.
Advanced field study with lectures, discussions, and laboratory work. The course includes the field determination of geologic structure and trains the student to work out independently the geology and physiography of the region studied with the life response and is thus of value to students of geography as well as of geology. Further it gives training in simple methods of surveying and in the interpretation of geologic maps.
$5 \ddagger$. Petrology. II. (Not offered in 1919-1920.)
Open to students who have completed course 2. Three hours a week for the second semester.

Lectures and laboratory work. Laboratory study of the more important rock species. Igneous, sedimentary, and metamorphic rocks. The work is intended to afford the student an opportunity to become thoroughly familiar with the macroscopic characteristics of the principal rock types and the methods of petrographical study, and to enable the student to gain some acquaintance with the theories of modern petrology.

[^10]
## GERMAN

Professor: Margarethe müller.
Associate Professors: Natalie Wipplinger, Ph.d.
emma marie Scholl, Ph.D.
$1 \ddagger$ Elementary Course. Grammar, reading, oral and written EXERCISES. I.
Open to all students. Three hours a week for a year.
Miss Scholl.
The texts used in this course are made the basis for a study of grammatical forms and rules, for speaking exercises and composition work. Frequent written exercises are required.
$2 \ddagger$. Elementary Course. Reading, free reproduction, written and ORAL EXERCISES, SHORT THEMES, MEMORIZING OF POEMS. I.
Open to all students who have completed course $I$ or the two unit admission requirement in German. Three hours a week for a year.

Miss Scholl.
The methods are the same as in course r. In connection with the reading special attention is given to the learning of the more common idioms. Some pages of easy reading are required outside of the regular class assignments. Several poems are memorized. Frequent written tests or sbort themes are required.

Course 2 is intended to fit students to enter courses 8,15 , and 16 .
3. German Scientific Prose. II.

Open to sophomorés, juniors, and seniors who have completed course 2 or the three unit admission requirement, and to others by special permission. Three hours a week for a semester.

Miss Scholl.
Selected readings, prepared and sight, based on subjects in natural science, history, psychology, and philosophy.

The aim of the course is to acquaint the student with the technical terms and phraseology of scientific texts and to enable her to understand them by sight.
5. Grammar and Composition. I.

Open to freshmen who have met the three unit admission requirement in German, and required in connection with course Io. One hour a week for a year.

Miss Müller.
Review of elementary grammar and study of more advanced grammar. Bi-weekly themes; grammatical exercises based on texts read in course 10.

[^11]6. Grammar and Phonetics. III. (Not offered in 1919-1920.)

Open to juniors and seniors who have completed at ieast three hours of grade II. Two hours a week for a year.

Systematic study of German Grammar. Elements of phonetics (Bühnendeutsch). Exercises in oral and written expression. Discussion of methods of teaching German.

This course is designed especially for those intending to teach German.
8. Grammar and Composition. II.

Open to sophomores, juniors, and seniors who have completed course 2 or equivalent, and required of those taking courses 15 and 16 . One hour a week for a year.

Miss Wipplinger.

The aim of this course is to give the student practice in oral and written expression. Bi-weekly themes; grammatical exercises based on the material treated in courses 15 and 16 .
9. History of the German Language. III.

Open to juniors and seniors who have completed three hours of grade II, and are taking other work in German. One hour a week for a year.

Miss Wipplinger.
This course aims to give a fuller and more thorough understanding of modern German through the study of its historical development. Text-book: Behagel's Die deutsche Sprache.
10. Outline History of German Literature. I.

Open to freshmen who have met the three unit admission requirement in German, and required in connection with course 5. Two hours a week for a year.

Miss Müller.
The object of this course is to furnish the student with the vocabulary necessary for the reading and discussion of literature, and to give her a general historical background for the more detailed study of German literature in subsequent courses. Texts used: Maria Stuart, Wenckebach's Meisterwerke, Goethe's Dichtung und Wahrheit (Jagemann).
11. Goethe's Life and Works (Introductory Course). II.

Open to students who have completed course 22. Three hours a week for the second semester.

Miss Müller.

Lectures, discussions. Study of the principal characteristics of Goethe's life and works to the time of his literary co-operation with Schiller. Works discussed in class: Götz von Berlichingen, Iphigenie, selected poems (Goebel). Interpretation of "Storm and Stress" in connection with Götz, of German classicism in connection with Iphigenie. Supplementary discussion of some of the following: Goethe's Briefe (Langewiesche), Dichtung und Wahrheit, Euripides' I phigenie, Boyesen's Life of Goethe.
12. Nineteenth Century Drama. III.

Open to juniors and seniors who have completed course 3r. Three hours a week for the second semester.

Miss Scholl.
Special study of Kleist, Grillparzer, Otto Ludwig, Hebbel, Ibsen, Hauptmann, Sudermann, and others; their relation to classic and romantic art, and to the social and philosophical problems of the century.
13. The German Novel. III.

Open to juniors and seniors who have completed or are taking three hours of grade II. Two hours a week for a year.

Miss Wipplinger.
Lectures on the historical development of the German novel before Goethe. Special study of some of the representative novels by Goethe, Eichendorff, Freytag, Spielhagen, Keller, Storm, Sudermann, and others, illustrative of certain important phases of German Kulturgeschichte.
14. Theory of the Drama, illustrated by classic and modern dramas. III. (Not offered in 1919-I920.)
Open to seniors who have completed three hours of grade III, and to others by special permission. Three hours a week for the first semester.

Miss Scholl.
Study of the historical development and the technique of the Greek, modern classic, romantic, social and naturalistic drama, based on the theories of Aristotle, Lessing, Hebbel, Freytag, Volkelt, and other modern theorists.
15. History of German Literature. II.

Open to sophomores, juniors, and seniors who have completed course 2 or equivalent, and required in connection with course 8. Two hours a week for the first semester.

Miss Wipplinger.
The course consists of discussions, reading and occasional lectures on the history of German literature before Goethe. The aim of
the course is to trace the parallel development of the language, literature, social conditions, and religious ideals of the times. Works read and discussed are: the Hildebrandslied, selections from the Nibelungenlied, the works of Wolfram, Gottfried, Hartmann, the Minnesingers and the Meistersingers, Volkslied, selections from Luther, Hans Sachs,-all according to Wenckebach's Meisterwerke. Occasional reference to Scherer's and Vogt and Koch's Geschichte der deutschen Literatur.
16. History of German Literature. II.

Open to sophomores, juniors, and seniors who have completed course 15, and to others by permission of the department; required in connection with course 8. Two hours a week for the second semester.

Miss Wipplinger.
The course is a continuation of course $1_{5}$; the methods and aims are the same. Chief topic: the classical period in German literature, with special emphasis on Lessing, Herder, Schiller, Goethe.
17. Middle High German (Introductory Course). III. (Not offered in 1919-1920.)
Open to juniors and seniors who have completed at least three hours of grade II. Three hours a week for the second semester.

Miss Wipplinger.
Survey of Middle High German forms and sounds. Translation of Middle High German epic and lyric poetry into the modern idiom.
18. The German Romantic School. III.

Open to juniors and seniors who have completed course 3r. Three hours a week for the second semester.

Miss Wipplinger.
A study of the development and spirit of the German Romantic School. Outside reading assigned from the following reference books: Haym, Brandes, Beers, on Romanticism; R. Huch, Blütezeit der Romantik; Hillebrandt's Lectures on German Thought; Boyesen, Essays; Heilborn, Novalis. Class work is based on the works of Friedrich Schlegel, Novalis, Tieck, Chamisso, Eichendorff, Heine, and others.
19. Lessing as Dramatist and Critic (Seminary Course). III.

Open to seniors who have completed three hours of grade III, and to others by special permission. Three hours a week for the first semester.

Treatment of Lessing's critical work in literature, theology, and æsthetics. Works read and discussed are: Laokoon, Hamburgische Dramaturgie, Minna von Barnhelm, Emilia Galotii, Axiomata, AntiGötze, Nathan der Weise, Erziehung des Menschengeschlechts. Reference books: Erich Schmidt's Lessing, Kuno Fischer's Lessing als Reformator der deutschen Literatur, Kuno Fischer's Lessing's Nathan, and others.
20. Schiller as Philosopher and Writer on Æsthetics (Seminary Course). III.
Open to seniors who have completed course 22 and at least three hours of grade III. Three hours a week for the first semester.

Miss Wipplinger.
Study of Schiller through his correspondence with Körner, Goethe, etc., and his philosophic-æsthetic poems and essays. These are read and discussed in class.
22. Schiller's Life and Works (Introductory Course). II.

Open to students who have completed courses 5 and Io, or 8, I5 and 16. Three hours a week for the first semester.

Miss Wipplinger.
Lectures, discussions. Study of Schiller's life and some of his important dramatic works. Texts: Boyesen's Schiller's Life; Die Räuber (Cotta); Wallenstein (Carruth); Schiller's Gedichte (Cotta); Schiller's Briefe (Kühnemann).
26. Gothic. III. (See Department of Comparative Philology, Course 6.) (Not offered in 1919-1920.)

Open to graduates and to seniors by permission of the instructor. Three hours a week for the second semester.

Miss Wipplinger.
27. German Lyrics and Ballads. II. (Not given in 1919-1920.) Open to students who have completed courses 5 and Io, or 8, 15 and 16, and are taking other work in German. One hour a week for a year.

Miss Scholl.
Historical study of Minnegesang, Volkslied, and the principal lyric poets up to the present day.
30. Studies in Modern German Idiom. II. (Not given in 1919-1920.) Open to students taking other work in German, who have completed courses 5 and IO, or 8, 15 and I6, and by special permission to those who have completed course 2. One hour a week for a year.

This course is designed to aid the student in acquiring a larger working vocabulary. Modern German texts are used as a basis of study. Constant oral and frequent written practice.
31. Goethe's Faust, Part I. III.

Open to juniors and seniors who have completed courses II and 22. Three hours a week for the first semester.

Miss Müller.

Study of the pre-Goethean development of the Faust legend in its more important literary forms. Close study of the text of Goethe's Faust, Part I. Collateral readings and reports on the relation of the poem to Goethe's life and times. Part II will be treated in a few final lectures.
32. Goethe, Advanced Course (Seminary Course). III.

Open to seniors who have completed course $3 I$ and at least one other three-hour semester course of grade III; students not taking course $3 I$ till the senior year, may by special permission enter course 32. Three hours a week for the second semester.

Miss Müller.
Study of Goethe's lyrics, ballads, later dramas, parts of Faust II, and other works. Collateral reading in the Goethe Jahrbuch, and from Eckermann, Gräf, Harnack, and others. Consideration of Goethe's relation to other literatures, etc.

Note.-The language of the classroom in all courses is almost exclusively German. The student thus has constant practice in hearing, speaking, and writing German.

## GREEK

Professors: Katharine May Edwards, Ph.D. Alice Walton, Ph.D., PROFESSOR OF LATIN AND ARCHEOLOGY.

## 13. Beginning Greek. I.

Open to all students. Three hours a week for a year.
Miss Edwards.
The aim of the course is to cover in one year the fundamental facts of Greek grammar with practice in reading and writing. The text-book is Allen's First Year in Greek. The selections are largely from Plato.
14. Second Year Greek. I.

Open to students who have completed course I3 or who have met the two unit admission requirement. Three hours a week for a year.

Miss Walton.
Plato: Apology and selections from other dialogues; Homer: selected passages; practice in reading at sight and in writing Greek.

1. Plato: Apology and selections from other dialogues; Homer: Odyssey (six or seven books); Euripides: one drama. I. (Not given in 1919-1920.)
Open to students who have met the three unit admission requirement. Three hours a week for a year.

Miss Edwards.

2. Plato: Phaedo; Republic (selections); Euripides: one or two dramas; Aristophanes: Clouds. II. (Not offered in 19191920.)

Open to students who have completed course I and to others by permission of the departinent. Three hours a week for a year.
3. Greek Historians. II. (Not offered in 1919-1920.)

Open to students who have completed course I. Three hours a week for a year.

Miss Edwards.
Special study of the history of Greece in the fifth century from Herodotus and Thucydides. The content of the course will vary in alternate years.

In 1920-1921 the emphasis will be upon the development of the Athenian empire and the Peloponnesian war, with readings from Thucydides, Plutarch's Pericles, and Aristophanes' Acharnians, and a few of the more important historical inscriptions.
4. Greek Drama. II.

Open to students who have completed course I or 14. Three hours a week for a year.

Miss Edwards.
Reading and study of selected plays, with lectures on the origin and development of Greek Drama.

## 5. Greek Lyric Poetry. III.

Open to students who have completed course 4. Three hours a week for the second semester.

Miss Edwards.
Special study of the poems of Sappho and Alcæus; Pindar and Bacchylides; Theocritus. Lectures on development of Greek Lyric Poetry.
7. Greek Dialects. III. (Not offered in 1919-1920.)

Open to students who have completed one full course of grade III. Thrce hours a week for a year.

Miss Edwards.
A comparative study of the Greek dialects, their characteristics and their relations to each other, with reading and study of inscriptions and selected texts.
8. History of Greek Literature in English Translations. II.

Open to juniors and seniors, and to sophomores who have completed one full course in Greek, or Art, or English Literature. One hour a week for a year.

Miss Edwards.
Lectures with readings (in translation) from the principal authors from Homer to Theocritus, with emphasis upon the Greek drama. One paper may be required on each semester's work.
The course aims to give such a survey of the development of Greek literature as will show the influence of Greek thought upon all succeeding literature and art.
9. Modern Greek. III. (Not offered in igi9-ig2o.)

Open to students who have completed course 2 or 3. One hour a week for a year.

Miss Edwards.
The course has two objects: first, a practical one, to give some acquaintance with the spoken and written Greek of to-day; second, a linguistic one, to trace the historical development of the language from classical times to the present.
11. Greek Syntax and Prose Composition. II. (Not offered in 1919-1920.)

Open to students who have completed course $I$. One hour a week for a year.

This course is especially recommended to those intending to teach Greek.
12. Homeric Seminary. III.
Open to students who have completed course 4. Three hours a week for the first semester.
Miss Edwards.

Critical study of selected portions of the Iliad, with discussions and lectures on special problems.
For additional courses see Comparative Philology and Classical Archæology.
For courses in the study of Greek Testament see Biblical History.

## HISTORY

Professors: Elizabeth Kimball Kendall, M.A., ll.b. Julia Swift Orvis, Ph.D. Mabel Elisabeth Hodder, Ph.D.
Associate Professor: Edna Virginia Moffett, Ph.D.
Assistant Professor: Edward Ely Curtis, Ph.D.
instructors': Louise hortense Snowden, b.S. Judith Blow Williams, Ph.D. Alfred Chester Hanford, M.A.
$1 \ddagger$. Political History of England to 1485 . I.
Open to freshmen, sophomores, and juniors, and to seniors who have taken no college course in History. Three hours a week for the first semester.

Miss Kendall, Miss Williams.
$2 \ddagger$. Political History of England from 4485 to the Present Time. I. Open to sophomores, juniors, and seniors as above, and to freshmen who have completed course $I$, or who offered English History as an admission subject. Three hours a week for the second semester.

Miss Kendall, Miss Williams.
The aim of these courses is to train students in the use of historical material and in dealing with historical problems. Emphasis is laid on the political, social, and industrial conditions which have developed the England of to-day.
$3 \ddagger$. History of Western Europe from tee Fifth Century to the Treaties of Westphalia. I. Open to all undergraduates. Three hours a week for a year.

Mrs. Hodder, Miss Snowden, Miss Williams.
A general survey of the history of Western Europe from the decline of Rome to the middle of the seventeenth century. Em$\ddagger$ Courses I and 2 , or course 3 , or course 10 are prerequisite to later election.
phasis is laid upon such topics as: the mediæval Empire, the Papacy, feudalism, monasticism, the Crusades, the rise of towns, Hundred Years' War, mediæval and Renaissance life and culture, the Reformation, and the beginnings of modern nationalities. The course aims to train students in methods of historical work and to furnish a background for the detailed study of particular periods.
4. History of Europe since the French Revolution. II.

Open to sophomores, juniors, and seniors who have completed one full course in History. Three hours a week for a year.

Miss Orvis.
This course involves ( I ) an introductory discussion of the condition of France on the eve of the revolution; (2) a detailed study of the progress of the revolution and of the reaction against democratic tyranny culminating in imperialism; (3) an inquiry into the influence of revolutionary ideas in the subsequent history of France, Germany, Austria, Italy, and Russia.
5. Constitutional History of England to 1399. II. (Not offered in 1919-1920.)
Open to students who have completed one full course in History. Three hours a weck for the first semester.

Miss Moffett.
A study of the development of English constitutional government as an expression of the character of the English people. The course deals with the Germanic origins, and with the development of English thought along constitutional lines to the close of the Plantagenet period.
6. Constitutional History of England from i399 to the Present

Time. II. (Not offered in 1919-1920.)
Open to students who have completed one full course in History. Three hours a week for the second semester.

Miss Moffett.
A study of the later development of the English constitution, the rise of party and cabinet government, and the actual working of the constitution to-day.
7. History of the United States from i787. III.

Open to juniors and seniors who have completed one full course and have completed or are taking a second course in History. Threc hours a weck for a year.

Mr. Curtis.

A study of the formation and development of the constitution of the United States, with special reference to controlling forces, such as the organization of parties, the growth of democracy, the rise of the slave power, the political effects of the development of the West.

8†. Europe in the Fifteenth Century. III. (Not offered in 19191920.)

Open to juniors and seniors who have completed two full courses in History, or course 3 or 10 and two courses in Art. Three hours a week for a year.

Miss Moffett.
A study of the intellectual, religious, and social life of the fifteenth century, and of the institutions and movements which were its outcome.
9. Diployatic History of Europe since 1740. III.

Open to juniors and seniors who have completed two full courses in History. Three hours a week for a year.

Miss Orvis.
This includes (1) a review of the period $1648-1740$; (2) the age of Frederick II; (3) a brief survey of the Revolutionary and Napoleonic period; (4) the Age of Bismarck and its results.
$10 \ddagger$. Medieval Life and Institutions. I.
Open to all undergraduates. Three hours a week for a year.

## Miss Moffett.

The course deals with the history of Europe to the close of the fourteenth century. It emphasizes those phases of mediæval life which have left the strongest impress upon modern times. A few mediæval sources are read at first hand, and some of the great personalities whose work is still vital are studied as carefully as time allows. The aim of the course will be to show the points of contact and of difference between the mediæval spirit and the modern, and to serve as a foundation for courses dealing with later periods, or as a background for the study of mediæval art or literature.
$\dagger$ History 8 and History 16 will not both be given in the same year.
$\ddagger$ Courses I and 2 , or course 3 , or course 10 are prerequisite to later election.
11. History of Political Institutions. III.

Open to juniors and seniors who have completed two full courses in History. Thrce hours a week for the second semester.

Miss Kendall.
The work of this course in 1919-1920 will be a consideration of the problems connected with the development of modern democracy.
12. Growth of the British Empire. III.

Open to juniors and seniors who have completed two full courses in History. Three hours a week for the first semester.

Miss Kendall.

This course includes ( 1 ) a historical review of the development of the empire; (2) a study of the changes of colonial policy; (3) a study of colonial administration; and (4) a discussion of present colonial and imperial problems.
13. History of Rome. II.

Open to sophomores, juniors, and seniors who have completed one college course in History, or who are giving special attention to Latin or Greek. Three hours a week for a year.

Mrs. Hodder.

This course offers a general survey of Roman History through the reign of Diocletian. The attempt is made to present the problems of recent scholarship in the study of the earlier period, but the main emphasis is placed upon the later Republic and the Empire. Particular attention will be given to the economic and social conditions, and to the development of the Roman system of government.

## 14. American History. II.

a. Age of Discovery and Conquest.
b. The American Revolution.

Open to sophomores, juniors, and seniors who have completed or are taking a full course in History. Three hours a week for a year.

Mr. Curtis.
In the first semester the discovery and exploration of the American continents by the Spanish, English, and French will be treated in detail, to be followed by a study of the contest between the European powers for control in the new world. The second semester will be devoted to a careful consideration of the American Revolution, especial attention being given to the European aspect of the struggle between England and her colonies.
15. International Politics. II.

Open to all seniors and to juniors who have completed or are taking a full course in History. One hour a week for a year with an additional appointment in alternate weeks. To count as one and one-half hours.

Miss Kendall.
The object of this course is to give a general view of international conditions since the close of the Bismarck period. In 1919-1920 this course will deal chiefly with conditions in the East with especial reference to America's interests in those conditions.
$16 \dagger$. Europe in the Sixteenth Century. III.
Open to juniors and seniors who have completed two full courses in History. Three hours a week for a year.

Miss Moffett.
A continuation of course 8 , though the latter is not a prerequisite. A brief introductory survey of conditions in the fifteenth century is followed by a more detailed study of the sixteenth, its great movements, and its great personalities.
17. Political History of Russia from the earliest times to the PRESENT. II.
Open to all seniors and to juniors who have completed or are taking another course in History. Three hours a week for the second semester.

Miss Orvis.
This course includes a study of ( 1 ) the forces which made Russia a world power, (2) the development and policy of the autocracy, and (3) the struggle for freedom culminating in the revolution of 1917.
18. Selected Studies in Medifval History. III. (Not given in igig1920.)

Open to approved juniors, seniors, and graduates who have had course 3 or course Io, and a second course in History. Three hours a week for a year.

Miss Moffett.
This is a second and more advanced course in Mediæval History, designed to give training in methods of historical research, using the mediæval period as a field. There will be lectures, discussions, and individual work done by each student with the instructor. $\dagger$ History 8 and History 16 will not both be given in the same year.

Study of mediæval problems and incidents, practice in compiling bibliographies, comparing sources and combining them to reach conclusions will form part of the work of the course.
19. Geography of European History. II.

Open to all seniors and to juniors and sophomores who have completed one college course in History. Three hours a week for the first semester.

Miss Moffett.

The institutions, economic and social conditions, and political history of some parts of Europe will be briefly studied in connection with their topography. Besides the study of the more important changes of boundaries, the course will attempt to strengthen the connection between events and localities, and to give a clearer conception of the scene of events already studied, or to be studied, in other courses in European History.
20. Politics of Eastern Europe. II. (Not offered in 1919-1920.)

Open to all seniors and to juniors who have completed or are taking another course in History. One hour a week for a year.

Miss Orvis.
The object of this course is to give a general view of Eastern European conditions since the close of the Age of Bismarck.
21. Selected Studies in American History. III.

Open to juniors and seniors who have completed two full courses in History. Three hours a week for a year.

Mr. Curtis.
This is a course in the history of American foreign relations. It deals with the most significant diplomatic problems which have arisen as the result of war, westward expansion, the growth of foreign commerce, immigration, and the acquisition of colonial possessions. The origin of important treaties, the development of the Monroe Doctrine, the evolution of the United States as a world power will be traced.
22. England under the Tudors and Stuarts. III.

Open to juniors and seniors who have completed two full courses in History. Three hours a week for a year.

Mrs. Hodder.
This course deals with the religious and constitutional struggles in the sixteenth and seventeenth centuries, with economic and social changes, with international relations, and with the founding of the British Empire.
23. Constitutional Government. II.

Open to juniors and seniors who have completed either courses I and 2 or course 3, or Economics $I$ or 15 . Three hours a week for a year.

Mr. Hanford.
This is an introductory course dealing with comparative modern governments. In the first semester the governments of Great Britain; France, Italy, and Germany are studied as a basis for comparison with the government of the United States, on which the second semester is spent. Throughout the course, special attention is given to the practical working of governments, to modern political tendencies, and to the relations of the individual to the government. An aim of the course is to prepare students for intelligent and effective citizenship.

HYGIENE<br>Director: Roxana hayward Vivian, Ph.d., PROFESSOR OF MATHEMATICS. Professor: William Skarstrom, m.D.<br>Associate Professors: Eugene Clarence Howe, Ph.D. Julia Eleanor Moody, Ph.D., ASSOCIATE PROFESSOR OF ZOOLOGY. Resident Physician: Katharine piatt Raymond, m.D.<br>instructors: Edna Barrett Manship. Margaret Johnson. Elizabeth Halsey, ph.B. Mary Sophie Haagensen. alfreda Mosscrop, b.A. harry Edward Brown, b.a. Mary Rees Mulliner, m.D.<br>Assistants: Fanny Garrison, B.A. annie Chapin Stediman. evelyn mae Cathcart, b.a.<br>Assistant in Gymnasium: Alice Mary Caulfield.<br>Recorder: Ruth farish Reynolds, B.A.<br>Librarian : Susan Grey Akers, b.A.<br>Curator: Anna Elizabeth Anderson.

## I. Courses Prescribed for the Certificate of the Department

(I) A two years' course leading to the certificate of the Department of Hygiene is offered to special students. This course is especially designed for the training of teachers of hygiene and physical education. In order to be admitted to this course, candidates must be without organic disease or serious functional disorder. A keen sense of rhythm is necessary. This course is open only to those who already hold the Bachelor's degree either from Wellesley College or some other college. Prevous courses in Chemistry, Physics, Psychology, and Education are essential. If a satisfactory previous course in Chemistry or Physics is lacking, it must be taken in the first year $\dagger$ and Hygiene $I_{3}$ deferred until the second year. In order to enter second-year elective work, these four preliminary courses and the required firstyear courses must be completed before the beginning of the second year.
$\dagger$ See course I in the respective departments
(2) A five years' course is offered leading to the B.A. degree and the certificate of the Department of Hygiene. This course is open only to candidates for the B.A. degree in residence at Wellesley College. In general, students in this course receive the B.A. degree at the end of the fourth year and complete in the fifth year the work required for the certificate of the Department of Hygiene. The following courses count toward the Bachelor's degree: course I , three hours; course 13 , three hours. (Further information may be obtained by addressing the College Recorder.)

1. Kinesiology. III.

Required of all first-ycar students. Three hours a week for a year.
Dr. Skarstrom.
Lectures and recitations dealing with the anatomical mechanism of movements: the rôle of joint motion, muscular action, gravity, leverage, inertia and internal resistance in the production and modification of gymnastic movements and their effects, as contrasted with "natural" movements.

This course counts three hours towards the Bachelor's degree.
2. Gymnastics. I.

Required of all first-year students. Five hours a week in the fall and winter.

Dr. Skarstrom.
Marching-adaptation of modern military marching. Elementary to fairly advanced free-standing gymnastic exercises. Elementary exercises on gymnastic apparatus, such as booms, ladders, ropes, rings, vaulting box, horse and buck.
3. Corrective Gymnastics and Massage. II.

Required of all first-year students. Two hours a week for the second semesier.

Dr. Mulliner.
Lectures on the theory and mechanics of faulty posture with practice in giving exercises suitable for each condition. General and local massage for cases that teachers of physical education should be able to treat under a physician's direction.
4. Dancing. I.

Required of all first-year students. One hour a week for a year. Miss Manship, Miss Johnson.
Elementary course in Folk Dancing and Singing Games.
5. Normal Instruction. II.

Required of all first-year students. Three hours a week for a year.

This course comprises five or six weeks of lectures and quizzes on gymnastic terminology with a survey of gymnastic material, followed by preliminary practice teaching. Students are given thorough drill on all the technical devices of teaching gymnastics.
6. Dancing. I.

Required of all frst-year students. One hour a week for a year.
Miss Manship, Miss Johnson.
This course includes elementary exercises in technique to secure plasticity, poise, co-ordination and grace. Dances are graded from Nursery Rhyme dances for children in the lower grades to slightly more complicated æsthetic, classic, and interpretative dances.
7. Outdoor Games and Sports. I.

Required of all first-year students. Three hours a week in the fall, eight hours in the spring.

Miss Manship, Miss Halsey, Mr. Brown, Miss Garrison.

In addition to field work, rules are studied and principles of management and coaching are discussed in the following sports: archery, baseball, basket ball, field hockey, rowing, and tennis. $\dagger$
8. Swimming.* I. (Not offered in 1919-1920.)
11. Symptomatology and Emergencies. I.

Required of all frrst-year students. Open to second-year students in 1919-1920. One hour a week for the first semester.

Dr. Raymond.
This brief course is intended to enable students to understand something of the nature, causes, and symptoms of the more common diseases; to detect conditions of doubtful health in applicants for gymnastic training; to comprehend intelligently the directions given by physicians regarding patients whom they may advise to take gymnastic exercise; and to apply First Aid methods in case of accident or sudden illness in camp or gymnasium.

[^12]25. Play, Playgrounds, and Athletics. II.

Required of all first-year students. Three hours a week for the first semester.

Miss Mosscrop.
The aims of this course are:
(I) To give the students an understanding of the development of the playground and recreation movement, and its relation to community health.
(2) To discuss the best methods of coaching and managing athletics, intramural sports and group contests, or mass athletics, with emphasis on the healthy development of the participants in those sports.

## 27. Personal Hygiene. I.

Required of all first-year students. One hour a week for the first semester.

Mr. Howe.
A conservative exposition of the regulation of the environmental conditions of health, and of the guidance of adaptation to these conditions.
30. Normal Instruction in Plays and Games. I.

Required of all first-year students. One hour a week for a year.
Mr. Brown.
Students are led to a familiarity with the various forms of play activities and are given practical experience in demonstrating and leading as many of these as seems practicable.

Possibilities are discussed as to classifying, grouping, and progressively arranging this miscellaneous mass of activities with a view to more scientific utilization.

Consideration is given to the efficient handling of large groups of persons in games, competitive meets, and public demonstrations.
35. Remedial Gymnastics. II.

Required of all first-year students. Three hours a week for the second semester.

Miss Haagensen.
This course is arranged to present the causes and early indications of conditions which require remedial work and practice in the application of hygiene rules and exercises which will lead to normal health.
39. Anatomy (Zoology ii). II.

Required of all frrst-year students. Three hours a week for a year. Miss Moody.

Lectures and laboratory work upon the anatomy of the muscles, viscera, and circulatory and nervous systems. Elements of histology.
9. Theory of Physical Education and Methods of Teaching. III. Required of all second-year students. Three hours a week for a year.

Dr. Skarstrom.
The aims of this course are: (r) to discuss the purposes, scope, and ideals of physical education; (2) to study the character, selection, classification, arrangement, and progression of gymnastic exercises; (3) a systematic study of the principles and technique of teaching gymnastics.
10. Gymnastics. II.

Required of all second-year students. Four hours a week in the fall and winter.

Dr. Skarstrom.
Intermediate and advanced marching, gymnastic free-standing exercises, and apparatus work.
12. History and Literature of Physical Education. III.

Required of all second-year students. One hour a week for a year.
Mr. Brown.

The purpose of this course is to give the student a comprehensive survey of the field of physical education, past and present; to give a clear understanding of the conditions governing the success or failure of the application of its principles; and to show the relation it bears to the other big movements of our time with a view to revealing a vision of its tremendous opportunities.
13. Physiology. III.

Required of all students. Open to first-year students who have completed the prerequisites in science. Three hours a week for a year.

Mr. Howe.
Human physiology with special emphasis on its application in personal hygiene and in physical education. Three lectures and one laboratory appointment of three periods.

This course counts three hours toward the Bachelor's degree.

## 14. Practice Teaching. II.

Required of all second-year students. November to May, six to eight hours a week.

Dr. Skarstrom, Miss Manship, Miss Halsey, Miss Mosscrop.

Students assist as squad leaders in the regular college classes two to four hours a week, and carry on under careful supervision the regular physical education work in the public schools of Wellesley, teaching two or three different grades during the year, four hours a week.
15. Theory and Practice of Physical Education in the First and Second Grades. II.
Required of all second-year students. One hour a week for the first semester.

Miss Halsey.

A study of the relations of physical education to the needs of children between six and eight years of age in the elementary schools. Practice in rhythm training, games, story plays, and mimetic exercises.
16. Dancing. II.

Required of all second-year students. One hour a week for a year. Miss Manship, Miss Johnson.
Advanced course in Folk and National Dances.
17. Corrective Gymnastics and Massage. II.

Required of all second-year students. Two hours a week from November until May.

Dr. Mulliner.
Practice under supervision in the use of methods and exercises taught in course 3 with the college students whose physical examinations have shown the need for special training in order to attain and maintain good posture.
18. Outdoor Games and Sports. II.

Required of all second-year students. Eight hours a week in the fall, six hours a week in the spring.

Miss Manship, Miss Halsey, Mr. Brown, Miss Garrison.
In addition to field work, rules are studied and principles of management and coaching are discussed in the following sports: archery, baseball, basket ball, field hockey, rowing and tennis.*

[^13]19. Anthropometry. II.

Required of all second-year students. One hour a week for the second semester.

Students acquire skill in the use of anthropometric instruments, in recording and filing, and in solving problems presented by the data thus secured.
20. Dancing. II.

Required of all second-year students. Two hours a week for a year.
Miss Manship, Miss Johnson.
This course includes more advanced work than that offered in course 6. Assignments are made for two original dances.
33. Practice in Teaching Esthetic, Social and Folk Dancing, and Lectures on the Relation of Music to Dancing. II. Required of all second-year students. One hour a week for a year.

Miss Manship, Miss Johnson.
Practical work in teaching dances similar to those in courses $4,6,16$ and 20.

Demonstrations and criticisms of original dances written for course 20. Practice in teaching dances suitable for schoolrooms and playgrounds.
38. Health Problems of School and Community. III.

Open to all second-year students who have completed course I3. Three hours a week for a year.

Mr. Howe.
The first part of the course deals with school health problems such as methods of effective health instruction, statistics and discussion of child development from the point of view of hygiene; and all of the sanitary aspects of school environment. In the second part are discussed the phases of general sanitary science with which teachers of hygiene and physical education come in contact not only in schools, but in social settlements, camps, industrial and recreation centers, etc. The laboratory appointments equivalent to two or three hours a week will be devoted to the practical and experimental study of such problems as ventilation and lighting, and to visits to open air schools, school lunch establishments, swimming pools, clinics, board of health laboratories, and to certain industrial and commercial plants.

## II. Courses open to all Undergraduates

Two hours in Hygiene are prescribed for the degree. One hour of this requirement is met by course 29; the second hour is met by four periods of practical work, two periods per week in the freshman year (course 21) and two in the sophomore year (course 22).

By special permission courses 23,24 and 34 may be substituted for the indoor work of courses 2I and 22. Courses 23, 28, 24, 34, 3I and 26 (except as noted below) do not count toward the degree.
29. Personal Hygiene. I.

Required of freshmen. One hour a week for a year.
Mr. Howe, Miss Malsey.
Stress is laid ( I ) on the applicability of hygienic practice in the immediate situations of college life, and (2) on the development of habits of posture and movement as a phase of education. The underlying physiology is reduced to the least amount needed for the scientific justification of the practice of personal hygiene.
21. Gymnastics and Outdoor Sports. I.

Required of all freshmen. Two hours a week for a year, counting onehalf hour toward the degree.

> Miss Manship, Miss Johnson, Miss Halsey, Mr. Brown, Miss Mosscrop, Miss Garrison, Miss Caulfield, And Assistants.

Outdoor work in the fall and spring terms-organized sports: archery, baseball, basket ball, golf, field hockey, horseback riding, rowing, running, tennis, and volley ball. This part of the work is designated as 21 f.s. (fall, spring).

Indoor work in the winter term-gymnastics. This part of the course is designated as 21 w . (winter). Students needing corrective or remedial work will substitute course 24 or 34 for the indoor gymnasium practice.

## 22. Gymnastics and Outdoor Sports. I.

Required of all sophomores who have completed course 21 . Two hours a week for a year, counting one-half hour toward the degree.

> Miss Manship, Miss Johnson, Miss Halsey, Mr. Brown, Miss Mosscrop, Miss Garrison,
> Miss Caulfield, and Assispants.

Advanced work on topics as in course 21. The outdoor work of this course is designated as 22 f.s. (fall, spring), and the indoor work as 22 w . (winter). Students needing corrective or remedial work will substitute course 24 or 34 for the gymnasium practice of this course.
23. Gymnastics. I.

Open to juniors and seniors who have completed courses 21 and 22 or their equivalent, and, by permission of the instructor, open to freshmen and sophomores who have had an equivalent of courses 21 and 22 and who meet the requirements of the department. Two hours a week from November until May.

> Dr. Skarstromf, Miss Joinson, and Assistants.
28. Organized Sports. I.

Open to juniors and seniors who have completed ourses 21 and 22, or their equivalent. Two hours a week in the fall and spring terms.

Miss Manship, Míss Johnson, Miss Halsey, Mr. Brown, Miss Mosscrop, Miss Garrison, Miss Caulfield, and Assistants.
Archery, basket ball, baseball, golf, field hockey, horseback riding, rowing, running, tennis, and volley ball.

## 24. Corrective Gymnastics. I.

Required in place of the indoor work of courses 21 and 22 in the case of all freshmen and sophomores whose physical examination indicates the need of posiure training or other corrective work.

Dr. Mulliner and Assistants.

34. Remedial Gymnastics. I.

Required in place of the indoor work of courses 21 and 22 in the case of all freshmen and sophomores whose physical examination indicates the need of remedial work. This course is open also to juniors and semiors. A fee may be charged for this course.

Miss Haagensen, Miss Garrison.

31. Elementary Dancing. I.

Open to students who have had no previous training. One hour a week from November until May.。

Miss Manship, Miss Jorinson.
This course will include exercises in technique to insure poise, co-ordination, plasticity, and grace. Dances will be graded from simple Nursery Rhyme dances to slightly more complicated æsthetic, classic, and interpretative dances. A synopsis of each day's program is typewritten and posted, and each student is required to keep a notebook.

## 26. Advanced Dancing. I.

Open to students who have completed course $3 I$ or an equivalent. One hour a week from November until May.

Miss Manship, Miss Johnson.
This course includes exercises in technique and dances more advanced than those offered in course 3 I. Each student is required to keep a notebook.

## ITALIAN

Professor: Margaret Hastings Jackson.
1 $\ddagger$. Elementary Course. I.
Open to freshmen who offer French and German for admission and to sophomores, juniors, and seniors. Three hours a week for a year.

Miss Jackson.
Grammar, with written and oral exercises; reading and sight translation. Conversation.
2. Intermediate Course. II.

Open to students who have completed course I or equivalcnt. Thrce hours a week for a year.

Miss Jackson.
Grammar, prose composition; reading and translation at sight; in the first semester from modern authors; in the second semester from classic authors.
3. History of Italian Literature in the Thirteenth and Fourteenth Centuries. Emphasis on Dante. III.
Open on consultation with the instructor to juniors and seniors who have a reading knowledge of Italian. Three hours a week for a year.

Miss Jackson.
Selections from the Vita Nuova and the Divina Commedia of Dante, the Sonnets of Petrarch and the Tales of Boccaccio will be read in the original.
4. History of Italian Literature in the Nineteenth Century. III. (Not offered in 1919-1920.)
Open to students who have completed courses I and 2 or equivalents. Three hours a week for a year.

Miss Jackson.
$\ddagger$ This course if taken in the senior year may not count within the minimum number of hours prescribed for a degree.
5. Dante and the Early Italian Revaissance. Englisii Course. II.

Open to juniors and seniors. Three hours a week for a year.
Miss Jackson.
Dante's Divine Comedy (in English) and the conditions of the age which produced it; the Early Italian Renaissance as expressed in the works of Petrarch, Boccaccio. A knowledge of Italian is not required.
Note.-The Dante Society offers an annual prize of one hundred dollars for the best essay on a subject drawn from the life or works of Dante. The competition is open to students or graduates of not more than three years' standing from colleges or universities in the United States. For subjects and conditions consult page 590 of the Harvard University Catalogue, 1918-1919.
7. Italian Prose Writers of the Fifteenth and Early Sixteenth

Centuries. III. (Not offered in 1919-192o.)
Open on consultation with the instructor to juniors and seniors who have a reading knowledge of Italian. Three hours a week for the first semester.

Miss Jackson.
Selections from the works of Macchiavelli, Castiglione, Savonarola and other writers of the period will be read in the original.
8. Italian Poets of the Fifteenth and Early Sixteenth Centuries.
III. (Not offered in 1919-1920.)

Open on consultation with the instructor to juniors and seniors who have a reading knowledge of Italian. Three hours a week for the second semester.

Miss Jackson.
Selections from Poliziano, Lorenzo de' Medici, Boiardo, Ariosto, Michael Angelo, Vittoria Colonna will be read in the original.
While courses 7 and 8 are continuous, one being the complement of the other, they may be elected separately.
9. Literature of the Italian Renaissance. III. (Not offered in 1919-1920.)
Open on consultation with the instructor to graduate students who have a reading knowledge of Italian. Three hours a week for a year.

Miss Jackson.
It is not the intention of the instructor to cover the entire period of the Renaissance but to treat of certain aspects only, the work to
adjust itself to the needs of the individual student. Under the supervision of the instructor the student will choose some author, or phase, or problem, of Italian Literature for special study, reporting thereon weekly.

## LATIN

Professors : Adeline Belle Hawes, M.A. Alice Walton, Ph.D.

Associate Professor: Caroline Rebecca Fletcher, M.A. instructor: Anna Bertha Miller, Ph.D.

1. Introduction to Latin Literature. I.

Open to freshmen, and to sophomores, juniors, and seniors who have had no Latin in college. Three hours a week for a year.

Miss Fletcher, Miss Miller.
A brief survey of the literature, illustrated by short passages from representative authors.

A more detailed study of certain masterpieces in prose and verse, with special regard to their literary form and their influence upon modern writers.

First Semester, Studies in Prose Authors: Cicero, Essay on Friendship, and selections from his correspondence with friends; Pliny the Younger, The letter as a literary form, Letters of Erasmus; Sallust or Livy, Selected topics in Roman History.

Second Semester, Selections from Latin Poets: Terence, Scenes from one or more comedies; Ovid, Passages from the Metamorphoses; Short selections from other poets.
3. Contributions of Latin Literature to Modern Life and Thought. I.
Open to freshmen, and to sophomores, juniors, and seniors who have had no Latin in college. Three hours a week for a year.

Miss Miller.
The study of passages in Latin authors embodying certain fundamental ideas which are a part of the classical heritage of modern life. The reading and class discussion will center about topics suggested in such current terms as imperial destiny, citizenship, nationalism, the State Church, humanism, etc.
2. Horace. II.

Open to students who have completed course I. Three hours a week for the first semester.

Miss Walton.
The Odes are studied, with selections from the Epistles.
8. Vergil. II.

Open to students who have completed course I. Three hours a week for the first semester.

Miss Hafes.
Selections from the Bucolics, Georgics, and Eneid VII-XII.
6. Tibullus, Propertius, and Ovid. II. (Not given in 1919-1920.)

Open to students who have completed course I. Three hours a week for the first semester.

Miss Fietcher.
17. Studies in Tacitus and Pliny. II.

Open to students who have completed a semester course of grade II. Three hours a week for the second semester.

Miss Hawes, Miss Walton.
Tacitus, Germania and Agricola, with selections from the other works. Pliny's Letters. The work in Pliny includes careful study of certain letters and the rapid reading of many others.
13. Studies in Cicero's Philosophical Works. II.

Open to students who have completed a semester course of grade II. Three hours a week for the second semester.

Miss Fletcher.
11. Latin Prose Composition. Intermediate Course. II.

Open to students who have completed course I and are taking a full course in the department. One hour a week for a year.

Miss Fletcher.
7. Sigat Reading in Prose and Verse. II.

Open to students who are taking a full course of grade II. One hour a week for a year. A second appointment with the instructor is substituted for preparation.

Miss Miller.

16. Roman Life and Customs. II.

Open to juniors and seniors without prerequisite, and to sophomores who have completed Latin I. One hour a week for a year.

Miss Hawes, Miss Walton, Miss Fletcher, Miss Miller.
Lectures, illustrated by photographs and lantern slides, on subjects connected with the daily life and surroundings of the Romans,
such as family life, dress, education, buildings, roads, travel, social functions, amusements, religious customs, etc. The required reading will be mainly in English.
4. Comedy. Plautus and Terence. III.

Open to students who have completed two full courses. Three hours a week for the first semester.

Miss Hawes.
This course includes the careful study of two or more plays together with the rapid reading of several others.
5. Satire. Horace and Juvenal. III.

Open to students who have completed two full courses. Three hours a week for the second semester.

Miss Hafes.
This course includes the reading of selected satires of Horace and Juvenal, with study of other Roman satirists by lectures and special topics. Sight reading in Martial.
18. Latin Epigraphy. III.

Open to students who have completed two full courses. Three hours a week for the first semester.

Miss Walton.
Selected inscriptions will be studied both for their content as sources of Roman public and private life, and their form. Egbert's Latin Inscriptions and facsimiles will be used.
15. Topography of Roman Sites. III.

Open to students who have completed two full courses. Three hours a week for the second semester.

Miss Walton.
Architectural History and Topography of Ancient Rome and of typical municipal and provincial towns.
19. Livy. Books I-X. III. (Not offered in 1919-1920.)

Open to students who have completed two full courses. Three hours a week for the first semester.

Miss Fietcher.
Study of the sources of the early history of the Roman Republic. Lectures and collateral reading.
20. Ovid, Fasti; Cicero, De Divinatione, De Natura Deorum. III. (Not offered in 1919-1920.)
Open to students who have complcted two full courses. Three hours a week for the second semester.

Miss Fletcher.
The early religious institutions of the Romans will be studied from these sources and from other selected readings.
21. Latin Literature of the Early Christian Church. III.

Open to students who have completed two full courses. Three hours a week for the second semester.

Miss Miller.
Readings from the Early Christian Apologists and Fathers illustrating the contact of Christian ideals with Pagan thought and civilization. Latin Hymns.

This course may count as an elective in the Department of Biblical History.

14 $\ddagger$. Literature of the Roman Eifire. III.
Open to students who have completed three full courses. Three hours a week for a year.

Miss Hawes.
The aim of this course is to secure an acquaintance with many representative authors of the Roman Empire, and to show the interest and the value of the "Silver Latinity" and the writers of the later Imperial Period. The readings, which include both poetry and prose, and vary somewhat from year to year, will include selections from Velleius Paterculus, Seneca, Quintilian, Tacitus, Martial, Apuleius, Claudian, Boethius, and other authors. The course includes also a few lectures on various aspects of society in the time of the Empire.

Rapid reading without translation is one of the features of this course.
$22 \ddagger$. History of Latin Poetry. III. (Not offered in 1919-1920.)
Part I, Poetry of the Republic.
Part II, Post-Augustan Poetry.
Open to students who have completed three full courses. Three hours a week for a year.

Miss Hawes.
In Part I some study will be given to the beginnings of Latin poetry and the earlier poets, but the main emphasis will be placed
$\ddagger$ Courses 14 and 22 are not given in the same year.
upon the poets of the Ciceronian Age, Catullus and Lucretius. Since the Augustan poets are studied in the grade II courses, that period will be considered only by way of review and comparison. In Part II the aim will be to secure an acquaintance with representative poets of different periods, and to show the interest and the value of the later Latin poetry.
Rapid reading without translation will be one of the features of this course.
10. Latin Prose Couposition. III.

Open at the discretion of the instructor to students who have completed course II and who are taking a full course in the department. One hour a week for a year.

Miss Fletcher.
12. Outline History of Latin Literature. III. (Not given in 19191920.)

Primarily for graduates. Open to qualified seniors by permission of the department. One hour a week for a year.

Lectures and readings, with direction of the students' private reading.

The aim of this course is to give a general survey of the subject, tracing the beginnings and development of the various kinds of prose and poetry, and considering the changes in the political and social conditions under which Latin literature developed.

## MATHEMATICS

```
        Professors: Helen Abbot Merrill, Ph.D.
            Eva Chandler, B.A.
            Roxana Hayward Vivian, Ph.D.,
                    DIRECTOR OF THE DEPARTMENT OF HYGIENE.
Associate Professor: Clara Eliza Smith, Ph.D.
Assistant Professor: Mabel Minerva Young, Ph.D.
instructors: Lennie Phoebe Copeland, Ph.D.
    Mary Florence Curtis, Ph.D.
    Helen Barton, B.a.
    Marion Elizabeth Stark, M.A.
```

1. Higher Algebra. I.

Required of freshmen. Three hours a week for the first semester.
Miss Chandler, Miss Smith, Miss Young, Miss Copeland, Miss Curtis, Miss Barton, Miss Stark.

The elementary theory of determinants, followed by a study of limits and derivatives, upon which the work in series and theory of equations is based.
$14 \dagger$. Plane and Spherical Trigonometry. I.
Required of freshmen who do not take course 15. Three hours a week for the second semester.

Miss Chandler, Miss Smith, Miss Young, Miss Copeland, Miss Curtis, Miss Barton, Miss Stark.
Exponential equations, trigonometric equations and transformations, solution of plane and spherical triangles.
$15 \dagger$. The Elements of Analytic Geonetry. I.
Open to approved freshmen as an alternative to course 14. Three hours a week for the second semester.

Miss Chandler, Miss Smith, Miss Young.
A brief course, covering the usual topics, and planned to introduce students as early as possible to advanced courses in mathematics. The necessary topics in trigonometry will be treated.
2. Conic Sections and Plane Analytic Geometry. II.

Open to students who have completed courses I and 14. Three hours a week for a year.

Miss Young, Miss Copeland.
16. History of Elementary Mathematics. II.

Open to students who have completed or are taking course 2 or course 3. Three hours a week for the second semester.

Miss Copeland.
The evolution of the fundamental concepts of mathematics. Great mathematicians and their chief contributions to elementary mathematics. A brief survey of modern developments in mathematics and its literature. A standard text is used, supplemented by lectures and short reports chiefly based upon rare old books in the mathematical library.
7. Introduction to the Theory of Statistics. II.

Open to students who have completed course I and either course 14 or course 15. One hour a week for a year.

Miss Young.
Lectures with supplementary reading on some of the mathematical principles and methods used in statistical work. Each student $\dagger$ Courses 14 and 15 may not both be counted toward the B.A. degree.
will present one or more studies based upon data drawn from economic, psychological, scientific or other sources.
11. Problem Work in Statistics. II. (Not offered in 19i9-1920.)

Open to students who have completed course I and either course 14 or course 15. One hour a week for a year.

Miss Vivian.

The class will meet two periods a week for problem work and exercises in the collection and arrangement of material, and certain methods will be presented in addition to those in course 7 .

Note.-Course 7 is primarily for theory and for those students who wish to use critically the statistics of others. Course II is primarily for problem work and for those students who wish practice in collecting and arranging statistical material. Students may elect course 7 without course II, but not course ir without course 7 .
3. Differential and Integral Calculus. III.

Open to students who have completed course 2 or course 15. Three hours a week for a year.

Miss Merrill, Miss Chandler, Miss Smith, Miss Curtis.

The applications include a course in curve tracing.
4. Theory of Equations, with Determinants. III. (Not given in 1919-1920.)
Open to students who have completed or are taking course 3. Three hours a week for the first semester.

Miss Chandler.
The work is based on Burnside and Panton's Theory of Equations.
5. Solid Analytical Geometry. III.

Open to students who have completed or are taking course 3. Three hours a week for the second semester.

Miss Chandler.
The straight line; the plane; surfaces of the second order. Brief study of surfaces in general.
$6 \ddagger$. Modern Synthetic Geometry. III.
Open to students who have completed or are taking course 3. Three hours a week for a year.

Miss Merrill.
$\ddagger$ Courses 6 and ${ }^{1} 7$ may not both be counted toward the B.A. degree.

Metrical and projective properties of plane and sheaf forms of the first and second orders; the anharmonic ratio; harmonic forms; the method of inversion; involution; collineation; the law of duality; theory of poles and polars; reciprocation; space forms and surfaces of the second order. Given by lectures and references, with constant practice in the solution of geometrical problems.
8. Higher Plane Curves. III. (Not given in i919-i920.)

Open to students who have completed course 3. Three hours a week for a year.

Miss Young.
Preliminary study of selected topics in algebra and of homogeneous co-ordinates. General properties of curves derived from the homogeneous equation of the nth degree, and the principles developed applied to a brief review of the conic and a detailed study of curves of the third order. A lecture course, with reading from standard texts.
9. Introduction to the Theory of Functions of a Complex VariAble. III. (Not given in 1919-1920.)
Open to students who have completed course 3. Three hours a week for a year.

Miss Smith.
Elementary treatment of analytic functions. Infinite series and products, with applications to Beta, Gamma, and elliptic functions.
10. Differential Equations. III.

Open to students who have completed course 3. Three hours a week for the first semester.

Miss Chandler.
A general course in ordinary and partial differential equations.
$17 \ddagger$. Descriptive Geometry. III.
Open to students who have completed or are taking course 3. Three hours a week for a year.

Miss Merrill.
The theory and practice of the representation of geometric figures. The use of two or more planes of projection in representing lines, surfaces and solids; intersection of surfaces; shades and shadows; the elements of perspective.

[^14]
## MUSIC

## Professors: Hamilton Crawford Macdougall, Mus.d. Clarence Grant Hamilton, M.A. <br> instructors: Emily Josephine Hurd. hetty Shepard Wheeler, ${ }^{3}$ m.A. Albert Thomas Foster. Blanche Francis Brocklebank. Ralph Springer Smalley. Joseph Goudreault. Raymond Clark Robinson. assistant: Miriam Louise Merritt, Mus.b.

The Wellesley College Choir of forty members, founded in 1900, furnishes the music for the Sunday services in the Memorial Chapel. Any student with a good natural voice is eligible for membership; trials to fill vacancies are held at the opening of each College year.
The college Symphony Orchestra, consisting of about thirty student and faculty members, was founded in 1906. It offers advantages of competent instruction in ensemble playing under a professional conductor. It gives one or two concerts a year with a program of classical music. Any members of the College who have sufficient technique are admitted to membership without expense.

A limited number of tickets for reserved seats at the concerts of the Boston Symphony Orchestra in Symphony Hall, Boston, are free to students in the department who are able to use them profitably.

## I. Musical Theory

The courses in theory and history are open to all students without regard to previous musical knowledge, and count toward the B.A. degree. The history and theory courses are subject to no separate tuition fee, with the exception of courses $9,10,11$, and 12 , where a nominal fee of five dollars is charged for tuning and repairs of instruments. Courses $8,4,14,18,19$, and 20 , are designed especially for those students desiring to gain an appreciative knowledge of musical literature.
15. Elementary Harmony. I.

Open only to freshmen who are taking practical music. Two hours a week for a year. No prerequisites.

Mr. Macdougall.
This course is designed for freshmen who enter college with the intention of specializing in music. It may be followed by course I , but not by course 8 . This course covers musical notation, the formation of triads and chords of the seventh, the invention of melodies and their harmonization, the simpler kinds of non-harmonic tones, elementary form, and ear training. Carefully kept notebooks are a part of the work.

[^15]8. Introductory Harmony. I.

Open to sophomores, juniors, seniors, and advanced freshmen (five-year music course). Thrce hours a week for a year. No prerequisites.

Mr. Robinson.
This course covers the ground necessary for admission to course I or 4 , and also offers a substantial foundation for subsequent work in practical or theoretical music. It includes the material of the ordinary elementary harmony course and in addition emphasizes ear training and harmonic analysis.

This course is not open to students who have taken course 15 .

1. Advanced Harmony. II.

Open to students who have completed course 15 or course 8 or the equivalent. Three hours a week for a year.

Mr. Hamilton.
This course covers in extenso the various classes of non-harmonic tones, chords of the ninth modulation, elementary orchestration, writing for the piano, organ, and for voices. The course aims to give facility in elementary composition.
5. Musical Analysis. II.

Open to students who have completed course 15 or 8 or the equivalent. Two hours a week for a year.

Mr. Robinson.

A course both technical and appreciative, designed to furnish students with a knowledge of harmony and musical form sufficient for the intelligent understanding of the standard Classical and Modern works. The course takes up the study of the principal chords, their function in the musical sentence, the smaller forms (song form, the small classical and modern dance forms) and then proceeds to the larger forms (Suite, Sonata, Symphony, Canon, Fugue, Overture, Symphonic Poem). The smaller forms will be studied through individual and class analysis, individual reports and short papers, while the Victrola and Player-piano will be freely used in the analysis of the larger forms. No original work in composition is required.
2. Interpretation. I.

Open to sophomores, juniors, and seniors who are at the same time taking lessons in practical music in the department and who have acquired a satisfactory degree of skill. One hour a week for a year. Mr. Macdougall, Mr. Hamilton.
This course is a training in the principles of interpretation, developed through the performance in class of music studied with the
private teacher and by listening to and analyzing compositions performed by others. The course concerns itself with the recognition of the simple cadences, harmonic figuration as applied to the accompaniment, the broader rhythmical distinctions, the relations of melody and accompariment, the school of the composer, biographical data, and the simpler elements of form.

Note.--Students wishing to elect the course should apply directly to the head of the department.

Students may elect practical music without electing the course in interpretation; but no one may elect the course in interpretation without at the same time electing practical music.
3. Interpretation. II. (Not given in 1919-1920.)

Open to students who have completed course 2 and who are at the same time taking lessons in practical music in the department and have acquired a satisfactory degree of skill; also by special permission to seniors. One hour a week for a year.

Mr. Macdougall, Mr. Hamilton.
This course is a continuation of course 2. The subject-matter of the course is the thematic and polyphonic melody, the larger forms, harmony in its æsthetic bearings, the æsthetic effects of the more complicated rhythms, comparative criticism and the various schools of composition. See note to course 2 .
9. Applied Harmony. II. (Not given in 1919-1920.)

Open to those students only who are at the same time taking course $I$. Two hours a week for a year. A laboraiory fee of five dollars is attached to this course.

Mr. Hamilton.
This course aims to realize synthetically at the pianoforte the principles taught in course I , following what may be termed a laboratory method.
Note.-Instruction will be given in small classes of not less than three students. The course is in no sense a substitute for pianoforte lessons. Students must satisfy the head of the department that they have a pianoforte technique adequate for the work; in general, the ability to play the easier Mendelssohn Songs without Words, and to read hymn tunes accurately at sight will be sufficient.
4. The Development of the Art of Music. III.

Open to students who have completed courses 8, and I or 5. Three hours a week for a year.

Mr. Macdougall.

A course in the appreciation of music designed to develop musical perception and the ability to listen intelligently to the best music. It includes the evolution of rhythm, harmony, and melody, and their powers and offices in musical expression; the principal musical forms analytically considered; studies of the principal composers, their lives, their strongest works, their relation to the progress of musical art. Some great work will be selected for study during the year.

This course is not open to students who have taken or are taking course I4.
10. Applied History. III. (Not offered in 1919-1920.)

Open to those s!udents only who are at the same time taking course 4. Tiuo hours a week for a year. A laboratory fee of five dollars is attached to this course.

Mr. Macdougall.
This course aims to realize synthetically at the pianoforte the development of music from the organum of Hucbald to the Wagner opera. Specimens of the music of various schools and periods will be collected, played and analyzed. See note to course 9 .

## 6. Counterpoint. III.

Open to students who have completed course $I$. Three hours a week for the first semester.

Mr. Robinson.
Counterpoint in two, three, and four voices; double counterpoint; analysis; the distinctions between strict (modal) and free counterpoint; the rules for the latter deduced from contemporaneous practice; fugue for two and three voices.
11. Applied Counterpoint. III. (Not offered in I919-1920.)

Open to those students only who are at the same time taking course 6. Two hours a week for the first semester. To this course a laboratory fee of two dollars and a haif is attached.

This course aims to realize synthetically at the pianoforte the laws of simple and double counterpoint by the constant playing and analysis of the best examples from the masters. See note to course 9 .
7. Musical Form. III.

Open to students who have completed course 6. Three hours a week for the second semester.

Mr. Robinson.
This course aims to cover the various imitative forms, the suite and sonata forms, the large forms of vocal and orchestral music.

Students have the opportunity of doing practical work in composition (song form, sonata movements, etc.).
12. Applied Form. III. (Not offered in 1919-I920.)

Open to those students only who are at the same tine taking course 7. Two hours a week for the second semester. To this course a laboratory fee of two dollars and a half is attached.

This course aims to play and to analyze a great number of specimens of the various forms, with careful analysis and classification. See note to course 9 .
14. History of Music. II.

Open to juniors and seniors, and to sophomores who have had one course in the department. Three hours a week for a year.

Mr. Hamilton.
Lectures on the history of music of all nations, with assigned readings and frequent musical illustrations, from which the student is taught to compile analytical programs and critiques.

The course is non-technical and no previous knowledge of music is required. It is not open to students who have taken or are taking course 4 .
13. The Symphony from Joseph Haydn to the Present Trie. III. (Not offered in 1919-1920.)
Open to students who have completed courses I and 4 or their equivalent and who have some facility in playing the pianoforte. Three hours a week for a year.

Mr. Macdougall.
A historical course, tracing the developing of the Symphony in its form, its instrumentation, and its.content.
17. Free Composition. III.

Open by permission to students who have completed courses 6 and 7. Three hours a week for a year.

Mr. Macdougall.
18. Beethoven and Wagner. III. (Not offered in 1919-1920.)

Open io students who have completed course I or its equivalent. Three hours a week for a year.

Mr. Macdougall.
An intensive course devoted to the analyses of selected pianoforte sonatas, chamber music, the symphonies of Beethoven, "Fidelio," and the operas of Wagner. The aim of the course will be to give an intimate knowledge of the two composers' works and to estimate their place in musical history.
19. Schubert and Schumann. II. (Not offered in 1919-1920.)

Open to juniors and seniors and to sophomores who have had one course in the department. Three hours a week for the first semester.

Mr. Hamilton.

An illustrated lecture course, intensive in character, devoted to the study of the principal works of the composers named. The romantic movement in music, the development of the German Song, the poetical and lyric piano piece and the birth of musical criticism are among the principal topics treated.

The work of the class will be based mainly upon assigned readings and critical papers.
20. Mendelssohn and Chopin. II. (Not offered in I919-1920.)

Open to juniors and seniors and to sophomores who have had one course in the department. Three hours a wieek for the second semester.

Mr. Hamilton.
An illustrated lecture course, intensive in character, devoted to the study of the principal works of the composers named. The beginnings of modernism, the culmination of sacred music in the oratorio, the age of the virtuoso, the development of instruments and individual and emotional treatment in music are the principal topics studied.

The work of the class will be based mainly upon assigned readings and critical papers.

## II. Practical Music (Instrumental and Vocal Lessons)

[Attention is called to the fact that a good student need not necessarily spend five years in college in order to carry on practical music at the same time with the academic course. See (a) below.]

It is believed that students having a performing technique will be able to profit by the theoretical instruction given in the department to a fuller degree than those without such a technique. To encourage students to acquire a technique, as well as to furnish authoritative instruction, the department undertakes to give lessons in pianoforte, organ, violin and violoncello playing, and in singing. Practical work is an elective, and students should notify the department of their election of the subject in the usual manner and at the proper time; with the exception of theory courses 2 and 3 and the applied music courses 9, 10, II, 12, practical work does not count toward the B.A. degree. It is offered to all students, whether candidates for degrees or not, as stated below:-
(a) Candidates for the B.A. degree who propose to spend but four years in college may take practical music, provided that they obtain each year the permission of the Dean of the College as well as of the Professor of Music; they must also take Musical Theory unless they have completed two twohour or three-hour courses in the subject.
(b) Candidates for the B.A. degree who are willing to devote five years to the college course will be permitted to take practical music each year of the course. Freshmen may do so without taking Musical Theory, but all other students in the academic and musical course are governed by the restriction laid down in (a).
(c) Candidates for the B.A. degree who wish also the Certificate of the Department of Music should plan to devote five years to the college course. Such students are required to take practical music, two lessons a week, throughout the five years. They must complete, satisfactorily to the department, a course in the literature of the instrument chosen or of the voice; they must apply for the certificate at least three years in advance. After the first year the study of Musical Theory is required.
(d) Students not candidates for the B.A. degree who desire to specialize in music must meet the requirements prescribed for admission to the freshman class, and must in addition pass an entrance examination, particulars of which will be furnished on application. Special students must take both Musical Theory and vocal or instrumental lessons, two a week, with not less than twelve hours of weekly practice. They must also take from six to nine hours per week of academic work, including Musical Theory, as may be decided in consultation with the Dean.
(e) Students not candidates for the B.A. degree who wish the Certificate of the Department of Music must comply with the conditions laid down in (d); moreover, the academic work taken must include modern languages. Such students must apply for the certificate on entering the department, and must have already acquired the fundamental technique of the instrument chosen or of the voice. The time occupied in study for the certificate depends upon the talent, upon the proficiency of the student at entrance, and upon her subsequent diligence; but in general four years at least are necessary. The various courses are so arranged that the pupil on completion will have an acquaintance with the best musical literature.
(f) Graduates of Wellesley College or of other institutions may make special arrangement for instrumental or vocal lessons.
(g) Permission to practice in Music Hall cannot be given to students not regularly registered in the department.
(h) Students whose progress is not satisfactory may be required to discontinue their lessons.

For tuition and other charges in the Department of Music see page 148 .

## COMPARATIVE PHILOLOGY

Professor: Katharine May Edwards, Ph.D.<br>Associate Professors: laura Emma Lockwood, Ph.D.<br>Natalie Wipplinger, Ph.D.

1. General Introduction to the Science of Language. III.

Open to seniors and juniors who have had at least one year of Greek. One hour a week for a year and an additional hour in alternate weeks. To count as one and one-half hours.

Miss Edwards.
Lectures on the origin and nature of language and the principles of its life and growth; outline studies in phonetics; classification of languages; groups of the Indo-European languages with chief characteristics.
3. Comparative Gramimar of Greek and Latin. III. (Not offered in 1919-1920.)

Open to students who have completed course I and who have had at least two years of Greek and Latin. Three hours a week for the second semester.

Miss Ediwards.
Historical study of sounds and inflections of Greek and Latin in relation to other Indo-European languages.
5. Sanskrit. III. (Not offered in ig19-1920.)

Open to graduates only. One hour a week for a year.
Miss Edwards.
6. Gothic (German 26). III. (Not offered in 1919-1920.)

Open to graduates, and to seniors by permission of the instructor. Three hours a week for the second semester.

Miss Wipplinger.
Reading of Ulfilas, with constant reference to the syntax, phonology, and etymology of the language. Presentation of fundamental principles in Germanic Philology.
8. Old English (English Language 4). III.

Open to graduates, and to seniors by permission of the department. Three hours a week for a year.

Miss Lockwood.
A study of Old English inflections, phonology and syntax. The reading of the best pieces of literature in Old English prose and -poetry. A particular problem in either literature or language is assigned to each student for investigation.
9. Old French (French Ii). III. (Not offered in 1919-1920.)

Open to graduates and to seniors by permission of the department. Three hours a week for a year.
A study of Old French in numerous old texts with a consideration of the general laws of its phonetic development from Latin to French, and the evolution of its syntax.
Lectures, critical reading, papers on special subjects.

## PHILOSOPHY AND PSYCHOLOGY

Professors: Mary Whiton Calkins. M.A., Litt.D., LL.D. Mary Sophia Case, B.a. Eleanor Acheson McCulloch Gamble, Ph.D.
Instructors: Horace Bidwell English, Ph.D.
Lucy Wilson, Ph.D.
Flora Isabel MacKinnon, ${ }^{4}$ M.A.
Graduate Assistants: Helen Francis Whiting, B.A. Ruth Alige Prouty, B.A. Ruth Shaw, B.A.

The requirement in philosophy for a degree is met by course 7 (first semester) followed in the same year by course 6 (second semester).

The department offers direction to graduate students in independent work in psychology and in philosophy, and conducts graduate conferenfes with individual students at stated times.

## I. Logic

3. Logic. I.

Open to sophomores and juniors. Three hours a week for the second semester.

Miss Gamble.

Training in argument and in logical criticism. Work expressly designed to meet the practical needs of the student. The course deals not only with the principles of deductive logic, but also with elementary questions of observation and testimony, and of scientific, statistical, and legal evidence. Text-book: Sellars, Essentials of Logic.

## II. Psychology

For description of the Psychology Laboratory, see page 166.
7. Introductory Course in Psychology. I.

Open to sophomores, juniors, and seniors. Three hours a week for the first semester.

Lectures. Divisions A and B: Miss Gamble;
Division C, Mr. English.
Laboratory, Miss Gamble, Miss Calkins,
Miss Wilson, Mr. English, Miss Whiting.
4 Appointed for second semester only.

This course aims to secure to students an acquaintance with primary mental facts, to give them a definite notion of the topics treated and of the experimental and statistical methods employed in psychology, to provide a psychological basis for the study of philosophy, of sociology, and of education, and to fit them for more advanced psychological work. The course is conducted mainly by lectures, with weekly laboratory or conference appointments. The course is at present based largely upon an outline to be obtained from the instructor. Supplementary text-books: Calkins, A First Book in Psychology; Titchener, A Text-book of Psychology; Breese, Psychology, or James, Psychology, Brief Course.
17. Social and Applied Psychology. II.

Open to seniors who have completed course 7 or course I. Three hours a week for a year.

Miss Gamble, Miss Calkins.
This course treats the following topics: the fundamental principles of social psychology; social hygiene as based on psychology with special consideration of the causes and types of delinquency; normal individual differences and mental tests; mental deficiency; and mental derangement. Among the books studied are: McDougall, Social Psychology; Maciver, Community; Hollingworth, Vocational Psychology; Tredgold, Mental Deficiency; White, Outlines of Psychiatry; Healy, The Individual Delinquent.
18. Experimental Psychology. II.

Open to students who have completed course 7, and by permission to students who have completed course 1 . Three hours a weeh for the first semester.

Mr. Evglish.
The historical development of psychological experiment is sketched in lectures. In the laboratory, each student makes classical experiments in their modern form and in an order corresponding to the historical development, and thus gains insight into the problems attacked and the partial solutions attained. Special attention is given to present-day tendencies in psychology.

Both this course and course 22 are designed to train the student in the methods of psychological introspection and experimentation.
22. Second Course in Experraental Psychology. II.

Open to students who have completed course 7, and by permission to students who have comfleted course I. Three hours a week for the second semester.

Mr. English.
Each student performs one or two typical experiments in each of the main fields of psychological investigation. In lectures, the
relation of experimental results to general psychological theory is traced.

This course, like course 18, is designed to train the student in psychological method.
14. Experimental Problems in Psychology. III.

Open to students who completed course 7 before 1919-Ig20, and to students who have completed course 18 or course 22. Three hours a week for the second semester.

Miss Gamble.
This course consists of investigation of special problems, experimental or statistical, by individual students. In 1919-1920 problems in the fields of memorizing and of mental tests are included. The methods employed are wider than the problems and are adapted to training students in the fundamental demands of research.
15. Second Course in Experimental Problems in Psychology. III.

Open to students who have completed course I4. Three hours a week for a year.

Miss Gamble, Mr. English.

5. Reading Course in German or in French Psychological Texts. II. (Not given in 1919-1920.)

Open to students who are taking course 14, course 15, course 17, course I8, or course 22. One hour a week for a year.

## III. Philosophy

6. Introduction to Philosophy. I.

Open to sophomores, juniors, and seniors who have completed course 7 . Three hours a week for the second semester.

Lectures. Divisions A and B, Miss Calkins; Division C, Miss MacKinnon. Conferences, Miss Calkins, Miss Gamble, Miss MacKinnon, Mr. English, Miss Shaw.
This course begins with a brief study of ethics, treated from a psychological starting point, as the science of the moral self. The emphasized topics of this study are the nature of goodness and of duty and the relation of virtue to instinct and to habit. The greater part of the course is devoted to the discussion of the philosophical problems raised in the study of psychology: the nature of body, the nature of mind, and the connection between mind and body. The
relations of philosophy to physical science and to religion are briely considered. The discussion is based upon Descartes, Meditations; selections from Hobbes, from La Mettrie, and from Haeckel: Berkeley, Principles of Human Knowledge and Three Dialogucs between Hylas and Philonous.
16. Social Ethics. II.

Open to seniors. One hour a week for a year with an additional appointment in alternate weeks. To count as one and one-half hours.

Miss Case.
The course aims to develop a comprehensive conception of human life and an intelligent apprehension of the significance of conduct, especially in its social aspects. Extended passages from Plato's Republican; Bosanquet's The Philosophical Theory of the State; Dewey and Tufts' Ethics, Part III; supplementary readings from Mill, Rousseau, Treitschke, Burns and others. Lectures on the nature of social institutions, especially the family and the state; emphasis on international relations. Class discussions.
10. Greek Philosophy. II.

Open to juniors and seniors who have completed or are taking course I or course 7. Three hours a weeh for a year.

Miss Case.
Primarily text study: (a) Pre-Platonic philosophy. Fragments (accompanied by outlines); selections from Xenophon's Memorabilia and from the dialogues of Plato. Two months. (b) Plato. Study of the dialogues, with especial emphasis on Plato's development. Most of the year. (c) Post-Platonic philosophy. Selections from Aristotle's De Anima and Metaplysics; lectures on Aristotle; brief summary of post-Aristotelian philosophy.
9. Problems of Modern Philosophy. III.

Open to juniors who are taking course Io, to seniors, and to graduate students. Three hours a week for a year.

Miss Calkins.
This course is conducted by lectures and discussions on problems of philosophy, including the principle of causation, the nature and existence of the self, the nature of the physical world, the relation of idealism to realism, and the issue between pluralism and absolutism. Discussion is based on the study of Hume, Kant, Spinoza, Leibniz, and Fichte; and students are referred also to the writings of Pearson, James, Royce, Ward, Bergson, Russell and other contemporary writers.
11. The Logic of Hegel. III.

Open to stidents who have completed-course io and have completed or are taking course 9, and by special arrangement to graduate students who have completed course g. Three hours a week for the first semester.

Miss Case.
Text study of extended passages from the Logic of Hegel's Encyclopedia.
12. Philosophy of Religion. IIJ.

Open to students who have completed course II. Three hours a week for the second semester.

Miss Case.
(a) Critical study of methods of examining religious beliefs, especially the psychological method and the method of Hegel. The relation of these methods to pragmatic tests. Readings from Durkheim, James, Coe, Royce, Hocking, Dewey, and others. (b) Discussion of special problems selected by the class. (c) Concluding lectures on the significance of religious experience.
13. Ethics. III. (Not given in 1919-I920.)

Open by permission to graduate students. Three hours a week for a semester or for a year.
19. Constructive Treatment of Problems in Metaphysics. III. (Not offered in 1919-1920.)
Open by permission to graduate students. Three hours a week for a semester or for a year.

Miss Calkins.
Subject in 1916-1917: the self in the psychological sciences and in philosophy.
20. Special Study of Philosophical Systems. III.

Open by permission to graduate students. Three hours a week for the second semester.

Miss Calkins.
Subject in 1919-1920: The Cambridge Platonists.

## PHYSICS

Professor: Louise Sherwood McDowell, Ph.d.<br>Associate Professor: Grace Evangeline Davis, m.a.<br>Assistant Professor: frances Lowater, Ph.d.<br>instructor: Lucy Wilson, Ph.D.<br>Assistant: Minnie Ruhmpohl, B.A.<br>Graduate Assistants: Helen Yule NicCoy, B.a. Mary Barrett Ashbaugh, b.s.

1. Elementary Physics. I.

Open to all undergraduates. Three hours a weck for a year.
Miss McDowell, Miss Milson, Miss Remmponl.
Miss McCor, Miss Ashbidugil.
This course is for beginners and presents briefly the elementary principles of mechanics, sound, heat, electricity, and light, and their simpler applications. The course is conducted by means of experimental lectures followed by laboratory work.
2. General Physics. I.

Open to students who have met the admission requirement. Three hours a week for a year.

Miss Lowater.
This course is intended for students who already have an elementary knowledge of the phenomena of the physical world, and presents more fully than course 1 the fundamental principles and their applications in everyday life and in the other natural sciences. The course is conducted by means of experimental lectures and laboratory work.
7. Electricity. II.

Open to students who have completed course I or course 2 and by special permission to juniors and seniors who have met the admission requirement. Three hours a week for the first semester.

Miss Davis.
Magnetic and electric fields of force; the study and use of instruments for the measurement of current, potential difierence, resistance and capacity; electromagnetic induction; electrolytic conduction.
3. Heat. II.

Open to students who have completed course 7 and by special permission to students who have completed course I or the first scinester of course 2. Three hours a weck for the second semester.

Miss Davis.
Thermometry, calorimetry, properties of vapors and gases, lique-
faction of gases, transmission of heat and its application in the heating and ventilation of buildings, kinetic theory, elementary thermodynamics, the steam engine, the automobile engine.
5. Light. III.

Open to students who have completed course 7. Three hours a week for the first semester.

Miss Lowater, Miss Davis.
The wave theory and its application to the phenomen of dispersion, interference, diffraction, polarization, propagation in crystalline media; theory and use of optical instruments; modern methods of illumination.

S $\ddagger$. Electric Waves and Wireless Telegraphy. III. (Not offered in 1919-1920.)
Open to juniors and seniors who have completed course 7. Three hours a week for the second semester.

Miss McDowell, Miss Wilson.
$9 \ddagger$. Recent Developments in Electricity. III.
Open to juniors and seniors who have completed course 7. Three hours a week for the second semester.

Miss McDowell, Miss Wilson.
The electrolytic dissociation theory; conduction through gases, cathode rays, X-rays; radio-activity; the electron theory.
6. Meteorology. II.

Open to sophomores, juniors, and seniors who have completed course $I$ or who have met the admission requirement. Three hours a week for the second semester.

Miss Davis.
Text-book: Milham's Mcteorology, with library references. The study of the phenomena of the weather,-air pressure, temperature, progress of storms, cold waves, winds, clouds, precipitation,leading to an understanding of the principles of weather prediction.
11. Theoretical Electricity and Magnetism. III.

Open to juniors and seniors who have completed course 7 and also course 3 in Mathematics. Thrce hours a week for the first semester.

Miss McDowell.
The work is based upon Starling's Electricity and Magnetism and free use is made of the calculus.
$\ddagger$ Courses 8 and 9 are ordinarily given in alternate years.
10. Mechanics. III.

Open to students who have completed course I or 2 in Physics, course 3 in Mathematics and either course II in Physics or course io in Mathematics. When combined with course to in Mathematics it may be counted toward a major in Mathematics. Three hours a week for the second semester.

Miss Lowater.

Equations of motion; simple harmonic motion; central orbits; statics of rigid bodies; work, energy; dynamics of a particle; motion of rigid bodies.

Emphasis will be placed on the application of mathematics, especially plane analytical geometry and the calculus, to physics; use will be made of differential equations.

## 14. The Automobile: Principles and Construction. II.

Open by permission to juniors and seniors who have completed course I or who have met the admission requirement. One hour a week for a year.

Miss Wilson.
The internal combustion engine; carburetors; systems of ignition, starting and lighting, and transmission. Lectures with demonstrations to illustrate the physical principles involved. Individual laboratory study of various automobile mechanisms.
12. Light. Mathematical Theory. III. (Not offered in igi9-ig2o.) Open to students who have completed course 5. Three hours a week for the second semester.

Miss McDowell.

## READING AND SPEAKING

Professor: Malvina Bennett, M.A. Instructors : Edith Margaret Smaill. MARY LENA WADSWORTH.

1. Introductory Course in Vocal Expression. I.

Open to sophomores, juniors, and seniors. Three hours a week for a year.

Miss Bennett, Miss Smaill, Mrs. Wadsworth.
Study of mental action in its effect on voice; development of logical thinking.
Body: poise and bearing.

Voice: breathing, articulation, pronunciation.
Reading and Speaking: direct address, description, story telling.
This course is not open to students who have taken or are taking course 4.
2. Advanced Course in Vocal Expression. II.

Open to students who have completed course I or 4. Three hours a week for a year.

Miss Smaill.

Development of the imagination in interpreting literature.
Body: exercises for freeing the body for responsive action.
Voice: exercises for freedom and purity of tone, enunciation. Reading and Speaking: current events, narrative poetry, standard novels, Browning and a modern play.
3. Interpretation of Shakespeare. II.

Open to students who have completed course I, or by permission to students who have completed course 4, also to those who have completed or are taking English Literature 9; to others at the discretion of the department. Tiree hours a week for a year.

Miss Bennett.
Analysis of characters; reading; scenes selected for memorizing and acting. Three plays studied.
4. English Speech. I. (Not offered in 1919-1920.)

Open to sophomores, and at the discretion of the department to juniors and seniors. Three hours a week for a year.

This course is planned primarily for students who need special training in English speech. Its aim is to correct carelessness and provincialism in speech.
Development of tone, elemental English sounds, standard of pronunciation.

Reading and speaking.
5. Elements of Public Speaking. I.

Open to seniors who have taken no course in the department. One hour a week for a year.

Miss Smaill.
The aim of the course is to assist students intending to teach, by criticism on voice, speech, and manner. Students will be asked to bring for criticism papers and speeches prepared for other departments.

## SPANISH

```
Associate Professor: Alice Huntington Bushee, M.A.
    Instructors: Angela Palomo, B.A.
        Ada May Coe, B.A.
```

Note.-A reading knowledge of French is required for all grade IlI work and is desirable in all courses. The language of the classroom is Spanish.
$1 \ddagger$ Eleyentary Course. I.
Open to all undergraduates. Three hours a week for a year.
Miss Bushee, Miss Palomo, Miss Coe.
Grammar, composition, dictation, conversation, prepared and sight translation. Short lectures are given occasionally in Spanish on various literary subjects to train the ear and serve as an introduction to later study.
2. Intermediate Course. I.

Open to students who have completed course I or an equivalent. Three hours a week for a year.

Miss Bushee, Miss Palomo.
Grammar, composition, themes, lectures, reading of typical modern novels and selections from Doir Quijote.
4. Spanish Literature in the Eighteenth and Nineteenth Centuries. II.

Open to students who have completed course 2. Three hours a week for a year.

Miss Bushee.
The aim of this course is to give the student a general idea of Spanish literature after the Golden Age: the French influence, Romanticism, and the noted authors of the latter part of the nineteenth century. This includes the rapid reading of both prose and poetry.
6. Modern Spanish American Literature. II.

Open to students who have completed course 2. Three hours a week for a year.

> Miss Coe.

The aim of this course is to show the influences at work in the making of Spanish American Literature with the reaction, especially in poetry, on the literature of Spain. Lectures will be given on the political and social conditions of the leading countries.
$\ddagger$ Course r, if taken in the senior year, may not count within the minimum number of hours prescribed for a degree.

## 7. Advanced Conversation and Composition. II.

Open to students who have completed course 2. One hour a week for a year.

Miss Palomo.

Three or four twentieth century plays will form the basis for this course and will give opportunity for oral discussion and written reports on life in contemporary Spain.
3. Drama of the Golden Age. IIt.

Open to students who have completed course 4, or with the permission of the instructor to those who have completcd course 6. Three hours a week for a year.

Miss Bushee.
This course will be introduced by a short general outline of the historical and literary influences at work during the period. Characteristic dramas of Lope de Vega, Alarcón, Tirso de Molina, and Calderon will be studied as representative of the nation's thought and ideals at the time.
5. The Spanish Novel. III. (Not offered in 1919-1920.)

Open to studcnts who have completed coursc 4, or with the permission of the instructor to those who have completed course 6. Three hours a week for a year.

Miss Bushee.
The first semester will be devoted to a general study of the novel before 1650 (especially the caballeresca, picaresca, and pastoral) and its relation to other countries. During the second semester Don Quijote will be studied.
8. Old Spanish Literature from ilfo to 1400. III. (Not offered in 1919-1920.)
Open to graduates and to seniors by permission of the department. Three hours a week for a year.

Study of "El Poema del Cid" and other characteristic works of the period.

# ZOOLOGY AND PHYSIOLOGY 

Professors: Marian elizabeth hubbard, b.s. Caroline Burling Thompson, Ph.D.<br>Associate Professor: Julia eleanor Moody, Ph.d.<br>instructors: Margaret alger Hayden, m.a.<br>anna Baker Yates, m.A.<br>Elsie May Lewis, m.a.<br>Assistant: Margaret Esther Elliott, b.s.<br>Curator of Museum: Albert Pitts Morse, lecturer in entomology.<br>Laboratory Assistants: Marguerite Schoonmaker, b.a.<br>Dorothy Estelle Fessenden, B.A.

1. The Biology of Animals. I.

Open to freshmen and sophomores. Three hours a week for a year.
Miss Hubbard, Miss Hayden, Miss Lewis, Miss Elliott.
This course serves as an introduction to the general principles of Zoology. The student becomes familiar with a number of representative invertebrates, and with one vertebrate, the frog. Emphasis is laid upon the theory of evolution.

Lectures, laboratory, and field work.
2. Vertebrate Zoology. II.

Open to juniors and seniors, and to sophomores who have completed course I. Three hours a weck for a year.

Miss Moody, Miss Lewis.
A comparative study of vertebrate types with particular reference to the history of the human body. Lectures on development, structure, classification and geographical distribution.
5. Natural History of Animals. III. (Not offered in 1g19-192o.)

Open to students who have completed courses $I$ and 2, and, with the approval of the head of the department, to juniors and seniors who have completed course I or 2. Three hours a week for the first semester.

The study of the living organism by investigation of structure, function, and behavior from the point of view of its relations to its environment, organic and inorganic, the interdependence of organism, their behavior, adaptations, and organic responses. Especially valuable to those intending to teach Zoology.
6. Theoretical Problems of Zoology. III.

Open, with the advice of the department, to seniors who have completed course 2 and who have taken or are taking one other course of grade III. Three hours a week for a year.

Miss Thompson.
The growth of biological thought. Theories of the origin of life, of development, of evolution; theories of heredity; other present day problems.
7. Entomology. II. (Not given in 1919-1920.)

Open with the approval of the department to students who have completed course I or 2. Three hours a week for the second semester.

Miss Thompson, Mr. Morse.
Lectures, laboratory, and field work with reference to the different groups of insects and especially the commoner forms. Primarily for those intending to teach Zoology.
8. Embryology and Cell Structure. III.

Open to juniors and seniors who have completed or are taking course 2. Three hours a week for a year.

Miss Thompson.
Lectures and laboratory work upon the structure of animal cells and tissues, the embryology of the chick and certain other vertebrates. Instruction in technique forms a part of the laboratory work.
10. Physiology. III.

Open to juniors and seniors who have completed or are taking course 2. Three hours a week for a year.

Miss Yates.
The course aims to present the fundamental facts and theories which underlie the normal functions of mammalian organisms. It includes a brief survey of foods, a consideration of the problems of nutrition and metabolism and a study of the different systems of the body. The rôle of physiology in the present day investigations of industrial efficiency and fatigue will be pointed out, and the problems and application of modern research discussed.
11. Anatomy. II.

Open only to first-year special students in the Department of Hygiene. Three hours a week for a year.

Miss Moody, Miss Elliott.
Lectures and laboratory work upon the anatomy of the muscles, viscera, circulatory and nervous systems. Elements of histology.

## COLLEGE EXAMINATIONS

An examination period occurs at the end of each semester. At these periods, and also during the days of the admission examinations in September, examinations for the removal of conditions and deficiencies and for advanced standing may be taken.
A student who wishes to take an examination upon a course which is not a part of her approved schedule for the year, must apply to the Dean for the requisite card of admission to the examination. The last day for receiving applications for such cards is for the September examinations, September first; for the mid-year examinations, January first; for the June examinations, May fifteenth .
N. B. Examinations for the removal of conditions and deficiencies excepted, no student can be admitted to examination upon a course which is not a part of her approved schedule for the year without permission both from the Head of the Department concerned and the Dean of the College. No student, therefore, should enter upon preparation for such an examination until her plan has been approved by both of the above named officers.

The College reserves the right to require the withdrawal of students whose scholarship is not satisfactory, and of those who for any other reason are regarded as not in accord with the ideals and standards which the College seeks to maintain.

## DEGREES

The following degrees are conferred by the Trustees upon recommendation of the Academic Council:-

Bachelor of Arts.
Master of Arts.

## REQUIREMENTS FOR THE B.A. DEGREE

Every candidate for the B.A. degree must complete before graduation the equivalent of fifty-nine hours. Since 1896, two grades in work which reaches the passing mark have been distinguished: one "Passed"; the other, "Passed with Credit." In order to be recommended for the degree of Bachelor of Arts a student must have "passed with credit" in not less than six hours in the first semester of the freshman
year and in not less than nine hours in each succeeding semester. Deficiency of such work in any semester may be made good in accordance with regulations adopted by the Faculty. Firstyear French and first-year German may not both be counted among the fifty-nine hours. Neither first-year French nor firstyear German may be so counted if taken after the sophomore year. Second-year French, second-year German, first-year Italian and first-year Spanish may not be counted among the fifty-nine hours, if taken after the junior year. Of the fiftynine hours required for the B.A. degree, a certain number is prescribed, the rest elective.
I. Prescribed. The following subjects are required as specified:-


Of the required subjects, Mathematics must be taken in the freshman year; Hygiene one and one-half hours in the freshman year, and one-half hour in the sophomore year; Biblical History, three three-hour semester courses in the sophomore and the junior years; English Composition three hours per week in the freshman year.* Of the natural sciences, one must be taken before the junior year; either a language or a science must be taken in the freshman year and both if neither a third language nor a science is offered for admission. Philosophy should ordinarily be taken before the senior year.
II. Elective. All courses are classified in Grades I, II, III; Grade I including elementary courses and Grade III the most advanced courses. All of the fifty-nine hours not indicated in the above are elective, subject to the approval of the Faculty.

[^16]Moreover every candidate for the B.A. degree must show before graduation that she has completed either
(I) nine hours in each of two departments, or
(2) twelve hours in one department and six hours in a second department.
Of the courses offered to fulfill this requirement, at least one full course of Grade III must be taken in the senior year. The nine-hour group must consist of at least six hours above Grade I, three hours of which must be of Grade III. The twelve-hour group must consist of at least nine hours above Grade I, six hours of which must be of Grade III. The six-hour group must include at least three hours above Grade I.

These requirements are met in the freshman year as fol-lows:-


These electives must be chosen in accordance with the prerequisites given in the department statements from the list of courses named below, subject to the following restrictions:-
(I) One electivc must be a science (if no science is offered for admission), and the second a language (if only two foreign languages are offered for admission).
(2) One elective must be chosen from courses in classics, history, or science.
(3) Only one of the following subjects may be elected: Art, Musical Theory, English Literature.
(4) French I and German I may not both be elected.

Language
Greek r, 13, 14
Latin $\mathbf{I}, 3$
German $\mathbf{1}, 2,5$ and 10
French 1, 2, 3 and 5
Italian I
Spanish I, 2

Sciences
Astronomy I
Bocany 5
Chemistry I, 4
Geology 8
Physics I, 2
Zoology I

## Other Subjects

 Art 12 English Literature I History I and 2, 3, 10 Musical Theory 15If $161 / 2$ hours are satisfactorily completed in the freshman year, the normal program for the remaining years would be as follows:-

| Sophomore year | . | . | . | . | . | $15^{1 / 2}$ | hours |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Junior year | . | . | . | . | . | . | . | 15 |
| Unior year | . | . | . | . | . | . | . | 12 |

If $161 / 2$ hours are not completed in the freshman year, a student may by special permission carry extra hours in the remaining years.
Elective courses must be chosen with great care so that changes will not be necessary. Students are held responsible for observing the requirements for the degree and the proper sequence of courses.

All requests for changes of elective courses should be sent to the Dean of the College before September 15th. In general, no changes may be made after the beginning of the year.

## REQUIREMENTS FOR THE M.A. DEGREE

The work required of a candidate for the M.A. degree is expected to occupy her entire time for a college year and is the equivalent of fifteen hours of college work. It includes, in general, no fewer than two full courses of Grade III or their equivalents, in addition to a thesis or a report or reports based on some piece or pieces of independent work. The student should choose one major subject and not more than one minor subject, which should be related to the major; or she may, if she prefers, do all her work in one subject. A candidate for the M.A. degree is required to have a reading knowledge of French and of German.

One year of graduate work is required of all candidates for the M.A. degree, but more time may be needed for the completion of the work.

Graduates of Wellesley College may do all the work in non-residence, under conditions defined in the Graduate Circular.

One year in residence is required of all other candidates for the degree.

Information regarding thesis, final examinations, etc., will be found in the Graduate Circular which will be sent on application to the College Recorder.

## EXPENSES

## TUITION

The charge for tuition to all students, whether living in college buildings or not, is \$I75 a year. Tuition is payable in advance and is not subject to return or deduction.

Students who are permitted to take seven hours or less of classroom work a week, and who do not live in college buildings, pay tuition by the course as follows: for a one-hour course, $\$ 20$; a two-hour course, $\$ 40$; a three-hour course, $\$ 60$. Payment is due at the beginning of the year. No charge is made for tuition in Biblical History.

## TUITION AND OTHER CHARGES IN DEPARTMENT OF MUSIC

For instruction for the college year in Pianoforte, Organ,
Violin, or Vocal Music, two lessons a week . . . $\$$ roo
One lesson a week 50
(Lessons thirty minutes in length.)

For use of the Pianoforte, one period daily for the college year .
\$io
For two and three periods daily, in proportion.
For use of the Pipe Organ in Music Hall, one period daily, for the college year

I5
For two or three periods daily, in proportion.
Special arrangements may be made for lessons on instruments not mentioned above.

Tuition in music must always be paid in advance and is not subject to return or deduction.

## MAINTENANCE FEE

(I) For all undergraduate students who room or board in college houses the Maintenance Fee will be \$r50 payable in two instalments, $\$ 50$ in September as heretofore, and $\$ 100$ in February, before the beginning of the second semester.
(2) For all students, graduate and undergraduate, who neither room nor board in college houses, the Maintenance Fee will be $\$ 75$, $\$ 50$ payable in September, and $\$ 25$ in February.

## FIXED TIMES AND AMOUNTS OF PAYMENTS

I. Students lodged in college buildings.

These students make payments as follows:-
September (at the opening of college)
This sum includes $\$$ Iro on account of tuition, $\$ 165$ on account of board and lodging, and $\$ 50$ on account of maintenance fee.

February (before the beginning of the second semester) .
This sum includes $\$ 65$, the balance of tuition payment, $\$ 160$ the balance due for board and lodging, and $\$$ roo the balance due for maintenance fee.

Total of these payments for the year
$\$ 650$
The charge for board begins at the opening of residence halls (see page 5) and students are not permitted to occupy rooms before that time.

## II. Students not lodged in college buildings.

a. Students who take their meals in college buildings but lodge in private houses make payments as follows:-

September (at the opening of college)
\$260
This sum includes $\$ 110$ on account of tuition, $\$ 100$ on account of board, and $\$ 50$ on account of maintenance fee.

February (before the beginning of the second semester). 265
This sum includes $\$ 05$, the balance of tuition payment, $\$ 100$, the balance due for board and \$roo the baiance due for maintenance fee.

Total of these payments for the year . . . . \$525

These students find rooms in the village of Wellesley. Payment is made to the head of the house at such rates and times as the parties to the arrangement may agree upon. Information regarding boarding places may be obtained by addressing the Dean of Residence.
b. Students who neither lodge nor board in college buildings make payment for tuition and maintenance fee as follows:-
September (at the opening of college) . . . .
February (before the beginning of the second semester)

Total of these payments for the year | $\$ 160$ |
| ---: |
| 90 |

These students find room and board in the village of Wellesley. Payment is made to the head of the house at such rates and times as the parties to the arrangement may agree upon. Information regarding boarding places may be obtained by addressing the Dean of Residence.

Payments must be made before the student can take her place in the classroom. No exception will be made to this rule without a written permission from the Treasurer.

Checks or money orders should be made payable to Wellesley College.

## FEES

## I. Undergraduate.

An application fee of $\$ 10$ is required from all candidates for admission, and no application is recorded until the fee is received (see page ${ }^{151}$ ). The same fee is required from all students in college who are intending to return for the following year, and from all former students who apply for readmission. If the student enters college, the amount of the application fee is deducted from the first tuition bill after entrance. If formal notice of withdrawal is received at the College before August 15 th of the year for which the application is made, the fee will be refunded. In all other cases it is forfeited to the College. A student who postpones entrance until the year following the one for which she first applied may transfer her application fee. But a fee so transferred will not be refunded if the student later decides to withdraw, unless the request for the transfer was received within the specified time. Requests for second transfers are sometimes granted, but a fee transferred a second time will not be refunded under any circumstances.

An additional charge is made for materials and the use of apparatus in the following laboratory courses: $\$ 5$ for each
laboratory course in Astronomy, Botany, Chemistry, Geology, Physics, Zoology; $\$ 5$ each for course 13 in Hygiene and for courses 9 and io in Musical Theory; \$2.50 each for the half courses II and 12 in Musical Theory; $\$ 2$ each for the studio courses in Art, and \$1 each for other Art courses, \$2 being the maximum charge for Art fees to any student. These fees are not subject to refund. Every student should also reckon on the expenditure of $\$ 10$ to $\$ 25$ annually for the purchase of books. At the time of taking the B.A. degree a diploma fee of \$io is charged.

## II. Graduate.

A matriculation fee of $\$ 5$ is payable when a student is accepted as a candidate for the Master's degree. The amount of this fee will be deducted from the diploma fee of $\$ 25$ payable when the degree is received.

## RESIDENCE

The residence halls belonging to the College and situated within the limits of the campus are Stone, Norumbega, Freeman, Wood, Fiske, Wilder, Pomeroy, Cazenove, Beebe, Shafer, Tower Court, Claflin, and The Homestead. Eliot and Washington Houses, also the property of the College, and ten houses leased to the College for dormitory purposes in order to meet temporary needs, are situated outside and immediately adjoining the college grounds. All these houses are under the direction of officers appointed by the College. All the rooms are furnished, and supplied with electric lights.

A student vacating a room before the close of the year, or relinquishing a room reserved for her at the beginning of the year, will be charged for board until the vacancy has been filled by an incoming student. Therefore, notice of intention to withdraw should be given at the earliest possible moment. No deduction is made for absences during the year.

All applications for rooms in college buildings take the date at which the application fee is received. (See pages 25 and 150 .)

Until May first, but not after that date, applications from former students will take precedence of those of new students in the matter of rooms.

DSo No student can receive a diploma until a satisfactory settlement of all her college dues has been made.

## HEALTH

The resident physician, Katharine P. Raymond, B.S., M.D., together with the Director of the Department of Hygiene, the Dean of Residence, and the President and the Dean of the College, ex officio, constitute a board of health to which all matters affecting the health of students are referred. Simpson Cottage is maintained as an infirmary under the charge of Dr. Raymond. Two trained nurses are in constant attendance. The services of the Resident Physician for consultation and treatment are free to all students.

## FELLOWSHIPS AND SCHOLARSHIPS

## A. FOR GRADUATES

The Alice Freeman Palmer Fellowship, yielding an income of about $\$ 1,000$, was founded in 1903, by Mrs. David P. Kimball.

The holder of this Fellowship must be a graduate of Wellesley College or some other American College of approved standing, a young woman of good health, not more than twenty-six years of age at the time of her appointment, unmarried throughout the whole of her tenure, and as free as possible from other responsibilities. The same person will not be eligible to the Fellowship for more than two years.
The Fellowship may be used for study abroad, for study at any American college or university, or privately for independent research. Several times during the period of tenure the holder of the Fellowship must furnish evidence that it is used for purposes of serious study and not for general culture; and within three years from entrance on the Fellowship she must present to the faculty a thesis embodying the results of the research carried on during the period of tenure.

Applications for this Fellowship should be received by the President of Wellesley College not later than February first of the academic year preceding that for which the Fellowship is asked.

## Holders of this Fellowship

[^17]1906-1907-Johnson, Anna (Mrs. Pell), Mathematics. B.A. University of South Dakota, 1903; M.S. University of Iowa, 1904; M.A. Radcliffe College, 1905; Graduate Student Radcliffe College, 1905-1906; Student University of Göttingen, 1906-1907, 1908; Instructor in Mathematics, University of South Dakota, 1907; Ph.D. University of Chicago, 1910; Instructor in Mathematics, igil-igit, and Associate Professor, 1914-1018, Mt. Holyoke College; Associate Professor of Mathematics, Bryn Mawr College, 1918- -

1907-1908-Cook, Helen Dodd (Mrs. Vincent), Philosophy. B.A. Wellesley College, 1905; M.A. 1907; Fellow in Philosophy and Psychology, Wellesley College, 1906-1907; Student at University of Würzburg, 1907-1909; Ph.D. University of Wurzburg, 1909; Instructor in Psychology, Wellesley College, rgo9-1913; Instructor in Psychology, Montclair Normal School, 1913-1916.
1908-1909-Stone, Isabelle,
Greek.
B.A. Wellesley College, 1905; Graduate Student Cornell University, 1905-1908; Ph.D. Cornell University, roo8; Student American School of Classical Studies in Athens, 1908-1909; Reader in Greek, Bryn Mawr College, second semester, 1909rgıo; Head of Greek and Latin Departments, Woman's College of Alabama, first semester, igio-igir.
1909-19io-Shepperle, Gertrude (Mrs. Loomis),
Comparative Literature.
B.A. Wellesley College, 1903; M.A. 1905; Graduate Student Radciife College, 1905-1907; Student University of Munich, 1907-1908; University of Paris, 1908IgII; Ph.D. Radclifie College, Igo9; Instructor in English, University of Illinois, 191I-1912; Instructor in German, New York University, 1912 -1913; Instructor in English, 1913-1914, and Associate in English, 1914-1919, University of Illinois; Assistant Professor of French, Vassar College, 1919- -.
igio-i91i-Hibbard, Laura Alandis,
English Literature.
B.A. Wellesley College, 1905; M.A. 1008; Graduate Student University of Chicago, I909-1911; Ph.D. University of Chicago, 1916; Instructor in English Literature, NIt. Holyoke College, 1908-1916; Instructor in English Literature, 1910-1917, and Associate Professor, 1917- -, Wellesley College.

1911-19iz-Barbour, Violet, $\quad$ History.
B.A. Cornell University, 1906; M.A. 1909; Graduate Scholar in History, Cornell University, r908-1909; carrying on historical research in England, France, and Holland, 1911-1913; Ph.D. Corneil University, 1914; Instructor in History, Vassar College, 19I4-
1912-1913-Coats, Bessie Marion, Philosophy. B.A. Vassar College, roo7; Mary E. Ives Fellow, Yale University, 1910-1911; Graduate Student Radclifie College, igir-ig15; M.A. Radclifie College, 1912; Principal of Ferry Hall, Lake Forest, Ill., 1915-1918; Principal of Bradford Academy, Bradford, Mass., 1918--.

1913-1914-Stocking, Ruth,
Zoology.
B.A. Goucher College, 1910; Graduate Student Goucher College and Johns Hopkins University, 1910-1911; Graduate Student Bryn Mawr College, 1911-1912; University Fellow in Zoology, Johns Hopkins University, 1912-1913; Johns Hopkins University, 1913-1914; Ph.D. Johns Hopkins University, 1915 ; Professor of Biology, Agnes Scott College, 1915-1916; Professor of Biology, Wells College, 1916- -
1914-1915-HoIDEN, RUTH, Botany.
B.A. Radcliffe College, 191r; M.A. Radcliffe College, 1912; Graduate Student Radcliffe College, 1912-1913; Student in Botany School, Cambridge University, England, 1913. Died April 23, 1917.

1915-1916-Hazlett, Olive Clio,
Mathematics.
B.A. Radcliffe College, I912; M.S. University of Chicago, 1913; Graduate Student and Fellow, University of Chicago, 1912-1915; Holder of Fellowship of the Boston Branch of the Association of Collegiate Alumne, 1914-1915; Ph.D. University of Chicago, 1915; Student at Radcliffe College, 1915-1916; Associate in Mathematics, Bryn Mawr College, 1916-I918; Instructor in Mathematics, Mt. Holyoke College, 1918- -.
1916-1917-Hazlett, Olive Clio,
Declined the Fellowship, which was awarded to Dunn, Grace Adelaide,

Mathematics.
Dunn, Grace Adelaide, Johns Hopkins University, 1915.

1917-1918-Hempl, Hilda (Mrs. Heller),
Bacteriology.
B.A. Leland Stanford, Jr., University, 1914; M.S. University of Michigan, 1915; Holder of the Scandinavian-American Fellowship, 1915-1916; Holder of the European Fellowship of the Association of Collegiate Alumnæ, 1916-1917. Student at University of California, 1917-1918.
1918-igig-Cohen, Teresa, Mathematics. B.A. Goucher College, 1912; M.A. Johns Hopkins University, 1915; Ph.D. Johns Hopkins University, 1918.
1919-1920-Allard, Beatrice, Semitic Literature.
B.A. Mt. Holyoke College, 1915; Scholar in Semitic Languages, Bryn Mawr College, 1915-1916; Fellow, Bryn Mawr College, 1916-1918؛ Holder of the Mary E. Woolley Fellowship of Mt. Holyoke Collese, Bryn Mawr College, 1918-1919.

Timirty Graduate Scholarships to the value of \$i75 a year, the equivalent of one year's tuition, have been established for the benefit of approved candidates for the M.A. degree in residence at Wellesley. Applications for these scholarships should be addressed to the College Recorder, Wellesley College, Wellesley, Mass.

Scholarships in Schools of Classical Study.-Studentships in the American School of Classical Studies in Athens, and the American Academy in Rome, are open to graduates and graduate students of Wellesley College who have done sufficient work in the classics to meet the admission requirements. The object of these schools is to afford opportunity for the study of classical literature, art, and antiquities, to aid in original research in these subjects, and to conduct the exploration and excavation of classical sites.

The American School of Classical Studies in Athens.-The school year extends from October first to June first. The regulations for admission are as follows: "Bachelors of Arts of co-operating colleges, and all Bachelors of Arts who have studied at one of these colleges as candidates for a higher degree, shall be admitted to membership in the School on presenting to the Committee a certificate from the classical department of the college at which they have last studied, stating that they are competent to pursue an independent course of study at Athens under the advice of the Director. Members of the school are subject to no charge for tuition." * Further information can be had by application to Professor Walton, who represents Wellesley College upon the Managing Committee of the School.

The American Academy in Rome, School of Classical Studies.-The American School of Classical Studies is now one of the consolidated schools of the American Academy in Rome. The school year extends from the fifteenth of October to the fifteenth of June. It is hoped that a summer session also for teachers of the classics may be arranged. For information in regard to the work of the School and the requirements for admission, application may be made to Professor Hawes.

[^18]Scholarships in the Marine Biological Laboratory at Wood's Hole*.-Wellesley College offers annually two scholarships for study at this laboratory. The laboratory is open to investigators for the whole year. During the summer three courses in Zoology and two in Botany are offered to those needing instruction. Applicants desiring to take any of these courses must have completed a college course in the subject in which they wish to work.
Students in either Botany or Zoology who desire to undertake original work will receive suitable direction. In addition to these opportunities there are courses of lectures on special topics and on subjects of general biological interest. Applications for appointment should state the character of the work to be done,-i.e., whether botanical or zoological, whether general work, investigation under direction, or independent investigation,and should be forwarded to Professor Hubbard or Professor Ferguson in time to reach Wellesley College before April first.

Scholarships at the Zoological Station in Naples.Wellesley College is a subscriber to the support of the American Women's Table at the Zoological Station in Naples, and thus has a voice in the selection of the persons who make use of it. Such persons must be capable of independent investigation in Botany, Zoology, or Physiology. Appointments are made for a longer or shorter period, as seems in each case expedient. Applications for the use of the table may be made through the President of the College.

The Ruth Ingersoll Goldmark Memorial Fund was established by Mr. C. J. Goldmark in I9I7, at present affording an income of $\$ 250$, to be applied to the aid of deserving students doing graduate work at Wellesley College or elsewhere in English Literature or English Composition or in the Classics, English Literature being given the preference.

## B. FOR UNDERGRADUATES

The income of these scholarships is applied to the aid of meritorious undergraduate students whose personal means are insufficient for their maintenance in college.
The Wood Memorial Scholarship of $\$ 5,000$, founded in 1878, by Caroline A. Wood, in memory of her husband.
The Grover Scholarship of $\$ 5,000$, founded in 1878 , by William O. Grover.

[^19]The Weston Scholarship of $\$ 5,000$, founded in 1878 , by David M. Weston.
The Northfield Seminary Scholarship of $\$ 5,000$, founded in 1878.
The Pauline A. Durant Scholarship of $\$ 7,315$, founded in i880, by Mr. and Mrs. Henry F. Durant, and raised to its present amount by bequest of Mrs. Durant, 1919.
The Sweatman Scholarship of $\$ 5,000$, founded in i880, by V. Clement Sweatman.

The Walter Baker Memorial Scholarship, founded in r880, by Eleanor J. W. Baker; raised to $\$ 7,000$ by will of Mrs. Baker in 1892.
The Annie M. Wood Scholarship, founded in 1880 , by Frank Wood, who maintained it by annual payments; established at $\$ 10,000$ in 1915 by bequest of Mr. Wood.
Two Frost Scholarships, founded in 1880, by Rufus S . Frost, as follows:-

One of \$1,000, the income to be given annually to some member of the graduating class designated by the Faculty.
One of $\$ 5,000$, the income to be devoted annually to the aid of students.

The Union Church Scholarshit, founded in 1880, by Mr. and Mrs. A. W. Stetson.
The Florence N. Brown Memorial Scholarship of $\$ 5,000$, founded in 1880, by Mr. and Mrs. Samuel N. Brown, Jr.
The Augustus R. Clark Memorial Scholarship of $\$ 5,000$, founded in 1880, by Mr. and Mrs. A. N. Clark.
Four Harriet Fowle Smith Scholarships, founded in 188i, by Henry Fowle Durant in memory of his mother.
The Durant Memorial Scholarship of $\$ 5,000$, founded in 1883, by the officers and students of Wellesley College, in honor of Henry F. Durant, the income to be appropriated annually to some student selected by the Faculty.
The Jane Topliff Memorial Scholarship of $\$ 6,000$, founded in 1883, by Mrs. William S. Houghton, in memory of her mother.
The Income of a Fund of $\$ 25,000$, known as the Stone Educational (Scholarship) Fund, founded in 1884, by Valeria G. Stone.

The Jeannie L. White Scholarship of $\$ 5,000$, founded in I886, by herself.
The Mr. and Mrs. Solomon F. Siitif Memorial Scholarship, founded in 1888, by George Smith, for the tuition of students from the town of Wellesley.
The Margaret McClung Cowan Fund of $\$ \mathrm{r}, 000$, founded in 1888, by Rev. and Mrs. P. D. Cowan, in memory of their daughter.
The Embielar Scholarship of $\$ 5,000$, founded in 1889, by the class of 1891, the income to be appropriated annually to some student selected by the Faculty.
The Sarah J. Houghton Scholarship of $\$ 6,000$, founded in 1889, by William S. Houghton, in memory of his wife.
The Edith Baker Memorial Scholarship of $\$ 7,000$, founded by bequest of Eleanor J. W. Baker in 1892,
The Joseph N. Fiske Memorial Scholarship of $\$ 8,000$, founded in 1892, by Mrs. J. N. Fiske.
The Abbie A. Coburn Memorial Scholarship of $\$ 2,000$, founded in 1892 .
The Eliza C. Jewett Scholarship of $\$ 6,000$, founded in 1894; the income to be appropriated to the daughter of a clergyman, or of a home or foreign missionary, selected by the Faculty of the College.
The ada L. Howard Scholarship of $\$ 6,000$, founded in 1895.

The Helen Day Gould Scholarship, founded in 1896, by Helen Miller Gould (Shepard), in memory of her mother; raised to $\$ 10,000$ by the donor in 1901 .
The Goodwin Scholarship of $\$ 5,000$, founded in 1897 , by Hannah B. Goodwin.
The Hyde Scholarship of $\$ 2,000$, founded in 1898, by Sarah B. Hyde.

The Bill Scholarship of $\$ 7,000$, founded in 1898 , by Charles Bill.
The Holbrook Scholarship of $\$ 3,000$, founded in 1898 , by Sarah J. Holbrook.
The (second) Helen Day Gould Scholarship, founded in 1899, by Helen Miller Gould (Shepard); raised to $\$$ ro,000 by the donor in 190r.

The Mary Elizabeth Gere Scholarship of \$5,000, founded in 1899, by Mary Elizabeth Gere.
The Ann Morton Towle Memorial Scholarship Fund of $\$ 5,000$, established in 1901, by bequest of George Francis Towle.
The Dana Scholarship of $\$ 5,000$, founded in igoi, through the gift of Charles B. Dana.
The (third) Helen Day Gould Scholarship of \$io,000, founded in 1901, by Helen Miller Gould (Shepard).
The George William Towle Memorial Scholarship Fund of $\$ 6,750$, founded in 1901, by bequest of George Francis Towle.
The Anna Palen Scholarship of \$io,000, founded in 1902.
The Rollins Scholarship of $\$ 8,000$, founded in 1903 , by Augusta and Hannah H. Rollins, in memory of their parents.
The Class of i889 Memorial Scholarship of $\$ \mathrm{~m}, 000$, founded in 1904, by the class, in memory of classmates who have died.
The Elizabeth S. Fiske Scholarship of $\$ 5,000$, founded in 1904, by bequest of Miss Fiske.
The Mae McElwain Rice Memorial Scholarship of \$1,000, founded in 1905, by the class of 1902.
The Sanborn Alumne Scholarship, yielding \$450 annually, founded in 1905, by Helen J. Sanborn of the class of I884, for the benefit of daughters of alumnæ: established at $\$ 10,000$ in r919 by bequest of Miss Sanborn.
The Julia Ball Thayer Scholarship of $\$ \mathbf{2}, 000$, founded in 1907, by bequest of Mrs. Julia Beatrice Ball Thayer, of Keene, N.H.
The Adams Scholarship of $\$ 2,000$, founded in 1907, by bequest of Adoniram J. Adams, of Boston.
The McDonald-Ellis Fund of $\$ 500$, established in 1908 by former students of the McDonald-Ellis School of Washington, D.C., in memory of the late principals of the school.
The Ransom Scholarship of \$1,000, founded in 1908, by bequest of Catherine Ayer Ransom.
The Emily P. Hidden Scholarship of $\$ 2,000$, founded in 1909, by bequest of Mary E. Hidden.

The Ethel Howland Folger Williams Memorial Fund, established in igir from the estate of the late Ethel Howland Folger (Williams) of the class of 1905 , the income to be given to a sophomore at the end of the first semester at the discretion of the head of the German department.
The Sophie Jeivett Memorial Scholarship of $\$ \mathrm{~m}, 000$, founded in igir, by Elsa D. James.
The Mildred Keim Fund of \$io,000, founded in igi 2 by Newton and Frances S. Keim, in memory of their daughter, Mildred Keim.
The Connecticut Scholarship of $\$ 5,000$, founded in 1912 , by the will of Louise Frisbie.
The Anna S. Newman Memorial Scholarship of \$i,000, established in 1913, through the gift of former students.
The Mary G. Hillman Mathematical (Prize) Scholarship of $\$_{1,000}$ established in 1913 by Elizabeth A. Hillman in memory of her sister.
The Class of i893 Memorial Scholarship of $\$ 5,000$, established by the class in 1913.
The M. Elizabeth Gray Scholarship of \$io,000, established in 1914 by bequest of William J. Gray.
The Cora Stickney Harper Scholarship of $\$ 2,000$, established in 1915, by bequest of Mrs. Cora Stickney Harper.
The Oliver N., Mary C., and Mary Shannon Fund of $\$ 15,000$, established in 1916, by bequest of Mary Shannon, as a permanent fund for free scholarships.
The Dr. Alma Emerson Beale Scholarship Fund of $\$ 3,000$, founded in 1917 by bequest of Dr. Alma E. Beale of the class of 189 r ; the income to be applied annually to a student of the College who intends to become either a foreign or a home missionary, or, second, to a student of the College who is the daughter of a clergyman.
The Stimson Mathematical Scholarship of \$roo, founded in 1919 by Candace C. Stimson in memory of her father, Dr. Lewis A. Stimson.
The Marie Louise Tuck Scholarship Fund of $\$ 9,500$, founded in igig by bequest of Alice C. Tuck.
The Class of 1884 Memorlal Scholarship, founded by the Class in 1919 (accumulating).

Another source of pecuniary aid is in the work of the Students' Aid Society established by the founders of Wellesley and revived and incorporated by the alumnæ of the College in April, 1916. The Wellesley College Loan Fund, established in 1908 through contributions from alumnæ and other friends of the College, is included in the resources of the Students' Aid Society. Small amounts are loaned to students without interest in expectation that these students will repay whenever they are able. Assistance is often given partly in gifts and partly in loans. The existing funds are not sufficient to meet the wants of deserving applicants, and contributions of any amount will be gladly received by the treasurer, Miss Mary Caswell, Wellesley College.

In one dormitory a reduction is allowed on payment for board, under certain conditions.

## LIBRARY

The Library of the College, endowed by Eben Norton Horsford, now numbers 87,696 volumes, including the departmental and special libraries enumerated below. The General Library is open on week days from 8.10 A. m. to 9.30 p. m., and on Sundays from 2.30 to 5.30 P. M. Students have direct access to the shelves. The library is catalogued by author and subject entries, and the most recent and useful bibliographical aids are provided; special effort is made by the librarians to train students in methods of research.

The Library subscribes for six daily and three weekly papers and for three hundred and twenty American and foreign periodicals. The list includes the most important representatives of the branches of instruction comprised in the college curriculum.

The Gertrude Memorial Library, established by Mr. A. A. Sweet, the Missionary Library, and other collections in the General Library, furnish 7,540 volumes for Biblical study and religious reading.

The Plimpton Library, established by Mr. George A. Plimpton, in memory of his wife, Frances Pearsons Plimpton, of the class of 1884, comprises 931 volumes of early Italian literature, including both manuscripts and printed books of the fifteenth century.

The following collections are placed in the buildings of the respective departments:-
Art Library, 2,632 volumes.
Botany Library, 883 volumes.
Chemistry Library, 834 volumes.
Astronomy Library, $\mathrm{r}, \mathrm{io6}$ volumes.
Hygiene Library, 2,627 volumes.
Music Library, $\mathrm{I}, \mathrm{I} 24$ volumes.

## GYMNASIUM

The department of Hygiene occupies Mary Hemenway Hall on the western border of the college grounds. It is designed to meet the requirements of the course for the training of teachers of hygiene, and to provide practical instruction for the entire College. The equipment includes large, well-lighted gymnasiums with ample bathing facilities, administrative offices, classrooms, and laboratories for anatomy, physiology, bacteriology, hygiene, anthropometry, corrective gymnastics, and research. The department library contains 2,627 volumes, a collection of valuable pamphlets, and regularly receives fifteen journals dealing with matters related to hygiene. Immediately adjoining Mary Hemenway Hall are tennis and archery courts, basket ball, baseball, volley ball, and hockey fields, an oval for horse back riding and a riding hall, with room for further expansion. Lake Waban furnishes facilities for rowing and skating, and there is also a golf course with a clubhouse. The equipment of the department is designed solely to aid in the application of modern principles of science to the maintenance and promotion of health.

## THE FARNSWORTH ART BUILDING AND ART COLLECTIONS

The Farnsworth Art Building, the gift of the late Isaac D. Farnsworth, was opened in September, 1889. Besides lecture rooms, galleries for collections, and studios for drawing and painting, a special feature is the arrangement of laboratories and libraries, so that the books and art material relating to particular subjects and periods can be made immediately available to general students.

The Art Collection consists of a large number of photographs and other material, including the James Jackson Jarves collection of laces and vestments; the M. Day Kimball Memorial, consisting of original pieces of antique sculpture; a few examples of early Italian painting; a collection of Indian baskets, the gift of Mrs. Rufus S. Frost; various Egyptian antiquities obtained through the kindness of the late Mrs. John C. Whitin, including certain interesting papyri; and scarabs and seals from the collection of Dr. Chauncey Murch, the gift of Mrs. Helen M. Gould Shepard; the Stetson collection of modern paintings, and a few other examples.

The collection of photographs and other reproductions numbers over fourteen thousand.

## EQUIPMENT IN MUSIC

Music Hall and Billings Hall are large brick buildings, devoted to the department of Music. Music Hall contains offices, studios, and practice rooms equipped with thirty-one new pianos of standard makes, a Victrola and two Player-pianos; also a large room, containing a two-manual pipe organ for the use of the organ pupils. Billings Hall, opened in 1904, contains the office of the Professor of Music, the library and classrooms for instruction in Musical Theory; also a concert room, seating four hundred and ten people, and containing the Grover organ,-a large three-manual organ, rebuilt and modernized.

The Music Library includes a collection of manuscripts, about two hundred scores (Symphony, Opera, Oratorio, and Cantata), two hundred songs, two hundred piano arrangements (two, four, and eight hands), besides six hundred and fifty reference books on musical subjects. The department owns ninety-three records for the Victrola and two hundred and eighty records for the Player-pianos.

## LABORATORIES AND SCIENTIFIG COLLECTIONS

ASTRONOMY
The Whitin Observatory is a one-story building of white marble, situated on a small hill on the college grounds, and devoted entirely to the use of the department of Astronomy. It contains two rooms surmounted by rotating domes, twenty-
five feet and twelve and one-half feet in diameter respectively; two transit rooms; a spectroscopic laboratory; a large, welllighted room for elementary laboratory work; and another large room in which is kept the department library. In the larger dome room is mounted a twelve-inch Clark equatorial refracting telescope, which is provided with a filar micrometer, a polarizing photometer, and a six-prism spectroscope. The twentyfive foot dome is rotated by an electric motor. The smaller dome contains a six-inch Clark equatorial refractor. There are two transit instruments, the larger a Bamberg prismatic transit of three inches aperture. A four-inch telescope with objective by Browning is mounted in a south wall of the building, with the eye end inside and the optic axis parallel to the axis of the Earth; a plane mirror beneath the objective reflects into the latter the light of the object observed. In the spectroscopic laboratory is a Rowland concave grating spectroscope of six feet focal length.

The Observatory is supplied with two Howard sidereal clocks, a Bond mean-time chronometer, and two chronographs, any of which may be connected electrically through a switchboard with keys near the various telescopes; a Berger surveyor's transit; an Evershed protuberance spectroscope; a Gaertner comparator for measuring spectrograms; a projecting lantern and about 400 astronomical lantern slides; and a large collection of illustrative apparatus and photographs.

The Observatory House, the residence of the Observatory staff, is near by. Both the Observatory and the house, and also the greater part of the astronomical equipment, are the gift of the late Mrs. John C. Whitin.

## BOTANY

The department of Botany has well-equipped laboratories and a range of greenhouses.

The illustrative collections comprise an herbarium of over twenty thousand phanerogams and twenty-one thousand cryptogams, including the lichen collection of the late Prof. Clara E. Cummings; also a collection of woods, fruits, and economic vegetable products; three hundred charts by Henslow, Kny, Dodel, Tschirch, and others; a collection of Auzoux's botanical models; Brendel's glass models of cryptogams; seventeen hundred water color paintings of North American
plants by Helen Frances Ayres; lantern slides and microscopic mounts. In addition collections for a permanent museum now number more than five thousand specimens.

The department has an "Outdoor Laboratory" for the use of certain courses. The greenhouses contribute to all the courses in the department; but are of especial importance in connection with the work in landscape gardening, in plant physiology and ecology.

The native flora about Wellesley is easily accessible, furnishing a convenient field for both the taxonomist and ecologist. The library ranks with the best botanical libraries in the country and is well supplied with reference works and with current periodicals.

## CHEMISTRY

The department of Chemistry occupies a separate building, which contains two lecture rooms and the chemical library, in addition to the rooms fitted up for laboratory work. Separate rooms are provided for work in General Chemistry, Organic Chemistry, Qualitative and Quantitative Analysis, and Food Analysis. The building is conveniently arranged and well equipped with necessary apparatus and appliances.

During the summer of 1918, a large well-lighted room, with all-modern laboratory equipment, was added for the use of the courses in Organic Chemistry.

## GEOLOGY AND GEOGRAPHY

The department of Geology and Geography has a large and well-equipped lecture hall provided with a Leitz epidiascope for lantern slide and opaque projection, a good sized classroom, and two laboratories furnished with students' desks, one for the use of Geography classes, the other for work in Geology.

The Geology Museum contains a typical college collection of dynamical, structural, and historical geology specimens,a systematic collection of minerals arranged according to Dana, and a systematic collection of rocks. There are three collections arranged for classroom use,-one each in mineralogy, petrology and structural and historical geology. These collections are all the generous gifts of colleges, museums and friends. The department has two noteworthy collec-
tions. The first is the Horace I. Johnson Mineral Collection, which consists of five thousand valuable and beautiful mineral specimens, including many precious metals and stones. This collection is the gift of Mr. John Merton of Calumet, Michigan, and was presented through the Class of 1915 by the courtesy of Miss M. Helen Merton. The second is the Reverend David F. Pierce Collection, which includes a complete and rare collection of building and ornamental stones and many precious and semi-precious minerals. This collection is the gift of Professor Frederick E. Pierce of Yale, Miss Anna H. Pierce, and Miss Mary E. Pierce of the Class of 1898.

The maps of the department include wall maps of different countries and sections of countries; all the United States Geologic Folios, and over six thousand topographic maps of the United States Geologic Survey, the gift of the Survey. Three thousand of these latter maps are arranged in groups to illustrate geographic types.

The department has fifteen hundred lantern slides which illustrate all phases of geology and geography.

## MATHEMATICS

The fine collection of Mathematical Models was destroyed by fire in March, ig14. At present there is only a small number of models for use in the elementary work.

## PHYSICS

The department of Physics occupies temporary quarters consisting of two conveniently arranged lecture rooms, fitted with direct and alternating current and gas, and laboratories for general physics, electricity and heat, and light.

The equipment, destroyed by fire in March, 1914, is being replaced as rapidly as conditions and funds permit. The lecture apparatus is sufficient to permit a wide range of experimental lectures. In the elementary laboratory duplication of apparatus permits a close co-ordination between lectures and laboratory exercises. The advanced laboratory equipment is especially strong in electrical apparatus, and in optics includes such instruments as the Reichsanstalt precision photometer, a Michelson interferometer, Société Genevoise spectrometer, a comparator designed by E. B. Frost, etc.

## PSYCHOLOGY

The temporary quarters of the laboratory now include nine rooms, eight in the south wing of the Administration Building and one in the basement of the Art Building. The equipment, entirely destroyed by fire in March, 1914, is being replaced as fast as present conditions permit. Fair provision is made both for demonstration and for general experimental work.

## ZOOLOGY

The department of Zoology is housed in a temporary building, to which, in the summer of 1919, a large wing was added. This building contains laboratories for the elementary course in Zoology, for Histology and Embryology and for Physiology. Two courses in Anatomy are conducted in the laboratories in Mary Hemenway Hall.

The equipment lost in the fire of March, 1914, is being replaced as rapidly as conditions permit. The fundamental needs of the various courses have been met, and the physiology laboratory in the new wing is fully equipped with modern apparatus.

The nucleus of a new museum has been formed, and additions are being made as fast as funds and the lack of adequate fire-proof space allow. A new collection of New England birds, and a valuable collection of shells, the gift of Mrs. Rebecca S. Beaman, of Cambridge, are housed this year in a basement room of the library.

## FORMS OF BEQUEST

I give and bequeath to Wellesley College, a corporation established by law, in the town of Wellesley, county of Norfolk, and Commonwealth of Massachusetts, the sum of dollars, to be safely invested by it, and called the-Endowment Fund. The interest shall be applied to the payment of the salaries of teachers in Wellesley College, as the Trustees shall deem expedient.

I give and bequeath to Wellesley College, a corporation established by law, in the town of Wellesley, county of Norfolk, and Commonwealth of Massachusetts, the sum of -____ dollars, to be appropriated by the Trusiees for the benefit of the College in such manner as they shall think will be most useful.

I give and bequeath to Wellesley College, a corporation established by law, in the town of Wellesley, county of Norfolk, and Commonwealth of Massachusetts, the sum of -__ dollars, to be safely invested by it, and called the -_Scholarship Fund. The interest of this fund shall be applied to aid desering students in Wellesley College.

# DEGREES CONFERRED IN 1919 

## MASTER OF ARTS

Mirlam Isabel Dean (B.A., Wellesley College, i916), Botany; Zoology.<br>Marie Wright Goler (B.A., Wellesley College, 1917), English Literature.<br>Ruth Alden Hoyt (B.A., Wellesley College, 1915), Physics.<br>Henrietta Littlefield (B.A., Wellesley College, i912), German.<br>Helen Wight Wheeler (B.A., Wellesley College, Ig13), German; Philosophy and Psychology.

## BACHELOR OF ARTS

Charlotte Bushnell Abbott
Mary Emily Aldrich Madeline Eleanor Almy
Elizabeth Agnes Anderson
Emma Katherine Anderson
Hester Lenore Anderson
Louise Hinmian Anderson
Helen Robbins Andrews
Lucile Andrews
Alice Hall Armstrong
Ellen Armstrong
Susan Underwood Armstrong
Marie Ernestine Arnold
Helen Horner Asam
Margaret Atwood
Ferebe Eleanor Babcock
Mary Elizabeth Babcock
Edith Augusta Bagley
Jean Dithridge Bailey
Katharine Clemens Bailey
Mamre Bailey
Muriel Baker
Elizabeth Lucy Barbour
Florence Hortense Barcalo
Eleanor May Barnes
Charlotte Denham Barstow
Marlan Victorla Bash
Florence Andrews Baxter
Margaret Fuller Belcher
Elizabeth Dyer Bell
Marion Bell
Ruth Bennett
Truth Madeleine Binns
Helen Mary Bishop
Helen Dorothea Bixby
Marian Hunt Blair
Mary Blake
Louise Wadhams Blakeslee
Eleanor Dichinson Blodgett
Helen Peck Bonsall
Prudence Bostwick
Hilda Catherine Bowen
Mildred Elizabeth Bowman
Isabel Katharine Boyd
Helen Rose Marie Brady
Gretchen Bragdon
Julia Van der Veer Brannock
Christine Smillie Breingan
Marguerite Amelia May Brenizer
Esther Brinton
Clara Marlitta Brockelman

Zillah Julla Bronner
Elizabeth Gertrude Brooks
Ruth Frances Brooks
Dorothy Wells Brown
Margaret Ellis Brown
Phyllis Buck
Alice Lydia Burbank
Faith Bushnell
Marion Matilda Calloway
Eleanor Estella Carroll
Katherine Biddle Carter
Mai Alline Caskey
Doen Ting Chang
Florence Henrietta Clarkson
Alice Westcott Clough
Muriel Coe
Ruth Stevens Coleman
Dorothy Elizabeth Collins
Dorothy Colvilie
Margaret Willis Conant
Margaret Elizabeth Coombs
Clarissa Burnham Cooper
Elizabeth Irene Cooper
Mary Windsor Crane
Mary Swan Crowther
Mary Cummings
Alice Godfrey Darling
Elizabeth Clark Davis
Dorothy Day
Dorothy Helen Decker
Dorothea Frances De Long
Ruth Denman
Averyl Angell Dickinson
Margaret Kathryn Dietrich
Helen Whittemore Dodd
Eleanor Dodge
Ruth Isabel Donovan
Ruth Dorchester
Dorothy Caryl Doremus
Marjorie Marble Downey
Helen Mary Dwight
Irene Stuart Earl
Marjorie Elmira Earp
Ruth Mac Gill Eastman
Gladys Twaddell Edwards
Fay Emerson
Elinor Peabody Emery
Madeleine Chilton Everett
Dorothy Dean Faris
Dorothea Mary Farrell
Dorothy Estelle Fessenden

Charlene Doris Fiebeger
Catharine Louise Fish Elizabeth Flournoy
Marjorie Elizabeth Flynn
Elizabeth Frances Freeman
Marie Lotise Frein
Elisabeth Goodale Frost
Malde Preston Gardner
Helen Grey Gaylord
Madeleine Gibson
Florence Emily Goodrich
Minnie Triplett Gould
Grace Sterling Gray
Mary Greene
Mary Louise Grim
Frances Anne Cazenove Grinnan
Margaret Curzon Hale
Susan Charlotte Hall
Marion Clark Hamblet
Alva Björkman Hammarsköld
Susan Westcott Handy
Elizabeth Platt Hannuy
Mary Etta Hanson
Mary Elizabeth Harding
Rena Holmes Harris
Margaret Florence Hastings
Lillian Elinor Haswell
Dorothea Hazzard
Vera Carrie Hemenway
Amelia Henderson
Louise Heydrick
Katharine Vernette Higley
Katharine Leighton Hilton
Kathryn Louise Hinrichs
Helen Barbara Hockenberry
Mary Esther Holland
Edna Marian Hollday
Evelyn Holt
Edna Holtorf
Esther Hoover
Ruth Hudson Hornsey
Margaret Marion Horton
Emily Narcissa Hoxie
Margaret Helen Hoyt
Anna Louise Hunter
Marion Ingersoll
Isabel Stewart Ireland
Gertride Jackson
Josephine Poe January
Esther Theresa Johnson
Florence Sidona Johnson
Frances Marie Johnson
Laura Irving Johnson
Sara Elinor Johnston
Helen Martha Jones
Pansy Victoria Jones
Helen Clinton Jordan
Lenore Elizabeth Jordan
Madeleine Paine Kelly
Ruth Elizabeth Kelly
Catherine Lewers Kerr
Cornelia Van Benschoten Kimball
Esther Lilllan Kimball
Elizabeth Ringle King
Esther Jane King
Mary Elijabeth Kirkland
Frances Cecilla Koester
Clara Virginia Kraulich
Anita Lettie Krigsman
Helen Antoinette Lamb

Esther Langley
Florence Isabel Langley
Clemewell Lay
Jean Lees
Faith Brewster Vaudin Le Lachevr
Margaret Elizabeth Leonard
Margery Wheddon Leonard
Hattie Doris Levy
Clarice Lewis
Ruth Endicott Lewis
Mildred Sara Liebman
Sing Ling
Margaret Powers Littlehales
Hazel Emeline Livingston
Constance Mary Loftus
Mary Edith Long
Cristabel Loos
Marlan Frances Lord
Edna Heffley Love
Helen Mabel Lumsden
Katharine Van Etten Lyford
Agnes Helene MíacBride
Viola McCarthy
Jane Elizabeth McCartney
Mirlam Graham McClain
Ruth Lilllan McClelland
Gladys McCreery
Elizabeth McDowell
Mirlam Edith McEwan
Dorothy Ellen McIntosh
Jeanette Mack
Helen Ricardia McNeely
Imogene McQuesten
Carolyn Julia Magoon
Hazel Martin
Mary Marguerite Martin
Jane Webster Matthews
Helen Merrell
Miriam Meyer
Elizabeth Lengnick Miler
Lillian Jones Miller
Ladra Esther Moles
Helen Moore
Helen Collord Moore
Ruth Mae Morris
Anne Josephine Morrison
Sarah Morrison
Anna Justina Morse
Mary Dana Morse
Elizabeth Martha Moulton
Kathleen Murphy
Elsie Mildred Nash
Evelyn Oakes
Helen Morton Packard
Doris Snell Patee
Gretchen Peabody
Elizabeth Peacock
Mildred Elizabeth Perkins
Frances Seibella Perry
Gertride Meta Petersen
Rose Phelps
Edith Estelle Pickard
Edith Elizabeth Seaton Pitt
Julla Burlingame Pllas
Lena Podoloff
Rita Ellen Pond
Pearl Olive Ponsford
Ruth Gildersleeve Porter
Margaret Louise Post
Ruth Boice Potter

Mary Eleanor Prentiss
Helen Prior
Mildred Wolf Prugh
Mary Beatrice Putney
Ollie Dorothy Rainold
Marion Boardman Reed
Ellen Lucretia Richardson
Dorothy Risk
Dorothy Mae Robathan
Marian Robinson
Hilda Elizabeth Roehm
Beatrice Allen Rogers
Constance Rogers
Freda Ann Rosenfield
Mary Sydney Roy
Adele Mary Rumpf
Evelyn Russell
Eugénie Hellman Sachs
Elizabeth Lee Safford
Louise Waternan Saunders
Lucy Erskine Sawyer
Margaret Roseman Scherer
Bernice Elizabeth Schmidt
Ruth Henriette Schmidt
Marguerite Schoonmaker
Emma Sonya Schreiber
Elizabeth Schroeder
Rose Jeannette Schwenger
Elisabeth McKibbin Scott
Marjorie Ingraham Scudder
Ruth Shaw
Marjorie Burr Shepard
Margaret Amanda Shillito
Marion Shipley
Elizabeth Frances Shipman
Marie Stewart Simonds
Miriam Rossiter Small
Katharin Malinda Smith
Lucy Boardman Smith
Berdena Blanche Snyder
Evelyn Alba Söderlund
Lillian Annie Solobion
Frances Mabel Southard
Marian Silvey Sprague

Margaret Stason
Elizabeth Winifred Stauffer
Therese Weiss Strauss
Arline Stevens Talcott
Dorothy Augusta Taylor
Eva Marie Taylor
Gladys Myrtie Taylor
Doris Markham Thompson
Emily Louise Thompson
Ida Kathleen Thompson
E-Ling Tong
Jessie Robinson Topping
Mary Rita Torpey
Elisabeth Sternberg Traut
Francesca Independence Traut
Hilda Traxler
Esther Rippard Trethaway
Emily Lois Trimmer
Leona Van Gorder
Katherine Grant Vose
Marion Horton Wallace
Sara Josephine Wallace
Virginia Eleanor Wanzer
Gladys Elaine Washburn
Harriet Eaton Webber
Ruth Walcott Weeks
Dorothy Weinschenk
Eleanor White
Helen Adams Whiting
Martha Huntington Williams
Margaret Mirlam Willis
Dorothy Wilson
Irene Harriet Wilson
Mildred Winchester
Margaret Hickenlooper Withrow
Selma Elise Wolcott
Alicla Slayback Wolfe
Muriel Wood
Esther Locke Worden
Susan Lowell Wright
Johanna Hilde Antoinette Wulp
Rachel Elizabeth Yost
Ethel Caghans Ziglatzif

## CERTIFICATES IN HYGIENE AWARDED IN 1919

Helen Adeline Barr,
B.A., University of Wisconsin

Margaret May Biggar,
B.A., Leland Stanford, Jr., University

Helen Bôcher,
B.A., Radcliffe College

Katharine Cochran Coan, B.A., Wellesley College

Margaret Conley,
B.S., University of Chicago

Juliet Dixon,
B.A., Pomona College

Louisa-May Greeley,
B.A., Wellesley College

Edith Crawford Haight,
B.A., State Normal College, Greensboro, N.C.

Helen Wilder Hazelton, B.A., Mount Holyoke College

Marie Henze,
B.A., Wellesley College

Alfreda Mosscrop, B.A., Vassar College

Helen Robinson, B.A., Rockford College

Olive Bateman Rowell, B.A., Vassar College

Doris Wardner, B.A., Wellesley College

Dorothy Winslow Waterman, B.A., University of Minnesota

Emma Fuller Waterman, B.A., University of Minnesota

## HONOR SCHOLARSHIPS

Honor Scholarships (without stipend) have been established by the College for the purpose of giving recognition to a high degree of excellence in academic work. These honors fall into two classes: students in the first, or higher class, are termed Durant Scholars; students in the second class are termed Wellesley College Scholars.

These honors are awarded to seniors on the basis of two and one-half years' work, to juniors on the basis of one and one-half years' work. The standard in each case is absolute, not competitive.

## DURANT SCHOLARS

APPOINTED IN I9I9

Mary Lellat Austin, ' 20
Edith Augusta Bagley, 'ig
Mab Norton Barber, '20
Elizabeth Lucy Barbotr, 'ig
Mavis Clare Barnett, ' 20
Marion Bell, 'ig
Helen Mary Bishop, 'ig
Dorothy Powell Black, '20
Eleanor Dickinson Blodgett, 'i9
Margery Borg, '2o
Prudence Bostwick, '19
Edna Helen Bowen,'2o
Marguerite Amelia May Brenizer, 'ig
Ruth Frances Brooks, 'ig
Brenda Perot Cameron, '2o
Elzura Harris Chandler, '20
Eleanor Cook Clark, '2o
Muriel Coe, 'i9
Ruth Stevens Coleman, 'ig
Jessie Marjorie Cook, '20
Elizabeth Horsey Cox, '2o
Lucia Eaton Dearborn, '20
Kathryn Mildred Ebberts, '20
Dorothy Deane Faris, 'ig
Charlene Doris Fiebeger, 'i9
Elizareth Frances Freeman, 'I9
Marie Louise Frein, 'I9
Margaret Haeseler Gay, '20
Florence Emily Goodrich, 'ig
Harriet Phoebe Gordon,' 20
Ruth Carlotta Greene, '20
Mildred Bartlett Harrison, 20
Dorothea Hazzard, 'ig
Vera Carrie Hemenway, 'ig
Amelia Henderson, 'ig
Edna Marian Holliday, 'i9
Evelyn Holt, 'ig

Edna Louise Holtorf, 'ig
Annice Kay JoHnson, ' 20
Rachel Conrad Jones, ' 20
Alison Mason Kingsbury, ${ }^{2} 0$
Florence Lauer Kite, '20
Anita Lettie Krigsman, 'I9
Faith Brewster Vaudin Le Lacheur, 'i9
Netta Levi,' 20
Katharine Lindsay, '20
Constance Mary Loftus, 'ig
Sarah Graham McLeod, '2o
Helen Merrell, 'I9
Ethel Glenn Morris,'2o
Sarah Morrison, 'ig
Emily Gladys Peterson,' 20
Edith Estelle Pickard, 'i9
Ellen Lucretia Richardson, 'I9
Adele Mary Rumpf,'ig
Alice Rupp, '20
Margaret Roseman Scherer, 'i9
Helen Hastings Scott, '2o
Katharine Bishop Scott, '2o
Hildegarde Bussier Shumway, '20
Miriam Rossiter Small, 'ig
Therese Weiss Strauss,'ig
Marian Agnes Stuart,' 20
Florence Tucker Swan, '20
Mary Rita Torpey, 'ig
Emily Lois Trimmer, 'ig
Katherine Grant Vose, '19,
Marion Horton Wallace, 'I9
Dorothy Weinschenk, 'I9
Cynthia Westcott, '20
Edith Williams,'20
Irene Harriet Wilson, 'ig
Susan Lowell Wright, '19

## WELLESLEY COLLEGE SCHOLARS

## APPOINTED IN IgIg

Doris Christine Adanis, '20 Emma Katherine Anderson, 'ig Hester Lenore Anderson, 'ig
Helen Robbins Andrews, 'ig
Alice Hall Armstrong, 'ig
Dorothy Wentworth Atwell,'2o
Josephine Dorothy Baker, '2o
Lucla Pierce Barber,' 20
Jeannette Lambert Beall, '2o
Edith Dorothy Bell, '20
Virginia Ridley Berryman, '20
Anna French Bigelow, '2o
Helen Dorothea Bixby, 'ig
Ruth Ault Bolgiano,' 20
Isabel Katharine Boyd, 'ig
Helen Rose Marie Brady, 'ig
Christine Smillie Breingan, 'ig
Frances Estelle Brooks, 20
Lydia Margaret Brown,' 20
Margaret Ellis Brown, 'ig
Marjorie Butterfield,' 20
Dorothy Wilcox Calvert, '20
Katherine Biddle Carter, 'ig
Dorothy Colville, 'ig
Bernice Eleanor Conant,' 20
Elizabeth Irene Cooper, 'ig
Gertrude Cora Davidson, ' 20
Ethel Ann Davis, '20
Gladys Twaddell Edwards, 'i9
Dorothy Therese Ellin, 'zo
Laura Ewe, ' 20
Edith Ferre, '20
Muriel Estelle Fritz, '20
Elisabeth Goodale Frost, 'ig
Margaret Gray, ' 20
Elizabeth Missimer Green, '2o
Dorothy Elizabeth Hall,'2o
Alva Björkman Hammarsköld, 'ig
Charlotte Sellers Hassett, ’2o
Katharine Churchill Hildreth, 'zo
Kathryn Louise Hinrichs, 'ig
Helen Barbara Hockenberry, 'ig
Mary Esther Holland, 'ig
Margaret Hornbrook, ${ }^{2} 0$
Margaret Marion Horton, 'ig
Emily Narcissa Hoxie,'ig
Margaret Helen Hoyt, 'ig
Flora Louise Hubner, ' 20
Catherine Hughes, 'zo
Anna Louise Hunter, 'ig
Marion Ingersoll,'io
Isabel Stewart Ireland, 'ig

Josephine Poe January, 'ig
Esther Theresa Johnson, i9
Gladys Terry Jones, '20
Bernice Lesbia Kenyon, '2o
Viola Beatrice Kneeland, '20
Jean Lees, 'ig
Hattie Doris Levy, 'ig
Margaret Powers Littlehales, 's 9
Gertrude Rose Lütke, 'zo
Mirlam Graham McClain, 'ig
Ruth Lillian McClelland, 'I 9
Mary Shiras McCullough, '2o
Margaret Beatrice MacNaughten, 'zo
Mary Marguerite Martin, 'ig
Jane Webster Matthews, 'ig
Laura Esther Moles, 'ig
Esther Frances Moody,' 20
Kathleen Murphy, 'I9
Florence Moran Orndorff,' 20
Helen Marion Palmer,' 20
Lena Podoloff, 'ig
Rita Ellen Pond, 'ig
Margaret Louise Post, 'ig
Rachel May Pratt, ' 20
Mary Eleanor Prentiss,' 'ig
Mary Beatrice Putney,'ig
Margaret Elizabeth Reinhart,' 20
Martha Hubbard Richardson, '20
Anna Alison Russell,' 20
Marguerite Schoonmaker, 'ig
Emma Sonya Schreiber,'ig
Rose Jeannette Schwenger, 'ig
Marjorie Ingraham Scudder, 'ig
Helen Gertrude Shaw, '20
Ruth Shav, 'ig
Florence Josephine Sheeler, '2o
Helen Parker Smith, '2o
Annie Malde Stewart, '20
Eva Marie Taylor, 'ig
Genevieve Mald Thomas,’ 20
Mary Dorothea Thomas, 20
Elisabeth Sternberg Traut, ig
Francesca Independence Traut, 'ig
Myrilla W'alcutt, ${ }^{2} 0$
Winnifred Washburn, '20
Edith Dana Weigle, 'zo
Elizabeth Austin Wight, '2o
Marion Adaline Williams,' 20
Margaret Miriam Willis,'ig
Carolyn Willyoung, '20
Esther Locke Worden, 'ig

## SUMMARY OF STUDENTS

Resident candidates for the M.A. degree ..... 23
Candidates for the B.A. degree:-
Seniors ..... 336
Juniors ..... 355
Sophomores ..... 427
Freshmen ..... 360
Non-candidates for degrees ..... 28
Total registration, November, 1919 ..... I,529
United States:-
Alabama 7 New Jersey ..... 153
Arizona New Mexico ..... I
Arkansas New York ..... 229
California North Carolina ..... 2
Colorado Ohio ..... 72
Connecticut Oklahoma ..... 5
Delaware Oregon ..... 2
District of Columbia Pennsylvania ..... 165
Florida Rhode Island ..... 28
Georgia South Carolina ..... 3
Hawaii South Dakota ..... I
Idaho Tennessee ..... 4
Illinois Texas ..... 25
Indiana Utah ..... I
Iowa 16 Vermont ..... 15
Kansas Virginia ..... 9
Kentucky Washington ..... 9
Louisiana West Virginia ..... 4
Maine Wisconsin ..... 20
Maryland I9 Wyoming ..... I
Massachusetts 308 Argentina ..... I
Michigan 34 Belgium ..... I
Minnesota $I_{5}$ Canada ..... 6
Mississippi 3 China ..... 5
Missouri 25 France ..... 4
Montana 6 Japan ..... 3
Nebraska ro Spain ..... I
New Hampshire ..... 31

# OFFICERS OF THE ALUMN $\mathbb{E}$ ASSOCIATION 

Mrs. Harriet Hinchliff Coverdale (Mrs. William H.), President,
328 W. 83d St., New York, N. Y.
Mrs. Janet Davidson Travell (Mrs. John W.), Vice President,
27 E. Ifth St., New York, N. Y.
Mrs. Marie Warren Potter (Mrs. C. D.), Corresponding Secretary,
26075 th St., Brooklyn, N. Y.
Miss Alberta Maude Welce, Treasurer, 15 E. 72 d St., New York, N. Y.
Miss Martha Hill McFarland, Director,
Rye Seminary, Rye, N. Y.
Miss Elva McKea, Secretary of the Executive Committee of the Graduate Council,
60I W. risth St., New York, N. Y.
Miss Lavra M. Dwight, Alumne General Secretary and Secretary of the Graduate Council,
Wellesley College.

## LOCAL ASSOCIATIONS

In the following, an arrangement by states has been adopted. The name standing after that of the club refers to the secretary-treasurer unless otherwise specified. In the address of this officer, the name of the city (or town) and state are omitted if these have already been expressly stated in the heading. Corrections or additions will be gratefully received. Brackets indicate information not recent.

California.
Central, Elizabeth S. Adams, 1770 Pacific Ave., San Francisco.
Southern, Elizabeth Connor, 526 LaLoma Rd., Pasadena.
China.
Katherine Williams, Y. W. C. A., Peking.
Colorado.
State, Myra Camp Bostwick (Mrs. E. L.), ro45 Gaylord St., Denver.
Denver, Jane Lennox Capen (Mrs. B. C.), 2137 Gaylord St., Denver.
Southern, Ruth Banning (Pres.), 83 I N. Nevada Ave., Colorado Springs.
Columbia, District of.
Edna Spaulding, 2224 N St., N. W., Washington.
Connecticut.
Bridgeport, May O. Davenport, 36 Laurel Ave.
Hartford, Dorothy Larrabee, 27 Summer St.
New Haven, Clara Boxrud Weigle (Mrs. Luther A.), 142 Cold Spring St.
Hawair.
Juliette May Fraser, 1804 College St., Honolulu.
Illinois.
Chicago, Ruth Watson, 3832 N. Keeler Ave., Irving Park.
Indiana.
Florence Venn, 1927 N. Illinois St., Indianapolis.
Japan.
Gertrude Willcox Weakley (Mrs. Wm. R.), 14 Kawaguchi, Osaka.
Kentucky.
Gertrude Tinker Fulton (Mrs. J. Gault), Anchorage.
Maine.
Eastern, Bernice B. Dunning, 156 Cedar St., Bangor.
Western, Mabel Wood Little (Mrs. Albion), 473 Cumberland Ave., Portland.
Maryland.
Ballimore, Virginia Alcock, $274^{2}$ St. Paul St.

Massachusetts.
Berkshire, Grace Van Deusan Hall (Mrs. George), Great Barrington
Boston, Eula G. Ferguson, 43 Hawkins St., Roxbury.
Fitchburg, Louise Stratton Vaughan (Mrs. Wm. R.), 16 Cherry St.
Haverhill, Lucasta Boynton, 140 Pleasant St., Bradford.
Lowell, Ruth Rylee Keep (Mrs. Sanford), r 37 Fairmount St.
Ouincy, Anna Pinkham Ryder (Mrs. Frank C.), 79 Winthrop Ave., Wollaston.
S. E. Mass., Mary F. Hitch, 177 Elm St., New Bedford.

Springfield, Tilla McCarten, 30 Thompson St.
Wurcester, Mary Powers Granger (Mrs. L. Dwight), 55 Stark Rd.

## Michigan.

Detroit, Marguerite Ickler, 44 Moss Ave.
Minnesota.
Minneapolis, Dorothy Stacy, 2307 Colfax Ave., W
St. Paul, Marie Johnson Oertung (Mrs. Harry), 941 Laurel Ave.
Missouri.
Kansas City, Lucy A. Holmes, 3637 Charlotte St.
St. Louis, Beatrice Douglass, 5079 Waterman Ave.
Nebraska.
Omaha, Jeannette Mayer Armstein (Mrs. Herbert), 38 ro Davenport St.
New Hampshire.
Anna Cross, Nashua.
New Mexico.
Lillian Spitz Bigler (Mrs. Earle), Box 125, Artesia.
New York.
Buffalo, Laura Barton, 118 Summit Ave.
Eastern, Marguerite W. Pearsall, 460 Hamilton St., Albany.
Ithaca, Alice Work Willcox (Mrs. Walter F.), 3 South Ave.
New York City, Muriel Windram Sichel (Mrs. Harold), 424 West 20 th St.
Rochester, Mary McLouth, Palmyra.
Syracuse, Mary Lovelace, 738 South Crouse Ave.
Utica, Marguerite Gomph (Pres.), 25 Faxton St.
Оніо.
Akron, Margaret S. Wright, 384 West Market St.
Cincinnati, Louise Domhoff, Hotel Gibson
Cleveland, Frances Dunham, 228r Tudor Drive.
Columbus, Helen Schoedinger, 347 Kendall Pl.
Youngstown, Artena Phillips, 244 Lincoln Ave.
Oregon.
Portland, Mary Hewett McArthur (Mrs. Lewis), 56 Hamilton Ter.
Pennsylvania.
Eastern, Alice Stockwell Stahr (Mrs. Henry), 261 North Broad St., Bethlehem.
Northeastern, Anna L. Hibbs, 227 Montgomery St., West Pittston.
Philadelphia, Constance Gill, 6427 Sherwood Rd., Overbrook.
Pittsburgh, Mary Bishoff, 8or Braddock Ave.
Southeastern, Bessie Kast, 2220 Penn St., Harrisburg.
Williams $\hat{\text { port, Anna Gilmore, } 8 \mathrm{I} 8 \text { Market St. }}$

## Rhode Island.

Providence, Celia Tourtellot, 15 Burnett St., Providence.
South Dakota.
Harriet Deane Tufts (Mrs. Arthur H.), Sioux Falls.
Utah.
Salt Lake City, Dorothy Day, 2480 5th St.
Washington.
Western, Estelle Roberts, 12 I 122 d Ave., N., Seattle.
Wisconsin.
Madison, Florence Hastings Stebbins (Mrs. B. W.), 1032 Sherman Ave.
Milwaukee, Ruth Strong, 6ig Shepard St.

## INDEX



| Page |  |  |
| :---: | :---: | :---: |
| French | - | 83 |
| Geology | . | 87 |
| German | - | 91 |
| Gothic | - | 131 |
| Graduate Instruction | . | 148 |
| Greek |  | 96 |
| Gymnasium |  | 161 |
| Harmony and Musical | Theory | 124 |
| Health Provisions | . . | 152 |
| Hebrew |  | 57 |
| History |  | 99 |
| Hygiene |  | 105 |
| Italian |  | 114 |
| Laboratories |  | 162 |
| Latin . | . | 116 |
| Libraries |  | 160 |
| Logic |  | 132 |
| Maintenance Fef, | . $\cdot$ | 149 |
| Marine Biological laboratory |  |  |
| ar Wood's Hole | - | 155 |
| Mathematics |  | 120 |
| Meteorology | . | 138 |
| Mineralogy | - | 90 |
| Music:- |  |  |
| Theory of |  | 124 |
| Instrumental and Vocal | 1 | 129 |
| Equipment in |  | 162 |
| Music Hall |  | 162 |
| Observatory |  | 162 |
| Pedagogy . |  | 70 |
| Philology |  | 131 |
| Philosophy |  | 132, 134 |
| Prysics |  | 137 |
| Physiology |  | 109, 144 |
| Political Science |  | 102 |
| Psychology |  | 132 |
| Reading and Speaking |  | 139 |
| Residence | . . | 151 |
| Sinskrit | - - | 131 |
| Scholarships |  | 152 |
| With Stipend:- |  |  |
| For Graduates |  | 154 |
| For Undergraduates | . | 155 |
| Without Stipend . |  | 171 |
| Scientific Collections |  | 162 |
| Sociology |  | 66 |
| Spanish |  | 141 |
| Special Students |  | 48 |
| Studio Lessons |  | 53 |
| Students' Aid Society |  | 160 |
| Summary of Students |  | 3 |
| Trustees, Board of | . . |  |
| Tuition. |  | 1.48 |
| Vacations |  |  |
| Wellesley Clubs |  | 174 |
| Zoological Station in | Naples | 155 |
| Zoology |  | I 4 |


[^0]:    ${ }^{1}$ The officers of instruction are arranged in three groups; the first group includes professors and associate professors, the second instructors, and the third other officers.

[^1]:    2 Absent on leave in Government Service.

[^2]:    ${ }^{3}$ Absent on leave.

[^3]:    * See page ${ }^{27}$.
    $\dagger$ See page 29.

[^4]:    *i.e., In addition to the 2 unit requirement.
    $\ddagger$ A part of this may be critical reading, a part rapid or outside reading.
    $\dagger$ From texts not previously memorized.

[^5]:    *See "Suggestions Concerning Preparation," on pages 36,37.
    $\dagger$ That is, the 2 unit requirement.

[^6]:    * Examinations in all subjects not starred in the list above may be taken at any time during the preparatory course. Subjects starred are classed as finals and the examinations must be taken within two years of a student's admission to collere, and at least three examinations must be taken during the last year. Candidates are advised to take English Composition and Algebra in the June before admission. Examinations in elementary French or elementary German may be taken as preliminaries by candidates who propose to take intermediate French or intermediate German in the final examinations. When a second unit in History is offered it is considered a final subject.
    $\dagger$ Candidates proposing to offer the one unit requirement in Greek may, if they prefer, apply to the College for permission to postpone this examination until September, since any combination of the examinations of the Board covers more ground than is required for the one unit preparation in Greek.

[^7]:    * With the present dormitory accommodations it is not ordinarily possible to reserve rooms on the campus for graduate students; if candidates secure places in college buildings they must pay the full charge for board and tuition.

[^8]:    *See General Notes.

[^9]:    $\ddagger$ See note under course 8 .

[^10]:    $\ddagger$ Courses $2-5$, and 4 are offered in alternate years.

[^11]:    $\ddagger$ First-year German may not be counted toward the B.A. degree if taken after the sophomore year, nor second-year German if taken after the junior year. German I and French I may not both be counted toward the B.A. degree.

[^12]:    $\dagger$ Special lessons in horseback riding are given at the present time in the riding hall.

    * A course of twelve lessons, including methods of instructing beginners, is offered at the present time at an adjacent swimming pool.

[^13]:    * Special lessons in horseback riding are given at the present time in the riding hall.

[^14]:    $\ddagger$ Courses 6 and 17 may not both be counted toward the B.A. degree.

[^15]:    ${ }^{3}$ Absent on leave.

[^16]:    * If a student fails to pass with credit in the second semester of English Composition I, she will be required to take an additional semester course in the sophomore year.
    $\dagger$ One hour of this requirement is met by a one-hour course in Hygiene in the freshman year; the second hour is met by four periods in practical work, two periods per week in the freshman year and two in the sophomore year.

[^17]:    1904-1905-Lehmann, Harriet (Mrs. Kitchin), Biology. B.A. Ripon College, 1902; M.A. Northwestern University, 1903; Graduate Student Radclife College, 1904-1905.
    1905-1go6-Andrus, Grace Mead (Mrs. de Laguna), Philosophy. B.A. Cornell University, 1903; Graduate Student Cornell University, 1903-1905. Declined the Fellowship, which was awarded to Gardiner, Elizabeth Manning (Mrs. Whitmore), Art. B.A. Radcliffe College, Igor; M.A. Wellesley College, 1905; Student American School of Classical Studies in Rome, 1905-1907; American School of Classical Studies in Athens, 1907-1908; Instructor in Art, Wellesley College, 1908-1910; Assistant to Director, Worcester Art Museum, 1909-1913.

[^18]:    *A few Fellowships are awarded on competitive examination.

[^19]:    * On the approval of the Department, the scholarship in Botany may be assigned, under special conditions, for study in other summer laboratories.

