## WELLESLEY COLLEGE BULLETIN catalogue number I 948-I949

Visitors to the College are welcome, and student guides are available. The administrative offices in Green Hall are open Monday through Friday from 9 A.m. to $4: 30$ p.m.

The Board of Admission office is open also on Saturday morning during the college year. Visitors to this office are advised to write in advance for an appointment.

## CATALOGUE NUMBER OFTHE WELLESLEY COLLEGE BULLETIN

## OCtOBER 25, I 948

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In the list below are the administrative officers to whom inquiries of various types should be sent. The post office address is Wellesley 81, Massachusetts.

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The President of Wellesley College

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The Recorder
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The Dean of Residence
Payment of College Bills
The Assistant Treasurer (Checks should be made payable to Wellesley College)
Scholarships
The Dean of Students
Academic Work of Students
The Class Dean
Social Regulations
The Dean of Residence
Requests for Transcripts of Records
The Recorder

## Alumnae and Undergraduate Employment*

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## Requests for Catalogues

The Information Bureau

## Alumnae Affairs

The Executive Secretary of the Alumnae Association
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## SEPTEMBER <br> S M T W T F S

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## AUGUST

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## AUGUST

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## CALENDAR

## Academic Year 1948-1949

First Semester
Registration of new students, 9 A.m. to 10.30 P.M.
Wednesday, September 29
Registration closes for all other students, 11.00 p.m. Friday, October 1
Classes begin . . . . . . Monday, October 4

Thanksgiving Day, holiday . . . . . November 25
Christmas recess $\left\{\begin{array}{l}\text { from } 3.15 \text { P.M. . . Thursday, December } 16\end{array}\right.$
Examinations $\left\{\begin{array}{llll}\text { from } & \text { P... } & . & . \\ \text { through } & . & . & . \\ \text {. Tuesday, February } 1 \\ \text {. Thursday, February } 10\end{array}\right.$

Second Semester
Classes begin. . . . . . . Monday, February 14
Spring recess $\left\{\begin{array}{l}\text { from } 12.15 \text { P.M. . . . . } \\ \text { to } 11.00 \text { P.M. }\end{array}\right.$. . . $\begin{array}{l}\text { Tuturday, April } 2\end{array}$
Memorial Day, holiday . . . . . . May 30
Examinations from . . . . . .Tuesday, May 31
Commencement . . . . . . Monday, June 13

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Associate Professor of English
Associate Professor of Zoölogy
Associate Professor of Education
Associate Professor of German
Associate Professor of Botany
Associate Professor of History Associate Professor of Mathematics

Associate Professor of Latin
Associate Professor of Zoölogy
Associate Professor of French
Associate Professor of English

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Assistant Professor of Hygiene and Physical Education

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[^3]Assistant Professor of Geology Assistant Professor of English Assistant Professor of English Assistant Professor of Education Assistant Professor of Chemistry Assistant Professor of Spanish Assistant Professor of Biblical History Assistant Professor of English Assistant Professor of Art

John Hewitt Mrtchell, ph.d., Jean MacDonald Arsenian, ph.d., Jan La Rue, b.s., m.f.a.,
Herbert Morrison Gale, s.t.b., ph.d.,
Richard Vernon Clemence, ph.d.,
Virginia Rogers Miller, m.a.,
Owen Scott Stratton, ma.a,
Elizabeth Holmes Frisch,
Sylvia Leah Berkman, ph.d., Alona Elizabeth Evans1, ph.d., Miriam Clough Ayer ${ }^{1}$, phid., Ferdinand Joseph Denbeaux, s.t.m., b.d., Assistant Professor of Biblical History Joseph Thistle Lambie, ph.d.,

Richard Burgin,
David Barnett, b.a.,
Olga Averino, Arnold Geissbuhler ${ }^{4}$,
Christine Madeleine Gibson5, m.A., Alfred Zighera,
Inez Elizabeth Hegarty, m.a.,
Mary-Eleanor Maule, m.a.,
Evelyn Kathryn Dillon, m.a., Instructor in Hygiene and Physical Education
Jean Guédenet, lic. ès let., dipl.e.s.,
Phyllida Mave Willis, ph.d.,
Virginia Mayo Fiske, ph.d.,
Mary Ellen Goodman, ph.d.,
Elizabeth Folger Tuller, ph.d.,
Susan Godoy, m.a.,
Mary Doyle Curran, ph.d.,
Lucinda Moles, m.a.,
Mary Sue Elrins, m.a.,
Barbara Emma Swan, b.a.,
Cathleen O'Conor Epstein, m.a.oxon., Melville Smith, b.a.,

> Instructor in French

## Instructor in Chemistry

Instructor in Zoölogy
Instructor in Sociology
Instructor in Chemistry
Instructor in Music
Instructor in English
Instructor in Spanish
Instructor in English
Instructor in Art
Instructor in English
Instructor in Organ

[^4]Verona Durick,
Instructor in Piano
Harry Koblalka,
Instructor in Violin, Conductor of the Orchestra, Director of Chamber Music

Frances Glenn Fort, m.a.,
Phyllis Pray Bober, ph.d.,
Mary Joan Donahue, ph.d.,
Teresa Grace Frisch, ph.d.,
Virginia Fleming Prettyman, ph.d.,
Emily Jane Graham, m.s.,
Virginia Loftus Senders, ph.d.,
Anna Asadourian, m.s.,
Elizabeth Bryant Tolman, m.a.,
Edward Vose Gulick, ph.d.,
Sally Marcia Loomis, m.a.,
Alice Birmingham Colburn, m.a.,
Margaret Torbert Duesenberry, m.a.,
Mary Elizabeth Van Dyke, b.s., Instructor in Hygiene and Physical Education John Franklin Hersh, m.a., Jean Knapp Marsh, m.a., John Rodney Williams, m.a., Mary Maxine Aitken, m.s.,
Oscar John Lewis Bradley, m.a., Helen Storm Corsa, ph.d., Marina Farmakis, ph.d., Gail Murl Hennis, m.a., Kwang-Won Kim, ph.d.,
Gertrude Huntington McPherson, m.a.,
Janet Lippe Norwood, m.a.,
Ilse Lisl Novak, ph.d.,
Helen Ann Padykula, m.a.,
Margaret Meda Pendleton, m.s., Elinor Osborne Seikel, b.a., Katherine Spencer, m.a., Mary Agnes Sullivan, m.s., Miriam Elaine Walther, ph.d., Mary Armstrong Watt, m.s., Instructor in Hygiene and Physical Education Judith Beach Welles, ph.d.,

Instructor in Physics
Instructor in Art
Instructor in English
Instructor in Art
Instructor in English
Instructor in Botany
Instructor in Psychology
Instructor in Chemistry
Instructor in Economics
Instructor in History
Instructor in English
Instructor in History
Instructor in Music

Instructor in Physics
Instructor in Hygiene and Physical Education Instructor in Political Science and Sociology

Instructor in Botany
Instructor in English
Instructor in English
Instructor in German
Instructor in Hygiene and Physical Education
Instructor in Biblical History
Instructor in Sociology
Instructor in Political Science
Instructor in Mathematics
Instructor in Zoölogy
Instructor in Geology
Instructor in Botany
Instructor in Sociology
Instructor in Chemistry
Instructor in Astronomy Instructor in Biblical History

Hilda Rosenbloom, m.a.,
Alice Graham McCabe, b.s., Dorothea Ward Harvey, b.a., Catherine Sears Hamilton, m.a., Margaret Breed Marsh, m.a., June Holcombe, b.s., Ruth Wood Gavian ${ }^{4}$, ph.d., Doris Kirk Holmes, m.a., Ruth Deutsch, m.a., Anna Lee Boswell Hopson ${ }^{4}$, m.a., Phyllis Smith Curtin, b.A.,

Instructor in Economics
Instructor in Hygiene and Physical Education Instructor in Biblical History Instructor in Philosophy

Instructor in English
Instructor in Hygiene and Physical Education Instructor in Education
Instructor in English
Instructor in German
Instructor in Sociology
Instructor in Voice

Gwenyth Morgan Rhome, m.a.,
Louis P. Galanis,
Margaret Ida Bernsau, b.a.,
Eleanor Madeline De Pauw, b.a.,
Margaret Louise Gilbert, b.a.,
Jean Hahn Hemmerly, b.a.,
Mu-lien Hsueh, b.s., Joan Barker Melvin, b.a., Clara Eleanor Tripp, b.a., Nancy Elizabeth Weber, b.a.,
Laura Dodson Winchester, b.a.,
Elizabeth Elley Newton, b.a.,
Helen Thompson, b.a.,
Gloria June Anderson, b.a.,
Frances Maud Barker, b.s.,
Virginia Mae Beers, b.s.,
Betty Irene Fass, b.a.,
Martha Mercer Immel, b.a.,
Elvira Rita Kalik, b.a.,
Mary Lucille Mathews, b.s., Raymonde Richard, lic. Ès let., Joan Sherwood, b.a., Joanna Elizabeth Frances Withrow, b.A.,

Assistant in Geology and Geography Assistant in Theater Workshop

Assistant in Physiology
Assistant in Psychology
Assistant in Chemistry
Assistant in Botany
Assistant in Botany
Assistant in Zoölogy
Assistant in Botany
Assistant in Astronomy
Assistant in Chemistry Assistant in Philosophy

Assistant in Physics
Assistant in Botany
Assistant in Botany
Assistant in Chemistry
Henry Warren Fellow in Chemistry
Assistant in Botany
Assistant in Psychology
Assistant in Psychology
Assistant in French
Assistant in Chemistry
Assistant in こaöloy

[^5]Gloria Elaine Zander, b.a.,
Assistant in Zoölogy
Constantine P. Cavarnos, ph.d., Assistant in Philosophy

## Lecturers

Margaret Elliott Houck, m.s., Curator of the Museum and Lecturer in Zoölogy Margaret Macdonald Winkler, m.a., Lecturer in Music and Director of the Choir Herbert Johannes Gezork, ph.d., d.d.,

Lecturer in Biblical History
Lecturer in French
Marie-Antoinette Quarré, b.a., c.e.s., Dipl.e.s., Arthur Eldon Winkler, b.s., M.F.A., Director of the Wellesley College Theatre Jacqueline Maumon, agrégée de l'université, Lecturer in French Myrtle Agnes Stuntzner, m.a.,

Lecturer in Education, and Director of the Page Memorial School
Carol Mary Roehm, b.a., Lecturer in Spanish, and Foreign Student Adviser Bartlett Hicks Stoodley, m.a., Mary Louise Carlson, ph.d., Lecturer in Sociology Auguste Anglès, agrégé de l'université, Lecturer in French Jeanette McPherrin, m.a., Lecturer in French, and Dean of Freshmen Marie-Hélène Pauly, docteur de l'université de paris, Lecturer in French Janet Brown Guernsey, m.a., F. Pauline Tompkins, ph.d., Seymour Orville Baker, ph.d., Franklin Gary, b.litt.oxon., Waclaw Jedrzejewicz, Zung-nyi Loh, m.a., Edward Olin Davenport Downes, Richard Walden Hale, ph.d., Marianne Lenore Simmel, m.a., Kuo-Sieu Wong Sun, m.a.,

Lecturer in Physics
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Lecturer in English
Lecturer in English
Lecturer in Russian
Lecturer in Mathematics
Lecturer in Music
Lecturer in Education
Lccturer in Psychology
Lecturer in History

## Special Lecturers in the Department of Hygiene and Physical Education

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Samuel R. Mearer, m.d.
Clifford L. Derick, m.d.
Britton F. Boughner, b.p.e.

## Anne L. Page Memorial School

| Myrtle Agnes Stuntzner, m.a., | Director |
| :--- | :--- |
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| Barbara Grey Hopins, b.s. in ed., | Teacher |
| Janet Anderson Moran, b.a., | Teacher |
| Barbara Mildram, b.a., | Teacher |
| Mary Segone Davis, b.s., | Teacher |
| Patricia Yocom Atkinson, b.a., | Teacher |

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Librarian
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Cataloguer
Readers' Librarian
Circulation Librarian
Cataloguer
Serials Cataloguer
Custodian of the Art Library.
Cataloguer
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Director of Publicity Placement Counselor in the Placement Office

Secretary to the Deans Assistant Recorder Assistant to the Director of Admission

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Placement Counselor in the Placement Office
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Associate Physician
Assistant Resident Physician
Consultant in Mental Hygiene

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Margaret Jean McCabe, Assistant in the Department of Physics
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Lugy E. Mulhall, Assistant in the Department of History
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Assistant in the Department of Art
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Assistant to the Registrar in the Department of Hygiene and Physical Education
Dorothy Sellers Wright,
Assistant in the Department of French

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Sophie Agnes Roche, m.a.,
Henrietta Taylor Burnett, b.a., Mildred Conrad Comegys, b.a., Franges May Beggs, b.a., Hilda Currier Wagner, Margaret Culbertson Myers,
Emma Leigh Rhett,
Helen Farr Robertson, b.a., Clara Wackenhuth Stobaeus, Ellen Burditt McKey, b.a., Glayds S. Morton, Hope Graves Williams,

Head of Noanett House
Head of Shafer Hall
Head of Olive Davis Hall
Head of Severance Hall
Head of Graduate Club House
Head of Clafin Hall
Head of Cazenove Hall
Head of Beebe Hall
Head of Munger Hall
Head of Washington House Head of Stone Hall
Head of Norumbega Hall
Head of Webb House

Louise Deiglmayr, m.a.,
Director of Horton, Hallowell, Shepard Houses, and Cedar Lodge

Katharine Mailler Wygant,
Mary Lord Harlow, b.a.,
Frances C. Powers, b.a.,
Eleanor Norton Sayles,
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Madelyn Worth Gamwell, b.a.,
Eudora Smith Sale,
Doris Wetherbee Scott,
Ellen Kallman Carter, Florence Barr Titus,

Margaret Bigelow Eldred, Joan Botham Twaddle, b.a.,

Head of Tower Court Head of Pomeroy Hall Head of Navy House Head of Crofton House Head of Little House Head of Eliot House Head of Dower House

Head of Homestead Head of Elms Head of Joslin House Head of Wiswall House Assistant to the Head of Tower Court

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Wilford Priest Hooper, b.s.,
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Comptroller Superintendent of Buildings and Grounds Purchasing Agent Purveyor
Dietitian
Household Supervisor
Assistant to the Treasurer

## Seventy-Fifth Anniversary Fund

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Chairman
Vida Buist, b.s.,
Executive Director
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Mrs. Paul L. Mansfield, Alumnae Secretary Wellesley College

## COMMITTEES OF THE ACADEMIC COUNCIL

The President is ex-officio a member of all standing committees of the Academic Council.
Administrative Board: Dean Wilson (Chairman), Misses Howard, Quarré, Sleeper, K. F. Wells; Mrs. Ruiz-de-Conde; Mr. Stratton; and (ex officiis) the Dean of Residence, the Class Deans, the Recorder, and a College Physician.

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Committee on Discipline: President Horton (Chairman), Miss Winslow; and (ex officiis) the Dean of Students, and the Dean of Residence.

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Committee on Faculty Publications: Dean Whiting (Chairman), Misses Boyce, Bruel, L. P. Smith, E. F. Wilson; Mrs. Wilson.

Committee on Graduate Instruction: Dean Whiting (Chairman), Misses Gilchrist, Goodfellow, Kingsley, E. F. Wilson; Messrs. Heyl (2nd sem.), Houghton (1st sem.), Zigler; and (ex officio) the Director of the Department of Hygiene and Physical Education.

Committee on Graduate Scholarships and Fellowships: Miss Williams (Chairman), Misses Bosano, Hayden, E. E. Jones; Mr. LaRue.

Committee on Nominations: Mrs. Killough (Chairman), Misses Abbot (2nd sem.), Coolidge (1st sem.), Creighton, Russell; and (ex officio) the Dean of Instruction.

Committee on Reappointments, Promotions and Dismissals: President Horton (Chairman), Misses Armstrong, Hawk, H. T. Jones; Mrs. Killough; Mr. Hinners; and (ex officio) the Dean of Instruction.

Committee on Scholarships: Dean Wilson (Chairman), Misses Creighton, Dowse, Michael; Mrs. Goodman; and (ex officiis) the Class Deans, the Dean of Residence, and the Recorder.

Committee on Student Records: Dean Wilson (Chairman), Misses Child, Law, Mowry; Mrs. Arsenian; Mr. Schwarz; and (ex officiis) the Dean of Instruction, the Class Deans, and the Recorder.

## Representatives on Joint Committees

Alumnae Council: Dr. Broyles; Misses Beall, Dennis, Goodfellow, Maule, Stuntzner; Messrs. Denbeaux, LaRue, Procter.

Board of Control of the Alexandra Garden and Hunnewell Arboretum: Miss Creighton (Chairman), Miss Howard; Mrs. Wyckoff.

Conference of Seven Colleges: Mr. Houghton, and (ex officio) the Dean of Instruction, by appointment of the President.

Committee on Lectures: Miss Berkman (Chairman), Misses McCarthy, Overacker; Mrs. Wyckoff; Mr. Curtis; and (ex officiis) the Dean of Residence, and two student representatives.

Library Committee: Miss Williams (Chairman), Misses Balderston, Ball; Mrs. Mallory; Mr. Guillen; and (ex officiis) the Librarian; Misses Boyce, H. D. French, Sleeper.

The Senate of the College Government Association: Misses McCarthy, Roehm; Mrs. Comegys; Mr. Gale; and (ex officio) the Dean of Residence (nonvoting).

Subcommittee on Student Activity Fee: Mrs. Bober.
Committee on Social Schedule: Misses Beall, E. K. Wells; and (ex officiis) Dean Lindsay; Misses Glasscock, Maynard.

The Superior Court of the College Government Association: Misses Prentiss, Roche; Mr. Denbeaux.

## HISTORICAL SKETCH

Wellesley College is one of that group of women's colleges established in the nineteenth century to offer to young women the educational opportunities "equivalent to those usually provided in colleges for young men." The motive of its founder, Henry Fowle Durant, was, however, something more than the enrichment of the experience of young women for their own sake. Addressing the first students in the fall of 1875 he said, "You mistake altogether the significance of the movement of which you are a part if you think this is simply a question of a college education for girls. I believe that God's hand is in it; . . . that He is calling to womanhood to come up higher, to prepare herself for great conflicts, for vast reforms in social life, for noblest usefulness."

To the end of preparing women for positions of responsibility, Mr. Durant insisted from the beginning on the maintenance of high academic standards, and of healthy community life in beautiful surroundings. He built an impressive College Hall on his own spacious estate twelve miles west of Boston, and spared no pains to make his gift contribute to the aesthetic development of students. He began to beautify the four hundred acre campus which has become one of Wellesley's distinctive assets. He encouraged the inclusion in the student body of representatives from all parts of the country and from foreign lands. He placed more emphasis on personal quality than on the accident of economic status, and he maintained a real democracy within the college family. He opened unusual professional opportunities to women on the faculty. He introduced laboratory work in science before it was widely recognized as academically necessary. He recognized the significance of the arts in education and encouraged "learning by doing." He assumed that religion was a normal part of the life of educated people and made provision for its study and expression in the program of the new community.

From the beginning the Board of Trustees has been composed of men and women whose interests have been far-reaching in New England and around the world. The first board included the President of Yale College, Chancellor of the University of the City of New York, Dean of the Episcopal Theological School at Cambridge, President of Boston University, a professor of the Rochester Theological Seminary and of Andover Theological Seminary, two pastors, and a former Governor of Massachusetts. The roster has been continuously noteworthy for the calibre of the persons who have contributed of their time, their professional experience, their money to strengthen the College. The present board includes educators as well as financiers, lawyers, an architect,
a doctor, businessmen-men and women of wide cultural interests selected for their expert contribution. It is a working board. Three of its regular members are nominated by vote of the Alumnae Association. An unusual feature of organization is the membership of a "faculty trustee" who is not a member of the faculty but is nominated by the Academic Council.

The history of the College falls into two fairly distinct periods, before and after the College Hall Fire. The College was chartered on March 17, 1870, but the planning of the program and the construction of College Hall required five years of effort and the opening did not occur until September, 1875. In a surprisingly short period, under the leadership of President Ada Howard (1875-1881) and Alice Freeman (1881-1887), the institution became established as a well-known college. It borrowed ideas and methods from various institutions, notably Mount Holyoke Seminary's program of domestic work for each student. It drew heavily on the resources of Harvard University but at once assumed responsibility for copying nothing blindly and for introducing a type of instruction which gave scope to the initiative of students.

During the presidencies of Helen Shafer (1887-1894) and Julia Irvine (1894-1899) the present curriculum of the College took shape and the experimental venture in higher education for women became established as a permanent part of the educational scene. President Caroline Hazard (1899-1910) brought to the academically mature College the graciousness of the artist. Music, art, gracious living were reemphasized as important factors in a community of educated people.

On the night of March 17, 1914, College Hall burned to the ground. The orderly evacuation of the building with no injury to any occupant won world-wide fame for the already well-known College. In the emergency created by this catastrophe President Ellen Fitz Pendleton (1911-1936) came to the position of leadership which made her indeed the builder which she will always be in the grateful memory of Wellesley women. Within twenty-five years the College grew into a beautifully equipped and well-endowed college. More significantly, Miss Pendleton guided the reorganization of the faculty into a democratically controlled policy-making body which worked consistently to maintain and develop a vital curriculum and community life. She assisted in the formation of a vigorous Alumnae Association and presided over the magnificent efforts of the trustees and alumnae to raise money to rebuild, expand, and endow the College. These efforts laid the foundation for the program of annual giving of the Alumnae Association whose Alumnae Fund has been the nucleus for the 75th Anniversary Fund campaign now in progress.

Through two wars Wellesley has participated in efforts to maintain the opportunity for intellectual and political and economic freedom
throughout the world. In the First World War the College sent four overseas units for relief work. In the Second World War it was represented by its graduates, faculty members, and union members in the military services and the Red Cross as well as in all varieties of community war service. Students modified their extracurricular programs to free time for community war service and were encouraged to use their vacations for this purpose. From October 1943 to September 1944 a branch of the Navy Supply Corps School located at Harvard University was housed in Cazenove and Pomeroy Halls.

Wellesley College started with three hundred students, most of them in a preparatory department which was part of the College until 1879. It has become a college of seventeen hundred undergraduates, with fifty or sixty graduate students. Its first graduating class of eighteen is succeeded by a present alumnae membership of sixteen thousand graduates, representing every state of the United States and fifty-one foreign countries. Commensurate with this growth, the external aspects of the College have changed almost completely. Starting with one building, it now has forty-eight. It began with Mr. Durant's private library of 8,000 volumes; its present library numbers over 254,000 volumes. Its one gymnasium room has been replaced by two large buildings to provide instructional and recreational facilities for the graduate department of Hygiene and Physical Education and for the enlarged undergraduate group.

In all the externals Wellesley College has changed, but through the years it has retained its distinctive character. It continues to maintain the intellectual disciplines underlying our civilization and to motivate Wellesley women to prepare themselves "for great conflicts, for vast reforms in social life, for noblest usefulness."

## ADMISSION

$\mathrm{S}^{\text {tudents interested in a course of study leading to the Bachelor of }}$ freshmen. A few students whose work in other colleges has been of high standard are accepted as juniors and seniors. Admission is competitive, and students are selected by the Board of Admission on the basis of evidence of scholarly attainment, character, personality, and general promise of ability to profit by the college experience. The College accepts students from all parts of this country and from foreign countries both for undergraduate and graduate study.

## Application for Admission

All communications concerning admission should be addressed to the Board of Admission, Wellesley College, Wellesley 81, Massachusetts.

Forms for application will be furnished on request. An application fee of ten dollars is required of all applicants and no registration is recorded until the fee is received. If the candidate cancels her registration or does not enter the College for any reason, the fee is not refunded, but it may be transferred to apply to a later year if the request for the transfer is received within a reasonable time after the beginning of the year for which the candidate is registered to enter college.

A report from the applicant's physician showing that she is organically sound and in good health, together with a certificate of vaccination and any required tests, must be filed with the Board of Admission well in advance of the date of entrance. The College reserves the right to reject any candidate who, in the opinion of the college physicians, is not fitted for work in the college community, and to dismiss at any time a student who does not coöperate fully with the college health officers.

## Admission to the Freshman Class

Application for admission to the freshman class may be made to the Board of Admission at any time up to March 1 of the year of entrance. A student is advised to make application not later than the beginning of her junior year in secondary school so that her school program may be approved before it is too late to make schedule changes. Since rooms are assigned according to the date of application, there is an added advantage in early registration. The date of application is not, however, a factor in determining admission.

In selecting the freshman class, the Board of Admission reviews school records, recommendations, information from the candidate concerning her interests and plans of study, and the results of the Scholastic Aptitude and Achievement Tests. The statement of col-
lege preference requested by the College Entrance Examination Board is not used as a factor in the selection of the freshman class. From the complete list of applicants a class of about four hundred is chosen. Candidates receive notification of the results of their applications early in June.

Students who are interested in admission should read carefully the recommendations concerning secondary school subjects to be offered for entrance and the statement concerning the College Board tests.

## Admission Units

A study of the requirements for the college degree on pages 36 to 39 will indicate to the applicant for admission the relationship between her secondary school subjects and the curriculum of Wellesley College. In general, the best preparation for college work is provided by courses in English, foreign languages, mathematics, history, and science, and students are advised to include all of these subjects in their secondary school programs.

The Board of Admission has outlined a plan of units * of study designed to meet the needs of most students. Other plans are, however, possible, and if a student will submit her entire program to the Board, she will be told whether it is satisfactory. The recommended plan is as follows:
English . . . . . . . . . . . . . . . . . . . 4 units
Foreign languages . . . . . . . . . . . . . . . . . . 5 units
It is recommended that these 5 units be divided as follows: Latin
or Greek, 3 units; a modern language (French, German, Spanish,
or Italian), 2 units. Other combinations may also be acceptable,
but no credit will be given for one unit of a foreign language. The
Board of Admission will be glad to answer inquiries concerning
language programs.
Mathematics . . . . . . . . . . . . . . . . . . . 3 units
These units should consist of algebra, 2 units, and plane geometry,

1. When only 2 units of mathematics are offered, one must be in
algebra, the other in geometry.


Science
1 unit
A laboratory science, biology, chemistry, or physics, is preferable. General science is accepted as an elective unit.

[^6]
## Elective subjects

Additional units in any of the subjects listed above may be included, or courses in history of art, music, Biblical history, and social studies.

Music may be offered for 1 , 2 , or 3 units as follows: 1 unit, fundamentals of music; 2 units, fundamentals of music and literature of music, or fundamentals and practical music; 3 units, fundamentals of music, literature of music, and practical music.

Students who have fewer units in some of the subjects than the plan calls for may have satisfactory preparatory programs if they have strong sequences of courses in one field. Programs which differ markedly from the recommended one should be approved by the Board of Admission in advance of application. In considering an unusual preparatory course, the Board takes into account the student's special interests and the school's opinion of her ability and equipment for college work.

The Board of Admission welcomes information concerning new curricular plans or courses which secondary schools are recommending to their students.

## School Records

Complete records of a student's work in secondary school are required. Blanks for records through the first semester of the senior year are sent to school principals in January. Supplementary reports are sent for at the close of the final semester.

The school record must be supplemented by statements from the school principal concerning the special abilities and interests of the student, power of sustained work, good health habits, integrity, sense of responsibility, initiative and self-reliance in work and in social relationships. The College wishes to be informed of circumstances which may have furthered or interfered with a student's work and of special honors and accomplishments.

## Tests for Admission

All candidates for entrance to the freshman class are required to take the Scholastic Aptitude Test and three achievement tests given by the College Entrance Examination Board. Application for these tests must be made directly to the College Board in Princeton, New Jersey, by the candidate herself. The candidate is likewise responsible for having the scores of her tests sent to the college. The dates for making application are given below.

The Scholastic Aptitude Test, which includes both verbal and mathematical sections, is designed to test a student's general aptitude for col-
lege work. Beginning with the class entering in 1949, all candidates will be required to take this test in the senior year at any one of the regular examination series. In general, a candidate who is studying mathematics during her senior year should take the program which contains the highest level mathematical section for which her trairing has prepared her.

| Years of study in mathematics | Appropriate Program |
| :--- | :--- |
| $2 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ | Program I |
| $21 / 2$ to 3 (or $31 / 2$ without Trigonometry) | Program II |
| $31 / 2$ to 4 , including Trigonometry........ | Program III |

A candidate who is not studying mathematics during the year in which she is examined should take Program I regardless of the extent of her training.

Achievement tests are given in English composition, social studies, four foreign languages, and three sciences. (See below for the complete list of tests.) Candidates for admission to Wellesley are required to take the English test and two others chosen from different fields. These tests should be taken in 1949 on April 9 so that the Wellesley Board of Admission will have the results when it meets in May to select the freshman class. The Scholastic Aptitude Test should also be taken at this time if it has not been taken earlier.

Attention is called to the fact that the achievement tests are designed to be taken in stride without extensive review or extra study and without any speeding up of the school program. The result of each test is judged in relation to the number of years a candidate has spent studying the subject. These tests should not be taken until the senior year.

Candidates from foreign countries are expected to take the College Entrance Examination Board tests if it is possible for them to make arrangements to do so.

## GENERAL INFORMATION CONCERNING TESTS

The College Entrance Examination Board will hold a complete series of examinations on each of the following dates during 1949:

Saturday, January 15, 1949 Saturday, June 4, 1949
Saturday, April 9, 1949
Wednesday, August 24, 1949
On each of the dates listed above, the schedule of tests will be as follows:

8:45 A.M.-Program 1:
Scholastic Aptitude Test (Verbal and Mathematical Sections), three hours. Composed of $2 / 3$ verbal aptitude material and $1 / 3$ mathematical aptitude material. Mathematical aptitude section based on arithmetic plus the rudiments of algebra and geometry.

8:45 A.M.-Program 2:
Scholastic Aptitude Test (Verbal Section) and Intermediate Mathematics Test, three hours. Composed of $1 / 2$ verbal aptitude material and $1 / 2$ mathematics achievement material. Verbal aptitude section same as for the Scholastic Aptitude Test, but shorter. Mathematics achievement section (Intermediate Mathematics Test) based on $21 / 2$ to 3 years of secondary school mathematics, including 1 year of plane geometry and $11 / 2$ or 2 years of algebra.

8:45 A.M.-Program 3:
Scholastic Aptitude Test (Verbal Section) and Comprehensive Mathematics Test, three hours. Composed of $1 / 3$ verbal aptitude material and $2 / 3$ mathematics achievement material. Verbal aptitude section same as for the Scholastic Aptitude Test, but shorter. Mathematics achievement section (Comprehensive Mathematics Test) based on $31 / 2$ to 4 years of secondary school mathematics, including 1 year of plane geometry, 2 years of algebra, and at least one semester of trigonometry, which is given more emphasis in the test than solid geometry.

1:45 P.M.-Achievement Tests-Not more than three of the following onehour tests may be taken:

| English Composition | Spanish Reading |
| :--- | :--- |
| Social Studies | Biology |
| French Reading | Chemistry |
| German Reading | Physics | Latin Reading

In addition, at the April, 1949 series only, achievement tests in Greek Reading and Italian Reading will be offered, but only to those candidates who register in advance specifically for these tests.

The schedule permits a candidate to take only one of the three-hour morning programs, and in the afternoon a maximum of three of the Achievement Tests.

Copies of the Bulletin of Information may be obtained without charge from the College Entrance Examination Board. The Bulletin contains rules regarding applications, fees and reports; rules for the conduct of the tests; advice to candidates; descriptions of the tests; sample questions; and lists of examination centers.

Candidates should make application by mail to the College Entrance Examination Board. Students who wish to take the examinations in any one of the following western states, territories, and pacific areas: Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, Wyoming, Territory of Alaska, Territory of Hawaii, Australia, and all Pacific islands except Formosa and Japan,
should address their inquiries and send their applications to The College Entrance Examination Board, P.O. Box 775, Berkeley 4, California. All others should write to 'The College Entrance Examination Board, P.O. Box 592, Princeton, New Jersey.

Application forms will be sent to any teacher or candidate upon request. When ordering the forms, candidates should state whether they wish forms for the January, April, June or August tests. Applications for any particular series will not be available until after the preceding series has been held. A copy of the Bulletin of Information is automatically sent to every candidate requesting an application blank.

Each application should be accompanied by the appropriate examination fee. A detailed schedule of fees follows:

$$
\begin{array}{cr}
\text { One three-hour morning program and one, two, or } & \\
\text { three Achievement Tests . . . . . . . . . . . . . . . . . } & \$ 10.00 \\
\text { One three-hour morning program only . . . . . . . . } & 5.00 \\
\text { One, two, or three Achievement Tests when taken } & \\
\text { alone . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } & 7.00
\end{array}
$$

All applications and fees should reach the office of the Board not later than the dates specified in the following schedule:

| January | April | June | August |
| :---: | :---: | :---: | :---: |
| 1919 | 1919 | 1919 | 1949 |
| Series | Series | Series | Series |

For examination centers located
In the United States, Canada, Mexico, or the West
Indies. . . . . . . . . . . . . .
Outside the United States, Canada, Mexico, or the
West Indies........... . November 27 February 19 April 16 June 6
Belated applications will be subject to a penalty fee of three dollars in addition to the regular fee.

Candidates are urged to send in their applications and fees as early as possible, preferably at least several weeks before the closing date, since early registration allows time to clear up possible irregularities which might otherwise delay the issue of reports. Under no circumstances will an application be accepted if it is received at the Board office later than one week prior to the date of the examination. No candidate will be permitted to register with the supervisor of an examination center at any time. Only properly registered candidates, holding tickets of admission to the centers at which they present themselves, will be admitted to the tests. Requests for transfer of examination center cannot be considered unless these reach the Board office one week prior to the date of the examination or earlier.

The Board will report the results of the tests to the institutions indicated on the candidates' applications. The colleges will, in turn, notify the candidates of the action taken upon their applications for admission. Candidates will not receive reports upon their tests from the Board.

## Summary of Procedure

The following schedule should be observed by all candidates for admission to the freshman class in 1949:

1. Application for admission should be made before March 1.
2. Information blanks sent by the College to applicants should be filled in and returned within two weeks after they are received.
3. Scholarship applications and requests for financial aid should be filed in the office of the Dean of Students before March 1. (A scholarship application blank must be obtained in advance. For information on basis of award, see page 160.)
4. Applications for the Scholastic Aptitude and achievement tests to be taken on Saturday, April 9, 1949, should be sent to the College Entrance Examination Board in March or earlier. The exact dates on which applications are due appear above.
5. Three photographs are due before April 1. These should be of standard passport size, glossy prints if possible. They should show head and shoulders only. The candidate's name and address must appear on the back of each picture.
6. A form for a health report will be sent to candidates. The health certificate must be complete and approved by the health department at the College before a student enters college.

## ADMISSION TO ADVANCED STANDING

If a student has maintained an excellent record in an accredited college and has special interests which she can follow at Wellesley College she may apply for admission to the sophomore or junior class. The number of students who can be admitted with advanced standing in any year, however, is very small, and only students with unusually good records are encouraged to apply.

A candidate must present evidence that she has had the subjects required for admission to the freshman class and that she has achieved a satisfactory score on the Scholastic Aptitude Test of the College Entrance Examination Board. She should submit a written statement of her reasons for wishing to transfer to Wellesley College and must secure from the college previously attended a transcript showing that she has attained a superior record in a program that is compatible with the requirements indicated on page 36. A candidate should be en-
titled to honorable dismissal from the college which she has attended and should be recommended by her instructors and Dean. Admission to advanced standing is competitive. The Board of Admission reserves the right to reject the application of any candidate who falls below the standard of any given year, set by the records of that year's candidates.

A candidate whose application for admission as a sophomore has been rejected will not be considered for admission as a freshman, nor may a rejected applicant for junior standing be considered for admission as a sophomore. Students who have carried an adequate college program for at least one year in an approved institution, whether a four-year college or a junior college, may not disregard that record and apply for admission as freshmen, but must apply under the conditions governing admission with advanced standing.

To obtain the B.A. degree, a student must be in residence at Wellesley College for at least two years, one of which must be the senior year. The work of these two years must include all the prescribed work (see page 36) not covered by the credentials submitted and such courses as are needed to meet the requirements for distribution and concentration (see page 37). Credit for courses completed at another college is tentatively granted early in the first year of residence, but determination of credit, which will depend upon the quality of the student's work at Wellesley College, is not made until the end of the year.

Application for admission should be made to the Director of Admission as early as possible and, in general, not later than April 1 of the year in which admission is sought. The selection of students for admission with advanced standing will be made in July of the year in which entrance is desired.

## READMISSION

No student who has withdrawn from college is automatically readmitted. Application for readmission should be made to the Secretary of the Committee on Student Records.

## ADMISSION OF FOREIGN STUDENTS

Students living in foreign countries who wish to enter Wellesley College are asked to make application before February first of the year in which they wish to enter college. An application should be accompanied by a letter written by the student giving her reasons for wishing to study in the United States and a detailed statement of her previous educational experience or a transcript of her record. Inquiries concerning admission and scholarships should be sent to the Foreign Student Adviser, Wellesley College.

## ADMISSION OF CANDIDATES FOR THE M.A. AND M.S. DEGREES

Candidates for the degree of Master of Arts, Master of Arts in Education, or Master of Science in Hygiene and Physical Education must hold the Bachelor's degree from a college of satisfactory standing, and must present adequate credentials signifying their ability to carry on the work for the degree.

Application for admission as a graduate student in any department should be made upon forms which will be furnished by the Dean of Instruction on request. It is desirable that the application be sent by March first of the year in which the student proposes to enter. It should be accompanied (1) by the official record of courses and grades, (2) by a copy of the catalogue of the institution attended, marked to indicate the courses taken, and (3) by letters of recommendation from two professors in the applicant's major department.

Graduate scholarships are described on page 166.
For requirements for the M.A. and M.S. degrees see page 42. A circular containing full information for graduate students will be sent on application to the Dean of Instruction.

## Admission of Candidates for the Teaching Certificate in Hygiene and Physical Education

A two years' course, especially designed for the training of teachers of hygiene and physical education, and leading to the teaching certificate of the Department of Hygiene and Physical Education, is offered to graduates of approved colleges who meet the requirements. Full information will be found on page 102.

Correspondence should be addressed to the Dean of Instruction.

## DEGREES

The following degrees are conferred by the Trustees upon recommendation of the Academic Council:

Bachelor of Arts.
Master of Arts.
Master of Arts in Education.
Master of Science in Hygiene and Physical Education.
Certificate in Hygiene and Physical Education.

## THE CURRICULUM

The curriculum has been planned to assure for the student the acquisition of certain skills which are of general use; to secure for her a broad foundation of liberal study by acquainting her with methods of work and ways of thinking in several representative fields of knowledge; and finally to develop in her a degree of competence in one field of knowledge through her study of her major subject and work related to the major. Of the hours required for the degree, a certain number is prescribed; a certain number must be elected to fulfill the requirements of work for distribution and work for concentration; the rest may be elected without restriction.

## REQUIREMENTS FOR THE B.A. DEGREE

Every candidate for the degree of Bachelor of Arts must complete before graduation 114 semester hours of academic work. The normal program consists of five courses carrying 15 semester hours of credit in each semester of the first three years of the college course, and four courses, 12 hours, in each semester of the senior year. In addition, every student must fulfill the requirements in health education, in physical education, and in speech.

## Prescribed Work

Required courses which carry academic credit:

$$
\begin{aligned}
& \text { English } 100 \text { (freshman year) . . . . . . . . . } 6 \text { hours* } \\
& \text { Biblical History } 104 \text { (sophomore year) . . . . . } 6 \text { hours }
\end{aligned}
$$

[^7]Requirements without academic credit:
Freshmen will be required to attend a series of lectures on the fundamental principles of health, given under the direction of the health officer of the College.

Freshmen and sophomores must complete successfully the prescribed work in physical education, two periods a week.

The Department of Speech will give speech tests to incoming freshmen. Those students whose speech habits are definitely below standard will be required to attend a speech clinic until their defects have been corrected.

## Work for Distribution

Twelve semester hours, that is, two year courses or their equivalent in semester courses, shall be elected as indicated from each of the three groups of subjects given below. At least 24 of the 36 hours required for distribution must be elected in the freshman and sophomore years. Twelve hours, divided between two groups, may be postponed until the junior or senior years.

Group I. Literature, Foreign Languages, Art, and Music.
Departments of English $\dagger$, French, German, Greek, Italian, Latin, Russian, Spanish, Art, Music.
Twelve hours shall be elected in Group I, six in one department and six in one or two other departments. Of the 12 hours in this group, at least six must be in literature (English or foreign). Literature courses shall be understood to include all courses in English literature, courses in Greek, Latin, and Russian literature in translation, and courses in a foreign language in which the main emphasis is on literature.

Group II. Social Science, History, and Philosophy.
Departments of Economics, Political Science, Sociology, History, Philosophy.
Twelve hours shall be elected in Group II as follows: six hours in economics or political science or sociology; and six hours in history or philosophy.

Group III. Science.
Departments of Astronomy, Botany, Chemistry, Geology and Geography, Mathematics, Physics, Psychology, Zoollogy.
Twelve hours shall be elected in Group III, six in one department, and the remaining six in one or two other departments.* Of the 12 hours in this group, at least six shall be elected in a laboratory

[^8]science. This shall be understood to mean astronomy, botany, chemistry, geology, physics, or zoölogy. The combination of Geology 101 and Geography 102, as well as the interdepartmental courses, An Introductory Course in Physical Science and An Introductory Course in Biology, may also be elected to fulfill the requirement of a laboratory science.

## Work for Concentration

Forty-two semester hours shall be elected in one field of concentration, of which a major of 24 to 30 hours shall be in one department, and 18 to 12 hours shall be in courses related or supplementary to the major but falling in one or more departments other than that in which the major is taken.*

All courses are classified in grades I, II, III; grade I indicating elementary courses and grade III the most advanced courses. Of the courses offered to fulfill the requirement of work for concentration, at least six hours of grade III must be taken in the senior year. Of the 42 hours required, at least 18 hours must be above grade I and at least 12 hours must be of grade III.

Courses offered as prescribed work, or as work for distribution, with the exception of French 101, German 101, Italian 101, Latin 107, Russian 100, and Spanish 101, may be counted as part of the 42 hours of work for concentration, unless otherwise specified by the department.

In the second semester of the sophomore year every student shall choose a major subject and shall prepare a provisional statement of the courses to be included in the work for concentration. While in the process of making her plans, she shall have a personal interview with the chairman, or with someone delegated by the chairman, of the department in which she plans to take her major. The student must obtain the signature of the department chairman, or her representative, indicating approval of her plan before she presents it to the Recorder. The final plan of the work for concentration shall be presented not later than the spring of the junior year.

## Foreign Language Requirement

Every candidate for the degree of Bachelor of Arts must show before graduation that she has some proficiency in the use of at least one foreign language, ancient or modern. This requirement may be met by passing one of the language tests of the College Entrance Examination Board at an appropriate score, or by passing one of the special language examinations given at Wellesley, or by the completion of a course in college at the second year level or higher. The following courses are of

[^9]the second year level: French 102, German 102, Greek 201, 202, 205, Italian 201, 202, Latin 103, Russian 200, Spanish 102.

## General Examination

Every candidate for the degree of Bachelor of Arts must pass a general examination in the major subject. A candidate for the degree with honors must pass special honors examinations in place of or in addition to the general examination.

The general examination is intended to test (1) the accuracy, extent, and depth of a student's knowledge of one subject (or field); (2) her intellectual initiative and independence in analyzing, organizing, and relating the material of that subject; (3) her assimilation of and ability to apply leading ideas met in that subject.

## Course Examinations

An examination period occurs at the end of each semester. Examinations for the removal of conditions and deficiencies and for advanced standing may be taken during any examination period and at other specified times.

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 Recorder for the requisite card of admission to the examination.

## Standard for Graduation

A certain quality grade is required for graduation and, for the purpose of determining this quality grade, numerical values called "points" are given to the grade letters as follows: for grade A, eight points for each semester hour of the course in which the grade is received, A-minus seven points, B-plus six points, and so on to C-minus one point; for grade D (passing), no points; for a grade below D, no points and not counted in hours toward a degree. In order to be recommended for the degree of Bachelor of Arts a student must in each semester attain a credit ratio of 1.75 . (The credit ratio is the ratio of the number of quality points earned to the semester hours carried.) Deficiency of points in any semester may be made good only in accordance with regulations adopted by the faculty. In general, students who are deficient in quality points at the end of the third year or who are otherwise not of diploma-grade standing will not be permitted to continue.

The College reserves the right to require the withdrawal of students whose academic standing is not satisfactory, and of those who for any other reason have shown themselves to be not in accord with the ideals and standards which the College seeks to maintain.

## Honors

The College offers to qualified juniors and seniors an opportunity to study for honors under the special direction of one or more instructors. Although there is considerable flexibility in the kinds of programs which may be arranged for candidates for honors, they will tend to conform to one or the other of two types.
(1) The student will elect a minimum of 42 hours in her special field. These 42 hours or more must be unified by the subject of her investigation. The student's program will include at least six hours of independent work, designated by the number 350 in her program, and may include 9 or 12 hours. The results of her investigation will usually be reported in the form of a thesis, and her work will be tested at the end of the senior year by a comprehensive examination, in part or wholly oral.
(2) The student will elect a regular program with a major normally of 24 to 30 hours and related work of 18 to 12 hours. Her program will include at least three hours of 350 work and may in some cases include as much as 12 hours. The 350 work will be planned to suit the needs of the student, but in all cases it will be designed to enrich her knowledge of and develop her competence in her major field. In the 350 course she may undertake work in a period or field not studied in her regular courses, or work designed to develop connection with a related field, or work to extend and deepen her knowledge of a subject already studied in one of her courses. Such work will be tested by discussions with instructors, or written essays, or examination questions, sometimes set in advance. At the end of the senior year the student will be given either the general examination or a special comprehensive written examination, and a short oral examination.

## General Instructions for Selegting Courses

The program in the freshman year is as follows:

| English 100 . . . . . . . . . . . . 6 hoursElectives, 4 six-hour courses . . . . . . . 24 hours |  |
| :---: | :---: |
|  |  |
| Hygiene 121 (no academic credit) |  |
| Total | 30 hours |

Freshmen normally carry five courses each semester and Hygiene 121, a course in physical education which has two appointments a week. In addition, they are required to attend a series of lectures on principles of health. Students whose speech habits are found to be defective will be required to take remedial work in speech.

## ELECTIVE COURSES OPEN TO FRESHMEN, ARRANGED BY GROUPS

Group I. Art 101, 105, 106; English 100, 101, 102, 104, 107*, 108; French 101, 102, 103, 104, 200, 201, 202, 208; German 101, 102, 104 , 208; Greek 101, 104, 201, 202, 205; Interdepartmental 107*; Italian 101, 201; Latin 102, 103, 105, 106, 201; Music 101, 201, 211, 212; Spanish 101, 102, 104; Speech 101, 102, 202.

Group II. Economics 101; History 101, 102, 103*; Philosophy 103, 104, 107*; Political Science 100; Sociology 102, 103, 104.

Group III. Astronomy 101; Botany 101, 103, 202, 203, 204, 206; Chemistry 101, 103, 106; Geology 101, 103; Interdepartmental 103, 106; Mathematics 105, 106, 107; Physics 101, 104, 105, 106, 201, 203, 205*; Psychology 101*, 103*, 207*, 209*; Zoölogy 101, 102*, 103.

## Preparation for Teaching

A student wishing special preparation for teaching may plan a fiveyear integrated course leading to a Bachelor of Arts at the end of the fourth year and a Master of Arts in Education at the end of the fifth. Such a student should consult her class dean about her plans as early in her course as possible.

The courses in a student's field of concentration and her free electives will be chosen to provide preparation in the subjects which she especially desires to teach. Her program will include also courses in education which will enable her to meet requirements for certification in many states. Practice teaching will be included in the work of the fifth year.

## Pre-Medical Course

A student who is planning to study medicine is advised to elect two pre-medical sciences in the freshman year. Attention is called to the fact that 24 hours are required as a basis for the general examination in any department, and that, in general, requirements for admission to medical schools of Class A can be met by 18 hours in chemistry and 12 hours in physics and zoollogy respectively. It is possible to fulfill the minimum requirement for medical school and to take the general examination in a field not required for entrance. Since medical school requirements are in the process of change, each student should study carefully the most recent catalogue of the particular school which she has chosen.

## Preparation for Hospital and Public Health Work

Students planning to prepare for work in hospital or public health laboratories should begin both chemistry and zoölogy in their freshman year in order to have the necessary foundation for advanced courses.

[^10]Directions for election, given under the Departments of Botany, Chemistry, Physics, and Zoölogy, should be consulted.

## Preparation for Civil Service

A student wishing to qualify for examinations offered by the United States Civil Service Commission or various state and local civil service agencies should consult with her major department and the placement office about appropriate combinations of courses. For many positions some training in statistics and public administration is desirable.

## REQUIREMENTS FOR THE M.A. AND M.S. DEGREES

Wellesley College offers graduate work leading to the degrees of Master of Arts, Master of Arts in Education, and Master of Science in Hygiene and Physical Education. A candidate is required to complete twenty-four hours of work. The program may include a thesis embodying the results of original research or reports based on independent work. In general, a candidate is required to work in one department. A candidate for the degree of Master of Arts or Master of Arts in Education is required to have a working knowledge of either French or German, to be tested by examination at entrance. Individual departments may require a second language. At least one year of graduate study is required of all candidates, but more time may be needed for the completion of the work. One year in residence is required of all candidates for the Master's degree.

Information regarding requirements for admission, theses, final examinations, etc., will be found in the Graduate Circular which will be sent on application to the Dean of Instruction.

## COURSES OF INSTRUCTION

## 1948-49

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 indicating elementary courses and grade III the most advanced courses. Grade I courses are numbered 101, etc.; grade II courses 201, etc.; grade III courses 301, etc.

The first semester is indicated by (1) following the course number, the second semester by (2). Courses not so designated are year courses.

## ART

Frofessor: Bernard Chapman Heyl, m.f.a. (Chairman)<br>Associate Professors: Agnes Anne Abbot ${ }^{2}$<br>John McAndrew, ${ }^{3}$ m.arch.<br>director of the art museum<br>Assistant Professors: Sydney Joseph Freedberg, ph.d.<br>Elizabeth Holmes Frisch<br>Instructors: Arnold Geissbuhler ${ }^{4}$<br>Barbara Emma Swan, b.a.<br>Teresa Grace Frisch, ph.d.<br>Phyllis Pray Bober, ph.d.

## History of Art

Many of the courses in art include some laboratory work in the one or more mediums with which the course is concerned. The department believes that laboratory training has great value in developing observation and understanding of artistic problems, and for this reason requires it of majoring students. It should be stated, however, that no particular natural aptitude is required and that the work is adjusted to the student's ability.
101. Introductory Course I: Ancient, Early Christian, and Medieval Art. A foundation for further study of the history of art, leading directly to course 205, but complete in itself. First semester: Greek art, its predecessors in Egypt, Mesopotamia and Ægean lands; the art of pagan Rome and Early Christian art. Second semester: Byzantine, Romanesque, and Gothic art. Laboratory work: drawing, sketching from the living model, and water color. Open to fresh-

[^11]men, sophomores, and juniors without prerequisite. Six hours. Miss Frisch, Mrs. Bober, Mrs. Frisch, Miss Swan.
205. Introductory Course II: Medieval, Baroque, and Modern Art. First semester: medieval art, with emphasis on Romanesque and Gothic architecture and sculpture. Second semester: Western art from the seventeenth century to the present day, with emphasis on painting. Laboratory work, including oil painting. Prerequisite, 101 or an equivalent. Not open to students who have completed or are taking 216. Six hours. Mr. Heyl, Mr. Freedberg, Miss Frisch, Mrs. Frisch, Miss Swan.

Note: After 1948-49 the content in the first semester of 205 will be changed to Italian Renaissance art.
207 (2). Art of the Far East. A study of the art of India, China, and Japan, with particular emphasis on China. No laboratory work. Open to juniors and seniors without prerequisite. Three hours. (Not given in 1948-49.)
209 (2). Art of the Roman Empire. The major monuments of architecture, sculpture, and painting in the Roman Empire from the formation of the Roman style through the Late Antique. Emphasis upon Roman contributions to the main tradition of Western art. No laboratory work. Open to sophmores who have completed 101 and to juniors and seniors without prerequisite. Three hours. Mrs. Bober. (Not given in 1948-49.)
212 (2). Spanish Art. Architecture, sculpture, and painting in Spain and Spanish America from the Middle Ages to the present. No laboratory work. Open to sophomores taking 205, and to juniors and seniors without prerequisite. Two periods a week with a third at the pleasure of the instructor. Three hours. Mr. McAndrew. (Not offered in 1948-49.)
215 (1). Renaissance Art. The art of the Italian Renaissance, with emphasis on painting. Brief introductory consideration of ancient and medieval art. No laboratory work. Open to sophomores who have taken History 101 or Italian 101 or 103 , and to juniors and seniors who have not completed Art 101. Three hours. Mr. Freedberg. 216 (2). Post-Renaissance and Modern Art. Western art from the beginning of the seventeenth century to the present. No laboratory work. Open to sophomores who have taken 215 and to juniors and seniors who have not completed or are not taking 205. Three hours. Mr. Heyl.
217 (2). French Painting. Painting in France from the introduction of Renaissance style about 1530 through the first half of the nineteenth century. No laboratory work. Open to sophomores taking

205 and to juniors and seniors without prerequisite. Two periods a week with a third at the pleasure of the instructor. Three hours. Mr. Freedberg.
302 (1). Studies in Italian Painting: the 14th and 15 th Centuries. A brief exposition of late medieval style in Italian painting, followed by studies of selected artists whose work significantly illustrates the character of Early Renaissance style. Particular attention to Florentine masters. Laboratory work included. Open to juniors and seniors who have completed 101. Three hours. Mr. Freedberg, Miss Swan.
303 (2). Studies in Italian Painting: the 16th Century. Studies of the major masters of the High Renaissance style, followed by the examination of some selected Mannerist painters, and of those developments within 16th century painting which lead in the direction of the Baroque. Considerable attention to Venetian masters. Laboratory work included. Open to juniors and seniors who have completed 101. Three hours. Mr. Freedberg, Mrs. Frisch.
305 (2). Modern Painting. A study of painting in Europe and America from about 1860 to the present. Open to juniors and seniors who have completed 205 and, by special permission, to students who have completed 216 or 217. Laboratory work included. Three hours. Mr. Heyl, Mrs. Frisch.
306 (1). Engraving and Etching from the Renaissance to the Present Time. The rise and development of engraving and etching including comparisons with the allied arts of woodcutting, mezzotinting, and lithographing, and a brief study of technical processes. Frequent visits to the Boston and Fogg museums. Open to juniors and seniors who have completed or are taking 205. Three hours. (Not offered in 1948-49.)
307 (2). $\dagger$ Problems in Medieval Style and Technique. Study of medieval manuscripts, mosaics, and wall paintings in Italy, with experiments in the medium concerned, for closer stylistic and technical analysis. Open to juniors and seniors who have completed 205. Three hours. Miss Abbot. (Not given in 1948-49.)
309 (1). Modern Architecture. The development of modern architecture in Europe and America in the last seventy years. Prerequisite, 205. Two periods a week with a third at the pleasure of the instructor. Three hours. Mr. McAndrew.
310. Medieval, Renaissance, and Modern Sculpture. First semester: the development of Romanesque and Gothic sculpture. Second
$\dagger$ Offered in alternate years.
semester: sculpture from the Renaissance to the present. Laboratory work, including modeling from life to develop a better understanding of the conventions of sculpture. Open to juniors and seniors who have completed 205. Six hours. Either semester may be counted as a semester course. Miss Frisch, Mrs. Frisch.
311 (1). Painting of Northern Europe. The period from the late fourteenth century to the mid-sixteenth century in France, Germany, and the Low Countries. Open to juniors and seniors who have completed 205 and, by permission, to especially qualified students. Three hours. Mr. McAndrew.

313 (1). Baroque Painting. European painting of the seventeenth century, with emphasis on the character of Baroque style. Open to juniors and seniors who have completed 205 or 216 . Two periods a week with a third at the pleasure of the instructor. No laboratory work. Three hours. Mr. Heyl. (Not given in 1948-49.)
314 (1). Byzantine Art. Mosaics and paintings of Byzantine, Bulgarian, Serbian, and Russian churches from the sixth to the fourteenth century. Problems in style and iconography with opportunities for independent work and comparative studies with Italian art. Open to juniors and seniors who have completed 205, 209, or 320. Three hours. (Not offered in 1948-49.)
320 (1). Greek Sculpture. The development of Greek sculpture from its origins through the Hellenistic age. Intensive study of focal monuments and artists in each successive period. Laboratory work, consisting largely of modeling and carving. Open to juniors and seniors who have completed 101 or are taking or have completed History 203 or a grade II course in Greek or Latin. Three hours. Mrs. Bober, Mrs. Frisch.
322 (1). Seminar in Architecture. Intensive study in medieval, Renaissance, or Baroque architecture, the exact content to be determined by the interests of the class. Prerequisite, 205. Two hours a week with a third at the pleasure of the instructor. Three hours. Mr. McAndrew. (Not offered in 1948-49.)
325 (1). Critical Studies in Art. Important critical problems studied through material selected from the entire range of art history. Open to seniors who have completed or are taking nine additional hours of grade III work in art. Three hours. Mr. Heyl and the Teaching Staff.
350. Research or Independent Study. Independent work on special problems under direction of one or more members of the department. Open, by permission, to juniors and seniors who have completed or are
taking a course of grade III. Three hours for a semester or six hours for a year.

## Studio Courses

Six hours of studio work may count toward the degree after six hours in the history of art have been completed; and twelve hours after twelve hours in the history of art have been completed.
105 (1). Drawing and Sculpture. Study of drawing and sculpture, with strong emphasis on design. Abstract problems in line and in relief, as well as portraiture and figure sketching. Open to sophomores, juniors, and seniors and, by permission, to freshmen who have studied art before entering college. Six periods of class instruction and three of studio practice, counting three hours. This course may count toward the degree after six hours in the history of art have been completed. Mr. Geissbuhler.
106 (2). Introductory Painting. Strong emphasis on design. Spatial and tonal problems partly abstract, partly representational, worked out in a variety of mediums. Open to sophomores, juniors, and seniors and, by permission, to freshmen who have studied art before entering college. Six periods of class instruction and three of studio practice, counting three hours. This course may count toward the degree after six hours in the history of art have been completed. Mrs. Frisch, Miss Swan.
206 (1). Watercolor and Oil Painting. Landscape, still life, and portraiture. Open to sophomores, juniors, and seniors who have completed 101, 105, or 106 . Six periods of class instruction and three of studio practice, counting three hours. This course may count toward the degree after six hours in the history of art have been completed. Mrs. Frisch.
208 (2). Composition. Principles of design related to various types of composition, in conjunction with direct study from the human model, still life, or landscape. Problems may take the form of book illustration, painting and mural decoration, etc. Open to sophomores, juniors, and seniors who have completed 105,106 , or 206 . Six periods of class instruction and three of studio practice, counting three hours. This course may count toward the degree after six hours in the history of art have been completed. Miss Abbot.

## Directions for Election

Courses 101 and 205, followed by grade III courses, form the usual sequence for a major in art. A reading knowledge of French or German is recommended. Students who are planning to do graduate work should have both French and German.

Students eligible for honors may elect an interdepartmental honors program in Classical Archeology or Medieval Studies (see page 146).

## ASTRONOMT

> Professor: John Charles Duncan, ${ }^{2}$ ph.d. (Chairman)
> Instructor: Miriam Elaine Walther, ph.d. Custodian: Katharine Bullard Duncan. Assistant: Nangy Elizabeth Weber, b.a.
101. General Astronomy. 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. Open to all undergraduates. Three lecture appointments, one twohour laboratory appointment, and an average of about an hour of evening observations. Six hours. At times, an evening meeting of the class is substituted for a daytime appointment. Mr. Duncan, Miss Walther, Miss Weber.
200 (2). Descriptive Astronomy. The appearance of the sky and its changes; interpretation of observed appearances through the work of astronomers; structure and behavior of the universe. Open to juniors and seniors without prerequisite. Courses 101 and 200 may not both be taken by the same student. Three periods of lectures and discussions, one of which will be on an evening. On this evening, when the weather is favorable, the stars will be studied with the telescope and otherwise. Three hours. Mr. Duncan.
206 (2). The History of Astronomy. Development of the science from ancient times to the present, with special emphasis on the period since Copernicus. Prerequisite, 101. Three hours. (Not offered in 1948-49.)
207 (1). Practical Astronomy. Practice in the use of astronomical instruments and methods: the equatorial telescope; elements of celestial navigation. Prerequisite, 101 or 200 . Three hours. This course involves both daytime and evening work at the Observatory. Miss Walther, Miss Weber.
208 (2). Practical Astronomy. Determination of time, longitude, and latitude; astronomical principles of navigation. Prerequisite, 101 or 200, and a knowledge of trigonometry. Three hours. This course involves both daytime and evening work at the Observatory. Mr. Duncan.

[^12]300 (1). Stellar Astronomy. Studies of the number, brightness, distribution, and motions of the stars; double and variable stars; structure of the Galaxy; extra-galactic systems. Open to juniors and seniors who have completed 101 and who have a knowledge of trigonometry. Three hours. Miss Walther.

301 (2). Astrophysics. Astronomical spectroscopy; the laws of radiation; determination of radial velocities; physical properties and constitution of the stars. Prerequisites, 101 and Physics 301. Three hours. When combined with Physics 301 it may be counted toward a major in astronomy or physics. Miss Walther.
302. Determination of Orbits. Equations of motion of two gravitating bodies. Determination, from three observations, of the elliptic and parabolic orbits of bodies in the Solar System. Orbits of binary stars. Prerequisite, 101 and a knowledge of calculus. This course may be counted toward a major in either astronomy or mathematics. Six hours. (Not given in 1948-49.)
303. Celestial Mechanics. The attraction of bodies of various forms under Newton's law of gravitation. The problems of two and of three bodies. Perturbations. Prerequisite, differential and integral calculus. Six hours. Mr. Duncan. (Not offered in 1948-49.)
304. Astronomical Seminar. Open to graduate students. Ordinarily, six hours. Mr. Duncan. (Not offered in 1948-49.)
350. Research or Independent Study. Work under one or more members of the department on subjects to be determined by the interests and capabilities of the individual student. This course may be taken repeatedly. Open, by permission, to graduates and other advanced students. Two or three hours for a semester, or two to six for a year. The amount of work contemplated must be indicated at the time of handing in electives.

## Directions for Election

All students who desire a general knowledge of astronomy and of the universe around them as a part of their general education should elect 101 or 200. Those for whom this course is insufficient but who would avoid technicalities may well continue with 207 or 206.

A major in astronomy should ordinarily include 101, 207, 208, 300, 301, and 302. This combination of courses demands as prerequisites twelve hours in mathematics and nine hours in physics.

Astronomy 301 may be counted toward a major in physics, and Astronomy 302 toward a major in mathematics.

## biblical HiStorr, LITERATURE, AND INTERPRETATION

Professors: Loulse Pettibone Smith, ph.d. (Chairman)<br>Muriel Streibert Curtis, b.A., b.d.<br>Assistant Professors: Ernest René Lacheman, b.d., ph.d.<br>Herbert Morrison Gale, s.t.b., ph.d.<br>Mary Lucetta Mowry, b.d., phid.<br>Ferdinand Joseph Denbeaux, s.t.m., b.d.<br>Instructors: Judith Beach Welles, b.d., ph.d.<br>Kwang-Won Kim, b.d., ph.d.<br>Dorothea Ward Harvey, b.a.<br>Lecturer: Herbert Johannes Gezork, ph.d., d.d.

The requirement in Biblical history is met by course 104. Students with a knowledge of Greek may substitute course 210 for the second semester of 104. 104. Studies in the Old and New Testaments. Basic material: selected parts of the Old Testament; the gospels of Matthew, Mark, and Luke. Aim: to acquire a knowledge of these materials, of their historical-critical analysis, of the rise of the Hebrew-Christian tradition and the relevance of this tradition to the individual and society. Required of sophomores except as indicated above. .Six hours. Miss Smith, Mrs. Curtis, Mr. Gale, Mr. Lacheman, Miss Mowry, Mr. Denbeaux, Miss Welles, Mr. Kim, Miss Harvey.
203. Elementary Hebrew. 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. Open to juniors and seniors. Six hours. Miss Smith. (Not given in 1948-49.)

204 (1), (2). The Beginnings of Christianity. This course is designed to enable those students who have already studied the synoptic gospels in 104 to continue their study of the New Testament and to see Christianity in contact with the life of the Græco-Roman world. The rise and earliest development of the Christian religion. Emphasis upon the thought of Paul and of the Fourth Gospel. Prerequisite, 104 or 210. Three hours. Mr. Gale.
207. History of Religions. The history of religions from the earliest historical period through such leading religions as Hinduism, Buddhism, Confucianism, Shintoism, and Islam, including a study of comparative developments and values. Open to juniors and seniors who have completed the required work in Biblical history. Six hours. Mr. Lacheman.

208 (1), (2). Survey of the Application of Christian Ethics to Social Problems. A study of the attitudes of the Christian church
toward social and political problems in certain periods of her history, past and present. An investigation of the opportunity of modern Christianity as an agent of social reconciliation and reconstruction in the light of the teachings of Jesus and the developments of history. Open to students who have completed the required work in Biblical history and who have taken or are taking Economics 101, History 101 or 102 or any other course in medieval or modern history, or Sociology 102. Three hours. Mr. Gezork.

210 (2). The First Three Gospels in Greek. This course covers the same material as the second semester of 104 , and is planned for those students who, in fulfilling the Biblical history requirement, prefer to study the gospels in Greek rather than in English translation. Open to students who have completed the first semester of 104 and have completed or are taking a grade II Greek course. Students choosing this way of fulfilling the requirement in Biblical history may postpone the work until their junior year without special permission. Three hours. Miss Mowry.

211 (2). The Old and New Testaments in the Light of Argheology. The results of archæology in their bearing upon Biblical history and religion. Emphasis upon the value of archæology in illustrating, testing, and making vivid the Biblical records. Chief emphasis on the discoveries in Palestine as portraying the life and customs of the people in that land. The inscriptions of Palestine and surrounding countries which have significance for Biblical history are studied in translation. Open to juniors and seniors who have completed the required work in Biblical history. Three hours. Mr. Lacheman. (Not given in 1948-49.)
212 (1). Religious Education. A course meant for those who in their own homes or in church schools may be responsible for the guidance of children in understanding of the Christian faith, in prayer, in the use of the Bible, in the worship, fellowship, and work of the church, in development of character and a sense of social responsibility. Suitable aims and methods in work with children of different ages. Examination of best books available. Open to students who have completed the required work in Biblical history. Three hours. Mrs. Curtis.

213 (1). Development in Judaism Since 70 A.D. The history of Judaism in its relation to the Graeco-Roman world, Christendom and Islam. Reading (in translation) of significant portions of Talmudic, Midrashic, poetic, and speculative literatures. Open to students who have completed the required work in Biblical history. Three hours. Mr. Lacheman. (Not offered in 1948-49.)

214 (2). Studies in Christian Biography. Studies of certain men and women important in the development of the Christian religion and illustrative of the varieties of Christian experience-such as St. Augustine, St. Francis of Assisi, Luther, Loyola, George Fox, John Wesley, Cardinal Newman, Albert Schweitzer, General William Booth, Kagawa. Light is thrown on the origins and characteristics of presentday denominations. Prerequisite, 104. Three hours. Mrs. Curtis.
301. Seminar in History of Religions. Readings and discussions in the history of religions other than Judaism and Christianity. Each student will be expected to investigate some particular problem. First semester: India and Islam; second semester: China and Japan. Open to seniors by permission. Six hours. Mr. Lacheman.
302. Interpretations of Christianity. The varying conceptions of the essentials of Christianity as formulated in some of the most important periods of the history of the church; the relation of these conceptions to the religion of the New Testament and to the religious thought of the present day. Open, by permission, to seniors who have completed 204. Six hours. Miss Smith.
303. Second Year Hebrew. Open to students who have completed 203. Six hours. Mr. Lacheman. (Not given in 1948-49.)

305 (2). Trends in Contemporary Christianity. Studies of contemporary conceptions of the Christian religion, as interpreted in the light of modern life and thought. Liberal and Neo-Reformation Protestantism, Anglo-Catholicism and Neo-Thomism, Mysticism, Scientific and Classical Humanism, and Social Christianity. Prerequisite or corequisite, 204. Three hours. Mr. Denbeaux.
306 (2). Further Studies in the Old Testament. More detailed work on selected portions of the Old Testament. Both content and emphasis (historical, literary, religious) are determined by the interests of the students. Open to juniors and seniors who have taken or are taking a grade II course in the department. Required of those who major in the department. Three hours. Miss Smith.
307 (1). Advanced Studies in the New Testament. Intensive study of the content of the gospels and its impact on the early church. Open to juniors and seniors who have completed 204. Three hours. Miss Mowry.
350. Research or Independent Study. On consultation with the department, qualified seniors or graduate students may arrange for directed study in advanced Hebrew, Biblical study, or history of Christian thought. Two to six hours. The amount of work contemplated must be indicated at the time at which electives are due.

## Directions for Election

After finishing the required course a student desiring to major usually continues her work by 204 and 305 in her junior year. In either junior or senior year she may take any other of the grade II courses, 306 (required for majors), 307; in the senior year 301, 302, or 350 . Students who choose 203 as juniors may continue Hebrew in 303 in the senior year. Philosophy 211 may count toward a major in Biblical history.

A year of Greek or Hebrew is strongly recommended for students majoring in Biblical history.

BOTANY<br>Professor: Howard Edward Pulling, ph.d.<br>Associate Professors: Grace Elizabeth Howard, ph.d.<br>curator of herbarium.<br>Harriet Baldwin Creighton, ph.d. (Chairman)<br>Delaphine Grace Rosa Wyckoff, ph.d.<br>Ruth Hutchinson Lindsay, ph.d.<br>Instructors: Emily Jane Graham, m.s.<br>Mary Maxine Aitken, m.s.<br>Elinor Osborne Seikel, b.a.<br>Assistants: Mu-lien Hsuef, b.s.<br>Clara Eleanor Tripp, b.a.<br>Jean Hahn Hemmerly, b.a.<br>Gloria June Anderson, b.a.<br>Frances Maud Barker, b.s.<br>Martha Mercer Immel, b.a.<br>Secretary and Custodian: Ellen Weiser Daggy

101. General Botany. An introduction to plant science designed to present the principles upon which all life depends, to show the importance of plants in our economic and social life, to discuss the origins and characteristics of the great groups of plants, and to afford students the opportunity to learn the principles and the practice of growing plants in the greenhouse and garden. Among the current topics considered are: plant nutrition and its relation to human nutrition, importance of bacteria and other micro-organisms, plant breeding and heredity, soil fertility, conservation, forestry, and utilization of plant products in industry. Open to all undergraduates. Six periods a week, in general two of lecture and discussion and four in laboratory, greenhouse, or field. Six hours. Miss Creighton, Miss Graham, Miss Howard, Mrs. Seikel. 103. An Introductory Course in Biology. For description and prerequisites, see Interdepartmental Courses 103.
202 (1), (2). Plant Biology. The relations of living things with their surroundings, using plants as examples. The opportunities and
handicaps presented to the individual by its inherited characteristics, its environment, and the consequences of the laws under which living things operate. Applications to gardening, horticulture, farming, and forestry. Open to students who have completed 101 or its equivalent and to juniors and seniors without prerequisite. Six periods a week, three of lecture and three of laboratory. Three hours. Mr. Pulling.
203 (1). Field Botany. This course is designed to acquaint the student with the more common wild and cultivated flowers, trees, shrubs, and ferns, and with the societies that they form. Open to students who have completed 101 or its equivalent and to juniors and seniors without prerequisite. Six periods a week, two of lecture and four in field, laboratory, or greenhouse. Three hours. Miss Howard.
204 (1), (2). Cultivated Plants. Garden plants-their identification and ornamental value, their culture requirements, methods of propagation, and the means of protecting them against pests and diseases. Open to students who have completed 101 or its equivalent and to juniors and seniors without prerequisite. Six periods a week, in general two of lecture and four of discussion, laboratory, greenhouse, or field. Three hours. Miss Graham.
205 (2). Survey of Bacteriology. A short, historical presentation of the discoveries of the microscopic world; and a study of the activities of bacteria, yeasts, and molds in relation to our physical and economic welfare. Emphasis on the problems of soil fertility, food preservation, industrial fermentations, public health and sanitation, diseases of plants, animals, and man, and their control. Prerequisite, six hours in group III. Five periods a week, three of lecture and two of demonstration laboratory including one field trip. Three hours. Mrs. Wyckoff, Miss Aitken.
206 (1), (2). The Structure of Plants. A study of the tissues and cells of root, stem, leaf, and flower: their development under usual environmental conditions. Open to students who have completed 101 or its equivalent, and to juniors and seniors without prerequisite. Six periods a week, two of lecture and four of laboratory. Three hours. (Not offered in 1948-49.)
304 (2). Plant Diseases. The structure, pathological processes, and effects, of representative fungi on economic and ornamental plants. A study of the methods used in cultivating fungi. Modern methods of combating plant diseases. Open to juniors and seniors who have completed six hours of grade II in botany. Students who have had 101 or its equivalent may take this course and the prerequisite of grade II at the same time. Six periods a week, two of lecture and four in laboratory, field, or greenhouse. Three hours. Miss Howard.

305 (2). Plant Ecology. The relations that plants have with the soil, the climate, and each other, thereby forming plant societies that develop into the climax for the locality; the effects of the disturbances produced by man; and the regeneration of a society when his influence is removed or continued unchanged. Open to juniors and seniors who have completed a year of grade II in botany. Six periods a week, two of lecture and four in laboratory, field, or greenhouse. Three hours. (Not offered in 1948-49.)
306. Physiology. First semester: those fundamental processes that must be understood if knowledge of plant behavior is to be applied. Second semester: lectures on the chief processes by which plants are affected by their environment and those by which they respond. Experiments are in the fields that each student selects, such as cell physiology, gardening, horticulture, non-infectious plant disease, plant nutrition, soil-testing. Open to juniors and seniors who have completed six hours of grade II in botany and who have completed or are taking a year of either chemistry or physics. Students who have completed 101 or its equivalent may take this course and the prerequisite of grade II at the same time. Six periods a week, two of lecture and four of discussion and laboratory. Six hours. Mr. Pulling.
307. Cytology and Genetics. A study of the structure and activities of living cells, with special emphasis upon chromosome behavior and its relation to heredity. Laboratory work includes the technique of making slides, and individual problems in the inheritance of specific characters in Petunia. Discussion includes the application of cytogenetic principles to taxonomy and evolution, as well as to practical problems of plant breeding and selection. Open to seniors, and, by permission, to juniors, who have completed six hours of grade II in botany. Six periods a week, in general two of lecture and discussion and four of laboratory or greenhouse. Six hours. Miss Creighton.
308. General Bacteriology. A study of the structure and physiological processes of bacteria and other micro-organisms, and their responses to the environment. Consideration of their relations to soil fertility, industrial processes, water and milk supplies, food spoilage and preservation, sewage disposal, disease, immunity, and public health. Practice in laboratory methods to develop techniques that are essential for bacteriological work. Open to students who have completed one year of chemistry and either one year of botany or zoölogy, or a second year of chemistry. Six periods a week, in general two of lecture and four of laboratory including two field trips. Six hours. Mrs. Wyckoff, Miss Aitken.
309 (1). Landscape Gardening. A study of ornamental plants with special emphasis upon their use in landscape gardening. The fun-
damental principles of design and the historical development of garden design are studied to furnish the background for an intelligent appreciation of present-day landscape architecture as a fine art. Laboratory practice in developing landscape plans for small estates. Open to seniors who have completed six hours of grade II in botany, including 203 or 204. By permission, 204 may be taken in conjunction with 309 . Six periods a week, in general two of lecture and four of discussion and practice in drafting-room and field. Three hours. Mrs. Seikel.
310 (2). Landscape Design. Continuation of the study of the principles of design with landscape materials introduced in 309; a summary of the fundamentals of landscape construction; problems of city planning from the standpoint of æsthetic and recreational requirements. Trips for observation and study. Prerequisite, 309. Six periods a week, in general two of lecture and four of discussion and laboratory. Three hours. Mrs. Seikel.
311 (1). Non-Vascular Plants. Algæ, fungi, lichens, liverworts, and mosses: their structure, identification, and relationships. Field trips to seashore, a peat bog, and to near-by ponds, streams, and woodlands. Individual projects for which the student chooses the plant or plants to be used for laboratory and greenhouse experiments in growth and development. Open to juniors and seniors who have completed 101 or its equivalent. Six periods a week, two of lecture and four in laboratory, greenhouse, or field. Three hours. Miss Howard. (Not given in 1948-49.)
312 (1). Advanced Bacteriology. A systematic study of the more important groups of bacteria. Consideration of the relations of certain bacteria to their biological environments including their relationship to disease and the resistance of the host to bacterial invasion. Discussion of the applications of the knowledge of bacteriological principles to the problems of public health. Laboratory practice in the preparation and sterilization of materials that are used for isolating, cultivating, and identifying bacteria. Practice in the performance of serological techniques that are frequently used for bacterial identification. Prerequisite, 308 or its equivalent. Six periods a week, in general two of lecture and four of laboratory, including one or two field trips. Three hours. Mrs. Wyckoff, Miss Aitken.
320. Theoretical Physiology. The content of this course depends upon the needs and interests of the students who elect it. The reading and discussions are concerned with the abstract and logical aspects of the subject; the methods by which research problems should be analyzed, the significance of explicit and implicit assumptions, the treatment of data, physiology as a field for deductive reasoning, etc. Open to graduate students only. Six hours. Mr. Pulling.
322. Botanical Seminars. The work in the seminars depends on the botanical background of each student and on her plan for further study. A field of botanical science is scrutinized from the standpoints of modern achievement, method of investigation, and the theories and reasoning involved in reaching the present-day conclusions: (a) anatomy; (b) bacteriology; (c) comparative morphology; (d) cytology; (e) ecology; $(f)$ genetics; ( $g$ ) geographical distribution; ( $h$ ) history of botany; ( $i$ ) pathology; ( $j$ ) physiology; ( $k$ ) plant materials; ( $l$ ) taxonomy. Open to graduate students only. Three to six hours for a semester or six to twelve for a year. The Teaching Staff.
350. Research or Independent Study. The study will be under the direction of an instructor in the field chosen. The nature of the work will depend upon whether the student is a senior or a graduate student, and upon the field of interest. Open to graduate students and, by permission, to juniors and seniors in any field in which the student has had or is taking a grade III course in the department. Two to six hours for a year, or three for a semester. Students desiring to register must secure the permission of the chairman of the department.

## Directions for Election

The courses in botany are intended to present to the general student a basis for understanding and interpreting the phenomena of the world of living things and, at the same time, to furnish a foundation for students who plan to follow professionally some phase of biological work.

The major in botany is based on 101 or on two of the following: 202, 203, 204, 206. The grade III courses, while still emphasizing fundamental biological principles, give more specific training in different phases of botanical science. A variety of sequences of courses is available. Any member of the department will be glad to talk with students concerning the department courses and supplementing courses that will most nearly fill their needs. Those students who are planning to continue their botanical work after graduation along lines of teaching, research, agricultural and experiment station work, in various kinds of technical laboratory work, landscape gardening, horticulture, or museum work, etc., will find it advisable to discuss their plans with the department as early as possible in their course.

For students interested in bacteriology, public health work, or medical laboratory work, 308 and 312 present the basic viewpoints and techniques of bacteriology upon which may be added the more technical training obtainable in graduate or professional schools. Other courses, such as 304, 306, and 307, in this department, as well as courses in chemistry and zoollogy, supplement these offerings.

Courses 308 and 312 may form a part of a botany major that includes a year of grade III other than, or in addition to, 309-310 or 350 .

The department offerings in landscape design, 309-310, may form a part of a botany major that includes a year of grade III other than, or in addition to, 308 or 312.

Botany majors may, under certain conditions, obtain permission from the chemistry department to take Chemistry 301 after having had Chemistry 101.

Of the foreign languages, the department considers French, German, Latin to be of special value.

## CHEMISTRY

| Research Professor: Professors: | Helen Somersby French, ph.d. <br> Mary Amerman Griggs, ph.d. <br> Helen Thayer Jones, ph.d. (Chairman) |
| :---: | :---: |
| Associate Professor: | Philippa Garth Gilchrist, ph.d. |
| Assistant Professor: | Margaret Kingman Seikel, ${ }^{1}$ ph.d. |
| Instructors: | Phyllida Mave Willis, ph.d. |
|  | Elizabeth Folger Tuller, ph.d. |
|  | Anna Asadourian, m.s. |
|  | Mary Agnes Sullivan, m.s. |
| Assistants: | Margaret Loulse Gilbert, b.a. |
|  | Laura Dodson Winghester, b.a. |
|  | Virginia Mae Beers, b.s. |
|  | Betty Irene Fass, b.a. |
|  | Joan Sherwood, b.a. |
| dian: | Emily May Hopkins, m. |

101. Elementary Chemistry. The fundamental laws and theories of chemistry, in connection with the study of the non-metals and a brief survey of the metals. Open to students who do not present chemistry for admission. Three periods of lecture and discussion and one threeperiod laboratory appointment. Six hours. Miss fones, Miss Gilbert, Miss Sherwood.
102. General Chemistry and Qualitative Analysis. In the first semester the preparatory work in chemistry is used as a basis for acquiring a wider knowledge of general chemistry and for the study of chemical theories. In the second semester a study is made of the principles which govern the reactions of electrolytes in solution, as illustrated by the chemistry of inorganic semimicro qualitative analysis. Prerequisite, the admission requirement or its equivalent. Three periods of lecture and discussion with one three-period laboratory appointment a week for the first semester, and two periods of lecture with six periods of laboratory for the second semester. Six hours. The second semester may be taken separately by those who have completed 101 or, by permission, 106. Miss Griggs, Miss Gilchrist, Miss Tuller, Miss Sullivan, and Assistants.

[^13]106. An Introductory Course in Physical Science. For description and prerequisites, see Interdepartmental Courses 106. Miss Jones, Miss L. Wilson, Miss Fort, Miss Winchester.
201 (1). Qualitative Analysis. A study of the principles which govern the reactions of electrolytes in solution, as illustrated by the chemistry of inorganic semimicro qualitative analysis. Prerequisite, 101 or, by permission, 106. Two periods of lecture and six periods of laboratory. Three hours. Miss Griggs, Miss Gilbert, Miss Beers, Miss Fass.
202 (1), (2). Quantitative Analysis. First course. A study of the fundamental methods of gravimetric and volumetric analysis with emphasis on the theory, laboratory technique and calculations of each method. Prerequisite, 103 or 201. One period of lecture, one period of discussion, and six periods of laboratory. Three hours. Miss Griggs, Miss W'illis, Miss Sullivan.
207 (2). Quantitative Analysis. Second course. A study of the newer methods for the analysis of alloys and ores and the theory and use of some of the special instruments employed in analytical chemistry. Prerequisite, 202. Two periods of lecture and six periods of laboratory. Three hours. Miss Tuller.
301. Organic Chemistry. A systematic study of both the aliphatic and aromatic series. The laboratory work introduces the student to the fundamental methods of preparation and purification of typical organic compounds. Course 311 provides additional laboratory work in organic preparations. Prerequisite, 103 or 201 or, by permission, 101. Three periods of lecture and discussion and one three-period laboratory appointment. Six hours. Miss French, Miss Asadourian, Miss Fass.
302 (2). Identification of Organic Compounds. A study of the systematic qualitative analysis of organic substances. Since each student identifies individual compounds and mixtures, independent work is encouraged. The course offers a good introduction to research methods and attitudes. Open to juniors and seniors who have completed 202 and 301. Two periods of lecture and discussion, six periods of laboratory. Three hours. Miss Sullivan.
303 (1). Advanced Quantitative Analysis. A study of some of the more advanced and newer methods of quantitative analysis. In the laboratory the student is introduced to special apparatus and equipment. Although many of the specific analyses may vary from year to year, electrometric titrations are usually included as well as special
problems. Open to juniors and seniors who have completed 202 and 301. Two periods of lecture and discussion and six periods of laboratory. Three hours. Miss Griggs, Miss Sullivan.
304 (1). Chemistry of Food and Nutrition. The composition of common food materials and their function in nutrition. Laboratory practice in standard methods of analysis of foods including grain products, carbohydrates, fats and oils, milk and milk products. Open to juniors and seniors who have completed 202 and who have completed or are taking 301. Two periods of lecture and discussion and five periods of laboratory. Three hours. Miss Gilchrist.

305 (1). Physical Chemistry. This course summarizes, and applies to practical problems, the laws of matter in its various states of aggregation, and also the laws governing solutions, including the colloid state, thermochemistry, and chemical equilibrium. Open to juniors and seniors who have completed 202 and have completed or are taking 301, a year of college physics, and Mathematics 106 or 107. A separate division will be formed for students who have completed in addition Mathematics 202. Three periods of lecture and discussion and one three-period laboratory appointment. Three hours. Miss Willis, Miss Tuller.

306 (2). Physical Chemistry. A continuation of 305, including especially reaction velocity, electrochemistry, photochemistry, and theories of atomic and molecular structure. Open to juniors and seniors who have completed 305. A separate division will be formed for students who have completed Mathematics 202. Three periods of lecture and discussion and one three-period laboratory appointment. Three hours. Miss Willis, Miss Tuller.

307 (2). Advanced Inorganic Chemistry. A comprehensive survey of the different classes of inorganic substances and the modern theoretical interpretation of their interactions. Open to juniors and seniors who have completed 202 and who have completed or are taking 301. Three periods of lecture and discussion. Three hours. Miss Jones.
309 (2). Brochemistry. The chemistry of the more important organs and tissues of the body and the chemical changes involved in the digestion, assimilation and elimination of food constituents. The laboratory work includes a study of the methods of analysis generally employed in hospital practice. Open to juniors and seniors who have completed 202 and 301 and who have completed or are taking Zoölogy 101 or 308. Two periods of lecture and discussion and five periods of laboratory: Three hours. Miss Gilchrist.

310 (1). Quantitative Organic Microanalysis. Methods of elementary microcombustions, as well as micromethods for the quantitative determination of certain groups in organic molecules. Open, by permission, to a limited number of juniors and seniors who have completed 202 and 301. One period of lecture and discussion, six to seven periods of laboratory. Three hours. Miss Tuller. (Not given in 1948-49.) 311. Organic Preparations. A laboratory course using semimicro methods and designed to supplement the training of students of organic chemistry. Open to students who are taking or have completed 301. One three-period laboratory appointment. Two hours. Miss Asadourian.
312 (1). Use of the Literature of Chemistry. An introduction to the literature of chemistry, both the primary sources (journals) and the secondary sources (abstracts, compendia and indices). The technique of searching this literature for isolated facts and methods, or for complete surveys of limited or extensive subjects. Open to majors who have completed or are taking 202 and 301, and to graduate students. One period of lecture and discussion. One hour. Miss Sullivan.
320. Seminar. Reports on recent developments in chemistry. Open to graduate students. This course usually meets every other week for two hours in the evening. Two hours. The Teaching Staff.
350. Research or Independent Study. An individual problem under the direction of the instructor in the field chosen. Laboratory work and reading. Open to graduate students and, by permission, to undergraduates who have completed at least 18 hours in the department. Three hours for a semester or six hours for a year.

## Directions for Election

Members of the department will be glad to advise students concerning courses which would best prepare for graduate study, for teaching, for work in industrial or hospital laboratories, for nursing, or for public health work.

Premedical students are referred to the requirements as given on page 41.

The American Chemical Society has established a set of requirements which it considers essential for the training of chemists, especially for industrial work. Students wishing to meet the standard of an accredited chemist as defined by this Society should consult the chemistry department.

For any major in chemistry one of the following sequences of courses is essential: Physical Science 106 or Chemistry 101, and 201, 202, and 301 ; or 103, 202, and 301. Any other courses in the department may be added to these to complete the 24 -hour major. For admission to
most graduate schools Chemistry 305 and 306 with prerequisite of Mathematics 202 are required.

It is advisable that all students majoring in chemistry should complete at least one year of college physics and one year of college mathematics, and acquire a reading knowledge of French and German before the senior year. For graduate work in chemistry a reading knowledge of French and German is required.

Students not majoring in chemistry who intend to use their chemistry after graduation will be recommended by the department only if they have completed at least 18 hours of chemistry.

## Exemption Examination

Unusually well-qualified students may apply for an examination covering the year's work in Chemistry 101. A college textbook of general chemistry should be used in preparation for this examination. The passing of this examination may be used as the prerequisite for Chemistry 201 or as the equivalent of Chemistry 101 in the work for distribution.

| ECONOMICS |  |
| :---: | :---: |
| Professors:Assistant Professors: | Elizabeth Donnan, ${ }^{\text {b b.a. }}$ |
|  | Lawrence Smith, m.a. (Chairman) |
|  | Lucy Winsor Killough, ph.d. |
|  | Richard Vernon Clemence, ph. |
|  | Joseph Thistle Lambie, phid. |
| Instructors: | Elizabeth Bryant Tolman, m.a. |
|  | Hilda Rosenbloom, m.a. |

101. Economic Principles and Problems. A course which contributes to the understanding of contemporary life through a study of the economic order on which our present social and political system is built. The growth of machine technique, corporate organization, and mass production, with the mechanism of money, banking, and international trade. Analysis of the working of the existing price system. The causes and results of present inequalities in the distribution of income; scales of living; trade unions, unemployment, social legislation; government regulation of business; taxation. Open to all undergraduates. Sections for freshmen will be arranged. Six hours. Mr. Smith, Mrs. Killough, Mr. Clemence, Mr. Lambie, Miss Tolman, Mrs. Rosenbloom.
203 (1). The Economics of Consumption. A study of the consumer and the market: the influences affecting the choices made by consumers; marketing methods and costs; legislation which concerns consumers;

[^14]aids to improved consumption and family financial planning. Prerequiste, 101. Three hours. Mrs. Rosenbloom.
204 (2). Economic History of the United States. Our national development in its economic and social aspects, with special emphasis upon the struggle between agrarian and business interests, the growth of business combinations and labor unions, and the development of government control of business. Open to sophomores, juniors, and seniors who have completed or are taking 101. Three hours. Mr. Lambie.
209 (1). Economic History of Great Britain. A comparison of economic and social life in England before and after the Industrial Revolution. Evolution of capitalism; struggle between landed and manufacturing interests; interrelation between economic thought and economic policy; effect of industrialization on labor; development of trade unionism; growth of economic imperialism; Labor Government's present foreign and domestic economic problems. Open to sophomores, juniors, and seniors who have completed or are taking 101. Three hours. Mr. Lambie.
210. Financial Organization of Society. Money, credit, general price levels, and business cycles. Emphasis on monetary systems and current monetary problems. The work of commercial banks and the functioning of the Federal Reserve system. Business cycles are dealt with historically and theoretically, and methods of stabilization are analyzed. Prerequisite, 101. Six hours. Mr. Smith.
211 (1). Introduction to Social and Economic Statistics. Statistical methods as used in the social sciences. Organization and presentation of statistical data. Frequency distributions and simple correlation. Introduction to time series analysis and index numbers. Open to students who have completed 101 and, by permission of the chairman of the department, to juniors and seniors who are taking 101. Credit for this course will not be given to a student receiving credit for Mathematics 205. Laboratory conferences are required on Tuesday afternoon. Three hours. Mrs. Killough.
300 (1). Economic Analysis. Modern techniques of analysis applicable to problems of prices, output, income, and employment. Methods of defining and reaching conclusions with respect to economic problems, and of appraising the significance of results. Open to juniors and seniors who have completed 101 and six additional hours in economics. Three hours. Mr. Clemence.
301 (2). Comparative Economic Systems. An examination of capitalism and a critical analysis of other economic systems that have been proposed or attempted such as socialism, fascism, communism, and
planned economy. A comparison of the economic systems of the United States and Russia. Open to seniors who have completed 101 and one of the following: $300,305,308$, Sociology 316 . Open to juniors, with the same prerequisites, by permission of the chairman of the department. Three hours. Miss Tolman.
304 (2). Standards of Living and Their Maintenance. The history, measurement, and distribution of the national income. Comparative scales and standards of living in the United States. Budgets and market indices. Possible improvements in both scales and standards by governmental and non-governmental action. Open to juniors and seniors who have completed 101 and have completed or are taking any course of grade II in economics or sociology. Two hours a week with the third at the pleasure of the instructor. Three hours. (Not offered in 1948-49.)
305 (2). Public Regulation of Business. The policy of government toward business. Special fields of regulation: the "natural monopolies" (transportation, public utilities, and communications), petroleum, and the declining industries of bituminous coal and agriculture. Open to juniors and seniors who have completed 101 and have completed or are taking one of the following: 203, 204, 209, 210, 300, Political Science 201, 202, 204, 304. Three hours. Mrs. Rosenbloom.
306 (1). Corporations and Combinations. Corporate structure and operation. The market for corporate securities, including investment banking, other investment institutions, the stock exchange, government regulation of security issues and exchanges. Problems arising from the development of great corporations, through both concentration and combinations. Open to students who have completed 101 and have completed or are taking one of the following: 204, 210, 211, Political Science 201, 304, Sociology 205. Three hours. Mr. Smith.
308 (1). Labor Economics. Problems of the worker in modern society, including the problems of technology, unemployment, wages, hours, the substandard worker; attempts to solve labor problems, including recent trade union developments and labor legislation. Open to seniors who have completed 101 and have completed or are taking one of the following: 203, 204, 209, 210, 300, Sociology 205, 206, Political Science 201, 202, Psychology 309, 310. Open to juniors, with the same prerequisites, by permission of the chairman of the department. Three hours. Miss Tolman.
310 (1). Public Finance. The principles and the practical problems of government expenditures and revenues. The theory and incidence of taxation and the chief taxes levied by the cities, states, and federal government. Public debts and public fiscal administration. Open
to juniors and seniors who have completed 101 and have completed or are taking one of the following: 203, 204, 209, 210, Sociology 201, Political Science 201, 304. Three hours. Mrs. Killough.
312 (2). Economic Statistics. Economic statistics, with special emphasis on the techniques of time series analysis and the construction of index numbers. Probability theory and multiple and partial correlation. Consideration of the place of the quantitative method in economics. Open to juniors and seniors who have completed 211 or, by permission of the chairman of the department, to students who have completed Mathematics 205, and have completed or are taking any other course of grade II in economics. Laboratory conferences are required on Tuesday afternoon. Three hours. Mrs. Killough.

313 (2). Seminar. Selected Topics in Economic Movements and Theories. Each year a different field of research is selected. Open to seniors and graduate students, approved by the chairman of the department, who have taken eighteen hours in economics. Two consecutive hours each week with a third at the pleasure of the instructor. Three hours. Mr. Smith.

314 (2). International Economic Relations. The economic position of the United States in relation to other countries. Theories of international trade and capital movements. Government and business control over foreign commerce. International economic problems of postwar reconstruction. Open to juniors and seniors who have completed 101 and have completed or are taking 204, 209, or 210 , or who are majoring in geography, history, political science, or sociology and have completed or are taking a grade II course in their major subject. Three hours. Mrs. Killough.

316 (2). Modern Economic Thought. The study and discussion of several recent books in the field of economics. They will be selected because of the importance of their contributions to the body of economic thought, because they illustrate contemporary modes of thought, and because of their influence on public opinion and public policy. Some attention will be given to the development of current economics and to the relation of economics to other social sciences. Open to seniors who have completed 101, six additional hours in economics, and six hours in the departments of history, political science, or sociology. The course meets for two consecutive hours each week, with a third hour at the pleasure of the instructor. Three hours. Mr. Clemence.

320 (2). Population Problems. For description and prerequisites, see Sociology 320.
350. Research or Independent Study. To a limited number of advanced students wishing to do individual work outside of regular courses the department is prepared to offer a course of directed reading, to be tested by examination or final paper. Students desiring to register for such a course must secure the approval of the chairman of the department in advance of the time at which electives are due. Two to three hours for a semester or four to six hours for a year.

## Related Course

The attention of students who are interested in the teaching of economics is called to Education 308, The Teaching of Social Studies in the Secondary School.

## Exemption Examination

The department is prepared to offer an examination for advanced standing covering the field of economic principles and problems.

> EDUCATION

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Associate Professor: John Pilley, m.a. oxon. (Chairman)
Assistant Professor: Isabella McLaughlin Stephens,'1 m.a.
Executive Secretary: Alice Burt Nichols, b.A., ed.m.
    Instructors: Christine Madeleine Gibson,'m.a.
        Ruth Wood Gavian,4 ph.d.
        Lecturers: Myrtle Agnes Stuntzner, m.a.
                            director of the anNe l. page memorial school
        Richard Walden Hale, jr., ph.d.
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The department of Education offers both undergraduate and graduate courses. Eighteen hours of work may be counted toward the B.A. degree. A more detailed statement of the requirements for the degree of Master of Arts in Education may be found in the Graduate Circular.
200 (1), (2). Principles of Education I. A preliminary study of the educative process. Human development contrasted with organic growth. Education as training and as self-directed activity. The meaning of a liberal education. Open to sophomores who have had or are taking a course in philosophy or psychology, and to juniors and seniors without prerequisite. Three hours. Mr. Pilley, Mr. Hale. 201 (2). Principles of Education II. A continuation of course 200. Prerequisite, 200. Three hours. Mr. Pilley.
202 (2). Social Aspects of Education. The school and its relation to society. The teacher's work. Conflicting educational poli-

[^15]cies. The future in education. Visits to neighboring schools. Prerequisite, 200. Three hours.

206 (1). Secondary Education. The rôle of secondary schools of various kinds within the educational system. Their aims, government, and organization in relation to their social, political, and economic backgrounds. The course is intended to prepare students for the method courses offered in the second semester. Prerequisite, 200 or 201, and a course in psychology. Three hours. Mrs. Gavian.
212 (1). Religious Education. For description and prerequisites, see Biblical History 212.
301 (2). The Teaching of Latin in the Secondary School. The place of Latin in the secondary school curriculum. Improved methods of teaching the ancient language. Review of authors read in high school with study of the historical and social background of their times. Evaluation of texts. Practice in prose composition. Observation of Latin classes in neighboring schools. Open to seniors who have taken Education 200 or 201, and 206, and who are taking a grade III course in Latin; or by permission. This course may be counted toward a 30-hour major in Latin. Three hours. Miss Robathan (Professor of Latin). (Not offered in 1948-49.)
302 (2). History of Educational Ideas and Institutions. The development of educational ideas and institutions from the sixteenth century to the present. The main emphasis is upon the developments accompanying the rise of the middle class and of industrialism. The course includes readings from the works of leaders in educational thought. Open to juniors and seniors who have taken 200 or 201, and Philosophy 107. Three hours. (Not given in 1948-49.)
303 (2). The Teaching of French in the Secondary School. The principles underlying the teaching of French, with special reference to the learning capacities of secondary school pupils. The integration of modern foreign languages with other studies in the curriculum. The equipment of the teacher and her department. The organization of courses in French, including the choice and use of texts and other materials. Observation of French classes in neighboring schools. Open to seniors who have taken Education 200 or 201, and 206 and who are taking French 301, 302, 305, 306, or 307; or by permission. This course may be counted toward a major in French. Three hours. Miss Dennis (Associate Professor of French).
305. The Education of the Young Child. The study of the young child at successive stages of growth: physical, social, and mental. A survey of fundamental theories and of actual procedures in the educa-
tion of children at the nursery school, kindergarten, and primary school levels. Critical examination of techniques of child study, and their interpretation. Emphasis on recent findings and current problems. Opportunities for observation and special study at the Page Memorial School. Open to seniors who have taken 200, or 201 and 202, and a course in psychology, and to graduates. Six hours. Miss Stuntzner.

307 (2). The Teaching of English in the Secondary School. A study of the rôle of language in thought and communication. Recent trends in English teaching and modern methods of encouraging secondary school pupils in the arts of reading and writing. A study of the contribution that literature can make to the personal development of young people. Visits to schools, libraries, etc. Open to seniors whose college course includes at least 18 hours in the department of English, and who have taken Education 200 or 201, and 206. Three hours. Miss Gibson.
308 (2). The Teaching of Social Studies in the Secondary School. Methods of encouraging high school students in an understanding of the society in which they are living and of its historical development. The relations between the kinds of knowledge developed in the separate social studies and the methods whereby a preliminary understanding of these relations may be encouraged in high school students. The particular problems that arise in teaching the social study in which students have specialized. Visits to neighboring schools. Open to seniors majoring in history, economics, political science, sociology, or geography, who have taken Education 200 or 201, and 206. Three hours. Mrs. Stephens. (Not offered in 1948-49.)
310. Seminar. Subject determined by the preparation and interests of the individual student. Open to graduates and seniors approved by the department. Six hours. Mr. Pilley.
350. Research or Independent Study. Subject determined by the preparation and interests of the individual student. The work will be under direction of one or more members of the department. Students wishing to study methods of teaching special subjects in which the department does not offer courses are advised to consult the chairman of the department as to possibilities of their making such study under this heading. Open, by permission, to graduates and seniors. Two to six hours.

## Diregtions for Election

Students who intend to teach should (in their sophomore year if possible) consult a member of the department concerning city and state requirements for the certificate to teach. In a majority of states these
requirements include from fifteen to eighteen hours in education; a few states require twenty-four hours. Plans should be made in the sophomore year for completion of the necessary courses in education in the junior and senior years.

A student wishing special preparation for teaching may plan a fiveyear integrated course leading to a Bachelor of Arts degree at the end of the fourth year and a Master of Arts in Education at the end of the fifth.

Such programs as those indicated below may be arranged for the fifth year:
I. Primarily for secondary school teachers.

12 hours in any of the following: 206, 301, 302, 303, 307, 308, 310, a course in psychology chosen in consultation with the department;
12 hours in one department other than education.
II. Primarily for teachers of young children.

305,310 , and 12 hours in one or more departments other than education, to be arranged in conference with the department.

ANNE L. PAGE MEMORIAL SCHOOL<br>Director: Myrtle Agnes Stuntzner, m.a.

The Anne L. Page Memorial School, as the college laboratory school, is an integral part of the Wellesley College educational program. It is a center for child study, observation, and participation for students from all departments of the College.

The school is for children from three through eight years of age. Its work is based on the recognition of the value of child study in the education of children and in their development as free and responsible human beings. The program of the school is one which recognizes that the early years of a child's life are significant in laying down the whole pattern of his personality.

|  | ENGLISH |
| :---: | :---: |
| Professors: | Edith Christina Johnson, ${ }^{2}$ ph.d. Katharine Canby Balderston, ph.d. Ella Keats Whiting, ph.d. Ola Elizabeth Winslow, ph.d. Grace Ethel Hawk, b.litt.oxon. (Chairman) Walter Edwards Houghton, ${ }^{3}$ ph.d. |
| Associate Professors: | Emma Marshall Denkinger, ph.d. <br> M. Eleanor Prentiss, m.a. <br> Charles William Kerby-Miller, ph.d. |
| Assistant Professors: | Ruth Carpenter Child, ph.d. <br> Mary Ruth Mighael, ph.d. <br> Evelyn Kendrick Wells, m.a. <br> Roberta Margaret Grahame, ph.d. <br> Katherine Lever, ph.d. <br> Sylvia Leah Berkman, ph.d. |
| Instructors: | Mary Doyle Curran, ph.d. Cathleen O’Conor Epstein, m.a. oxon. Mary Sue Elkins, m.a. <br> Mary Joan Donahue, ph.d. <br> Virginia Fleming Prettyman, ph.d. <br> Sally Loomis, m.a. <br> Helen Storm Corsa, phd. <br> Oscar John Lewis Bradley, m.a. <br> Margaret Breed Marsh, m.a. <br> Doris Kirk Holmes, m.a. |
| Lecturers: | Fravklin Gary, b.litt. oxon. Seymour Orville Baker, ph.d. |

$100 . \dagger$ Required Freshman Composition. First semester: exposition. Emphasis on use of source materials. Weekly themes or their equivalent. Second semester: critical and interpretative writing; description; simple narration. Fortnightly themes or their equivalent. Required of freshmen. This course may not count toward a major in English. Six hours. Miss Prentiss, Mr. Kerby-Miller, Miss Child, Miss Michael, Miss Berkman, Miss Grahame, Mrs. Epstein, Miss Elkins, Miss Donahue, Miss Prettyman, Miss Loomis, Miss Corsa, Mr. Bradley, Mr. Baker, Mirs. Marsh, Mifs. Holmes.
100a (1). Continuation Course in Composition. A practical course in various types of expository writing designed to give training

[^16]in analysis, and in the organization and effective presentation of ideas. Required of students who have made D grade in the second semester of 100 . Three hours. Mrs. Epstein.
101. English Literature of the Renaissance. A study of Elizabethan literature with emphasis on Sidney, Spenser, and Shakespeare. Designed to illustrate the spirit of the age and its literary achievement, and to develop a critical understanding of important continuing types of literature. Open to all undergraduates. Six hours. Miss Wells.
102. The Interpretation of Literature. The theory and practice of poetry, fiction, and drama, studied in the work of certain major writers. The course is designed to teach students to read and evaluate literature. In 1948-49, the reading will center on Donne, Pope, and T. S. Eliot for poetry; George Eliot and Henry James for fiction; Shakespeare, Congreve, and Shaw for drama. Open to all undergraduates. Six hours. Mrs. Curran, Miss Grahame, Miss Berkman, Miss Donahue.
104. Survey of English Literature. The analysis, through lectures, reading, and discussion, of representative English authors and works, chosen primarily to illustrate: the permanent spirit and developing characteristics of a people; the moods of successive periods; shifts and varied emphases in taste and ideas. Open to all undergraduates. Certain sections will be reserved for juniors and seniors. Six hours. Miss Wells, Miss Child, Mr. Bradley, Mrs. Holmos.
107. Interpretations of Man in Western Literature. For description and prerequisites, see Interdepartmental Courses 107.
108 (2). Ballads and Folk Songs. English and American traditional songs today. Their poetry, music, folklore, legend, connection with other folk expressions (dance, tale, play, etc.). Their reflection of earlier societies and their influence on present culture. Conditions of survival, as observed especially in the southern Appalachians. Open to all undergraduates. Three hours. Miss Wells.

201 (1), (2). The Essay. A study of the development of the technique of the English essay through the letter, the character, and other literary forms. Varied reading in contemporary essays and frequent practice in writing different types of essays. Open to students who have completed the requirement in English composition. Not open to students majoring in English who have completed three semesters of grade II work in writing or who are taking another writing course.* Three hours. Miss Prentiss.

[^17]203 (1), (2). Studies in Journalistic Writing. A critical study of selected types of journalistic writing: news story, editorial, special article, book review, dramatic review, as exemplified in typical American and English newspapers and weekly periodicals. Constant practice in writing. Prerequisite, same as for 201. Three hours. Mr. KerbyMiller.

205 (2). Critical Writing. Practice in writing analytical and interpretative criticism. Study of modern critical theory, with illustrative reading of modern criticism. Prerequisite, same as for 201. Three hours. Miss Child.

206 (1). Informative Writing. Practice in several forms of prose writing-critical, factual, and interpretative-in relation to the interests and needs of individual members of the class. Prerequisite, same as for 201. Three hours. Mrs. Holmes.

207 (1), (2). Varied Forms of Writing. Practical and creative forms of prose composition with illustrative reading. Types of writing selected in accordance with the interests of the class. Four long papers and short reports. Prerequisite, same as for 201. Special division open to freshmen exempted from 100 at midyears. Three hours. Miss Child, Mrs. Epstein, Miss Elkins.
208 (2). Studies in Biography and Literary Portraits. Problems and practices that distinguish biography as a developing form of literary art. Emphasis on the contemporary biographer's way of handling his materials. Writing varied and frequent. Prerequisite, same as for 201. Three hours. Miss Prentiss. (Not given in 1948-49.)

209 (2). Verse Composition. Study of the principles of English versification and frequent practice in the techniques of verse. Prerequisite, same as for 201. Three hours. Miss Grahame.
210 (1). Modern Poetry. English and American poetry and poets, recent and contemporary. Open to juniors and seniors without prerequisite. Three hours. Miss Grahame, Mrs. Curran.
212 (1), (2). Modern English Drama. The history of the drama of England and America from 1879 to our own day, with study of the influence of Ibsen and other continental dramatists. Open to juniors and seniors without prerequisite. Three hours. Miss Denkinger, Miss Berkman.
217 (1), (2). Milton. A critical study of Milton as a master of lyric, epic, and dramatic poetry, and as a writer of notable prose. The character and genius of the poet, as influenced by the political and religious conflict of the time. Open to sophomores who have taken six
hours of literature in the deparunent, and to juniors and seniors without prerequisite. Three hours. Miss Hawk.
218 (1). The English Novel: The Rise of the Type. The growth of the English novel from the Elizabethans to Scott with emphasis on the eighteenth century. Consideration of the thought and technique of the greater novelists: Defoe, Richardson, Fielding, Smollett, Sterne, Jane Austen, and Scott; and of certain minor writers who express the rising romanticism of the period. Prerequisite, same as for 217. Three hours. Mr. Fierby-Miller, Miss Corsa.
219 (2). The English Novel in the Nineteenth Gentury. A study of the major novelists: Dickens, Thackeray, Meredith, Hardy, and James; and of the representative works of lesser writers who exemplify the development of realism and romanticism in the fiction of the century and the shifting currents of intellectual inquiry and social reform. Prerequisite, same as for 217. Three hours. Mrs. Curran, Miss Corsa. 220 (1). Chaucer. A study of Chaucer's poetry, tracing the development of his art and showing the relation of his work to the social and literary background of his time. Prerequisite, same as for 217. Three hours. Miss Whiting.
221 (1). History of English Drama to 1642. A study of the growth of English drama from its beginnings to its culmination in the work of Elizabethan and Jacobean dramatists. Prerequisite, same as for 217. Three hours. Mr. Baker.

222 (2). History of English Drama, 1660-1900. A study of Restoration, and eighteenth and nineteenth century drama, with emphasis upon the intellectual and social forces that shaped it. Open to students who have taken 221. Three hours. Mr. Baker.
223 (1). American Literature. The beginnings of American literature and the social conditions out of which it grew, followed by a consideration of American writers through Emerson. Emphasis upon major figures. Prerequisite, same as for 217. Three hours. Miss ${ }^{W}$ Tinslow, 1 Iiss Michael.

224 (2). American Literature. American writers from Whitman to the present time. Emphasis upon maior figures. Open to students who have taken 223. Three hours. Miss It'inslow, Miss Michael.
225 (2). The Age of Dryden. The revolt against Puritanism and the growth of rationalism. The lyric poetry of Dryden, Waller, and others; the diaries of Pepys and Evelyn; John Bunyan; the satire of Butler, Dryden, and the Restoration Wits; developments in prose style; and the rise of periodical literature, with emphasis upon Defoe,

Steele, and Addison. Prerequisite, same as for 217. Three hours. Mr. Kerby-Miller.
230. The Romantic Period, 1789-1832. Major emphasis upon the poetry and criticism of Wordsworth, Coleridge, Shelley, Byron, and Keats. The essays of Lamb and Hazlitt studied as representative expressions of romantic taste and doctrine. Prerequisite, same as for 217. Six hours. Miss Donahue, Miss Prettyman.
301 (1), (2). The Short Story. Study of the specific technical problems of the short story, with some consideration of its historical development and of contemporary trends in England and America. Four original short stories and occasional critical reports. Open to juniors and seniors who have completed six hours of grade II work in writing. Three hours. Miss Johnson, Miss Denkinger.

303 (1), (2). Criticism. The principles and practice of literary criticism, beginning with the influence of Plato and Aristotle, and including the critical theories of neo-classicism, romanticism, and modern realism. Lectures, class discussions, and short critical papers. Open to juniors and seniors who have completed or are taking six hours of grade II in English and, by permission, to specially qualified non-majors. Three hours. Miss Prettyman.
304. Seminar. Senior Course in Composition. Advanced study of techniques of writing, including one long original play or dramatization; one sustained piece of narrative writing involving artistic treatment, and short critical papers. Open to seniors who have completed six hours of grade III in English, including 301. Six hours. Miss Denkinger, Miss Prentiss.
305 (1). Advanced Studies in Journalistic Writing. The magazine article and other types of expository and journalistic writing. Stress on original and effective methods of presentation and the development of a finished expository style. Reading in the best contemporary journals. Prerequisite, same as for 301. Three hours. Mr. KerbyMiller.
308 (1), (2). The Modern Novel. Major trends in the development of the novel in the twentieth century with relation to its shifting points of emphasis in form and purpose. Representative works will be studied to indicate the influences of modern psychological and social theories and of movements in allied arts upon the novel of this century. Open to juniors and seniors who have either (1) completed a course of grade I literature and are taking six hours of grade II literature in the department, or (2) completed six hours of grade II literature. Specially qualified non-majors may be admitted to this course by permission. 'Thrce hours. Mr. Gary.
309. Shakespeare. Shakespeare's development as dramatist and poet, studied through twenty plays. Some consideration of his debt to his contemporaries, his use of stage conventions, his theater, representative source studies, Shakespearian criticism, theories of tragedy. Prerequisite, same as for 308. Six hours. Miss Balderston, Miss Winslow, Mr. Gary.
310 (1). Pope and Sivift. Pope and Swift considered as representative writers of neo-classicism and rationalism, and as masters of satire. Prerequisite, same as for 308. Three hours. Miss Balderston.
311 (2). The Age of Johnson. The second half of the eighteenth century studied as a period of transition between the neo-classic and romantic eras. Dr. Johnson will be the center of the course, and the periphery will include Goldsmith, Boswell, Burke, Gray, Cowper, Blake, and Burns. Prerequisite, same as for 308. Three hours. Miss Balderston.
312 (2). History of the English Language. A study of the English language with emphasis upon growth and structure and upon the relation of the language to the literary expression of English-speaking people. Open to juniors and seniors who have completed or are taking six hours of grade II in English and, in addition, to students who are concentrating in foreign languages. Three hours. Miss Whiting.

314 (1). Victorian Prose. The prose of Macaulay, Huxley, Carlyle, Mill, and Newman, studied with special reference to Victorian conceptions of politics, science, religion, and aesthetics. Prerequisite, same as for 308. Three hours. Mr. Houghton.
315 (2). Victorian Poetry and Criticism. The poetry of Tennyson, Browning, Arnold, Morris, and Hopkins studied in connection with the criticism of Ruskin and Arnold. Prerequisite, 230 or 314. Specially qualified non-majors who have not completed the prerequisites may be admitted by permission. Three hours. Mr. Gary.
316 (1). Seventeenth Century Poetry and Prose Exclusive of Milton. The stress and conflict of an age of transition, presented through the innovations of Donne and Jonson in poetry, and of Bacon, Browne, Burton, and Taylor in prose. Brief study of Cavalier and religious poetry. Prerequisite, same as for 308. Three hours. Miss Hawk.
324. Seminar. Studies in American Literature. Representative American writers, with detailed study of their social background and literary achievement. Open to seniors who have completed six hours of grade III in literature and to graduate students. Six hours. Miss Winslow.

325 (1). Seminar. Intensive study of one period of English literature or of one English author. In 1948-49 the topic will be some phase of sixteenth century literature, exclusive of Shakespeare. Prerequisite, same as for 324. Three hours. Mr. Gary.
329 (2). Seminar. Intensive study of one period of English literature or of one English author. In 1948-49 the subject will be Donne and other metaphysical poets of the seventeenth century. Prerequisite, same as for 324. Three hours. Miss Hawk.
350. Research or Independent Study. Permission to register for this course must be obtained before electives are handed in. Three or six hours. The amount of work contemplated must be indicated at the time of handing in the electives.

## Directions for Election

To fulfill the literature requirement in group I, students may elect $101,102,104,107,108,210,212,217,218,219,220,221,222,223,224$, $225,230,303,308,309,310,311,314,315,316,324,325,329$. Courses with emphasis on writing may not be elected to fulfill the distribution requirement in group I. They are: 100, 201, 203, 205, 206, 207, 208, 209, 301, 304, 305.

Members of the classes of 1949 and 1950 will graduate under the new plan for a major in English described below. For members of 1949, some exceptions to the new requirement will be granted when necessary.

A choice of two majors is offered to students interested in working in the field of English:

1. The regular major in language, literature, and composition.
2. A major for students especially interested in the study of drama.

Courses 100 and 100a count for the Bachelor of Arts degree but do not count toward either major.

Courses with emphasis on writing and 312 (The History of the English Language) do not fulfill the literature requirement for the degree, as described on page 37 under "Work for Distribution."

All students majoring in English will be expected
(1) to know representative works of a variety of great writers in English;
(2) to relate these works to the culture of their times;
(3) to write not only with ease and accuracy but with regard for literary form and expression.

Regular Major in Language, Literature, and Composition
This major will include a concentration of at least 30 hours.*

[^18]Every student must elect at least three hours from each of the following five groups. At least 18 hours must be chosen from groups I, IIa, IIb, and IIIa. Of these, at least 15 hours are to be taken in English (and, if desired, American) literature before the modern period. A student may take one course from IIIb each semester, but only one at a time.
I. Extensive courses.

104, 218-219, 221-222, 223-224, 303, 312.
II. Intensive study of author or period.
a. Single figures: $217,220,309,310$.
b. A period: $101,225,311,314,315,316,324,325,329$.
III. Study of forms and types.
a. With emphasis on reading: $102,108,210,212,230,308$.
b. With emphasis on writing: 201, 203, 205, 206, 207, 208, 209, 301, 304, 305.
Note: There are four courses which may serve as an introduction to this major: 101, 102, 104, and Interdepartmental $107 \dagger$.

Seniors who have attained at least B-standing in the work of the department will have first claim upon membership in seminars and in 350 courses.

## Exemption Examination

Freshmen and sophomores who secure the permission of the chairman may qualify for entrance to grade II work in literature by passing an advanced-standing examination. The department will offer two such examinations, covering the material of courses 101 and 104 respectively.

## Related Courses

Related courses for concentration may be chosen from many fields. A knowledge of English history, of at least one foreign literature, and of the outlines of European thought are of great value to the students of English. In the history department, special attention is called to 103, History of Western Thought, to 213, History of England, and to 217, The Renaissance and Reformation in Europe; in philosophy, to 203, Aesthetics, and to 214, Development of Modern Philosophy; in the classical departments, to Greek 104, Mythology, and to Greek 203 and Latin 105, dealing with Greek and Latin literature in translation; in Italian, to 103, Introduction to the Italian Renaissance; in Russian, to 201, Russian literature in translation; in education, to 200, Principles

[^19]of Education, and 307, The Teaching of English in the Secondary School.

## MAJOR WITH EMPHASIS ON DRAMA

Distribution of work: This major should ordinarily be made up as follows:

18 hours of English literature, including 101 or 104; six hours of grade II (221-222 or 212 supplemented by any semester course of grade II); and six hours of grade III (309).

15 hours chosen from elective courses in writing and in criticism, including 207 (taken preferably in the junior year); 301 or 303; and 304.

Speech 203, Theater Workshop (to be taken before the senior year).
General examination: Students taking this major will be examined in the general examination upon 30 hours of work selected from the courses listed above.

Students who wish may include other courses in drama in the field of concentration, e.g., French 212, 213, German 308, Greek 203, 301, Italian 307, 310, Latin 203, Music 323, Spanish 104, 204, 301, Speech 201, 205.

## FRENCH

| Professors: | Ruth Elvira Clark, litt.d. <br> René Escande de Messièresi, agrégé de l'université. Andrée Bruel, docteur de l'université de paris. Marjorie Henry Ilsley, docteur de l'université de paris. (Chairman) |
| :---: | :---: |
| Associate Professors: | Dorothy Warner Dennis, b.a., dipl.e.u. <br> Françoise Ruet Livingston, m.a., agregée de l'université. <br> Edith Melcher, ph.d. |
| Instructor: Assistant: | Jean Guédenet, lic. ès let., dipl.e.s. <br> Raymonde Richard, lic. Ès let., dipl.e.s. |
| Lecturers: | Marie-Antoinette Quarré, b.a., c.e.s., dipl.e.s. Jacqueline Maumon, agrégée de l'université. Marie-Hélène Pauly, docteur de l'université de paris. Auguste Anglès, agrégé de l'université. Jeanette McPherrin, m.a. |

All courses of the department are conducted in French. Oral expression is stressed.

Attention is called to the opportunity for residence in the French Center, Tower Court.

Well qualified juniors will be allowed to spend the year 1948-49 in Paris with the foreign study group of Sweet Briar College (successor to the University of Delaware group).
${ }^{1}$ Absent on leave.
101. Elementary Course. Intensive oral work, training in composition, reading of selected texts as an introduction to French life and institutions, with special study of Paris. Open to students who do not present French for admission. Three class periods and one period of laboratory work. Six hours. Miss Dennis, Miss Melcher.
102. Regions of France Studied in Modern Authors. Novels and short stories serve as a basis for intensive oral and written work. Prerequisite, 101, or two admission units in French. Three class periods and one period of laboratory work. Six hours. Miss Clark, Mrs. Ilsley, Miss Pauly, Miss Quarré, Mrs. Livingston.
103. French Life and Institutions. French contemporary life presented by modern authors: biography, novels, and drama. Stress on grammar, vocabulary and pronunciation. Frequent written work. Prerequisite, three admission units in French. Six hours. Miss Clark, Miss Maumon, Miss Quarré, Miss McPherrin.
104. Introduction to the Study of French Literature. The aim of this course is to prepare students for more advanced work in language and literature. It provides an historical background and acquaints the student with French methods of literary study through the reading of works of various periods. Frequent practice in the written language. Outside reading. Prerequisite, three admission units in French or 102. Not open to students who have taken 103. Six hours. Mr. Guédenet, Miss Pauly.
200. French Literature Through the Centuries. First semester: an introductory study of the Middle Ages and the Renaissance; the seventeenth century, and the eighteenth century to Voltaire. Second semester: Voltaire to the twentieth century. Class discussion of selected masterpieces, short papers, outside reading. Emphasis on oral expression. Primarily for non-majors. Prerequisite, 103 or four admission units in French; by permission, 102. Six hours. Miss Melcher, Miss Clark, Miss Maumon, Miss Pauly.
201. Background of French Culture. French art and literature interpreting the social and political history of France. This course serves as a basis for advanced literature courses and for an understanding of modern France. Emphasis on oral expression. Recommended to students planning to major in French. Prerequisite, 103, or 104 or four admission units in French; by permission, 102. Six hours. Mrs. Livingston, Miss Dennis.
202. Studies in Language. I. Composition, translation, grammar. Weekly written work. Prerequisite, 103 or 104 or four admission units in French. Two hours. Mrs. Livingston, Miss Maunon.
204. The Middle Ages and the Renaissance. Landmarks in early French literature, including La Chanson de Roland, Tristan et Iseult, Le Roman de la Rose, and works by Villon, Rabelais, Montaigne, and la Pléiade. The medieval texts are read in modern French versions. Recommended to students planning to major in French. Prerequisite, 103, 104; exceptionally 200, 201. Six hours. Miss Bruel.
205. Studies in Language. II. Composition, translation, grammar. Weekly written work. Stress on translation. Prerequisite, 202 or 200 or 201 or 204 or 212-213; open to others by permission. Two hours. Mrs. Livingston.
206. French Speech. I. A comparison of French and English speech habits with scientific training in French diction and intonation. Individual and choral recitation. Work with phonograph records. Frequent recording of students' voices on soundscriber discs. Open to students who have completed 104, to those who have taken or are taking a grade II or a grade III course in French, and, by permission, to students who have completed 102, 103. Specially recommended to students majoring in French. Two class periods a week and one hour of practice work. Two hours. Miss Dennis.
208. Conversation. Intensive practice in the spoken language to build up the student's vocabulary while giving some insight into French current events and various aspects of French life. Class discussion based on French periodicals, newspapers, or recent books. Prerequisite, 103 or 104 , or four admission units in French. Four hours. Miss Maumon, Mr. Anglès, Mr. Guédenet, Miss Richard.
212 (1). French Drama before the Revolution. A survey of the theater in the Middle Ages, the Renaissance, the seventeenth and eighteenth centuries. Prerequisite, 104 or a six-hour course of grade II, or, by permission, 103. Three hours. Miss Melcher.

213 (2). French Drama in the Nineteenth and Twentieth CentURIES. A study of the drame romantique, the comedy of manners, and the problem play, the théâtre libre, trends in modern drama before 1940. Prerequisite, 104 or a six-hour course of grade II, or, by permission, 103. Three hours. Miss Melcher.
301. The Classical Period of French Literature. The development of French classical literature in the seventeenth century. The authors studied are: Malherbe, Descartes, La Rochefoucauld, Corneille, Pascal, Molière, La Fontaine, Mme. de La Fayette, Boileau, Bossuet, Racine, La Bruyère, Fénelon. Open to students who have completed 200 or 201 with a grade of at least C, or 204 or 212-213; also to seniors who are taking six hours of grade II. Six hours. Mr. Guédenet, Mrs. Ilsley.

303 (2). The Teaching of French in the Secondary School. For description and prerequisites, see Education 303.
305. The Evolution of the French Novel. Intensive reading of representative masterpieces; medieval romances and stories; Gargantua and Pantagruel; novels of the classical period and eighteenth century, such as l'Astrée, la Princesse de Clèves, Manon Lescaut, la Nouvelle Héloïse; nineteenth century, including works of Stendhal, Balzac, Flaubert, Maupassant, and Barrès. Open to juniors and seniors who have completed 204 or 212-213, or who are taking a course of grade III. Six hours. Miss Bruel.
306. The Romantic Period. A study of the romantic movement in French literature; the great novelists and poets of that period: Lamartine, Vigny, Victor Hugo, Musset, Chateaubriand, Mme. de Staël, Benjamin Constant, Balzac, Stendhal. Open to juniors and seniors who have completed a full grade III course, and to approved juniors and seniors who have completed 204 or 212-213. Six hours. Mr. Anglès.
307. Contemporary French Literature. The evolution of French poetry from Baudelaire to the present day, with special studies of Baudelaire, Verlaine, Rimbaud, Claudel, Valéry, Mme. de Noailles, etc. The masters of French prose during the same period: Barrès, Bergson, Gide, Proust, Giraudoux, Mauriac, Maurois, J. Romains, etc. Open to seniors who have completed 301 or $311-312$ or 305 or 306 and, exceptionally, by permission, to seniors who have completed 204 or 212-213. Six hours. Mir. Anglès.
308 (1). Studies in Language. III. Advanced composition and translation. Open to juniors and seniors who have completed or are taking a six-hour course of grade III, and, by permission, to juniors and seniors who have completed 205. Two hours. Miss Quarré.
310 (2). Studies in Language. III. Advanced composition and translation as in 308 , with different subjects and texts. Primarily for students who have completed 308. Prerequisite, same as for 308. Two hours. Miss Quarré.
311 (1). Eighteenth Century Literature: the Age of Enlightenment. The development of liberal, humanitarian, and democratic ideas, with stress on the writings of Montesquieu and Voltaire. Open to juniors and seniors who have completed 204 or 212-213, or who have completed a grade III course. Three hours. Miss Melcher. (Not given in 1948-49.)
312 (2). Eighteenth Century Literature: the Return to Sensibility. The transition from neo-classicism to romanticism, with special study of the works of Diderot and Rousseau. Open to juniors
and seniors who have completed 204 or 212-213, or who have completed a grade III course. Three hours. Miss Melcher. (Not given in 1948-49.)
313. Present-Day Problems in France. A study of living conditions and problems of reconstruction in France, with a survey of the economic, political and cultural background. Open to juniors and seniors who have completed six hours of grade II or by special permission of the department. Two hours. Miss Bruel.
316. French Speech. II. Advanced scientific training in French diction and intonation with the aid of modern recording equipment. Study of varied texts and practice in oral composition and self-expression. Open to students who are taking 308 and 310, or by special permission. Two hours. (Not given in 1948-49.)
320. Seminar. Currents of Thought in Their Relationship to French Literature. The analysis and interpretation of such subjects as the rise and evolution of the democratic ideal in France, the French Renaissance, conflicts of ideas in the eighteenth century, the evolution of French romanticism, trends in present-day literature. Open to graduates and approved seniors. Six hours. Mr. de Messières. (Not given in 1948-49.)
321. Medieval Language and Literature. Open to graduate students who have completed twenty-four hours of college French, and, by permission, to seniors who have completed the same amount of work. Six hours. Miss Bruel.
322 (1). Seminar. Intensive Study of One Author. Prose. The life and works of a prose writer in relation to the social history and literary trends of the period. A single author of outstanding importance will be selected, such as Montaigne, Pascal, Molière, Voltaire, Rousseau, Balzac, Flaubert, or Proust. Open to graduates and approved seniors. Three hours. (Not given in 1948-49.)
323 (2). Seminar. Intensive Study of One Author. Poetry. Similar to 322. The author studied might be one of the following: Racine, Lamartine, Victor Hugo, Baudelaire, Paul Valéry. Open to graduates and approved seniors. Three hours. (Not given in 194849.)
350. Research or Independent Study. Open, by permission, to graduates and to approved seniors who have completed at least one full grade III course in French and are taking another full grade III course. Two to three hours for a semester or four to six hours for a year. The amount of work contemplated must be stated at the time of handing in electives.

## Directions for Election

Courses 200, 201, 204, 212-213, and grade III courses (except 308, 310,313 ) may be elected to fulfill the literature requirement in group I.
I. Course 101 counts for the degree but does not count towards a major.

Course 102 counts for the major only if directly followed by a sixhour course of grade II.

Students planning to major in the department (with the exception of those who carried a grade II course in their freshman year) should not carry two six-hour courses of grade II without permission of the department.
II. Course 202 taken in the sophomore year, 205 in the junior year and 308,310 in the junior or senior year will be valuable to students majoring in French. Courses 206 and 316 will give intensive training in diction.
III. Students majoring in French literature are advised to include 301 in their program. Students proposing to elect French 307 in the senior year are advised to elect 306 in the junior year.
IV. Special attention is called to Education 303, which is open to seniors who are taking French 301, 305, 306, 307 or 311-312.

Related Courses Suggested for Election
French 301: Greek 203 (Greek Literature in English Translation), History 201, Latin 105 (Latin Literature in English Translation), and courses in Italian and Spanish literature including the sixteenth and the seventeenth centuries; Art 217.

French 311-312: History 102, 201, English 218, 310; Art 217.
French 305: English 218; Spanish 302.
French 306: History 201, English 313, German 305, Italian 202, Spanish 301; Art 217.

## GEOLOGY AND GEOGRAPHY

## Professor: Margaret Terrell Parker, ph.d. <br> Associate Professors: Louise Kingsley, ph.d. (Chairman) Elizabeth Eiselen, ph.d. <br> Assistant Professor: Alice Mary Dowse, m.a. <br> Instructor: Margaret Meda Pendletov, m.s. <br> Custodian and Assistant: Gwenyth Morgan Rhome, m.a.

101.* General Geology. First semester: physiography. A course designed to develop understanding of the physical features of landscapes,

* The first semester of Geology 101 may be elected, to be followed by Geography 102 in the second semester (see Geography, page 86). Students more interested in geography than in historical geology are advised to elect this combination. The first semester may be elected separately by juniors and seniors who have taken a full year of laboratory science in another department.
by explaining the processes by which land forms originate and are modified, and the rocks and minerals of the earth's crust upon which these processes work. Many areas in the United States and elsewhere are studied as illustrations. Foundations are laid for interpreting past geologic history, and for understanding the relations of topographic features to human occupation.

Second semester: historical geology. The origin of the earth and the sequence of geologic events by which its present characters have been developed, including the origin of valuable mineral deposits. The evolution of life on the earth.

Open to all undergraduates. Six periods a week: in general, three of lecture or discussion and three of laboratory. Occasional afternoon field trips will be substituted for laboratory work. Six hours. Miss Parker, Miss Kingsley, Miss Dowse, Miss Pendleton.

## Geology

103 (1). Gemology. A study of precious and semi-precious stones: geologic occurrence; properties necessary for identification and appreciative understanding of relative value and beauty. History of gems and gemology. Laboratory work includes some cutting of semiprecious stones. Open to all undergraduates. Two periods of lecture and two of laboratory. Counts toward a major in geology but not for distribution. Three hours. Miss Dowse.

202 (1). Mineralogy. A study of minerals, including those which are economically valuable and those which are essential constituents of rocks. Identification and determination of the composition of all the better known minerals by means of physical properties and blowpipe analysis. The modes of occurrence of minerals and the industrial uses to which they are put. Prerequisite, Geology 101 or 103, Chemistry 101, or Interdepartmental Courses 106. Two three-period appointments for lecture and laboratory. Three hours. Mr. Gibson, Miss Rhome. (Not given in 1948-49.)

203 (2). Cartography. For description and prerequisites, see Geography 203.

204 (1). Geomorphology. Advanced study of land forms, with illustrations from many parts of the world, and reading from original sources. Comparison of the conceptions of American and European geomorphologists. Shore processes and glacial features studied in the field. Emphasis in laboratory work on methods by which the development of land forms is determined, such as study of aerial photographs and making of projected profiles. Prerequisite, 101. Four hours a weck; in general, two of lecture and two of laboratory. Occasional
field trips will be substituted for class work. Three hours. Miss Dowse.
205 (1)*. Paleontology. The facts and principles of organic evolution as revealed by the life of the past. The steps in the deveiopment from simple, generalized forms to more complex and specialized types illustrated by a comparative study of fossils. Prerequisite, Geology 101, Zoölogy 101, or Botany 101. Four hours a week of lecture and laboratory. Three hours. Miss Kingsley.
206 (2). Regional Geology of North America. A systematic study of the United States, Canada, and Mexico by physiographic provinces, dealing with the geologic history, the kinds of rocks (including the economically important rocks), the structures and their relations to topography. Prerequisite, 101. Four hours a week; in general, three of lecture and one of laboratory. Three hours. Miss Dowse.
312 (2)*. Crystallography. Crystal systems. Principles of optical crystallography. Determination of minerals by means of their optical properties. Students interested in minerals will find good correlation between Geology 202, 103, and 312. Open to juniors and seniors who have completed 202. Juniors and seniors majoring in chemistry or in physics may be admitted to the course upon the recommendation of the two departments concerned. Two two-period appointments for lecture and laboratory. Three hours. Miss Dowse.
314 (1). Structural Geology. Description and interpretation of rock structures. The origin and structure of mountain ranges. Opportunity is offered for individual study of areas of special interest. Laboratory work includes interpretation of geologic maps, the drawing of cross-sections, and graphical solution of problems. Open to juniors and seniors who have completed 101 and a grade II course in geology. Two two-period appointments for lecture and laboratory, with occasional field trips. Three hours. Miss Kingsley.
315 (2). Vulcanism and Igneous Rocks. Extrusive and intrusive phases of vulcanism. Description, identification, and origin of igneous and related metamorphic rocks. Particular emphasis is placed on regional studies. A portion of the work will consist of individual reports on special areas. Open to juniors and seniors who have completed 101 and 202. Two two-period appointments for lecture and laboratory, with occasional field trips. Three hours. Miss Kingsley.
316 (2)*. Economic Geology. A study of economically valuable mineral deposits, both metallic and non-metallic. The origin, composition, and geological and mineralogical relations of these deposits; their geographic distribution and political significance. Open to juniors

[^20]and seniors who have completed 101 and 202. Two two-period appointments for lecture, class discussion, and laboratory. Three hours. Miss Kingsley. (Not offered in 1948-49.)
350. Research or Independent Study. The subject of study will be determined by the preparation of the student and by her special interests. Her work will be under the direction of the member of the department in whose field the subject lies. Open, by permission, to juniors and seniors who are majoring in the department. Three hours for a semester or six hours for a year.

Summer Fieid Courses. The department will recommend summer field courses given by other colleges (dealing chiefly with the Rocky Mountain region) to interested students who have completed one year or more of geology at Wellesley. Credit may be given for such courses provided the student's plans are approved in advance by the department.

## Geography

102 (2). Introductory Geography. World distribution, and the principles underlying distribution, of the various elements of the natural environment: relief features, soils, climates, natural vegetation, water and mineral resources. Types of human adjustments to environment. Resultant world cultural patterns. Open to students who have completed the whole or only the first semester of 101. Six periods a week; in general, three of lecture or discussion and three of laboratory. Occasional afternoon field trips will be substituted for laboratory work. Three hours. Miss Parker, Miss Pendleton.
203 (2). Cartography. Principles governing choice of projection, scale, and grid in map making; methods of depicting relief; use of aerial photographs in photomapping; evaluation of source materials. Opportunity in laboratory for map projects chosen to suit the special interests of the student. Open to juniors and seniors without prerequisite, and to sophomores who have completed 101 or 102 . Four periods a week; in general, two of lecture and two of laboratory. Three hours. Miss Dowse.

208 (1), (2). The Geography of Europe. A study of man's adjustments to physical environment in Europe. Topography, climate, and other environmental factors in their relation to the early rise of civilization in Europe, the distribution of races and languages, the partition of the continent into political units, and economic development. Detailed study of selected countries of major interest to American students. Consideration of geographic relationships involved in postwar reconstruction problems. Open to juniors and seniors without prerequisite, and to sophomores who have completed 101 or 102 , or who are planning
to major in history, economics, or political science. Three hours. Miss Parker.
209 (2). The Geography of the United States, Canada, and Alaska. A study of man's economic activities as related to environmental factors in the major geographic regions of the United States, Canada, and Alaska. Particular consideration is given to geographic factors concerned with current economic problems. Open to juniors and seniors without prerequisite, and to sophomores who have completed 101 or 102, or who are planning to major in history, economics, or political science. Three hours. Miss Eiselen.
303 (2). The Geography of Middle America. A geographic study of Mexico, the countries of Central America, and the Caribbean Islands; the environmental background for the formation of the many political units and for the economic development of the various countries and natural regions. Open to juniors and seniors who have completed 102 or a course in regional geography; also to juniors and seniors who have completed or are taking History 214 or are majoring in Spanish. Three hours. Miss Eiselen.
304 (1). The Geography of South America. The physiographic features, climates, and resources of South America; the influence of these factors upon the colonization of the continent by Europeans, upon the formation of independent political units, and upon the present and possible future economic development of the various countries. Open to juniors and seniors who have completed 102 or a course in regional geography; also to juniors and seniors who have completed or are taking History 214 or are majoring in Spanish. Three hours. Miss Eiselen.
306 (1). Conservation of Natural Resources. A study of the natural resources of the United States with a view to understanding the need for and the principles governing their conservation. The course includes consideration of the problems of floods, soil erosion, utilization of arid and semi-arid lands, preservation of forests, and intelligent use of mineral and fuel supplies. Open to juniors and seniors who have had 101, 102, or a course in regional geography or are majoring in economics or botany. Counts toward a major in geography but not for distribution. Three hours. Miss Eiselen.
308 (2). The Geography of Asia. A geographic study of Asia as a whole and of selected political units of the Eurasian continent. These units are Asiatic countries with the exception of the Soviet Union, of which the European, as well as the Asiatic, portion is studied. The course examines the geographic background of various problems of current world importance which have their roots in the geography of Asia. It gives opportunity for application of principles developed in earlier
regional courses in interpreting human adjustments to enviromment in oriental countries. Open to juniors and seniors who have completed 208. Three hours. Miss Parker.

309 (1). Climates of the World. Advanced study of the elements and controls of climate and of the resultant world climatic pattern, with emphasis upon the economic significance of this pattern. Systems of classification of climates. Open to juniors and seniors who have completed 102 and at least one regional course in geography. Three hours. Miss Parker. (Not offered in 1948-49.)
305 (1). Seminar in Geography. Topics are assigned to students for independent investigation. Reports of individual work are presented weekly. Open to graduate students and to approved seniors. Three hours. Miss Parker.
350. Research or Independent Study. The subject of study will be determined by the preparation of the student and by her special interests. Her work will be under the direction of the member of the department in whose field the subject lies. Open, by permission, to juniors and seniors who are majoring in the department. Three hours for a semester or six hours for a year.

## Directions for Election

Geology. A geology major must include 101. Grade II courses should be selected with a view to the type of advanced work which the student desires. Advice from the department should be secured. A summer field course in western United States is suggested as a good background for advanced courses. Geography 306 and the regional courses correlate well with geology. Chemistry is desirable for students majoring in geology. Those intending to do graduate work should consult the department for advice in the selection of related courses.
Geography. A geography major should include the first semester of 101, 102, 208, 209, and at least twelve hours of grade III work in geography. Students who wish to major in geography will find that this work correlates well with Geology 204 and with work in history, economics, and other social sciences. For advanced work in the subject, both French and German are useful.

By permission, six hours of closely correlated work in history will be accepted as part of a major in geography.

The attention of students who are interested in the teaching of geography is called to Education 308, The Teaching of Social Studies in the Secondary School.

## Exemption Examination

Students with exceptional preparation in either geology or geography may apply for an exemption examination.

## GERMAN

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\begin{aligned}
\text { Professor: } & \text { Marianne Thalmann, ph.d. } \\
\text { Associate Professors: } & \text { Magdalene Schindelin, Ph.d. } \\
& \text { Barbara Salditt, ph.d. (Chairman) } \\
\text { Instructors: } & \text { Marina Farmakis, ph.d. } \\
& \text { Ruth Deutsch, m.a. }
\end{aligned}
$$

The language of the classroom in all courses is almost exclusively German. The student thus has constant practice in hearing, speaking, and writing German. A summer term at the German School, Middlebury College, is recommended as stimulating and helpful.

A limited number of qualified students are permitted to spend the junior year in Zürich.
101. Elementary Course. Study of fundamental elements of German grammar; frequent written exercises; reading of short stories; special emphasis on oral expression. Open to students who do not present German for admission. Four class periods. Six hours. Miss Thalmann, Miss Schindelin, Miss Farmakis, Mrs. Deutsch.
102. Intermediate Course. Extensive reading with emphasis on vocabulary building; review of fundamental principles of grammar; frequent composition and oral expression; discussion of German culture. Prerequisite, 101 or two admission units in German. Six hours. Miss Schindelin, Miss Farmakis.
104. Outline History of German Literature. First semester: an introduction to German literature from its beginning to the seventeenth century. Second semester: an introduction to the seventeenth and eighteenth centuries, Schiller and Goethe. Open to freshmen who present three or more admission units in German. Six hours. Miss Salditt.
202. History of German Literature. Introduction to German literature; the parallel development of literature, social conditions, and ideals of the times. Works read and discussed are: the Hildebrandslied, selections from the Niebelungenlied, the works of Wolfram, Gottfried, Hartmann, the Minnesingers; Volkslied, selections from Luther, Hans Sachs, Lessing, Herder, Schiller, Goethe. Prerequisite, 102 or, by permission, 101. Six hours. Miss Salditt, Miss Schindelin.
204. Goethe and Schiller. Their lives and their works. Their literary growth studied with emphasis on their development from ''Sturm und Drang" to classicism and considered in relation to eighteenth century literature in general. Prerequisite, 104 or 202. Six hours. Miss Salditt.
206. Conversation. Practice in the use of the spoken language. Class discussions based on readings in newspapers, periodicals, and
other contemporary materials. Prerequisite, 102 or, by permission, 101. Two hours. Miss Farmakis.

207 (1). Advanced Composition and Conversation. Intensive work in written and oral German; composition, translation, grammar. Prerequisite, 202 or 206, or, by permission, 104. Two hours. (Not given in 1948-49.)
208. German Life and Thought in the Nineteenth and Twentieth Centuries. The development of intellectual and aesthetic trends in the nineteenth and twentieth centuries. Varied literary texts; pamphlets, letters, memoirs of musicians, scholars, artists, and statesmen. Open to students who have completed 104 or 202 and, by special permission, to other students with sufficient knowledge of German. Six hours. Miss Thalmann. (Not given in 1948-49.)
209 (2). Linguistics. Study of the structure of the German language: advanced syntax, morphology, semantics, with emphasis on synonomy. Prerequisite, 202 or 206 or, by permission, 104. Two hours. (Not offered in 1948-49.)
304 (1). Goethe's Faust. Study of the pre-Goethean development of the Faust legend in its more important literary forms. Intensive study of Goethe's Faust, Part I; extensive study of Part II. Open to seniors who have completed six hours of grade II and to juniors by special permission. Three hours. Miss Thalmann.
305 (2).* The German Romanticists. A study of early romantic philosophy and significant writers of the period: Schelling, Novalis, the Schlegels, Tieck, E. T. A. Hoffmann, Schopenhauer. Prerequisite, at least one course of grade III. Three hours. Miss Thalmann. (Not offered in 1948-49.)
306 (2).* From Lessing to Herder. Literary trends in the eighteenth century. Extensive selections from Lessing, Herder, and Winckelmann. Open to juniors and seniors who have completed 304. Three hours. Miss Salditt.

308 (2). Seminar. Studies of Representative Authors in Nineteenth Century Literature. Prerequisite, one course of grade III. Three hours. Miss Thalmann.
312 (1). Literature of the Modern Period. A study of the outstanding authors of the twentieth century. Discussion of naturalism, new romanticism, expressionism, and post-expressionism. Open to students who have completed 204 or 208 and to seniors by special permission. Three hours. Miss Schindelin.

* Courses 305 and 306 will be offered in alternate years.

350. Research or Independent Study. Open to graduate students, and, by permission, to seniors. Three hours for a semester or six hours for a year.

## Directions for Election

To fulfill the literature requirement in group I, students may elect courses 104, 202, 204, 208, and grade III courses.

Course 101 may be counted for the degree but not for the major.
Course 102 may count for the major.
Students who start with 101 in college and desire to major in German should consult the department in order to obtain permission to omit 102 and take 202 and 206.

Students intending to major in the department are requested to take 104 or 202 and at least twelve hours of grade III work.

Students intending to teach German will be recommended by the department only if they have taken from six to twelve hours of grade III.

## GREEK

Professor: Helen Hull Law, ph.d.
Associate Professor: Barbara Philippa McCarthy, ph.d. (Chairman)
101. Beginning Greek. The fundamental facts of Greek grammar with practice in reading and writing. Selections from the great writers of prose and poetry. Open to students who do not present Greek for admission. Six hours. Miss McCarthy, Miss Law.
102. Modern Greek. Practice in speaking and writing the Greek of today. Open by permission of the instructor. Two hours. Miss McCarthy.
104 (2). Classical Mythology. The more important myths of the classical period in relation to the literature, art, and religion of ancient times; their influence on the literatures of succeeding periods. This course may not be counted toward a major in Greek. Open to all undergraduates. Three hours. Miss Law.
201 (1). Plato. Apology, Crito and selections from other dialogues. Prerequisite, 101 or two or three admission units in Greek. Three hours. Miss Law.
205 (2). Homer. Selected books of the Iliad. Prerequisites, 101 and 201; or two admission units in Greek and 201; open to others by permission. Three hours. Miss McCarthy.
202 (2). Homer. Selected books of the Odyssey or other material selected to meet the needs of the class. Prerequisites, three admission units in Greek and 201, or 205. Three hours. Miss Law. (Not given in 1948-49.)

203 (1). Greek Literature in English Translation: Epic, Tragedy. Reading of the Iliad and Odyssey, and plays of Eschylus, Sophocles, and Euripides. Lectures on the origin of epic poetry and tragedy and their influence on later literature. This course may not be counted toward a major in Greek. Open to juniors and seniors without prerequisite, and to sophomores who have completed a course in literature in any department. (This does not include a beginning course in a foreign language.) Three hours. Miss McCarthy.
206 (1). Writing of Greek. Review of the essentials of grammar and syntax. Written exercises based on prose selections to be read at sight in class. Open to students who have completed 101 and are taking another course in Greek other than 203 and 104. Three hours. Miss McCarthy. (Not offered in 1948-49.)
301. Greek Drama. Reading and study of dramas of Æschylus, Sophocles, Euripides and Aristophanes. Prerequisite, 201 and 205 or 202. Six hours. Miss Law.
302. Greex Poetry from Homer through Theocritus. Epic, lyric, and pastoral poetry. Prerequisite, 201 and 205 or 202. By permission, students may elect either semester as a semester course. Six hours. Miss McCarthy.
306. Greek Prose from Herodotus through Lucian. Reading from Herodotus, Thucydides, Plato and Lucian, varying from year to year according to the needs and desires of the class. Prerequisite, 201 and 205 or 202. By permission, students may elect either semester as a semester course. Six hours. Miss McCarthy. (Not given in 1948-49.)
350. Research or Independent Study. Open to seniors by permission, and to graduate students. Three hours for a semester or six hours for a year.

## Directions for Election

To fulfill the literature requirement in group I, students may elect any course in Greek except 101, 102, 206.

Students majoring in Greek are advised to elect some work in Latin. Their attention is also called to the courses in Greek history, classical art, and Greek philosophy.

Students eligible for honors work may elect an interdepartmental honors program in classical archæology (see page 146).

Qualified students may fulfill the second semester of the Biblical history requirement by electing Biblical History 210, The First Three Gospels in Greek.

HISTORT<br>Professots: Edward Ely Curtis, ph.d. Judith Blow Williams, ph.d.<br>Associate Professors: Evelyn Faye Wilson, ph.d. (Chairman)<br>Henry Frederick Schwarz, ph.d.<br>Charlotte Elizabeth Goodfellow, ph.d.<br>Assistant Professor: John Hewitt Mitchell, ph.d.<br>Instructors: Edward Vose Gulick, ph.d.<br>Alice Birmingham Colburn, m.a.

Lecturer: Kuo-Sieu Wong Sun, m.a.
101. Medieval and Early Modern Europe. A study of the origins of modern European civilization and the modification of political, social, and economic institutions under changing conditions: the development of Christianity and Christian churches; the assimilation of the heritage of the ancient world; feudalism and the rise of the middle class; and the development and expansion of the national state. Open to all undergraduates. This course, 102 or 103 is prerequisite to later election. Six hours. Miss Wilson, Mr. Mitchell.
102. Modern European History. A survey of conditions in the seventeenth century; the leading movements in the development of modern Europe, such as colonial expansion in the eighteenth century, the Industrial Revolution, the French Revolution, the Liberal and Nationalist movements of the nineteenth century, the emergence of the modern British Empire, the unification of Italy and of Germany, the World Wars. Open to all undergraduates. This course, 101 or 103 is prerequisite to later election. Six hours. Mrr. Schwarz, Mrs. Culburn, Mr. Gulick.
103. History of Western Thought. Major epochs in the history of western thought as related to the great trends in historical development. Open to sophomores, juniors, and seniors who have not taken History 101 or 102 and, by permission, to freshmen who have some knowledge of European history. Six hours. Miss Williams.
200. History of Europe from the Decline of Rome to the Present Time. The development, out of medieval society, of national states, industrialization, European expansion overseas, world conflicts. Modern efforts to restore a sense of unity to society. (Primarily for nonmajors.) Open to juniors and seniors, except those who have taken 101 or 102. Six hours. Mr. Schwarz.
201. History of Modern France. A study of the political, constitutional, cultural, and social development of France from the beginning of the seventeenth century to the present. Prerequisite, six hours
in history; open to those giving special attention to the study of French. Six hours. Mr. Mitchell.
202 (1), (2). History of Europe since 1914. The causes and course of the War of 1914-18, the peace settlements, revolutions and the emergence of communism, fascism and national socialism, social and economic tension, rivalries among the powers, the recent conflict. Prerequisite, six hours in history or political science or economics. Three hours. Mrs. Colburn.
203*. The History of Greece. A brief survey of the oriental civilizations by which the Greeks were influenced. A study of the social, economic, and political development of the Greek State; Greek civilization in its most significant aspects. Prerequisite, six hours in history; no prerequisite to those who are giving special attention to the classics or Greek philosophy. Six hours. Miss Goodfellow.
204*. History of Rome. A general survey of Roman history. The conclusions of modern archæologists and historians with regard to the earlier period, with main emphasis upon Rome's experiments in government, the attempts of her statesmen to solve the social and economic problems of the Republic, and the Empire, and upon the development of Rome's legacy to the modern world. Prerequisite, six hours in history; no prerequisite to those who are giving special attention to the classics. Six hours. Miss Goodfellow. (Not offered in 1948-49.)
205 (2). Colonial America. The foundation and growth of the British colonies in America. Emphasis upon colonial policy and administration, and upon the causes and course of the American Revolution. Open to juniors and seniors without prerequisite, and to other students who have completed six hours in history or who have completed or are taking Economics 204, English 223, Geography 209, Philosophy 204. Three hours. Mr. Curtis.
206*. Central Europe. A survey of Central Europe-Germany, Poland, Bohemia, and the Danube Valley-since the fifteenth century; the political evolution of the states in this area, with emphasis on social and cultural developments and relationships. Open to students who have completed six hours in history or who are giving special attention to the study of German. Six hours. Mr. Schwarz. (Not offered in 1948-49.)
209 (2)*. History of Russia. The forces which made Russia a world power; the development and policy of the autocracy; the struggle for freedom; the existing régime. Open to all seniors, to juniors who have completed or are taking another course in history, and to sophomores who have completed six hours. Three hours. Mr. Gulick.

* Offered in alternate years.

213. History of England. A general survey of English history, political, social, economic, and cultural, with special emphasis on England's contributions to the modern world. Some attention to England's oversea expansion and the formation of the British Empire. Open to sophomores, juniors, and seniors who have completed six hours in history or are giving special attention to English literature, political science, economics, or sociology. Six hours. Miss Williams.
214 (1). The Rise of the Latin-American Republics. A survey of the exploration and conquest of the New World by the Spaniards. Spanish colonial policy and the causes of the revolutionary movement.
The wars of liberation and the emergence of the present republics, with special reference to the recent history of Mexico, Brazil, and Argentina. Prerequisite, six hours in history. No prerequisite to sophomores, juniors, and seniors who are majoring in Spanish, or have completed Geography 304, Political Science 207, or Sociology 306. Three hours. Mr. Curtis.
214. The Renaissance and Reformation in Europe. A study of relationships between economics, politics, and culture in western Europe, 1300-1600: the rise of capitalism and the middle class, the renaissance state, and humanism in its various aspects. In the second semester, the Protestant revolt and the Catholic Reformation. Prerequisite, six hours in history. Open, by permission, to students who have completed six hours in art. Six hours. Miss Wilson.
221 (1). The Founding of American Nationality, 1787-1865. The framing and adoption of the Constitution, the founding of political parties, the westward movement, the rise of the slave power, irrepressible conflict and the Civil War. Open to juniors and seniors without prerequisite, and to other students who have completed six hours in history or who have taken or are taking Economics 204, Geography 209, Philosophy 204, or Political Science 201 or 202. Three hours. Mr. Curtis.
222 (2). The Emergence of Modern America, 1865 to the Present Time. Political and economic reconstruction, the New South, the Cleveland era, the rise of progressivism, global wars and retreat from isolationism, the advent of the New Deal. Open to juniors and seniors without prerequisite, and to other students who have completed six hours in history, or who have taken or are taking Economics 204, Geography 209, Philosophy 204, or Political Science 201 or 202. Three hours. Mr. Curtis.
215. England Under the Tudors and Stuarts. The Renaissance and Reformation in England; Puritanism and its accompanying democratic ideals; the constitutional struggles of the sixteenth and seven-
teenth centuries; social and economic changes initial to the founding of the British Empire. Open to juniors and seniors who have completed 12 hours in history. Six hours. Miss Williams. (Not offered in 194849.)
216. Diplomatic History of Europe since 1789. A review of the period 1648-1789, followed by extensive study of diplomatic problems of the nineteenth and twentieth centuries with emphasis on World War I and its consequences. Open to juniors and seniors who have completed 12 hours in history. Six hours. Mr. Gulick.
217. British History since 1815. Postwar problems and conditions in England in 1815. The significant developments in the political, social, and intellectual history of Great Britain and the British Empire, and England's part in world affairs, until the present. During the first semester, political, social, and cultural developments in England will be emphasized, while foreign relations and imperial affairs will be stressed in the second. By permission of the instructor, either semester may be taken independently. Open to juniors and seniors who have completed 12 hours in history or Economics 209. Six hours. Miss Williams.
218. American Foreign Relations. 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, and the evolution of the United States into a world power. Open to juniors and seniors who have completed 12 hours in history or nine hours in history and Economics 314 , or who have taken or are taking Political Science 208 or 301. Six hours. Mr. Curtis.
308 (1). Imperialism in World Politics. European expansion in Asia, Africa, and the Islands of the Pacific in the nineteenth and twentieth centuries; colonial and imperial systems and problems; international politics as related to the control of raw materials, international finance, and imperial communications. Open to juniors and seniors who have completed 12 hours in history or nine hours in history and Economics 314. Three hours. Miss Williams, Mfr. Schwarz, Mr. Mitchell, Mr. Gulick (jointly).
219. Medieval Culture from St. Augustine to Dante. A study of society, thought, and learning in the early middle ages, the influence of Byzantine and Moslem civilizations in the West, the medieval renaissance, and the synthesis of the thirteenth century. Open to juniors, seniors, and graduates who have had a course of grade I or II, or are taking a course of grade III, in medieval history, art, or literature (for
example, History 101, Latin 106, Art 205, French 201, 321, Italian 301, Biblical History 302, English 220). Six hours. Miss Wilson.
220. International Relations: Far East. The Orient in the nineteenth and twentieth centuries, with special reference, in the first semester to the history of Chinese civilization, and in the second to the politico-economic interests of Europe and America. Prerequisite, same as for 312. Six hours. Mrs. Sun.
221. Social and Cultural History of Europe. The development of culture from early times through the rise of the Mediterranean civilizations, the Middle Ages, the Renaissance, and modern times, covering the more important phases of social, economic, and intellectual life. Open to juniors and seniors who have completed 12 hours in history. Six hours. Miss Williams. (Not offered in 1948-49.)
312 (1). International Relations: the Near East. A general view of international relations in the Near East since the Congress of Berlin, with special reference to postwar settlements and to present conditions. Open to juniors and seniors who have either (1) completed a course of grade I and have completed or are taking six hours of grade II in history, or (2) completed six hours of grade II in history. Specially qualified non-majors who have not completed the prerequisites may be admitted by permission. Three hours. Mr. Gulick.

## 313 (2)*. Russia in Transition. A Century of Russian Civiliza-

 tion. Life and thought in Russia since the middle of the nineteenth century. Changes in political institutions, social structure, ethical and artistic standards, with special attention given to prominence and significance in Russian history of Tolstoy, Dostoyevski, and Lenin. Open to juniors and seniors who have either (1) completed a course of grade I and have completed or are taking six hours of grade II in history, or (2) completed six hours of grade II in history. Specially qualified non-majors who have not completed the prerequisites may be admitted by permission. Three hours. Mr. Gulick. (Not offered in 1948-49.)314*. Political and Cultural History of Germany since the Seventeenth Century. A study of German society, and the evolution of the intellectual and artistic life of Germany against the background of political institutions and relationships, from the middle of the seventeenth through the nineteenth century. Attention will be given to the diversity of German culture and to the effect of outside influences and their assimilation. Open to juniors and seniors who have completed or are taking six hours of grade II in history. Specially qualified

[^21]students who have not completed the prerequisite may be admitted by permission. Six hours. Mr. Schwarz.
315 (2). Seminar. Selected Studies in History. Subject for 194849: the writing of history from Herodotus to modern times. The changing conceptions of history and historians in relation to the intellectual background from which they came, and their influence upon contemporary historical thought. Open to graduate students and approved seniors who are majoring in history. Three hours. The Teaching Staff. 350. Researcif or Independent Study. By consultation with the department, students may arrange for from two to six hours of individual work. Open, by permission, to juniors and seniors who have completed or are taking a course of grade III in history. Two to six hours. The amount of work contemplated must be indicated at the time at which electives are due.

## Directions for Election

Students electing history may choose any of the introductory courses 101, 102 or 103, but not more than one of these courses may be counted in a major. The only other restrictions are those required by the prerequisites stated for each course. Students desiring to take the general examination in history are advised, however, to seek the advice of the chairman and other members of the department in order to insure a proper correlation of courses.

The courses are designed to help the student to acquire methods of historical work, and to furnish a basis for the more detailed study of particular periods.

Courses in political science may be included with a major in history with the permission of the department.

Students proposing to teach history are advised to take at least four courses in the department.

By permission of the department, six hours of closely correlated work in geography will be accepted as part of a 24 hour major in history.

The attention of students who are interested in the teaching of history is called to Education 308, The Teaching of Social Studies in the Secondary School.

## Exemption Examination

Students who before entering college have had unusual preparation in European history with regard to both amount and type of training may apply for examination for exemption from the requirement for distribution, or for entrance directly into grade II work. In addition to the evidence offered by the examination, they will be expected to give further indication of their training by submitting papers prepared in secondary school for their classes in history.

## hrgiene and phrsical education

Professor: Ruth Elliott, ph.d. (Chairman)<br>Associate Professors: Elizabeth Beall, ph.d.<br>Ada Roberta Hall, ph.d.<br>associate professor of physiology.<br>Assistant Professors: Marion Isabel Cook, m.a.<br>Elinor Marie Schroeder, ph.d.<br>Katharine Fuller Wells, ph.d.<br>Instructors: Evelyn Kathryn Dillon, m.A.<br>Jean Knapp Marsh, m.a.<br>Mary Elizabeth Van Dyke, b.s.<br>Gail Murl Hennis, m.a.<br>Mary Armstrong Watt, m.s.<br>June Holcombe, b.s.<br>Alice Graham McCabe, b.s.<br>Registrar: Marion Dorothy Jaques, b.A.<br>Musician for the Dance: Kathryn R. Hodgson.

Special Lecturers: Andrew Roy MacAusland, m.d., orthopedics.<br>Clifford L. Derick, m.d., internal medicine.<br>Samuel R. Meaker, m.d., menstrual function.<br>Britton F. Boughner, b.p.e., recreation.

## I. Undergraduate Courses*

The Department of Hygiene and Physical Education, through its program adapted to individual needs and abilities, aims to help each student to build up sufficient strength and vitality to meet the demands of a normally active life; to appreciate and practice fundamental health habits; to develop a normal carriage, a sense of rhythm, coördination and motor judgment; to be a coöperative and contributing participant in group activity; and to acquire skill and a lasting interest in wholesome forms of recreation.

Two hours a week of physical education activities are required for freshmen and sophomores. The activity program of each year is divided into three seasons: fall, winter, spring.

Sports Requirement: During the two years, the department requires that students take one season of a team sport and two seasons of an individual sport (not necessarily the same sport). If a student can demonstrate a fair degree of skill in an individual sport, or if she has a Junior or Senior Life Saving Certificate, she may substitute other activities for individual sports.

A student's choice of activity is subject to the approval of the department, on the basis of the results of the medical and physical examinations, and the student's previous experience.

Posture Requirement: Every student is expected to attain a grade of at least $\mathbf{C}$ minus on her posture photograph. Failure to meet this standard at the end of

[^22]the second year of indoor work will necessitate enrollment in course 125 until the standard is attained or until the end of the winter season of the senior year. The 122 winter grade will be withheld until this requirement is fulfilled.
121. Activities for Freshmen. Choice of the following: Fall: Archery, canoeing, golf, hockey, modern dance, riding $\dagger$, rowing, swimming (elementary), tennis, volley ball. Winter: Fundamentals of movement and conditioning (gymnastics, modern dance techniques, swimming). Spring: Archery, canoeing, golf, lacrosse, modern dance, riding $\dagger$, rowing, swimming (elementary), tennis. Required of freshmen, two periods a week. The Staff.
122. Activities for Sophomores. Choice of the following: Fall: Activities listed under 121. Winter: Badminton, basket ball, modern dance, riding $\dagger$, senior life saving, square and round dancing, squash, swimming, water safety instructor training course. Spring: Activities listed under 121. Required of sophomores who have completed 121. Two periods a week. The Staff.
124. Individual Corrective Exercise for Freshmen. Required of freshmen whose orthopedic condition indicates the need of individually planned exercise. Two hours a week in the winter, with 121 fall and spring. Miss Wells, Miss Van Dyke, Miss Watt.
125. Individual Corrective Exercise for Sophomores. Required of sophomores whose orthopedic condition indicates the need of individually planned exercise. Two hours a week in the winter, with 1.22 fall and spring. Miss Wells.
126. Voluntary Activities for all Students. Students may elect with the permission of the department any of the activities listed under 121 or 122. Open to all students and faculty. Two hours a week in the fall, winter, or spring terms. The Staff.
131. Modified Activities for Freshmen. Fall: Choice of archery, canoeing, golf, riding $\dagger$, tennis, volley ball. Winter: Fundamentals of movement and conditioning. Spring: Choice of archery, canoeing, golf, riding $\dagger$, tennis. Required of freshmen whose physical condition indicates the need of modified activities. Two hours a week. Miss Schroeder, Mrs. McCabe.
132. Modified Recreational Activities for Sophomores. Fall: Choice of archery, canoeing, golf, riding $\dagger$, tennis, volley ball. Winter: Recreational activities. Spring: Choice of activities listed under 131. Required of sophomores whose physical condition indicates the need of modified activities. Two hours a week. Mrs. McCabe.

## II. Professional Training in Hygiene and Physical Education for Undergraduate and Graduate Students

Professional courses in hygiene and physical education are offered to both undergraduate and graduate students. The courses are designed (1) to fit students to become specialists in the field of physical education, recreation and health work; (2) to provide basic training for those who wish to combine with other teaching work as assistant in physical education, or camp and recreational work.

## UNDERGRADUATE ELECTIVES

Though there is no major in hygiene and physical education, 207, 208, and 303, counting toward the B.A. degree, and courses 202, 203, 204, 217, 218, may be elected with the consent of the instructor of the course and the student's class dean. Successful work in selected theory and activity courses should enable such students to assist in physical education or recreation under the guidance of trained specialists.

SUGGESTIONS FOR UNDERGRADUATES WHO ARE CANDIDATES FOR THE B.A. DEGREE, AND FOR THE TEACHING CERTIFICATE AND M.S. DEGREE IN HYGIENE AND PHYSICAL EDUCATION

The work for the B.A. degree may be completed in four years. An additional year beyond the Bachelor's degree is necessary to complete the requirements for the Teaching Certificate and M.S. degree.

A student may enter this five-year course at the beginning of her freshman, sophomore, or junior year. The Recorder will furnish the student with a form to be presented to the chairman of the department, since permission to register for the five-year course must be obtained from the chairman by each applicant. By the end of the sophomore year a student should have completed Hygiene and Physical Education 121, 122, Biblical History 104, Chemistry 101, Psychology 101, the prescribed course in English composition, and six additional hours from one or more of the following fields: bacteriology, biology, hygiene, physics, sociology, and psychology.

The following electives are suggested: courses in economics, education, sociology, psychology, bacteriology, zoölogy, physics, Hygiene 202, 217, 218. Students wishing to meet the requirement for state teachers' certificates should consult the education department. A full major in zoölogy is an advantage.

It is essential for candidates to develop basic skills in the following activities as prerequisites for the required methods courses: swimming and modern dance before the junior year; basketball, hockey, badminton or tennis, and one additional sport from the following: archery, badminton, canoeing, fencing, golf, tennis, before the senior year. It is
desirable to attain skill in as large a variety of physical education activities as possible.

The American Red Cross Standard First Aid Certificate and the Senior Life Saving Certificate are required for the Teaching Certificate in Hygiene and Physical Education and should be secured before the junior year.

SCHEDULE OF PROFESSIONAL COURSES IN THE FIVE-YEAR PROGRAM
Freshman and Sophomore Years: Specially qualified students may elect methods courses 202, 203, 204 in lieu of the required courses 121 and 122. Students are advised to consult the chairman of the department concerning such a plan.

Funior Year: 126, 202 c, 204, 210, Education 200, Zoölogy 301, 313. Hygiene 207 and Zoölogy 302 may be taken in the junior or in the senior year.

Senior Year: 126, $202 \mathrm{a}, \mathrm{b}$; d or e; and one additional sport from the following: d, e, f, g, h, i; 203, 208, 303, and Hygiene 207 and Zoölogy 302 if not completed in the junior year.

Fifth Year: 214, 304, 306, 309, 321, 322; and for candidates for the M.S. degree in Hygiene and Physical Education one of the following graduate courses: $318,323,350$, an approved graduate course in an allied department, or a thesis.

Students are referred to the Bulletin of the Graduate Department of Hygiene and Physical Education.

## Graduate Work

(For a full description, see the Bulletin of the Graduate Department of Hygiene and Physical Education)

Graduates of colleges of satisfactory standing are admitted to the graduate work of the department. For the full professional course leading to the teaching certificate and to the master's degree, two years are required. Students, however, who as undergraduates have completed a major in hygiene and physical education may fulfill the requirements for the master's degree in one year.

## TEACHING CERTIFICATE IN HYGIENE AND PHYSICAL EDUCATION

Candidates should present for admission one year of chemistry (chemistry completed in secondary school may be accepted), one semester of psychology or educational psychology, one semester of principles of education, and six additional hours from one or more of the following fields: bacteriology, biology, hygiene, physics, sociology, and psychology. Whenever possible the equivalent of mammalian
anatomy (Zoölogy 301 and 313) and physiology (Zoölogy 302) should be presented for admission. The following electives are suggested: courses in economics, education, sociology, psychology, bacteriology, biology, physics, and music. Students planning to teach in public schools should include education courses required for state certification in their undergraduate program.

It is essential that candidates attain skill, before admission, in basket ball, hockey, life-saving, modern dance, swimming, badminton or tennis; and as many as possible of the following: archery, badminton, canoeing, fencing, golf, tennis. The methods courses in these activities deal primarily with teaching method, organization, and related theory. If a student lacks skill needed for profitable work in any of these methods courses, additional practice will be required in undergraduate classes at Wellesley College. It is desirable to attain skill in other activities, such as folk, square and tap dancing, gymnastics and apparatus, lacrosse, riding, rowing, soccer, softball, squash, volley ball and winter sports.

The American Red Cross Standard First Aid Certificate and the Senior Life Saving Certificate are required for the Teaching Certificate in Hygiene and Physical Education and should be secured before admission.

## MASTER OF SCIENCE IN HYGIENE AND PHYSICAL EDUCATION

Graduate students who have qualified for advanced study and research, who have completed or are completing the requirements for the Teaching Certificate, may register for and complete in one or two years the twenty-four hours required for the M.S. degree in Hygiene and Physical Education. This requirement may be fulfilled by electives from the following: Hygiene and Physical Education 303, 318, 321, 322, 323, 350, thesis, and, with special permission, graduate courses in closely allied fields.
202. Technique of Teaching Sports. Teaching methods, officiating, organization, equipment: (a) Basket ball-two hours a week in the fall. (b) Hockey-two hours a week in the fall. (c) Swimmingtwo hours a week, second semester. (d) Badminton-one hour a week in the winter. (e) Tennis-two hours a week in the spring. ( $f$ ) Archery-one hour a week in the spring. (g) Canoeing-one hour a week in the fall. (h) Fencing-two hours a week in the winter, second semester. (i) Golf-two hours a week in the fall. (j) Lacrosse -one hour a week in the spring. ( $k$ ) Squash-one hour a week in the fall. (l) Water Safety Instructor Training course-three hours a week, first semester. ( $m$ ) Synchronized swimming-one hour a week, first semester. Required of first or second-year graduate students: $a, b, c ; d$ or $e$; and one additional sport from the following: $d, e, f, g, h, i$.

Prerequisite, basic skills in each one of the activities elected by the student except in lacrosse and squash. Prerequisite for ( $m$ ), 202 (c). Miss Beall, Miss Schroeder, Miss Wells, Miss Dillon, Miss Hennis.
203. Technique of Teaching Gymnastics, Apparatus, and Tumbling. Lectures on gymnastic terminology, selection and adaptation of material, progression; methods of presentation with practice in teaching. Required of first-year graduate students. Two hours a week in the winter. Miss Beall.
204. TechniQue of Teaching Rhythmic Activities. Rhythmic fundamentals; methods, materials, and practice teaching for elementary school level; music in relation to movement; technique of percussion; folk, square, social, modern and pre-classic dance for various age levels. Required of first-year graduate students. Prerequisite, elementary modern dance. Six hours. Mrs. Marsh.
207 (1). Measurement in Physical Education. The development, use, and interpretation of objective measurement and statistical methods in physical education. Required of first-year graduate students. This course counts three hours toward the B.A. degree. Miss Schroeder.
208. Leadership in Play and Recreation; Camp Counseling. Growth and development of the child and adolescent; play in education. Selection and adaptation of play activities for different age periods. Principles and methods of teaching. Social recreation programs and municipal recreation departments. Camp counseling. Required of first-year graduate students. Psychology or educational psychology is prerequisite. This course counts six hours toward the B.A. degree for students in the five-year program. Other students may elect one semester only for credit. Miss Beall, Miss Cook.

210 (1). Physical Examination. Organization, purpose, and techniques of the physical examination; types of records; interpretation of findings. Required of first-year graduate students. Two hours. Miss Wells.
214. Supervised Teaching. Responsible teaching experience, under supervision, in health and physical education programs of elementary and secondary schools and in college undergraduate classes. Required of second-year graduate students. Eight hours a week, exclusive of individual conferences. Miss Cook and the Staff.
217 (1). Modern Dance Workshop. Analysis of technical exercises for intermediate and advanced modern dance classes; development of technical studies in dance form; organization and function of dance groups; the collaborative project on the secondary school and college level; dance production. Lectures, discussion, observations, practical
projects. Open to second-year graduate students, and to undergraduate students by special permission. Prerequisite, modern dance unit of 204. Two hours. Mrs. Marsh.
218 (2). Problems in Dance Composition. Thematic material, form and design, methods of development, criteria for evaluation. Open to second-year graduate students, and to undergraduate students by special permission. Prerequisite, modern dance unit of 204. Two hours. Mrs. Marsh.
301 (1). Mammalian Anatomy. (Zoölogy 301-See Department of Zoölogy and Physiology.)
313 (2). Mammalian Anatomy. (Zoölogy 313-See Department of Zoölogy and Physiology.)
302. Physiology. (Zoölogy 302-See Department of Zoölogy and Physiology.)
303. Kinesiology. First semester: study of joint and muscle function; analysis of fundamental movements. Second semester: mechanical principles of human motion; anatomical and mechanical analysis of posture, physical education skills and everyday activities. Required of first-year graduate students. Course 301 or its equivalent is prerequisite. Course 301 may be taken concurrently. Physics, while not required, is strongly recommended. This course counts six hours toward the B.A. degree, or the M.S. degree in Hygiene and Physical Education. Miss Wells.
304. Principles and Philosophy of Physical Education. Study and discussion of the aims and objectives of physical education, including historical development, relation to the general field of education, and analysis of present-day programs and methods in terms of objectives. Required of second-year graduate students. Four hours. Miss Elliott.

306 (2). Organization and Administration. The study of procedures upon which the teaching situation depends; i.e., selection and adaptation of activities, examination and grouping of pupils, testing the results of teaching, evaluation of the teacher and leader, provision of equipment, department organization. Illustrative problems selected from elementary, secondary schools, colleges, and recreation agencies. Required of second-year graduate students. Two hours. Miss Elliott.
309. Orthopedic and Remedial Physical Education. The study of body mechanics, corrective exercise, and massage. Preparation for teaching corrective physical education. Supervised teaching in the Wellesley College Posture Clinic for Children. Lectures by an ortho-
pedist and observation in orthopedic clinics. Required of second-year graduate students. The first semester of course 303 or its equivalent is prerequisite. Six hours. Miss Wells, Dr. MacAusland.
318. Problems in Health, Physical Education, and Recreation. Discussion of trends and current problems in these fields. Open in the first semester to second-year graduate students who have had the equivalent of courses 304 and 306 . Open to all second-year graduate students in the second semester. By permission students may elect either semester as a semester course. This course counts six hours toward the M.S. degree in Hygiene and Physical Education. Miss Elliott, Miss Beall, Miss Cook.
321. Applied Physiology. The application of human physiology to the problems of hygiene and physical education. The physiological aspects of exercise, fatigue, coördination, training, growth, functional tests, nutritional standards, and other topics related to the teaching of health and physical education. Required of second-year graduate students. Hygiene 207 and Zoölogy 302, or their equivalents, are prerequisite. Course 207 may be taken concurrently with the permission of the instructor. Three hours a week of lecture and recitation for a year, and one two-hour laboratory period in the winter, counting six hours. This course counts six hours toward the M.S. degree in Hygiene and Physical Education. Miss Hall.
322. Health Problems of School and Community. Social, economic, and educational influences on health; health agencies at work. Principles and procedures in conducting a health program. Health services, environmental hygiene, instruction and guidance, curriculum construction, methods and materials, appraisals. Special problems in various areas of health education. Required of second-year graduate students. This course counts six hours toward the M.S. degree in Hygiene and Physical Education. Miss Cook and Special Lecturers.
323. Seminar in Hygiene and Physical Education. First semester: survey of research methods and techniques related to various types of study in health, physical education and recreation; selected techniques applied to special projects. Second semester: further analysis of research problems; evaluation of completed studies. Open to secondyear graduate students. By permission the first semester only may be elected. This course counts six hours toward the M.S. degree in Hygiene and Physical Education. Miss Schroeder and other Members of the Staff.
350. Research or Independent Study. With the permission of the department, qualified graduate students may arrange for directed individual study in hygiene and physical education. Open to secondyear graduate students. Two to six hours. This course counts toward the M.S. degree in Hygiene and Physical Education.

## INTERDEPARTMENTAL COURSES

103. An Introductory Course in Biology. A course designed to introduce the student to fundamental biological principles as a basis for an understanding of the nature and the unity of living things and of the place of man in the biologic world. Open to students who have not offered biology for admission. In general, two hours of lecture and discussion and four of laboratory or field work. Six hours. Miss Creighton, Mrs. Wilson.
104. An Introductory Course in Physical Science. A course designed to acquaint the student with some of the basic concepts of physics and chemistry, the characteristics which these sciences possess in common, and an appreciation of the methods by which the concepts have been developed. Selected fundamental concepts and principles will be studied in a setting which includes both the circumstances surrounding their evolution and their effect on modes of scientific thought. Open to students who do not present chemistry or physics for admission. Three periods of lecture and discussion and one three-period laboratory appointment. Six hours. Miss H. Jones, Miss Lucy Wilson, Miss Fort, Miss Winchester, Miss Beers.
107.* Interpretations of Man in Western Literature. Representative views of the nature of man, and of his relation to the universe and society, reflected in the work of major writers of the western world; the expression of their thought in significant artistic form, such as epic, drama, essay. Open to sophomores, juniors, and seniors, and to specially qualified freshmen by permission of the Dean of Freshmen. Six hours. Miss Taylor, Miss Lever.

## ITALIAN

Professor: Gabriella Bosano, dottore in filologia moderna (Chairman)
Associate Professor: Angeline La Piana, dottore in lettere.
The language of the classroom is Italian except for occasional necessary explanations of grammar and idioms.

A limited number of qualified students are permitted, when practicable, to spend the junior year in Italy with the foreign study group of Smith College.

A summer term at the Italian School, Middlebury College, is recommended.
101. Elementary Course. The fundamental elements of Italian grammar and a general view of Italian civilization through frequent oral and written exercises. Reading aloud with special emphasis on correct pronunciation. Four class periods and five hours of preparation

[^23]each week. Open to students who do not present Italian for admission. Six hours. Miss Bosano, Miss La Piana.
103. Introduction to the Study of the Italian Renaissance. First semester: intensive study of the Italian language and of the background for a general knowledge of Italy in the Renaissance. Second semester: reading and discussion of selections from outstanding Italian authors of the period such as: Petrarca, Boccaccio, Vasari, Leonardo da Vinci, Machiavelli, Castiglione, Bandello, Tasso, and Guarino. The language used in the classroom is English. No prerequisite. Open to seniors and, by special permission, to juniors. Six hours. Miss Bosano.
201. History of Italian Literature in the Twentieth Century. Emphasis on drama and fiction as represented by the works of D'Annunzio, Pirandello, Deledda, and others. Prerequisite, 101 or equivalent. Six hours. Miss La Piana.
202. History of Italian Literature in the Nineteenth Century. A study of the literature of the nineteenth century as the expression of the political and philosophical thought of the period. Special emphasis on the works of G. Mazzini, A. Manzoni, and G. Carducci. Prerequisite, 101 or equivalent. Six hours. Miss Bosano. (Not offered in 1948-49.)
205. Composition. Difficult parts of Italian grammar and syntax. Free composition with special attention to letter writing. The subject matter will deal chiefly with contemporary Italy. Open to students who have completed 101. Two hours. Miss La Piana.
206. Practical Phonetics and Conversation. Practice in the spoken language. Emphasis on rhythm and melody and clear phrasing. Application of practical phonetics to radio work by means of records and soundscriber discs. Open to students who have completed 101. Four hours. Miss La Piana.
207. The Realistic and Psychological Novel in the Nineteenth Century. An intensive study of the work of $G$. Verga of the school of realism, and of A. Fogazzaro and the psychological novel. Additional reading and analisi estetica of selected poems of G. Parini, U. Foscolo and G. Leopardi. Prerequisite, 101 or equivalent. Six hours. Miss Bosano.
301.* Dante and His Time. The outstanding characteristics of the Middle Ages and its writers. The reading of Dante's Divina Commedia

[^24]and Vita Nuova in the original and in full. Open, by permission, to juniors and seniors who have completed or are taking 201 or 202 or 207. Six hours. Miss Bosano.
304.* Translation. Translation from English into Italian and vice versa of passages drawn from literary and scientific works. Emphasis on specific, technical vocabulary. Open to students who have completed 101, 201, 202, or 207. Two hours. Miss La Piana.
306.* Conversation. Conversation based on reading and critical study of articles from Italian newspapers and reviews. The purpose of this course is to familiarize the students with the language used in current publications. Open to students who have completed 101, 201, 202, or 207. Four hours. Miss La Piana. (Not given in 1948-49.)
307.* Drama and Short Stories in the Italian Renaissance. Emphasis on the plays of Poliziano, Guarini, Machiavelli, Ariosto, Tasso, Aretino, and Lasca, and on the short stories of Boccaccio and Bandello. Open, by permission, to juniors and seniors who have completed or are taking 301. Six hours. Miss Bosano. (Not offered in 1948-49.)
308.* History and Epics in the Italian Renaissance. A detailed study of Machiavelli's and Guicciardini's works, considered as literary masterpieces, and the poems of Pulci, Boiardo, Ariosto, and Tasso. Open, by permission, to juniors and seniors who have completed or are taking 301. Six hours. Miss Bosano. (Not given in 1948-49.)
309.* Seminar. Revival of Classic Learning in Italy and Especially in Florenge During the Fourteenth and Fifteenth Centuries. Development of Italian Humanism from F. Petrarca to A. Poliziano traced so that students may estimate the achievements of a new era in Italian civilization. Open to graduate students and, by permission, to seniors. Six hours. Miss Bosano. (Not offered in 1948-49.)
310.* Seminar. Modern Italian Drama. Development of the drama during the seventeenth and eighteenth centuries, from the Commedia dell'arte to Goldoni and Alfieri. Open to graduate students and, by permission, to seniors. Six hours. Miss La Piana. (Not given in 1948-49.)
350. Research or Independent Study. By consultation with the department students may arrange for individual work. Open, by permission, to juniors and seniors who have completed or are taking a course of grade III in the department. Two to six hours.

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## Directions for Election

To fulfill the literature requirement in group I, students may elect courses 201, 202, 207, and grade III courses (except 304, 306).

A major in Italian is generally based on 101. It is very desirable that students majoring in Italian should have had or be taking a college course in one of the ancient or modern languages, and should elect such courses in history and art as deal in whole or in part with Italian civilization and culture. Such courses will be required of students working for honors.

Students taking a 24 hour major should include 201 or 202 or 207, 205, 206, 301, 307 or 308.

Students taking a 30 hour major should include 201, 202 or 207, $301,304,306,307$ or 308.

Note:-101 may not count toward the major.

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\begin{array}{cc}
\text { LATIN } \\
\text { Professor: } & \text { Dorothy Mae Robathan, }{ }^{1} \text { ph.d. } \\
\text { Associate Professors: }: \begin{array}{c}
\text { Margaret Elizabeth Taylor, ph.d. (Chairman) } \\
\\
\text { Charlotte Elizabeth Goodfellow, ph.d. } \\
\text { Lecturer: }
\end{array} \text { Mary Louise Carlson, ph.d. }
\end{array}
$$

102. Beginning Latin. The aim of the course is to acquire in one year sufficient knowledge of grammar and syntax to enable the student to read Latin authors. Reading will include simple Latin and selections from classical writers. Open to students who do not present Latin for admission. Six hours. Miss Carlson.
103. Vergil or Cicero; Lyric Poetry. (a). Epic: Selections from the Eneid; Lyric: Catullus and Horace. (b). Readings from Cicero's Letters and Orations and from other authors selected to meet the needs of the students. Selections from Catullus and Horace. Prerequisite, three admission units of Latin, or for especially recommended students, two units, or 102. Those who read poetry in the third year will elect (b); those who read prose will elect (a). By permission, properly qualified students may elect the second semester without the first. Six hours. Miss Carlson.
104 (1). Roman Life and Customs. A study of Roman civilization through the medium of its social conditions, religious customs, education, amusements, buildings, etc. Lectures illustrated by lantern slides, photographs, coins, and other Roman antiquities. The required reading will be in English. No prerequisite. Three hours. Miss Robathan. (Not offered in 1948-49.)
[^26]105 (2). Latin Literature in English Translations. The most important poets and prose writers, with emphasis upon those authors who have especially influenced modern forms of literature. Lectures on the development of Latin literature. No prerequisite. Not open to students who have had or are taking 201. Three hours. Miss Carlson.
106. Medieval Latin. Readings from Latin writers in the fields of literature, history, and philosophy of the Middle Ages, including Cassiodorus, Gregory the Great, Bede, Geoffrey of Monmouth, John the Scot, Erasmus, Abelard, the chroniclers of the Crusades, the romancers of the Gesta Romanorum, religious drama, songs of the Goliards, and church hymns. Only so much attention will be given to linguistic study as the reading requires. Prerequisite, three or more admission units of Latin, or for especially recommended students, two units, or 102. Six houis. Miss Goodfellow.
201. The Golden Age of Latin Literature. The reading will be chosen from the following topics: studies in mythology from Ovid's Metamorphoses or Fasti; Livy's History; Cicero's philosophy in the De Senectute or De Amicitia; lyric verse in the shorter poems of Catullus and the Odes and Epodes of Horace. Prerequisite, four admission units of Latin or 106; or, by permission, three units including one of Vergil. Six hours. Miss Goodfellow.
202 (2). Vergil. Selections from the Eclogues, Georgics, and Eneid. Study of the poet's early work in pastoral romance, and his later development through didactic epic, the Georgics, to the heroic epic of the Eneid. Prerequisite, 103 or 201. Three hours. Miss Taylor.
203 (1). Comedy. Plautus and Terence. Careful study of two plays followed by the rapid reading of others. The sources of Latin comedy, its linguistic and literary features, and its influence upon later literature. Prerequisite, 103 or 201. Three hours. Miss Goodfellow.

204 (2). Pliny and Martial. A study of Roman society in the early Empire as reflected in the Letters of Pliny and the Epigrams of Martial. Reports on special topics connected with the literary style and social background of these authors. Prerequisite, 103 or 201. Three hours. Miss Carlson.

205 (1). Cicero. Selections from the philosophical works and letters. Prerequisite, 103 or 201. Three hours. Miss Carlson.
301 (2). The Teaching of Latin in the Secondary School. For description and prerequisites, see Education 301. (Not offered in 1948-49.)

302 (1). Satire. Horace and Juvenal. .The origin and development of satire as a literary form. Special emphasis upon the satires of Horace and Juvenal; other Roman satirists studied by topics and reports. Prerequisite, six hours of grade II exclusive of 201. Three hours. Miss Robathan. (Not offered in 1948-49.)
303 (2). Latin Epigraphy. Selected inscriptions studied both for form and content as sources for the study of Roman public and private life. Prerequisite, six hours of grade II exclusive of 201. Three hours. Miss Robathan. (Not offered in 1948-49.)
304 (2). Topography of Rome. The early history of Rome, its development, the construction and furnishings of typical public and private buildings in the capital and in provincial towns. Such study of the material surroundings is connected with the literary and social development of the Roman people, and is introductory to further work in classical archæology. Prerequisite, six hours of grade II exclusive of 201. Three hours. Miss Robathan. (Not offered in 1948-49.)

306 (2). Studies in Roman Religion. The changing religious experience of the Republican period and of the early Empire; the influence of Oriental cults. Readings from the sources, especially from Livy, Cicero, and Ovid. Prerequisite, six hours of grade II exclusive of 201. Three hours. Miss Taylor. (Not offered in 1948-49.)
309 (2). Prose Literature of the Early Empire. History: Livy, Tacitus, Suetonius, Velleius Paterculus. Reading based on choice of topics. Prerequisite, six hours of grade II exclusive of 201. Three hours. Miss Goodfellow.
310 (1). Poetry of the Republic. The beginnings of Latin poetry, the earlier poets, with main emphasis upon poets of the Ciceronian Age, Catullus and Lucretius. Prerequisite, six hours of grade II exclusive of 201. Three hours. Miss Taylor.

312 (2). Poetry of the Empire. Elegy: Tibullus, Propertius, Ovid. Selections from representative poets of the later period. The course may be given in one weekly appointment. Prerequisite, six hours of grade II exclusive of 201. Three hours. Miss Robathan. (Not offered in 1948-49.)
350. Research or Independent Study. Open to graduate students and, by permission, to juniors and seniors. Two to six hours.

## Diregtions for Election

The literature requirement in group I may be met by electing from the following list of courses: $103,105,106,201,202,203,204,205,302$, 309, 310, 312.

Courses 102, 104, 105, count for the degree but do not count toward a major in Latin.

Students intending to major in Latin are advised to take at least one course in Greek and History 204. Art 209 and 320 may be counted toward a 30 hour major in Latin by students who are at the same time taking a grade III course in Latin.

No students are recommended to teach Latin who have not had at least six hours of grade III and Education 301.

Students eligible for honors work may elect an interdepartmental honors program in classical archæology (sce page 146).

## MATHEMATICS

Professor: Marion Elizabeth Stark, ph.d. (Chairman)<br>Associate Professor: Helen Gertrude Russell, ph.d.<br>Assistant Professor: Miriam Clough Ayer, ${ }^{1}$ ph.d.<br>Instructor: Ilse Lisl Novak, ph.d.<br>Lecturer: Zung-nyi Loh, m.a.

Course 106 is for students who have not had a course in trigonometry, 107 is for those who have spent a half-year in studying this subject.

Students should consult the announcements of the departments of astronomy, chemistry, economics, philosophy, and physics for courses to which mathematics is either an absolute or an alternative prerequisite.
105. Introductory Mathematics. Topics from intermediate algebra. A brief course in trigonometry. Analytic geometry of the straight line and the conic sections. Elementary differentiation and integration. Prerequisite, two admission units in mathematics. Not open to students who present three units in mathematics. Six hours. (Not given in 1948-49.)
106. Trigonometry, Analytic Geometry, Introduction to the Calculus. Plane trigonometry, plane analytic geometry, elementary differentiation and integration with applications. Prerequisite, three admission units in mathematics. Six hours. Miss Russell, Miss Loh.
107. Analytic Geometry, Introduction to the Calculus. This course is similar to 106, but a prerequisite of trigonometry makes it possible to consider additional topics and applications connected with analytic geometry and elementary calculus. Prerequisite, four admission units in mathematics or a course in trigonometry equivalent to that outlined by the College Entrance Examination Board. As the work covered by the fourth unit is not uniform in all schools, students in this course will as far as possible be given individual instruction. Six hours. Miss Stark, Miss Loh.

[^27]201. Elementary Mathematical Analysis. Selected topics from advanced algebra, analytic geometry, and the calculus. Prerequisite, 105. Six hours. (Not offered in 1948-49.)
202. Differential and Integral Calculus. A study of the derivative and the integral including their geometric and physical interpretations. Prerequisite, 106 or 107. Six hours. Miss Novak.
203 (2). History of Elementary Mathematics. 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. Prerequisite or corequisite, 201, 202, or 220. Three hours. (Not offered in 1948-49.)
205 (1)*. Introduction to Mathematical Statistics. Fundamental statistical methods, with special emphasis on the use of elementary mathematics and the calculus in the development of theory and in practice. Preparation will include assigned laboratory work. Prerequisite or corequisite, 201, 202, or 220 . Credit for this course will not be given to a student receiving credit for Economics 211. Three hours. Miss Novak. (Not given in 1948-49.)
206 (1)*. Descriptive Geometry I. The theory underlying architectural and engineering drawing. Problems involving the use of two or more planes of projection in representing points, lines, and planes. Revolution applied to measurement. Prerequisite or corequisite, 201, 202 , or 220 . All students must have a knowledge of the elements of solid geometry. The department will give directions for gaining readily the necessary acquaintance with this subject. Three periods of lecture or discussion with two laboratory periods. Three hours. Miss Stark. (Not offered in 1948-49.)
208 (2)*. Descriptive Geometry II. Artists' perspective and photogrammetry, basic to the interpretation of aerial photography. Intersection of surfaces, development, shades and shadows. Prerequisite, 206. Three periods of lecture or discussion with two laboratory periods. Three hours. Miss Stark. (Not offered in 1948-49.)
220. Differential and Integral Calqulus. A study of the derivative and the integral. The course is similar to 202 but places more emphasis on multiple integration, partial differentiation, and geometry of three-space. Open by permission to students who have completed 106 or 107. Six hours. Miss Russell.
302. Functions of a Real Variable. Continuity and other properties of functions; convergence of series; representation of functions by

[^28]power series and definite integrals. Infinite products, infinite integrals, Fourier series, and other allied subjects. Prerequisite, 202 or 220. Six hours. Miss Stark.
303 (1). $\dagger$ Differential Equations. An introductory course in ordinary and partial differential equations. Prerequisite, 201, 202, or 220. Three hours. Miss Loh.

304 (2). Introduction to Modern Algebraic Theory. Topics in algebraic theory which are of importance in the study of geometry and analysis as well as in the development of higher algebra. Prerequisite, 201, 202, or 220. Three hours. Miss Novak.
308. Functions of a Complex Variable. Elementary treatment of analytic functions with applications to elliptic and harmonic functions. Infinite series, transformations, and conformal mapping. Prerequisite, 302. Six hours. Miss Russell.
309. Projective Geometry. Concepts and theorems of projective geometry developed by both synthetic and analytic methods. Prerequisite, 201, 202, or 220. Six hours. Miss Novak.
350. Research or Independent Study. Open by permission of the department to qualified seniors. Three hours for a semester or six hours for a year.

## Directions for Election

A major must include at least 12 hours of grade III.
It is advisable for students who are planning to do graduate work in mathematics to acquire the ability to read French or German.

Only those students who have completed satisfactorily at least six hours of grade III in mathematics will be recommended as teachers of mathematics.

## Exemption Examination

An examination for exemption from a course in mathematics to satisfy partially the distribution requirement in group III will be offered to students who have been unusually well prepared in algebra, trigonometry, analytic geometry, and the elements of differentiation and integration.

Students desiring to enter directly into grade II work may either apply for the exemption examination or give evidence of having completed the work in secondary school in a satisfactory manner.
$\dagger$ Astronomy 302 or Physics 305 if preceded by Mathematics 303, may be counted toward a major in mathematics.

## MUSIC

| Professor: <br> Associate Professor: | Howard Hinners, b.a. <br> Hubert Weldon Lamb, ${ }^{1}$ b.a. |
| :---: | :---: |
| Research Librarian: Assistant Professor: Instructors: | Helen Joy Sleeper, m.a., mus.b. |
|  | Jan LaRue, b.s., m.f.A. (Chairman) |
|  | Susan Godoy, m.a. |
|  | Margaret Torbert Duesenberry, m.a. |
| Lecturers: | Margaret Macdonald Winkler, m.a. director of choir |
|  | Edward Olin Davenport Downes |
| Instructors in Practical Music: | Richard Burgin (Violin) |
|  | David Barnett, b.a. (Piano) |
|  | Olga Averino (Voice) |
|  | Alfred Zighera (Cello) |
|  | Harry Kobialka (Violin; Conductor of the Orchestra and Director of Chamber Music) |
|  | Melville Smith, b.a. (Organ) |
|  | Verona Durick (Piano) |
|  | Phyllis Smith Curtin, b.a. (Voice) |

101. Fundamentals and Elementary Analysis. Notation, modes, intervals, chords. An analytical study of the elements of music and the principles of harmony as exemplified in the forms of the classical period. Drill in ear-training, sight-singing, clef-reading, and transposition. Open to all undergraduates. Four periods a week, one of lecture and three section meetings. Six hours. Miss Godoy.
102. Introduction to Musical Literature. An historical survey course designed to develop the student's musical understanding, insight, and powers of observation through the study of music of various styles and periods. No previous knowledge of music is required. Open to sophomores, juniors, and seniors who have had no other course in the department. Not to be counted toward a major. Three hours of lecture and one section meeting a week. Six hours. Mrs. Winkler, Mrs. Duesenberry.
103. Elementary Harmony. Triads and their inversions, secondary dominants, modulation, and non-harmonic tones. Harmonization of melodies and unfigured basses. Ear-training. Open to students who have completed 101 or to those who can pass a test in ear-training and fundamentals. Students taking the course must have sufficient facility at the keyboard to play hymn tunes at sight. Six hours. Mr. Hinners. 209 (1). The Classical Period. The development of the classical sonata, string quartet, symphony, and concerto. The later operas of
[^29]Gluck and Mozart. Prerequisite, 101 or 103. Not to be counted toward a major. Three hours. Mrs. Winkler.

210 (2). The Larger Instrumental Forms in the Nineteenth Century. The development of the symphony and the concerto from Schubert to Brahms. Prerequisite, 101 or 103. Not to be counted toward a major. Three hours. Mrs. Winkler.
211. Bach to Beethoven. A study of representative eighteenth century masterpieces, both choral and instrumental. The evolution of style from the late baroque period to the culmination of classicism. Open to students who have completed 101 and to those who can pass a test in ear-training and fundamentals. Six hours. Mr. LaRue.
212. Advanced Analysis. The structural methods of contrapuntal music. Analysis of representative works in modal and tonal idioms. Harmonic analysis of the larger forms of the classical period and of selected works of Schubert, Schumann, and Chopin. Open to students who have completed 101 and to those who can pass a test in ear-training and fundamentals. Six hours. Mr. Hinners.
301. Gounterpoint. The principles of two- and three-part writing. Composition in small forms. Analysis. Prerequisite, 201. Two periods a week with a third at the pleasure of the instructor. Six hours. Mr. Lamb. (Not given in 1948-49.)
302. History of Style in Music from the Middle Ages to the Present. The materials and methods of composition and their relation to social and cultural backgrounds. Open to juniors and seniors who have completed 211 or 318 and 319 , and also 212 or 301 or 310 . Required of music majors. Six hours. Mr. Downes.

305 (1). The Middle Ages and the Renaissance. Gregorian chant and the rise of polyphony. Main emphasis on the culminating schools of the sixteenth century, with detailed study of selected works by Palestrina, Victoria, Lassus, and the madrigalists. Open to juniors and seniors who have completed 201 or 211 or 212 and who are taking 211 or 212 or 301 or 310. Three hours. Mr. Lamb. (Not offered in 1948-49.)
310. Advanced Harmony. Dominant sevenths and ninths, the augmented sixth chords and secondary sevenths. Harmonization of more extended melodies and basses involving some of the elementary principles of composition. Ear-training and advanced analysis. Prerequisite, 201. Six hours. Mr. Hinners.
315. Orchestration. The technique of the principal orchestral instruments. Composition in small forms for chamber groups.

Analysis. Exercises in scoring for orchestra. Open to graduates and, by permission, to juniors and seniors who have completed 301 and 310 . One three-period class a week. Six hours. Mr. Lamb. (Not offered in 1948-49.)

318 (1). Seminar: Beethoven. Detailed analysis of representative works. Open to juniors and seniors who have completed 211 or 212, or who have completed or are taking 301 or 310 . Three hours. Mr. Downes.

319 (2). The Nineteenth Century. Evolution of the romantic style. Nationalism. Impressionism. Open to juniors and seniors who have completed 212 or who have completed or are taking 301 or 310. One three-period class a week. Three hours. Mr. Downes.
323. The Opera. The development of dramatic music. A study of operatic traditions as represented by selected works of the more important composers. Open to juniors and seniors who have completed 201 or 211 or 212 . One three-period class a week. Six hours. Mr. LaRue.

325 (1). Seminar: Strawinsky. A study of the more important works and their influence on contemporary music. Open to juniors and seniors who have completed 212 or who have completed or are taking 301 or 310. Three hours. Mr. LaRue. (Not given in 1948-49.)
350. Research or Independent Study. On consultation with the department, properly qualified students may arrange for directed study in theory, composition, or the history of music. Three hours for a semester or six hours for a year.

## Practical Music (Instrumental and Vocal Lessons)

Work in practical music is not credited toward the B.A. degree, and there is an extra charge for it.*

Instruction is provided in piano, organ, violin, cello, and voice, and arrangements may be made for private instruction in other instruments. Students in piano who wish to do so may supplement their private lessons with group study which is available to them without additional charge as part of the piano course. Advanced students of string in-

[^30]struments or piano are eligible, also without additional charge, for group instruction in the performance of chamber music.

Candidates for the B.A. degree may take practical music provided they take or have already taken a course in the theory or history of music. Practical music is an elective, and students wishing to take it should notify the department in accordance with the procedure required for the election of an academic course.

Instruction in practical music is available to graduates of Wellesley College and to residents of the town of Wellesley by special arrangement.

Practical music study is normally undertaken on a yearly basis, though with the permission of the chairman of the department it may be elected for a single semester only. Students whose work proves unsatisfactory may be required to discontinue their lessons.

## Directions for Election

The department offers two types of major, one primarily in the literature, and one primarily in the theory of music.

For a 24 hour major in the literature of music, the following courses are required: $101,212,318,319$, and 302 . Course 211 may be substituted for 318 and 319 provided six hours of grade III work are included in the courses taken in the related field. For a major of 30 hours, 101, 211, 212, 302, and six additional hours of grade III are necessary. Both the above sequences are intended for students who are interested chiefly in acquiring an intelligent appreciation of music. They do not offer sufficient technical training for graduate work or teaching.

For a major in theory, courses 201, 211, 301, 302, and 310 are required, with course 101 as a prerequisite not counting toward the major. This major is intended for students interested in acquiring a deeper understanding of music through more intensive study of its technical aspects. Students planning to do graduate work or to teach should take this major.

Suggested correlative subjects for students majoring in music: European history, literature, art.

A knowledge of German, French, Italian, and Latin is, in the order named, important for graduate work in music.

## PHILOSOPHT

Professors: Thomas Hayes Procter, ph.d. Mary Lowell Coolidge, ph.d. (Chairman)<br>Associate Professor: Virginia Onderdonk, b.a.<br>Instructor: Catherine Sears Hamilton, m.a.<br>Assistants: Elizabeth Elley Newton, b.a.<br>Constantine P. Cavarnos, ph.d.

103 (1), (2). Bases of Knowledge. A study of the principles of valid thinking together with a critical examination of the ultimate sources of knowledge. Some study of logical inference and of scientific method will be included. Open to all students except those who have taken 108. Three hours. Miss Onderdonk, Mrs. Hamilton,

104 (1), (2). Theories of the Good Life. A study of typical ethical theories in their relation to the metaphysical assumptions implied by them. Open to all students. Three hours. Miss Coolidge, Mrs. Hamilton, - -
107. Introduction to Philosophy Through Greek Thought. A course based on the material presented by the Greek thinkers. An introductory discussion of the various Pre-Socratic schools. Special attention to Plato's Apology, Crito, Phaedo and Republic and to Aristotle's Ethics and to parts of the Metaphysics. Open to sophomores, juniors, and seniors, and, by permission of the Dean of Freshmen, to freshmen. Six hours. Mr. Procter, Mrs. Newton, Mr. Cavarnos.
203 (1). Æsthetics. A study of philosophical problems concerning the nature of beauty, of artistic creation, and of standards in criticism. Some attention will be given to the relation of æsthetic to other values. Readings in such classical philosophers as Plato and in such contemporary writers as Croce and Santayana. Open to sophomores who have completed a course in philosophy and to juniors and seniors without prerequisite. Three hours. Miss Coolidge.

204 (2). American Philosophy. Studies in the development of philosophy in the United States from Colonial times until the present. The work will include an examination of the philosophical assumptions of such authors as Edwards, Jefferson, Emerson, James, Dewey. Open to sophomores, juniors, and seniors who have taken or are taking a three-hour course in philosophy or a course in American history or literature. Three hours. Miss Coolidge. (Not offered in 1948-49.)

## 211 (1), (2). Introduction to Philosophy Through the Problems

 of Religion. A brief historical and psychological study of the religious consciousness leading to a discussion of the nature and validity ofreligious experience in contrast with other types of experience and of the philosophical problems involved in this contrast. Open to sophomores who have completed a course in philosophy, and to juniors and seniors without prerequisite. Three hours. Mr. Procter, Miss Onderdonk.
214. Studies in the Development of Modern Philosophy. A study of important European philosophies from Descartes to Nietzsche designed to give students a knowledge of the chief philosophical systems and to provide some philosophical background for the understanding of related movements in literature and the natural and social sciences. Open to sophomores who have completed a course in philosophy, and to juniors and seniors without prerequisite. Open also, by special arrangement, to graduate students. Six hours. Miss Coolidge, Miss Onderdonk.

216 (1). Fundamental Principles of Logic. A study of the forms of valid reasoning with emphasis on the analysis and symbolic formulation of ordinary English sentences and the deduction of simple conclusions. There will be some discussion of such notions as implication, proof, consistency, definition, postulate. Open to sophomores who have completed a course in philosophy or mathematics, and to juniors and seniors without prerequisite. Three hours. Miss Onderdonk.

306 (2). Advanced Logic. A study of modern developments of logic including a discussion of the nature of a deductive system, the logic of classes, and the calculus of propositions. Open to students who have taken 216. Two periods a week with a third at the pleasure of the instructor. Three hours. Miss Onderdonk. (Not given in 1948-49.)
307. The History of Greek Philosophy. An advanced study of Greek philosophy, offering more extended and more detailed readings in Plato (with emphasis on the later dialogues) and also in Aristotle, the Stoics, Epicureans, and Neo-Platonists. Open to juniors and seniors who have completed six hours in philosophy and, by permission, to other seniors majoring in related departments. Open also to approved graduate students. Not open to students who have taken course 107. Six hours. Mr. Procter.

311 (2). Leibniz and Kant. An intensive study of the philosophies of Leibniz and Kant. Open to students who have taken or are taking course 214. Three hours. Miss Onderdonk.

321 (1). Seminar: Studies in Recent Philosophy. Papers and discussions based on the writings of representatives of naturalism, pragmatism, and realism. Open to juniors and seniors who have completed 214 and to graduate students. Three hours. Miss Coolidge.

322 (2). Seminar: Studies in Recent Philosophy. Papers and discussions based upon the writings of Bradley, Bergson, and Whitehead. Open to juniors and seniors who have completed 214 and to graduate students. Three hours. Mr. Procter.
323 (1). Medieval Philosophy. A study of medieval thought, emphasizing the works of Augustine and Thomas Aquinas. Open to juniors and seniors who have completed 107 or 307 , and by permission to seniors taking 307 , and to juniors and seniors with adequate preparation in related fields such as art, Biblical history, history, and literature. Three hours. (Not offered in 1948-49.)
350. Research or Independent Study. Open to graduate students and seniors by permission. Two to six hours.

## Directions for Election

A 24 or 30 hour major in philosophy must include 107 or 307, 214 and 321, 322. Course 214 should be elected in the sophomore or junior year. As courses supplementary to a philosophy major, the department strongly recommends Psychology 101 or 103. Certain courses in mathematics, natural science, history, Biblical history, political science, and sociology, and in English, French, German, Latin, and Greek literature are also suggested.

Students who expect to do graduate work in philosophy are strongly advised to take French or German and a course in logic (216 or 306).

The department recommends that students electing philosophy to fulfill the distribution requirement choose either 103-104, 107, or 214.

## PHYSICS

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\begin{aligned}
& \text { Professors: }: \text { Lucy Wilson, ph.d. } \\
& \text { Alice Hall Armstrong, ph.d. (Chairman) } \\
& \text { Heding Kohn, ph.d. } \\
& \text { Associate Professor: } \text { Dorothy Heyworth, ph.d. } \\
& \text { Instructors: } \text { John Franklin Hersh, m.a. } \\
& \text { Franges Glenn Fort, m.a. } \\
& \text { Assistant: } \text { Helen Thompson, b.a. } \\
& \text { Lecturer: } \text { Janet Brown Guernsey, m.a. }
\end{aligned}
$$

101. Elementary Physics. A course designed to give an intelligent understanding of man's physical environment and the everyday applications of the fundamental laws of mechanics, heat, electricity, sound and light. Open to students who do not offer physics for admission. Three periods of lecture and discussion with one three-period laboratory appointment. Six hours. Miss Heyworth, Mrs. Guernsey, and Assistants.
102. Elementary Physics. The same topics as in course 101, but with greater emphasis upon the mathematical development of the subject. Open to students who do not offer physics for admission. Prerequisite or corequisite, Mathematics 106 or 107. Three periods of lecture and discussion with one three-period laboratory appointment. Six hours. Mrs. Guernsey, Miss Heyworth, and Assistants.

105 (1). Fundamental Principles of Physics. Selected topics in mechanics; wave motion and its applications in sound and light; current electricity. Open to students who offer physics for admission. Three periods of lecture and discussion, with one three-period laboratory appointment. Three hours. Mrs. Guernsey, Miss Fort.
106. An Introductory Course in Physical Science. For description and prerequisites, see Interdepartmental Courses 106. This course will, by special arrangement, serve as prerequisite for grade II courses in physics. Miss Wilson, Miss H. Jones, Miss Fort, Miss Winchester.

201 (1), (2). Electricity. Direct and alternating current phenomena: the effects of inductance, capacitance, and resistance. Laboratory study of methods of measurement. Open to students who have completed 101, 104, or 105, and, by permission, to sophomores, juniors, and seniors who pass an examination for exemption from 105. Open in the second semester, by permission, to freshmen who pass an examination for exemption from 105. Additional prerequisite or corequisite, Mathematics 106 or 107 . Three periods of lecture and discussion, with one three-period laboratory appointment. Three hours. Miss Armstrong, Mrs. Guernsey.
202 (2). Атомic Physics. A brief introduction to the kinetic theory of gases, to theories of the nature of radiant and atomic energy, and of the constituents and structure of the atom, nuclear and extra-nuclear. Evidence offered by the phenomena of cathode rays, photoelectricity, ionization, optical spectra, x-rays, radioactivity, isotopes. Open to students who have completed 201 and, by permission, to sophomores, juniors, and seniors who have completed 101, 104, or 105 . Three hours. Miss Kohn.

203 (2). Meteorology. Air pressure, temperature, winds, clouds, precipitation, progress of storms, cold waves, atmospheric optics; chief concepts of air mass analysis with the application to weather forecasting; study and practice in the use of meteorological instruments. Open to students who have completed 105 and to sophomores, juniors, and seniors who have completed or are taking 101 or 104 or who have presented one admission unit in physics. Three periods of lecture and
discussion with one three-period laboratory appointment. Three hours. Miss Fort.
205 (1). $\dagger$ Sound. A preliminary study of vibrations and wave motion. Physical basis of music, characteristics of musical instruments; architectural acoustics; reproduction of speech and music. Open to students who have completed 101 or 104; to sophomores, juniors, and seniors who have offered physics for admission; and, by permission, to freshmen who pass an examination for exemption from 105. Three periods of lecture and discussion and one two-period laboratory appointment. Three hours. Miss Armstrong. (Not given in 1948-49.) 301 (1).* Light. The wave theory and its application to the phenomena of interference, diffraction, double refraction, polarization, and dispersion; theory and use of optical instruments; nature of light sources. Open to juniors and seniors who have completed a course of grade II in physics, or a year course of grade I in physics and a year course of grade I in astronomy. Three periods of lecture and discussion with one three-period laboratory appointment. Three hours. Miss Kohn.
302 (1). The Fundamentals of Electronics. Circuit elements; resonant circuits; theory of multi-electrode vacuum tubes and their application to amplifiers, oscillators, modulators, and demodulators. Open to juniors and seniors who have completed Physics 201 and Mathematics 202. Three periods of lecture and discussion, with one three-period laboratory appointment. Three hours. Mr. Hersh.
303 (2). Radio Communication. Transmitters, receivers, and sound equipment; radiation and propagation of waves; transmission lines and antennas; ultra-high-frequency generators. Prerequisite, 302. Three periods of lecture and discussion with one three-period laboratory appointment. Three hours. Mr. Hersh.
304 (1). $\ddagger \S$ Theoretical Electricity and Magnetism. A preliminary study of simple vector analysis. Mathematical treatment of fundamental principles of magnetism, electricity, and electromagnetic radiation. Open to juniors and seniors who have completed 201 and Mathematics 202. Three hours. Mr. Hersh.
305 (2). $\ddagger$ Mechanics. Equations of motion; statics of rigid bodies; work, energy; dynamics of a particle; motion of rigid bodies, the me-

[^31]chanics of airplane flight. Emphasis on the application of mathematics, especially plane analytic geometry and calculus, to physics; use will be made of differential equations. Prerequisite, 101, 104, or 105 and Mathematics 202. When combined with Mathematics 303 it may be counted toward a major in mathematics. Three hours. Miss Heyworth.
306 (1). $\dagger$ Heat and Thermodynamics. Introduction to mathematical theory of heat conduction, kinetic theory of gases, and the laws of thermodynamics. Open to juniors and seniors who have completed 202 or 203 and Mathematics 202. Three hours. Miss Armstrong. (Not offered in 1948-49.)
307 (2) $\dagger$. Introduction to Spectroscopy. Experimental study of line and band spectra in emission and absorption; spectroscopic instruments, light sources, intensity measurements; application to qualitative and quantitative analysis; term analysis of atomic and molecular spectra. Explanation, on the basis of quantum theory, of the structure of spectra in relation to the structure of atoms and molecules. Prerequisite, 301 and Mathematics 106 or 107 . Two periods of lecture, one period of discussion, and one three-period laboratory appointment. Three hours. Miss Kohn.
309 (2) $\dagger$. Experimental Atomic Physics. Individual experiments such as the measurement of the charge on the electron, the ratio of charge to mass of the electron, ionization potentials, photoelectric measurements; problems in optical and x-ray spectroscopy; experiments involving use of cloud chamber and Geiger counters. Open to juniors and seniors who have completed 202. Six periods of laboratory a week. Three hours. Miss Armstrong. (Not offered in 1948-49.)
350. Research or Independent Study. The work will be under the direction of the member of the department in whose field the work lies. Opportunity will be offered for a series of experiments as well as for investigation of a single problem. Open to graduate students and, by permission, to juniors and seniors who have completed eighteen hours in physics. To count two to three hours for a semester or four to six hours for a year. By permission the work may be arranged to count one hour for the first semester in case two or three hours are elected for the second semester. The amount of work contemplated must be indicated at the time of handing in electives.

## Directions for Election

A major in physics should ordinarily include 101 or 104 or 105, 201, 202, 301, 302, 305 and at least one other grade III course.

[^32]Mathematics 202 and a year of college chemistry are required for a major in physics. A reading knowledge of German and French, while not required, is desirable.

Pre-medical students are referred to the requirements as given on page 41.

## Exemption Examination

An examination for exemption from Physics 105 is offered to qualified students who present one admission unit in physics and also present an acceptable laboratory notebook when applying for the examination. Sophomores, juniors, and seniors who pass this examination and also satisfy the mathematics requirement are eligible for either semester of Physics 201; freshmen who are taking Mathematics 106 or 107 are eligible for the second semester of Physics 201.

Students who pass the exemption examination may count it as the equivalent of Physics 101 in the work for distribution.

## POLITICAL SCIENCE

Professors: Louise Overacker, ph.d. M. Margaret Ball, ph.d. (Chairman)<br>Assistant Professors: Alona Elizabeth Evans ${ }^{1}$, phid. Owen Scott Stratton, m.a.<br>Instructors: John Rodney Williams, m.a.<br>Janet Lippe Norwood, m.a.<br>Lecturer: F. Pauline Tompkins, ph.d.

100. Introduction to Political Science. Fundamental political principles developed through a study of the governments of the United States, Great Britain, France, Soviet Russia, and other selected areas. Special emphasis upon the theory and functioning of democracy. Open to all undergraduates. By permission, the first semester may be taken separately by those who have had a secondary school course in American government. Six hours. Miss Overacker, Mr. Stratton, Mr. Williams, Miss Tompkins, Mrs. Norwood.
201 (1). Public Administration. An analysis of the principles of public administration with illustrative material drawn from contemporary government practice. The problems involved are approached through the study of the organization and methods of operation of selected government agencies. Open to students who have completed 100 and, by permission, to those who have completed or are taking another grade II course in the department. Three hours. Mr. Stratton.
202 (1), (2). Political Parties and Pressure Politics. The nature and functions of parties; factors determining political action; the role

[^33]and techniques of pressure groups; party organization; bosses, machines, and the spoils system; the use of money in elections; party leadership and responsibility. Emphasis upon trends in the United States, with some consideration of parties in other democracies. Open to students who have completed 100 and, by permission, to those who have completed or are taking another grade II course in the department. Three hours. Miss Overacker.
204 (2). Legislative Problems. Analysis of systems of representation, including proportional representation; legislative organization and procedures; leadership and responsibility; proposals for the reorganization of Congress; relation of legislature and administration; regulation of lobbying. Comparison of legislative bodies in the United States with those in other democracies. Open to students who have completed 100 and, by permission, to those who have completed or are taking another grade II course in the department. Three hours. Mr. Stratton.
206 (1). Government and Politics of Asia. A study of the political ideas and institutions of China, Japan, and other selected Asiatic countries, including some comparison with those of western countries. Open to sophomores, juniors, and seniors who have had or are taking 100, or, by permission, to students who have had or are taking 208, History 310, or Sociology 207. Three hours. Mfr. I' ${ }^{\prime}$ illiams.
207 (2). Governmext and Politics of Latin America. A study of the political ideas and institutions of Argentina, Brazil, Mexico, and other selected Latin American countries, including some comparison with those of the United States and Great Britain. Open to sophomores, juniors, and seniors who have had or are taking 100, or, by permission, to students who have had or are taking 208, and to juniors and seniors majoring in history or Spanish. Three hours. Miss Ball.
208. International Politics. A study of contemporary world politics with special attention to problems of international security and economic, social, and cultural coöperation; the League of Nations; the structure, functioning, and development of the United Nations; the Inter-American system; dependent areas and international trusteeship. Open to students who have completed 100, 206, 207, or six hours in history, economics, sociology, or geography. Six hours. Miss Ball.

301 (1). International Law. The nature and scope of the rules governing the conduct of states in their relations with one another. Major emphasis upon the law of peace: recognition; state succession; jurisdiction over persons, territory, and vessels; the status and immunities of diplomats; the law of treaties; international claims; pacific settle-
ment of disputes; some attention to the rights and duties of belligerents and neutrals in time of war. Open to juniors and seniors who have completed 100 and a grade II course in political science, economics, history, or sociology; or 208. Three hours. Miss Tompkins.
303 (1). Law and the Administration of Justice. The nature, sources, and sanction of law; development of common law principles and institutions; organization of English and American courts; civil and criminal procedure in the United States; the growth of administrative justice. Open to juniors and seniors who have completed 100 and a grade II course in political science, economics, history, or sociology. Three hours. Mrs. Norwood.
304 (2). The Supreme Court and the Constitution. The Constitution as interpreted by the Supreme Court. The President's powers, interstate commerce, "due process," the "police power," protection of civil rights and liberties; theories of constitutional interpretation and the rôle of the Supreme Court in the American constitutional system. Open to juniors and seniors who have completed 100 and a grade II course in political science, economics, history, or sociology. Three hours. Mrs. Norwood.
310 (2). Public Administration: Advanced Course. An advanced study of the principles and problems of public administration, with emphasis upon the problems of administrative organization, personnel and financial management, administrative regulation and adjudication, the rôle of administrators in the determination of policy, and the problem of maintaining a responsible bureaucracy. Open to juniors and seniors who have completed 201. Three hours. Mr. Stratton.
316 (1). History of Sogial and Political Thought. For description and prerequisites, see Sociology 316 (1).
318 (2). Modern Political Theory. The leading political theories of the nineteenth and twentieth centuries; a study of the nature and functions of the state, with special reference to individualism and collectivism, democracy, socialism, communism and anarchism, fascism and national socialism. Open to juniors and seniors who have completed 100 and a grade II course in history or political science; or 206, 207, or Sociology 316. Three hours. Mr. Williams.
322 (1), (2). Seminar. Selected Problems: National. Intensive study of one problem or a series of related problems. Emphasis upon methods of research and use of source material; oral reports at frequent intervals; a final paper. Open to a limited number of juniors, seniors, and graduate students specializing in political science, economics, or history, who have completed 12 hours in political science. Three hours. Mr. Stratton, Miss Overacker.

324 (1), (2). Seminar. Selected Problems: International. Intensive study of one problem or a series of related problems. Emphasis upon methods of research and use of source material; oral reports at frequent intervals; a final paper. Open to a limited number of juniors, seniors, and graduate students specializing in political science, economics, or history, who have completed 12 hours in political science. Three hours. Miss Ball, Miss Tompkins.
350 (1), (2). Research or Independent Study. The department is prepared to offer a course of directed reading to a limited number of students. Open, by permission, to juniors and seniors who have completed or are taking a course of grade III in political science. Three hours.

## Directions for Election

The courses in political science are arranged to meet the needs of the following groups of students: those intending to do graduate work in political science or law; those planning to qualify for certain civil service examinations and other types of public service; those wishing to supplement their work in other fields with a knowledge of political science; students who wish to be prepared to take an intelligent part in the political activities of their communities after college.

By special permission, certain closely related courses in economics, history, geography, or sociology may be included as part of the major in political science. The department will be glad to suggest combinations of courses to meet particular needs and interests.

The attention of students who are interested in teaching is called to Education 308, The Teaching of Social Studies in the Secondary School.

## Exemption Examinations

A. American Government. Open to any student who considers herself qualified, either by work in preparatory school or by individual reading and study. The examination will cover approximately the material studied in the second semester of Political Science 100. Students whose preparatory school program has included a half-year course in American government, a year course in American history and government, or a year in the social studies, might be in a position to pass such an examination satisfactorily. It would exempt students from three hours of the distribution requirements in group II or admit them to Political Science 201, 202, or 204.
B. An examination including the governments of Great Britain and at least one other European government, as well as American government. Open to any student who considers herself qualified, either by preparatory school work or individual reading and study. This examination would exempt students from the distribution requirement in group II or admit them to any grade II course in political science.

## PSYCHOLOGY

Professors: Edna Heidbreder, ${ }^{1}$ ph.d. Michael Jacob Zigler, ph.d. (Chairman)<br>Associate Professor: Edith Brandt Mallory, ph.d.<br>Assistant Professor: Jean MacDonald Arsenian, ph.d.<br>Instructor: Virginia Loftus Senders, ph.d.<br>Assistants: Eleanor Madeline DePauw, b.a.<br>Mary Lucille Mathews, b.s. Elvira Rita Kalik, b.a.<br>Lecturer: Marianne Lenore Simmel, m.a.

101 (1), (2). Introduction to Psychology: Semester Course. A survey of the general field of psychology. A study of intelligence, learning, memory, perception, sensory processes, emotion, imagination, motivation, personality, and related problems. Open to sophomores, juniors, and seniors and, by permission of the Dean of Freshmen, to freshmen. Not open to students who have completed 103. Three hours. Mr. Zigler, Mrs. Mallory, Mrs. Senders.
103. Introduction to Psychology: Year Course. A survey of the general field of psychology, more complete than that given in 101. Emphasis on the more complex psychological processes. Open to sophomores, juniors, and seniors who have not taken 101, and, by permission of the Dean of Freshmen, to freshmen. Six hours. Mrs. Arsenian, Miss Simmel.
201 (1). Psychological Statistics. Training in the use of statistical techniques as they have been especially adapted to the handling and evaluating of representative types of psychological data. Emphasis on developing in the student an understanding of the possibilities and limitations of the use of statistics in psychology. Prerequisite, 101 or 103. Three hours. Mrs. Senders.

207 (2). Psychology of Child Development. The psychological development of normal children: physical bases, modes of learning, interests, motives, personality patterns. Problems and goals. Prerequisite, 101 or 103 . Three hours. Mrs. Mallory.
209 (1), (2). Experlmental Psychology, Laboratory Course. Typical experiments in each of the main fields of psychological investigation. Laboratory work supplemented by occasional lectures. Training in psychological method. Prerequisite, 101 or 103. Six periods of laboratory work a week, counting three hours. Mr. Zigler, Mrs. Mallory.
213 (2). Physiological Psychology. A survey of the existing information concerning mechanisms basic to behavior. Prerequisite, 101 or 103. Three hours. Mr. Zigler.

[^34]219 (2). The Psychology of Learning. An examination and evaluation of current theories of learning, with special attention to those centering about the concepts of the conditioned reaction, trial and error, and insight. Emphasis on recent studies of the psychology of learning. Laboratory experiments on human and animal subjects. Prerequisite, 101 or 103. Three hours. Mrs. Senders.

220 (1). Comparative Psychology. A survey of the field of comparative psychology emphasizing changes in capacity for adaptation from lower to higher animal forms. Lectures supplemented by laboratory work. Prerequisite, 101 or 103 . One or two lectures a week, supplemented by laboratory work. Three hours. Mrs. Senders.
222 (2). Problems in Experimental Method. A survey of the methods employed in the experimental investigation of psychological problems. Examination of underlying principles of psychological method. Training for subsequent research and for the critical evaluation of psychological literature. Prerequisite, 209. Three hours. Mrs. Mallory.
301 (1). History of Experimental Psychology. A study of psychological trends-their inception, growth, and bearing upon modern psychology. Open to juniors and seniors who have completed or are taking two grade II courses in psychology. Three hours. Mr. Zigler.
303 (1). Experimental Problems in Psychology. An experimen-tal-project course in which each student investigates a special problem under the direction of an instructor. Open to graduate students and to juniors and seniors who have shown in 209 an aptitude for laboratory work. Six periods of laboratory a week, including one or two with instructor. Three hours. Members of the Staff.
308 (2). Experimental Problems in Psychology. An experimen-tal-project course which may be taken either as a continuation of 303 or as a substitute for it. Open to graduate students and to juniors and seniors who have shown in 209 an aptitude for laboratory work. Six periods of laboratory a week, including one or two with instructor. Three hours. Members of the Staff.
309 (1). Abnormal Psychology. The facts of abnormal psychology, presented in such a way as to throw light on the psychology of normal people. A study of symptoms of abnormality and their significance, various neuroses and psychoses, and the principal theories and interpretations of abnormal behavior. Open to juniors and seniors who have completed 101 or 103 and have completed, or are taking, at least six hours of work above grade I in one of the following: psychology, sociology, zoölogy and physiology. Also open to seniors by permission of the instructor. Three hours. Miss Simmel.

310 (1). Social Psychology. Current problems in social psychology: socialization of the individual; communication; acquisition of attitudes; measurement of attitudes; race prejudice; effect of group structure on individuals; leadership. Open to juniors and seniors who have completed 101 or 103 and have completed, or are taking, at least six hours of work above grade I in psychology or sociology. Also open to seniors by permission of the instructor. Three hours. Mrs. Arsenian.
313 (1). Psychological Testing. Individual differences in intelligence and personality. Review of methods by which psychologists have studied these differences; survey and evaluation of their findings. Examination of selected tests. Some practice in testing. Open to juniors and seniors who have completed 209. Three hours. Mrs. Mallory.
314 (2). Seminar. Psychological Tests and Measurement. Advanced Course. Principles of psychological measurement. Interpretation of test results. Special study of tests used in vocational and educational fields. Open to students who have completed 313. Three hours. Mrs. Mallory.
320 (2). Readings in Current Psychology. Methods of approach to current problems in the fields of personality, clinical and social psychology. Readings in periodical literature, discussion, and reports from professional persons actively engaged in research. Open to graduate students, to seniors who are taking 24 hours in psychology, and, by permission, to seniors who are taking 18 hours. Three hours. Mrs. Arsenian.

321 (2). Seminar. Emotion and Motivation. Discussion of the problems involved in human emotion and motivation. Historical survey of theories in these two fields with special emphasis on recent research. Open to graduate students, to seniors who are taking 24 hours in psychology, and, by permission, to seniors who are taking 18 hours. Three hours. Miss Simmel.

324 (2). Seminar. Psychological Theory. Studies of representative contributions to psychological theory. Open to graduate students, to seniors who are taking 24 hours in psychology, and, by permission, to seniors who are taking 18 hours. Three hours. Miss Heidbreder. (Not offered in 1948-49.)
326 (2). Seminar. Selected Topics. Current problems in experimental and applied psychology. Open to graduate students, to seniors who are taking 24 hours in psychology, and, by permission, to seniors who are taking 18 hours. Three hours. Mr. Zigler.
350. Research or Independent Study. Open to graduate students and seniors by permission. Two to three hours for a semester or two to six for a year.

## Directions for Election

A major in psychology must include 209. Courses 303,308 , and 350 may not be included in a minimum major of 24 hours.

Courses supplementary to a psychology major may include courses in philosophy, economics, education, mathematics, political science, sociology, physics, physiology, and zoölogy.

A reading knowledge of French and German is desirable for undergraduates, and is required of students in most graduate schools.

## RUSSIAN <br> Lecturer: Waclaw Jedrzejewicz

100. Elementary Course. Open to sophomores, juniors, and seniors. Six hours. Mr. Jedrzejewicz.
101. Intermediate Course. Prerequisite, 100. Six hours. Mr. Jedrzejewicz.
102. Russian Literature in Translation. Russian literature of the nineteenth and twentieth centuries, with chief emphasis upon the great writers of the nineteenth century. Open to juniors and seniors. Six hours. Mr. Jedrzejewicz.

## Directions for Election

The College does not offer a major in Russian language and literature.

Course 201 may be elected to fulfill the literature requirement in group I.

## SOCIOLOGY

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\begin{aligned}
\text { Professors: } & \text { Leland Hamilton Jenks, }{ }^{\text {L Phi.d. }} \\
& \text { Mary Bosworth Treudey, phid. (Chairman) } \\
\text { Instructors: } & \text { Mary Ellen Goodman, ph.d. } \\
& \text { Gertrude Huntington McPherson, M.a. } \\
& \text { John Rodney Wiliam, m.a. } \\
& \text { Katherine Spencer, m.a. } \\
& \text { Anna Lee Boswell Hopson, }{ }^{4} \text { m.a. } \\
\text { Lecturer: } & \text { Bartlett Hicks Stoodley, m.a. }
\end{aligned}
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102 (1), (2). Introductory Sociology. An introduction to the sociological way of looking at society. Contemporary social situations in terms of culture patterns, social structure, and social relations. Open
${ }^{1}$ Absent on leave.
${ }^{4}$ Appointed for the first semester only.
to all undergraduates. Sections for freshmen are planned. Three hours. Mr. Stoodley, Mrs. Goodman, Mrs. McPherson, Miss Spencer, Mrs. Hopson.
103 (2). American Culture. A sociological analysis of American culture with special emphasis upon the major themes in accordance with which it is patterned. Consideration of some of the methodological principles necessary for an objective study of culture. Prerequisite, 102. Three hours. Mr. Stoodley, Mrs. Goodman, Mrs. McPherson, Miss Spencer.
104 (2). Cultural Anthropology. Anthropological approaches to culture history. A study of selected non-literate societies as wholes, with analysis of important aspects of culture as manifested in such societies. Open to all undergraduates who have completed 102 and, by permission, to others. Three hours. Mrs. Goodman.
204 (2). Spanish-American Culture. An analysis of elements entering into the formation of contemporary culture and society in selected Hispanic-American republics. Open to sophomores, juniors, and seniors who have completed one year's work in sociology. Three hours. Miss Spencer.
205 (1), (2). Group Organization. An analytical study of organized groups with emphasis upon problems of human relationships. Laboratory work will consist of the analysis of a functioning organization or of case material. Open to juniors and seniors who have completed either one year in sociology or Economics 210. Three hours. Mrs. McPherson.
206 (1). Applied Anthropology. The use of anthropological theory and techniques in the study of such contemporary sociological problems as the administration of dependent peoples, military governments, and other situations involving directed cultural change. Open to sophomores, juniors, and seniors who have completed one year's work in sociology. Three hours. Mrs. Goodman.
207 (1). The Structure of Chinese Society. An analysis of the structure of the family, the market area and the empire, with emphasis upon factors and processes in current change. Open to sophomores, juniors, and seniors who have completed one year's work in sociology. Three hours. Miss Treudley.
208 (2). Social Welfare. The organization, technical development, and professionalization of social work. Its functions in the community. Field study of social agencies. Open to sophomores, juniors, and seniors who have completed one year's work in sociology. Three hours. Miss Treudley.

209 (1). The Negro in the United States. A survey of the salient characteristics of American Negroes, of their changing geographical distribution, and of the significant social and cultural facts and processes which condition the lives of Negroes in the contemporary United States. Field work on selected problems. Open to juniors and seniors who have completed 103 or any course of grade II in sociology. Three hours. Mrs. Goodman.

211 (1). Introduction to Soclal and Economic Statistics. For description and prerequisites, see Economics 211. This course, although it may be included in the major, is not to be counted among grade II prerequisites for later election.

302 (1). Social and Cultural Change. Theories of social change such as those of Kroeber, Sorokin, Marx, Toynbee, and Spengler. Processes of change in human behavior, culture, and social structure in historical perspective. Open to seniors who have completed 102 and also twelve hours of work to be chosen from the fields of economics, sociology, history, and political science. Three hours. Mr. Stoodley.

304 (2). Standards of Living and Their Maintenance. For description and prerequisites, see Economics 304. (Not offered in 1948-49.)

305 (1). Types of Social Structure. Structure and change in such major historical activity systems as the church, government, and business enterprise. Three hours. Mr. Jenks. (Not offered in 1948-49.)
307 (2). Ethnic Groups in the United States. A study of the culture, institutions, and social relations of ethnic groups and their integration in the American community. An analysis of the personality, patterning, and life history of upwardly mobile ethnic types. Open to juniors and seniors who have completed 103 or any course of grade II in sociology. Three hours. Miss Treudley.
308 (1). Modern Labor Relations. For description and prerequisites, see Economics 308.
315 (2). Seminar in Sociology. Related individual research topics. Problems of method and approach in sociology. Open to seniors majoring in sociology. Three hours. Mr. Fenks. (Not offered in 1948-49.)

316 (1). History of Social and Political Thought. Outstanding trends of thought from the Greeks to modern times, as reflected in the writings of such social and political philosophers as Plato, Aristotle, Augustine, Machiavelli, Locke, and Rousseau. Open to juniors and
seniors who have completed nine hours in sociology, or Political Science 100 and a grade II course in political science, sociology, history, economics, or philosophy. Three hours. Mr. Williams.
319 (2). Modern Sociological Theory. Assumptions relevant to current sociological theory. Development of sociology as a field. Examination of the systematic theories of such sociologists as Marx, Durkheim, and Max Weber. Open to seniors who have completed six hours of grade II in sociology, or 316. Three hours. Mr. Stoodley.
320 (2). Population Problems. Socio-economic problems arising out of the increase, the distribution, and the movement of population. Principles, goals, and techniques for a population policy with special reference to the United States. Open to juniors and seniors who have completed 102 and any course of grade II in either economics or sociology. Three hours. Miss Treudley.
322 (2). The Family. A study of American family structure and the historical, social, and individual influences operating to change this structure. Emphasis placed on the demands of the family institution upon the individual and the expectations of the individual with reference to the family. Material from other societies used to set the American family in sociological perspective. Open to seniors who have completed a course in the department. Three hours. Mr. Stoodley.
323 (1). Criminology. Crime and the social structure. Prison culture and the prison community. Field study of agencies dealing with criminals. Open to seniors who have taken nine hours in sociology or who have taken or are taking Psychology 309. Three hours. Miss Treudley.

350 (1), (2). Research or Independent Study. The department is prepared to supervise a limited number of students who wish to pursue individual programs of reading, research, or field work. Open to juniors and seniors by permission. Three or six hours.

## Directions for Election

All members of the staff are prepared to confer with students with respect to sequences of courses in sociology and closely related fields. The department will approve minimum majors where supported by a strong concentration of closely related courses. Majors are advised to elect either Economics 101 or Political Srience 100 as well as work for distribution early in their programs.

## SPANISH

Professors: Jorge Guillén, doctor en letras, catedrático de universidad. Ada May Coe, ${ }^{3}$ m.a.<br>Assistant Professors: Anita Oyarzábal. m.a.<br>Justina Ruiz-de-Conde, lic. en derecho, ph.d. (Chairman) Ruth Whittredge, ph.d.<br>Instructors: Mary-Eleanor Maule, M.a. Lucinda Moles, m.a.

Lecturer: Carol Mary Roehm, b.a.
All courses of the department are conducted in Spanish; oral expression is stressed.

Attention is called to the opportunities for residence in the Spanish Corridor of Wellesley College, and for study in the summer school of Middlebury College. Qualified students may also take advantage of the Junior Year in Mexico.
101. Elementary Course. (a) Grammar, reading, composition, dictation, practical conversation on everyday life, short lectures in Spanish. Four class periods and five hours of preparation a week. (b) The subject matter is the same as in (a). The teaching method stresses the intensive oral approach (mimicry-memorizing). Five class periods and four hours of preparation a week. Open to students who do not present Spanish for admission. Students electing this course should indicate choice of (a) or (b). Six hours. Mrs. Ruiz-de-Conde, Miss Roehm, Miss Maule, Miss Whittredge.
102. Aspects of Spanish and Spanish American Life. (a) The object of the course is two-fold: linguistic and cultural. Grammar, reading from modern authors with emphasis on vocabulary building for oral and written expression. Prerequisite, 101. Three class periods and one group conference.
(b) The subject matter is the same as in (a). The teaching method stresses the intensive oral approach. Five class periods and four hours of preparation a week. Prerequisite, two units in Spanish for admission.

Six hours. Miss Whittredge, Miss Maule, Miss Moles.
104. Prose and Poetry of the Nineteenth Century. A study of the literary trends of this period and of some outstanding works. Constant practice is given in the written and spoken language. Prerequisite, three units in Spanish for admission or, on recommendation of the department, 101. Six hours. Miss Oyarzabbal, Miss Whittredge, Mrs. Ruiz-de-Conde.

[^35]203 (1). Composition. Emphasis on the acquisition of a large working vocabulary. Prerequisite, 102, 104, or three hours of grade II. Three hours. Miss Oyarzábal.
204 (2). Contemporary Spanish Literature. Modern tendencies in Spanish thought and literature. Prerequisite, 102 or 104. Three hours. Miss Oyar ábal.
206. Main Currents of Spanish Literature. Themes and forms which have characterized Spanish literature studied in their general development. Correlation of history and literature. First semester: the Middle Ages to the seventeenth century. Second semester: eighteenth, nineteenth, and twentieth centuries. Prerequisite, 104, and, by permission, 102. Six hours. Mr. Guillén.
207 (1). The Civilization of Mexico. A presentation of Mexican civilization: the literature of the country, the other arts, together with the economic and sociological factors which have produced in Mexico a blend of Spanish and Indian institutions and ideology. Special attention to the contemporary period. Prerequisite, three hours of grade II or by special permission. Three hours. Miss Coe.
208 (1), (2). Conversation. Intensive practice in the spoken language to gain fluency, to improve pronunciation and intonation, and to build a practical vocabulary. Class discussions based on various aspects of life in Spanish-speaking countries. Prerequisite, 102 or 104. Three hours. Miss Oyarzábal.
209. Poets of Spain. Analysis and interpretation of the works of major Spanish poets. Prerequisite, 104 and, by permission, 102. Six hours. Mr. Guillén.
301 (1). Drama of the Seventeenth Century. The characteristics of the Spanish drama of the Golden Age. Analysis of Spain's ideals of this period as revealed in the drama. Representative masterpieces of the great dramatists: Lope de Vega, Castro, Alarcón, Tirso de Molina, Calderón. Open to juniors and seniors who have completed 206, or 204 and 207. Three hours. Miss Coe.
302 (2). Cervantes. Study of Cervantes and his work, representing the culmination of the novel in Spain and the opening of a new era in the history of the European novel. Reading of Novelas Ejemplares; analysis and discussion of Don Quijote. Open to juniors and seniors who have completed 206, or 204 and 207. Three hours. Mr. Guillén.
303. Seminar. Spanish Literature from 1100 to 1500. Study of El Cantar de Mio Cid, El Libro de buen amor, La Celestina. Open to graduates and to approved seniors who have completed at least one course of grade III. Six hours. Miss Coe. (Not offered in 1948-49.)
304. Seminar. Spanish Poetry. A study of the principal movements and outstanding poets. Open to graduates and approved seniors who have completed at least one course of grade III. Six hours. Mr. Guillén. (Not given in 1948-49.)
305. The Spanish Novel of the Golden Age. The development of the Spanish novel in the sixteenth and seventeenth centuries in its different types and tendencies. Open to graduates and approved seniors who have completed 302. Six hours. Miss Oyarzábal. (Not given in 1948-49.)
306. Modern Spanish American Literature. Reading and discussion of representative works in prose and poetry with a special study of the main literary currents, their historical background and their relation to the problems of the present day. First semester: novel and essay. Second semester: poetry. Open to juniors and seniors who have completed Spanish 206, or 204 and 207, or by special permission. Six hours. Miss Coe, Miss Maule.

309 (2). Spanish Civilization. A course designed to trace the national ideals and traits of character in order to develop an appreciation and understanding of Spain's present-day problems. Prerequisite, six hours of grade II. Three hours. Mrs. Ruiz-de-Conde.

310 (1). Composition. Advanced composition based on the reading of articles from current newspapers and magazines. Prerequisite, six hours of grade II. Three hours. Mrs. Ruiz-de-Conde.
350. Research or Independent Study. Open, by permission, to graduates and to approved seniors and juniors who have completed one full grade III course in Spanish and are taking another full grade III course. Three hours for a semester or six for a year.

## Directions for Election

To fulfill the literature requirement in group I, students may elect courses 104, 204, 206, and grade III courses (except 309, 310).

Course 101 counts for the degree but does not count toward a major.
Students majoring in Spanish are required to take courses 206, 301, and 302, and six additional hours of grade III work in literature.

## RELATED COURSES SUGGESTED FOR ELECTION

Art 101, 205, 212, 215, 216, 313; English 102, 104, 107, 210, 212, 218, 219, 221, 222, 230; French 200, 212, 213, 301, 305, 306; Geography 208, 303, 304; German 104, 202, 208; Greek 203; History 101, 102, 200, 202, 214, 217; Italian 103, 202; Latin 105; Philosophy 214; Political Science 202, 207, 208, 318; Sociology 204.

## SPEECH

Associate Professor: Jeannette Barry Lane, ph.b. (Chairman)<br>Assistant Professors: CÉcile de Banke<br>Virginia Rogers Miller, m.A.<br>Instructor: Inez Elizabeth Hegarty, m.a.

## Theater Workshop

Director: Arthur Eldon Winkler, b.s., m.f.a.
Assistant: Louis P. Galanis
Certain limitations are placed upon the hours in this department. Not more than 12 hours of grade II work may be counted within the minimum number of hours for the B.A. degree, and three to six hours of grade I work, with no duplication permitted at the grade I level. Students may elect for credit either 101 or 102 plus 12 hours in grade II work.
All freshmen and transfer students are required to attend a private conference at which a diagnostic test and an analysis of the student's speech and voice will be made. For those students who would benefit by instruction, the kind of work that would be most helpful will be suggested. Students who are found to have speech defects or speech disorders will be required to attend the speech clinic.
The courses are designed to help the student to acquire: (a) effective use of voice and good pronunciation in spoken English, (b) skill in public address on the platform and over the air, (c) the power to interpret poetry and dramatic literature, (d) an appreciation of the art of the theater. The courses are arranged to make possible systematic and progressive study in the speech arts.
Speech Clinic. Analysis of speech defects, with special remedial work for their correction, for those students who require such help. The work will be conducted in private conference or in small groups. No credit. Miss Hegarty, Mrs. Miller.
101. Fundamentals of Speech. Study of physiological processes in voice production and the phonetic bases of spoken English. Guidance, practice, and criticism in the fundamentals of oral interpretation, public address, and drama. Open to all undergraduates. Six hours. Miss de Banke, Miss Lane, Mrs. Miller.
102 (1), (2). Voice and Speech Techniques. Study of vocal and phonetic skills requisite for the speech arts. Open to all undergraduates. Not open to students who have completed 101. Three hours. Miss Lane, Miss Hegarty.
201. Oral Interpretation of Modern Drama. Presentation of selected scenes illustrating the more important trends from Ibsen's day to the present. Emphasis on character delineation. Development, by laboratory method, of fundamental acting techniques. Open to sophomores, juniors, and seniors who have had one course in the department or adequate preparation elsewhere. Six hours. Miss Lane.

202 (2). Principles and Practice in Public Address. Emphasis on briefing, outlining, speech making, round table and panel discussion, debate, and open forum. Open to students who have completed one course in the department, and, by permission, to sophomores, juniors, and seniors. Three hours. Mrs. Miller.
203.* Theater Workshop. Theoretical and practical study of the art of the theater. Presentation of one-act plays in the workshop. Open, by permission of the instructor, to sophomores, juniors, and seniors, who have completed one course in the department or to those who have an adequate background in speech, drama, and art. Three periods of class work and two of laboratory. Six hours. Director, Mr. WIVinkler; Assistant, Mr. Galanis.
204 (2). Choral Speaking. This course introduces the origin and modern revival of choral speaking, and studies the educational, psychological, and social values of the verse-speaking choir, together with special technique requisite for its presentation. Open to sophomores, juniors, and seniors who have had one course in the department or adequate preparation elsewhere. Students must consult the instructor before electing this course. Three hours. Miss de Banke.
205. Oral Interpretation of Shakespearean Drama. Approach to the study of the Elizabethan repertory theater through dramatic presentation. Scenes from plays of Shakespeare presented with special regard to contemporary background. Open to sophomores, juniors, and seniors who have completed one course in the department or have had adequate preparation elsewhere, and to those who are taking or have completed English 309. Six hours. Either semester may be counted as a semester course. Miss de Banke.
206 (2). English Phonetics. A study of speech sounds in English. Practice in the use of the International Phonetic Alphabet. Comparison of stage diction and the three types of American pronunciation. Some consideration of the application of phonetics to speech re-education and to acting. Open to sophomores who have completed one course in the department, and to juniors and seniors without prerequisite. Three hours. Miss Hegarty.
207. Voice and Diction. Voice production and techniques of good speech, with special attention to the professional needs of the student. Emphasis is placed on the correction of nasality, indistinct utterance, extremes of pitch, and monotony. Group and individual guidance, practice, and criticism. Open to graduate students only. Meeting one period a week throughout the academic year. No credit. Miss Hegarty.

[^36]
# ZOÖLOGY AND PHYSIOLOGY 

Professors: Margaret Alger Hayden, ph.d. Harriet Cutler Waterman, ph.d. (Chairman) Gladys Kathryn McCosh, ph.d.<br>Associate Professors: Mary Lellah Austin, ph.d.<br>Eva Elizabeth Jones, ph.d. Louise Palmer Wilson, ph.d. Ada Roberta Hall, ph.d.<br>Instructors: Virginia Mayo Fiske, ph.d. Helen Ann Padykula, m.a.<br>Assistants: Margaret Ida Bernsau, b.a. Joan Barker Melvin, b.a. Joanna Elizabeth Franges Withrow, b.a. Gloria Elaine Zander, b.a.<br>Secretary and Custodzan: Kathleen Millicent Leavitt

Lecturer: Margaret Elliott Houck, m.s. CURATOR OF THE MUSEUM
101. The Biology of Animals. This course furnishes the basis for an intelligent understanding of animal life and of the place of man in the world of living things. The study of a series of forms of increasing complexity, culminating in a vertebrate, develops a conception of what an animal is and suggests probable evolutionary sequences. Cells are studied as units of structure and to demonstrate, particularly in germcells, the mechanism of heredity. In the second semester, lectures and discussions on the evidence and factors of evolution, on heredity and eugenics. Open to all undergraduates. Six periods a week, in general two of lecture and discussion, and four of laboratory. Six hours. Miss Hayden, Miss McCosh, Miss Austin, Mrs. Houck, Mrs. Fiske.
102. Principles of Zoölogy. A course designed for students who already have some scientific knowledge of animal life. A study of invertebrate and vertebrate animals serves as a basis for the consideration of important biological principles and for an appreciation of man's place in nature. Opportunity for individual studies and reports on subjects determined by interests and preparation of students. In the second semester, special emphasis on evolution and heredity. Students who have offered for admission a course in biology which was largely on animals and which included careful dissection of several forms by the individual students should apply to the Dean of Freshmen for permission to take this course. Six periods a week, in general two of lecture and discussion, and four of laboratory. Six hours. Miss Padykula.
103. An Introductory Course in Biology. For description and prerequisites, see Interdepartmental Courses 103.

Exceptionally well prepared students are advised to consider the possibility of entering Zoölogy 203 or 204 instead of a grade I course. (See last paragraph under Directions for Election.)
203. Vertebrate Zoölogy. Evidences of evolution from the study of the comparative anatomy and the development of the vertebrates, based upon a careful dissection of dogfish, necturus, and cat. The evolution of the vertebrate type will be traced from a primitive form to man, with particular emphasis upon the changes leading up to the structures found in the human body. Open to juniors and seniors without prerequisite, and to other students who have completed 101 or 102. Five-year hygiene students electing this course must also take 301. Six periods a week, in general two of lecture and discussion, and four of laboratory. Six hours. Miss Waterman.
204. Animal Egology. A study of animals in relation to their environment, that is, the natural history of animals. The behavior of animals in their natural surroundings, their adaptations for particular habitats, environmental factors, ecological succession, animal communities such as stream life and a meadow society, distribution and balance in nature. Field studies limited to near-by regions. Open to students who have completed 101 or 102 and to juniors and seniors without prerequisite. Six periods a week, in general two of lecture and discussion, and four of laboratory or field work. Six hours. Miss McCosh.
301 (1). Mammalian Anatomy (Hygiene 301). The gross anatomy of bones and muscles. Required of first-year graduate students in the Department of Hygiene and Physical Education; also of juniors who are registered as five-year hygiene students. If counted as part of a major in zoölogy, 301 should be preceded by 101 or 102 . Three periods a week, in general one of lecture and discussion, and two of laboratory. Two hours. Miss Waterman.
302. Physiology (Hygiene 302). For description, see 308. Required of first-year graduate students in the Department of Hygiene and Physical Education; also required of students registered for the five-year hygiene course, either in the junior or senior year. If counted as part of a major in zoölogy, 302 should be preceded by 101 or 102. Open to hygiene students only; others take 308. Six periods a week, in general two of lecture and discussion, and four of laboratory. Six hours. Miss Hall.
303 (1). Histology and Histological Technique. A study of the microscopic structure of the tissues and organs of mammals. Emphasis on the relation of structure and function. Some training in the preparation of tissues for microscopical study. Open to juniors and seniors who have completed or are taking 203 or 204 or 308 . Six
periods a week, in general one of lecture and discussion, and five of laboratory. Three hours. Miss Jones.
304 (2). Embryology. The development of an individual from its origin as a fertilized egg through the time of formation of the principal organs and systems. Laboratory work chiefly on a study of chick and pig embryos. Open to juniors and seniors who have completed or are taking 203 or 204 or 308 . Six periods a week, in general two of lecture and discussion, and four of laboratory. Three hours. Miss fones.
305 (2). The Development of Modern Zoölogy. A study of the outstanding biological contributions from the early Greek period to the twentieth century, leading to a consideration of representative theories and problems of zoölogy of the present day. Open to students completing a 24 -hour major in zoölogy, and to others with the approval of the department. Three hours. Miss Austin.
306 (1). Genetics. The principles of heredity, based on the cytological and genetical evidence found in animals; the application of these principles to human inheritance and to the practical problems of eugenics. The class work is supplemented by a few breeding tests with Drosophila. Open to students completing a 24 -hour major in zoölogy, and to others with the approval of the department. Three hours. Miss Hayden.
308. Physiology. The course gives a fundamental knowledge of general physiological processes. Simple physical and chemical studies of living matter. Observations of more complex physiological proc-esses-nutrition, circulation, respiration, excretion, nerve-muscle response, reproduction, endocrine activities. Open to students who offer as prerequisites Zoölogy 101 or 102 and Chemistry 101 or 103; or to students who in addition to fulfilling the chemistry requirements have completed or are taking Zoölogy 203. Open by permission without prerequisite to students majoring in chemistry. Chemistry 301 is recommended as a parallel course. Six periods a week, in general two of lecture and discussion, and four of laboratory. Six hours. Mrs. Wilson.
309 (1). Metabolism. The physiological reactions by means of which energy changes are produced in the animal body. The laboratory work includes a clinical method of determining basal metabolism and individual problems to illustrate normal and abnormal physiological oxidations in laboratory animals. Prerequisite, 302 or 308. Six periods a week, in general two of lecture and discussion, and four of laboratory. Three hours. Miss Hall. (Not offered in 1948-49.)
310 (2). Advanced Histology. A continuation of the study of organs not included in 303. Various aspects of histological research are
considered in a series of reports on original papers. Individual problems afford practice in special methods of technique. Open to juniors and seniors who have completed 303. Six periods a week, in general one of lecture or discussion and five of laboratory. Three hours. Miss Jones.
312 (2). Physiology of Nutrition. The study of assimilation by tissue cells and the processes involved in normal digestion and absorption of foodstuffs. Normal and faulty nutrition compared by feeding experiments with animals. Prerequisite, or corequisite, 308 or 302 . Chemistry 301 is not required as a prerequisite but is recommended. Six periods a week, in general two of lecture and discussion, and four of laboratory. Three hours. Miss Hall.
313 (2). Mammalian Anatomy (Hygiene 313). The digestive, respiratory, excretory, reproductive, circulatory, and nervous systems. Required of first-year graduate students in the Department of Hygiene and Physical Education; also of juniors who are registered as five-year hygiene students with the exception of those students who have already completed 203. If counted as part of a major in zoölogy, 313 should be preceded by 101 or 102 and 301. Three periods a week, in general one of lecture and discussion, and two of laboratory. Two hours. Miss Waterman.
316 (1). Physiology of the Endocrine Glands. The chemical control of the animal organism through the secretions of the endocrine glands. Individual problems. Prerequisite or corequisite, 308 or 302. Six periods a week, in general two of lecture and discussion, and four of laboratory. Three hours. Miss Hall. (Not offered in 1948-49.)
350. Research or Independent Study. Elementary research problems in invertebrate and vertebrate zoölogy, ecology, histology, embryology, cytology, protozoölogy, and physiology. Independent work required of the student under the direction of the instructor in the field chosen. Open to graduate students and, by permission, to seniors and juniors. Three hours for a semester or six hours for a year. The amount of work contemplated must be indicated at the time of handing in electives.

## Directions for Election

These courses are designed to provide for the general student a basis for the interpretation of phenomena in the world of living things. At the same time they may furnish a foundation for students who plan to follow professionally some phase of biological work, such as teaching, research, laboratory technique, medicine, public health, physical education, nursing, medical social service.

Five-year hygiene students wishing to major in the department should elect 101 in the freshman or sophomore year, and 301, 313, and 302 in the junior and senior years.

Pre-medical students are referred to the requirements as given on page 41.
For public health work, students are advised to elect 101 or 203, 308 and 303 in this department and to include Botany 308 among the courses related to the major.

A knowledge of chemistry is required of all students taking work in physiology and is desirable for all students majoring in the department. A reading knowledge of French and German is desirable for undergraduates, and is required, ordinarily, of students in graduate schools.

Students majoring in the department may under certain conditions obtain permission from the chemistry department to take Chemistry 301 after having taken 101.

The department will admit properly qualified freshmen and sophomores to Zoölogy 203 or 204 without examination but by special permission after consultation with the chairman of the department.

## Exemption Examination

The department will offer an examination for exemption from zoölogy as a distribution requirement to any student who offers for admission a year course, taken in either the junior or senior year and carried at a grade of $\mathrm{B}(85)$ or more, and who presents an acceptable laboratory notebook when applying for the examination.

## INTERDEPARTMENTAL HONORS PROGRAMS

Several interdepartmental honors programs are open to qualified students. Conditions of admission to candidacy and of award are the same as for other candidates for honors. See page 40.

## CLASSICAL ARCHEOLOGY

The purpose of this program is to correlate work in classical art, literature, and history, and so offer opportunity for a comprehensive study of ancient civilization. It will also serve as a basic preparation for graduate and field work in classical archæology. Emphasis may be placed on either the Greek or Roman period.

The field of concentration should normally include 48 hours divided as follows: 18 hours in art; either 18 hours in Greek and 6 in Latin or 18 hours in Latin and 6 in Greek; 6 hours in ancient history. The following courses may be counted in this program:

Art: 101, 209, 314, 320, 350
Greek: all courses except 104 and 203
Latin: all courses except 104 and 105
History: 203, 204
Three hours of 350 must be included, which should as a rule correlate work in art and literature.

Students contemplating field work in archæology are advised to elect some work in geology.

Students interested in this program should consult Associate Professor Barbara P. McCarthy of the Department of Greek.

## LATIN AMERICAN STUDIES

The field of concentration will include courses dealing with LatinAmerica, and the work will be pointed toward the study of language, culture, and international relations.

For a period of three years, for the classes of 1949, 1950, 1951, all students will complete a Standard Minimum Requirement:

| Economics 101. Economic Principles and Problems. | 6 hours |
| :---: | :---: |
| Geography 304 (1). The Geography of South |  |
| America. 303 (2). The Geography of Middle | 3 hours |
| America | 3 hours |
| History 214 (1). The Rise of The Latin-American Republics |  |
| Political Science 207 (2). Government and Politics of Latin America. | 3 hours |
| Sociology 204 (2). Spanish-American Culture . | 3 hours |
| Spanish 102. Aspects of Spanish and Spanish |  |
| American Life. | 6 hours |
| 208 (1). Conversation. | 3 hours |
| 207 (2). The Civilization of Mexico. . | 3 hours |
| 306. Modern Spanish American Litera- |  |
| ture. | 6 hours |
| * Research or Independent Study. | 3 hours |
| * Integrating Seminar. | 3 hours |
|  | - |
|  | 45 hours |

For students concentrating in Latin-American Studies, the prerequisites will be waived for all the courses in the Standard Minimum

[^37]Requirement except for Sociology 204 and for Spanish 306. For Spanish 306 these students may offer as a prerequisite 6 hours of literature (Spanish, English, American, or another foreign literature).

Students interested in this program should consult Professor Edward Curtis of the Department of History.

## MEDIEVAL STUDIES

The purpose of this program is to provide a broader understanding of the formative period of European culture than can be gained within a single department.

The field of concentration shall consist of 42 to 45 hours divided as follows:

1. Required courses ( 30 to 33 hours): History 101, Medieval and Early Modern Europe, and 309, Medieval Culture From St. Augustine to Dante; Latin 106, Medieval Latin; Philosophy 107, Introduction to Philosophy Through Greek Thought, or 307, The History of Greek Philosophy, and 323 (1), Medieval Philosophy; and an integrating seminar ( 3 to 6 hours) will normally ${ }^{* *}$ be required.
2. 9 to 12 additional hours selected from courses in the medieval field in art, Biblical history, or literature. Ordinarily this additional work will fall within a single department; but exceptionally, combinations of courses in more than one department may be approved.
If a student elects 24 hours or more in the Department of History, Latin, or Philosophy, the additional hours taken to fulfill the requirement for concentration in medieval studies may be chosen from more than one department.

Students interested in this program should consult Associate Professor E. Faye Wilson of the Department of History.

## INTERNATIONAL RELATIONS

The purpose of this program is to facilitate the study of international relations for those honors students who wish to follow a more comprehensive program in this field of study than can be accomplished by majoring in any one department.

The field of concentration shall consist of 54 hours as follows:
36 hours in courses listed below.
18 hours of related courses, of which at least 3 shall be 350 work.

[^38]A seminar in any department may be substituted for 350 work,
if approved by a student's director.
Required courses:
Economics 101. Economic Principles and Problems. . . . . . . . . . . . . . . . . . . . . . . . . . . . 6 hours
Economics 314 (2). International Economic Relations..................................... 3 hours
Geography 208 (1), (2). The Geography of Europe 3 hours
History 102. Modern European History, or
History 200. History of Europe from the Decline of Rome to the Present Time.

$$
6 \text { hours }
$$

History 305. Diplomatic History of Europe since 1789 or
History 307. American Foreign Relations...... 6 hours
Political Science 100. Introduction to Political Science (either semester)................... 3 hours
Political Science 208. International Politics..... 6 hours
Political Science 301 (1). International Law.... 3 hours
36 hours
If permitted by a department, a student may meet any of the above requirements by an exemption examination.

The honors committee may require of individual students a reading knowledge of one language in addition to that required for graduation.

A regional emphasis may be given to this program by the selection, within the 18 hours of related work, of courses dealing with a particular region.

Students interested in this program should consult Professor Williams of the Department of History.

## THE COLLEGE COMMUNITY

Wellesley is a residential college. The conditions of life at Wellesley are designed to facilitate and supplement the scholar's activity.

The Deans are the officers most directly concerned with the organization of the academic community. In addition to the Dean of Instruction, the Dean of Students, and the Dean of Residence, there is a dean for each class. The Dean of Freshmen is ex officio a member of the Board of Admission and is, therefore, in a favored position to help entering students take their places in the life of the College. At the beginning of the sophomore year, each class is assigned to a member of the teaching staff who is relieved from some duties in order to assume responsibility as the academic adviser for the class during its last three undergraduate years. The Dean of Students is chairman of the class deans and is especially responsible for the interpretation of educational policy to the students. The Dean of Instruction is in charge of those matters of educational policy and administration which relate especially to the faculty.

Halls of Residence are maintained for all undergraduates except those within commuting distance who prefer to live at home. A Head of House presides over each residence and coöperates with the student officers to develop the house group as a congenial social unit. Most of the campus halls have resident faculty members, and other members of the faculty are frequently entertained in the houses by students. There are thirteen freshman houses. Nine of these are in the village, not far from the campus, and accommodate more than half the entering class. Each freshman house has a freshman president with a junior as her adviser. In each of the other campus houses, members of at least three classes are in residence. Rooms are assigned to new students in the order in which their original application fees have been received.

One of the effects of the war upon colleges, as upon the families of the country, was to bring about a shortage in domestic employees. Since 1943 it has been necessary to ask each student to contribute her services to the work of the dormitory. All students give two or three hours a week to cover the service in the dining rooms, answer bells or care for their own rooms. The schedule for this work is made and directed by a student Head of Work in each house.

Married students may be given permission by the Class Dean and the Dean of Residence to live in college houses provided (a) that they can pay the full semester fees in advance, not on the partial payment plan; (b) that they agree in advance that there will be no refund if withdrawal is caused by conditions directly related to their marriage; (c) that they agree to ask no special favors for their husbands which would
not be possible for other men; (d) that their record indicates that they will not be a nuisance by asking special favors for themselves on the ground of their marriage; (e) that if they are scholarship recipients they will submit revised applications to the Scholarship Committee.

Religious Services are held daily in the College Chapel. On week days these are conducted by some member of the faculty, except on Thursday when a member of the senior class is the leader. The Sunday morning services are led by visiting clergymen of many denominations. In all these services the college choir, led by a member of the department of Music, participates; and, in addition, there are a number of special musical vesper services during the year. The Christian Association conducts a varied program of religious discussions and conferences, and its officers direct numerous service agencies in the neighborhood of Wellesley in which many students participate. The Christian Association coöperates with the Student Christian Movement and is an important link between Wellesley students and those of other colleges in this country and abroad.

The Health Service is directed by the college physicians in coöperation with the department of Hygiene and Physical Education. The medical staff includes four physicians, one of whom is a psychiatrist. A visiting nurse is available for visits to student houses, and a clinic is open without charge to all students at Simpson Infirmary, where eight trained nurses are in constant attendance. The proximity of the College to Boston permits frequent conference with other doctors, and early consultation in case of serious illness is assured. Hospitals in Boston and Newton are so accessible that immediate care can be given to any type of illness or accident. In case of serious illness, parents are notified by telephone or telegram. Seven days of infirmary care are allowed without charge to resident students provided no extra service is required.

Emphasis is laid on preventive medicine and on the maintenance of healthy living conditions on the campus. Campus employees are examined by a college physician, and the doctors coöperate with the dietitian and purveyor in the selection of food.

The Placement Office, established by the Founders of the College as the Teachers' Registry, includes in its scope the placing of seniors and alumnae in teaching and other professions, and in business, government, and industry; the supplying of information about training courses, apprenticeships, and assistantships; the arranging of lectures and discussions on occupations; and the scheduling of interviews with employers who visit the College. Registration for placement is open to all who have taken courses in Wellesley College. Undergraduates are welcome to use the office for information, suggestions, and advice at any time. Each senior is invited to register and is assisted in formulating plans for the future. A library of books, pamphlets, current
magazine and newspaper articles of vocational interest is maintained and is available at all times to any interested student or alumna. Additional information can be secured at any time from members of the placement office staff. The office maintains files, collects credentials, and is the source of information concerning the vocational equipment and experience of Wellesley women. The registration fee is two dollars for life membership, and no commission is charged for placement. The office also registers undergraduates and alumnae for summer work, and has charge of undergraduate employment during the school year.

The College Government Association is responsible for the maintenance of efficient organization of the undergraduate community. It is directed largely by students, though it receives its charter from the Academic Council of the Faculty, which has representatives on its governing boards. Other student organizations foster a variety of interests: the Athletic Association; the Barnswallows (dramatic) Association; the Christian Association; the Forum; the Cosmopolitan Club; Radio; and numerous departmental clubs. The Wellesley College Service Fund is administered by a special committee of faculty and students which raises and distributes funds for educational and philanthropic agencies. The largest item in its budget is the annual contribution to Yenching University in China.

## ACADEMIC AND COMMUNITY BUILDINGS

(Listed in order of construction)
College Hall, the first academic building of Wellesley College, was the gift of the founders, Mr. and Mrs. Henry Fowle Durant. In 1875 it was finished and equipped under the close personal supervision of the founders. On March 17, 1914, all but one wing of this historic building was destroyed by fire. That wing, in constant use since 1914, was remodeled in 1936 and houses the department of Geology and Geography. It is located on the hill overlooking Lake Waban.

Music Hall and Billings Hall are large brick buildings devoted to the department of Music. Music Hall, built in 1880, contains offices, practice studios, and listening rooms, and includes in its equipment thirty-five pianos, six phonographs, a recording machine, and a two-manual organ. The ground floor of Billings Hall (opened in 1904) is given over to the department offices, two classrooms, and a small auditorium. These are equipped with six pianos, a clavichord, two phonographs, and a projector. The second floor is occupied by the Music Library and the office of the Research Librarian in Music.

The department has at its disposal the assignment to students of eight tickets for the weekly concerts of the Boston Symphony Orchestra in Symphony Hall, Boston.

Simpson Infirmary, a brick building erected in 1881, was used as a residence hall until 1908. It now provides living quarters for the Resident Physician and the infirmary staff.

Adjoining this building is a thoroughly modern hospital unit completed in February, 1942. Besides the doctors' offices and wellequipped clinic, there are twenty-three patients' bedrooms, lounges, and a solarium.

The Farnsworth Art Building was the gift of the late Isaac D. Farnsworth in 1889. It contains lecture rooms and exhibition galleries and is used by the department of Art for its library, study rooms, laboratories and studios.

Through the active interest of friends of the College, the Museum contains a small but representative selection of monuments from different periods and styles: Egyptian minor arts; the M. Day Kimball collection of classical sculpture, including a Polyklitan figure of an athlete; Græco-Buddhist stucco sculpture from Kashmir; a recently excavated mosaic from Antioch; a few Italian primitives; a 16th century tapestry; the James $J$. Jarves collection of textiles and laces; a polychrome terracotta bust of the Virgin attributed to Silvestro dell'Aquila; a bronze by Kolbe; an early Corot; a late Renoir; a small painting by Francesco Furini; the Cumæan Sibyi by Elihu Vedder; two paintings by Frank

Duveneck; a portrait study by Whistler; and two miniatures by Artemis Tavshanjian.

The Chapel was presented in 1899 by Miss Elizabeth G. Houghton and Mr. Clement S. Houghton as a memorial to their father, Mr. William S. Houghton, a trustee of the College from 1880 to his death in 1894. Its windows include memorials to the Founder of the College and to various alumnae and members of the faculty. Behind the memorial tablet (by Daniel Chester French) in honor of Alice Freeman Palmer are the urns holding her ashes and those of her husband, Professor George Herbert Palmer, trustee of Wellesley College from 1912 to 1933. The three-manual, Aeolian-Skinner organ of ninety-one stops was dedicated in the fall of 1936.

The Whitin Observatory is a one-story building of brick, faced with white marble, situated on a small hill on the college grounds and devoted entirely to the use of the department of Astronomy. The Observatory House, the residence of the Director of the Observatory, is nearby. The Observatory, the House, and much of the astronomical equipment are gifts of the late Mrs. John C. Whitin.

Mary Hemenway Hall, on the western border of the campus, was erected in 1909 as headquarters of the department of Hygiene and Physical Education when the Boston Normal School of Gymnastics became a part of Wellesley College. It contains lecture rooms, laboratories, offices, and the library of the department of Hygiene and Physical Education.

The Library of the College, endowed by Eben Norton Horsford, now numbers over 254,000 volumes, including the departmental libraries. The building of the Main Library was the gift of Andrew Carnegie. It was opened for use-in 1910 and was enlarged to its present size in 1916, with seating capacity for 539 readers. The books in the Main Library form a collection chosen primarily for the use of students and instructors in literature and languages, the social sciences, philosophy, mathematics, Biblical history, and geography. The Library is catalogued by author and subject entries, and the most recent and usefuil bibiographical aids are provided. Special effort is made to train students in methods of research.

The Library subscribes for more than one thousand American and foreign periodicals, including daily newspapers representing different sections of the United States, besides representative British and Continental dailies.

The Library has also many special collections of great interest and value to the student doing graduate or other research work. Among the most valuable of these are the Frances Pearsons Plimpton Collection of Italian books and manuscripts chiefly of the Renaissance; the

Ruskin Collection; the English Poetry Collection; the Katharine Lee Bates Collection of Modern Poets; the Laura Hibbard Loomis Collection of Medieval Literature. With the establishment of the Mayling Soong Foundation, it is expected that a model undergraduate book collection will develop for teaching the art, culture, history, and philosophy of the Far East, particularly China.

The Brooks Memorial Room provides comfortable and beautiful surroundings with carefully selected books for leisure hours of reading.

The following departmental libraries are located in the buildings of the respective departments: Art, Astronomy, Botany, Chemistry, Education, Geology, Hygiene, Music, Physics, Psychology, and Zoölogy.

The Page Memorial School on the college campus has two small buildings and is devoted to the education of young children.

Founders Hall, a building for lecture rooms and department offices pertaining to instruction in the liberal arts, was opened for use in 1919. The hall was built from the Restoration Fund, secured for the College through trustees, faculty, alumnae, and other friends, and replaces in some part College Hall, the first and main building of the College. The building is dedicated as a memorial to the Founders of the College.

Alumnae Hall, built in 1923 as the gift of the alumnae for a recreation center, contains an auditorium seating 1,570, a ballroom, a library, and full equipment for entertaining. There is also a recreation room, known as "The Well", which contains a soda fountain, tables for light refreshments, and a nickelodeon.

Sage Hall was built to house the departments of Botany and Zoölogy and Physiology. The first unit for the department of Botany was erected in 1927, and the Zoölogy and Physiology unit in 1931. The principal donor was Mrs. Russell Sage.

Hetty H. R. Green Hall, the administration building, was in large part the gift of Mrs. Green's son and daughter, Colonel Edward H. R. Green and Mrs. Matthew A. Wilks. It contains the administrative offices, class and seminar rooms, the faculty assembly hall, and offices of student organizations. The Galen L. Stone Tower, named for its donor, contains a carillon which was the gift of Mrs. Charlotte Nichols Greene.

Pendleton Hall was opened in 1935. It was named at the request of the undergraduates in honor of Ellen Fitz Pendleton, President of the College from 1911 to 1936. This fire-proof building houses the departments of Chemistry, Physics, and Psychology.
The Recreation Building, containing the George Howe Davenport Swimming Pool, was opened in March, 1939. It is the gift of many donors, two of whom, Mr. and Mrs. Davenport, gave large sums.

This building has many facilities, including squash and badminton courts, and is used for the indoor activities of the physical education classes. It also serves as a recreation center for students, faculvy, administration, alumnae, and their guests.

## Residences

The college residences are grouped into several units on and off the campus.
The Hazard Quadrangle consists of four houses having approximately 100 students in each: Beebe, Cazenove, Pomeroy, and Shafer Halls.

Munger Hall is adjacent to the Hazard Quadrangle and accommodates 120 students.

The Tower Court group receives its name from the largest of its three buildings (which accommodates 240) and includes, also, Claflin Hall (with 110 students) and Severance Hall (with 140).

Stone and Olive Davis Halls form one building, though each half is operated as an independent unit for 90 students.

Norumbega Hall (with 50 students) is centrally located on the hill with Green, Founders, and Pendleton Halls, and the Farnsworth Art Building.

Dower House and Homestead are campus residences, each accommodating about 35 freshmen who take their meals at Navy House.

Navy House, so named because it was moved from a Naval Air Station where it had been a women officers' quarters, is a temporary house for 50 freshmen.

Nine houses in the village-Crofton, Eliot, Elms, Joslin, Washington, Webb, Wiswall, Little, and Noanett-form a residence unit for approximately 250 freshmen.

Fiske House, the Graduate Club House, accommodating 30, is the social headquarters for all graduate students.

Horton, Shepard, and Hallowell Houses, and Cedar Lodge are club and apartment houses for members of the faculty. They are located in close proximity to the campus.

The President's House, Oakwoods (the home of the Dean of Students), Crawford (the home of the Dean of Residence), and Observatory House (the home of the Director of the Observatory), are on the campus.

Each of the larger student residences contains several faculty apartments.

## EXPENSES

For students resident in college houses . . . . . . . . $\$ 1600^{*}$
For students not resident in college houses . . . . . . $700^{*}$
Undergraduate students who are permitted to take seven semester hours or less of classroom work a semester, and who do not live in college buildings, pay tuition by the course as follows: for two semester hours, $\$ 70$; four semester hours, $\$ 185$; six semester hours, $\$ 262.50$. Payment is due at the beginning of the year.

For graduate students, the charge for full tuition is $\$ 225$ a semester, covering a program of eight or more semester hours. Tuition for the year is payable in two installments of $\$ 225$ each, one at the opening of college and the other at the beginning of the second semester. Students in the Department of Hygiene and Physical Education are allowed a remission to be applied against tuition in return for four hours a week of assistance in the work of the department. Fees for a program of less than eight semester hours, and for residence in the Graduate Club House may be found in the Graduate Circular.

## Times and Amounts of Payment

Payments must be made before the student can take her place in the classroom. No exception will be made to this rule without written permission from the Assistant Treasurer.

Checks or money orders should be made payable to Wellesley College. If sent by mail, they should be addressed to the Assistant Treasurer.

There are no deductions for absences, and no refunds save in exceptional cases of which the College shall be the sole judge.
for students resident in college houses:
Standard Plan:

$$
\begin{align*}
& \text { July } 10 \text { Deposit to reserve a place in college for the ensuing year. } \\
& \text { Failure to make such deposit will mean loss of enrollment. } \\
& \text { No part of any scholarship or loan awarded by Wellesley } \\
& \text { College and ordinarily no part of a grant from the Wellesley } \\
& \text { Students' Aid Society may be applied on this payment. }
\end{align*}
$$

The deposit is not refundable.
October (at the opening of college) . . . . . . . . . . . . $\$ 775$
February (at the beginning of the second semester) . . . . . \$775
*These fees will be slightly lower for those members of the Class of 1950 who
were in Wellesley College in March 1947 .
Alternative Plan:
July 10 (see under Standard Plan) ..... $\$ 50$
First semester: four installments, in October, November, De- cember, January, each $\$ 194.75$ ..... \$779
Second semester: four installments, in February, March, April, May, each \$194.75 ..... $\$ 779$
FOR STUDENTS NOT RESIDENT IN COLLEGE HOUSES:
Standard Plan:
July 10 ..... $\$ 50$
Deposit to reserve a place in college for the ensuing year.Failure to make such deposit will mean loss of enrollment.No part of any scholarship or loan awarded by WellesleyCollege and ordinarily no part of a grant from the WellesleyStudents' Aid Society may be applied on this payment.The deposit is not refundable.
October (at the opening of college) ..... \$325
February (before the opening of the second semester) ..... \$325
Alternative Plan:
July 10 (see under Standard Plan) ..... \$50
First semester: four installments, in October, November, December, January, each $\$ 82.25$ ..... \$329
Second semester: four installments, in February, March, April, May, each $\$ 82.25$. ..... \$324Graduate and special students who do not live in college buildings makepayment for room and board directly to the management of the privatehouses in which they have secured lodging and meals, at such rates andtimes as the parties to the arrangement may agree upon. Informationregarding boarding places may be obtained by addressing the Dean ofResidence.
Fees

1. Application fee.

An application fee of $\$ 10$ is required from all candidates for admission, and no application is recorded until the fee is received. The same fee is required from all former students who apply for readmission. Application fees will not be credited on any bill. If the application is cancelled for any reason, by the candidate or the College, the fee 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.
2. Matriculation and diploma fees for graduate students.

A matriculation fee of $\$ 5$ is payable when an applicant is admitted to graduate work. The diploma fee of $\$ 5$ is payable upon receipt of the Master's degree or the Certificate in Hygiene and Physical Education.
3. Music fees.

Fees for instruction in instrumental and vocal music are given on page 118.
4. Infirmary fees.

The privileges of the infirmary, when prescribed by the Resident Physician, are open to resident students without charge for a period not exceeding seven days, provided no extra service is required. An infirmary fee of $\$ 7.00$ a day is charged for periods exceeding seven days. Charges for extra services will be determined by the amount required.

No student may receive a diploma until a satisfactory settlement of all her college fees has been made.

## Other Expenses

1. Health and accident insurance.

Arrangements for a group student health and accident insurance policy are made by the College with a reputable insurance company. The College allowance of seven free days in the infirmary per year together with the benefits of the group student health and accident insurance, should meet the greater part of the necessary medical expenses ordinarily incurred at the College. Details in regard to this insurance will be mailed with first semester bills by the Assistant Treasurer, who will be glad to answer questions about it. This insurance is strongly recommended to students, but is not a requirement.
2. Books, supplies, etc.

A student should plan on an annual expenditure of $\$ 40$ to $\$ 75$ for books, supplies, and subscriptions, and at least $\$ 100$ for incidentals and recreation.
3. Room furnishings.

Student rooms are supplied with the essential articles of furniture. Students are expected to furnish curtains and couch covers. A small table and a comfortable chair are permissible additions. They may also bring radios, record players, clocks, and additional reading lamps upon the payment of $\$ 1.00$ a year for each piece of electrical equipment.

A student who leaves personal possessions in the house does so at her own risk. Articles remaining unclaimed for more than one year after a student has left college, either by withdrawal or graduation, will be disposed of by the College.

## FINANCIAL AID

Students of real intellectual interest and ability can find the means for obtaining a Wellesley degree through scholarships, loans, and various kinds of self help. College scholarships form a substantial basis for aid. These scholarships granted by the faculty committee may be augmented by awards from the Students' Aid Society. It is also possible for students to earn money for incidental expenses by obtaining work through the Placement Office.

## Scholarships:

Scholarships maintained by income from permanent funds are awarded annually to undergraduate students, and grants are made from other funds which the trustees set aside for this purpose each year. Awards are made in recognition of intellectual ability, of good college citizenship and character, and of genuine financial need. Regular scholarships range from $\$ 100$ to $\$ 600$. Holders of Pendleton Scholarships may receive awards as large as $\$ 950$. There are also a few larger scholarships for foreign students.

A limited number of scholarships are offered to incoming freshmen. Awards are based on financial need and on credentials which give promise of academic success and good college citizenship. The largest awards available to freshmen are the Pendleton Scholarships of $\$ 600$ to $\$ 950$, named in honor of Ellen Fitz Pendleton who was President of Wellesley College from 1911 to 1936. There are fifteen of these scholarships, eight of which are granted on a regional basis: one in New England, one in the Middle Atlantic States, two in the South, two in the Central States, and two in the Far West. The remaining seven are open to students from all parts of the country. As funds permit, sums ranging from $\$ 100$ to $\$ 500$ are awarded to other freshman applicants.
Applications from students in college must be filed with the Dean of Students, who is Chairman of the Faculty Committee on Scholarships, on forms furnished for the purpose and in accordance with the instructions posted near the close of the first semester.

Applications from candidates for admission should be made to the Dean of Students before March 1 of the year of admission. More detailed information about scholarships may be obtained from the Dean of Students.

Wellesley College is a member of the Seven College Conference which has established National Honor Scholarships for Women. These scholarships may be competed for by students from the three following districts: Middle West, Kansas, Missouri, Nebraska; South, Louisiana, New Mexico, Oklahoma, Texas; West, California, Oregon, Washington.

Information about these scholarships may be obtained by writing to Mrs. F. Murray Forbes, Jr., Executive Secretary, Committee on National Scholarships for Women, 21 Beaver Place, Boston 8, Massachusetts.

## Cooperative Houses:

Two houses on the campus have been established on a cooperative basis where students may earn $\$ 75$ toward their fees by doing an hour`s work a day at household tasks. Since students in all houses spend two to three hours a week at such work without remuneration the additional effort asked of members of the cooperative house amounts to not more than four hours a week.

Places in the cooperative house are awarded to scholarship applicants whose needs cannot be fully met by grants and who give promise of being responsible members of the household. The $\$ 75$ is divided equally for credit between the two semesters.

Experience of long duration has shown that this kind of regular work can be carried by freshmen as well as by upper class students without presenting any hazard to their academic standing or their health.

## Loan Funds:

There are available several specific funds from which the College may make loans to assist worthy undergraduate students. Detailed information about loans may be obtained from the Dean of Students.

## The Wellesley Students’ Aid Society:

This organization is maintained by alumnae and former students of the College, aided by the faculty and undergraduates, as their contribution toward keeping the opportunities of Wellesley open to students of moderate means. Awards are made in some combination of gift and loan to supplement college scholarships, and are made on practically the same basis as college grants. They ordinarily range from $\$ 50$ to $\$ 200$. Loans and occasionally gifts in small sums, $\$ 5$ to $\$ 25$, are also made for incidental expenses and emergencies.

## Opportunities for Employment:

The Placement Office offers assistance to students who wish to earn money toward their college expenses. The types of employment are mainly caring for children, clerical work, library work, and assisting in the various offices and departments of the College. Within the College three exchanges dealing in furniture, books, and food afford regular work for a number of students. Agencies for newspapers, magazincs, and dry cleaning yield substantial returns to students. While the

Placement Office makes every effort to obtain places for those who wish to work, it cautions students against depending upon this source for any considerable income. Such employment makes a distinct draft upon strength and time, and freshmen are advised not to undertake more than one kind of remunerative work.

## GRADUATE FELLOWSHIPS AND SCHOLARSHIPS

The Alice Freeman Palmer Fellowship, yielding an income of about $\$ 1,400$, was founded in 1903 by Mrs. David P. Kimball. The holder of this fellowship must be a graduate of an American college of approved standing, a 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. She must have completed at least one year of graduate study. 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.

A form to be used in applying may be obtained from the Secretary to the President, Wellesley College. The application must be filed before February first.

The Fanny Bullock Workman Scholarship, yielding an income of about $\$ 1,200$, was founded in 1929 by the bequest of Mrs. Fanny Bullock Workman.

The holder of this scholarship must be an alumna of Wellesley College who has completed at least one year of graduate study. She must present evidence of good health, character, financial need, and ability; and must be free from personal obligation which would interfere with study. The scholarship may be used to assist preparation for any useful work.

Forms to be used in applying may be obtained from the Secretary to the President, Wellesley College. Applications must be filed before February first.

The Anne Louise Barrett Fund, yielding an income of about $\$ 1,000$, was founded in memory of her sister, by bequest of Mrs. Helen Barrett Montgomery of the class of 1884. The income is to be awarded, preferably in the field of music, to a woman who is a graduate of an American college of approved standing and who is a candidate for an advanced degree or has completed at least one year of graduate study. At the discretion of the trustees it may be awarded in any other field. On presenting evidence of notable accomplishment, the same person will be eligible to apply for the fellowship for a second year. In the case of candidates of equal ability, preference will be given to a Wellesley graduate.

The fellowship may be used for study abroad, for study at any American college or university, or privately for independent research. Work in music must be primarily in musical theory, or composition, or the history of music.

Forms to be used in applying may be obtained from the Secretary to
the President, Wellesley College. The application must be filed before February first.

The Harriet A. Shaw Fund, yielding an income of about $\$ 800$, was founded by Mrs. Elizabeth Cheney Kaufmann. The income is awarded in the field of music, art, and allied subjects to a woman who is a graduate of an American college of approved standing and not more than twenty-six years of age at the time of her appointment. In the case of applicants of equal merit in different fields, preference is given to the music candidate. The scholarship may be used for study abroad, for study at any American college, university, or art school, or privately for independent research. Work in music must be primarily in musical theory, composition, or the history of music. Work in art may be in history of art or in the creative field (painting, sculpture or architecture), provided the applicant has had undergraduate work in history of art.

Application forms may be obtained from the Secretary to the President, Wellesley College. The application must be filed before February first.

The Horton-Hallowell Fellowship has been established by the Alumnae Association of Wellesley College in honor of Mary E. Horton, the first professor of Greek, and Susan M. Hallowell, the first professor of Botany. It is open to alumnae of Wellesley College in need of financial assistance for graduate study in candidacy for the degree of Doctor of Philosophy or for private research of equivalent standard. The amount of the fellowship is $\$ 1,200$. A candidate for this fellowship must present evidence of good health.

Forms to be used in applying may be obtained from the Chairman of the Fellowship Committee, Alumnae Office, Wellesley College. Applications must be filed before February 15.

The Susanna Whitney Hawkes Teaching Fellowship, from the bequest of Susanna Whitney Hawkes, is offered to a graduate student in the Department of English who is seriously preparing to teach English composition as well as literature.

The fellowship is open to those graduates of Wellesley College who have shown special competence in English work, and who have received their B.A. degree within six years. The fellowship, which may be awarded for two successive years, covers tuition fees for graduate courses at Wellesley College and also carries with it an annual stipend of $\$ 500$.

Applications, with full information about the applicant's work, must be received not later than March first and should be addressed to the Chairman of the Department of English, Wellesley College.

The Ruth Ingersoll Goldmark Memorial Fund, yielding an income of about $\$ 200$, was founded in 1946 by bequest of Charles J. Goldmark. The income from this fund is to be used to award a scholarship to a graduate student at Wellesley College or elsewhere who is working in English literature, or English composition, or in the Classics. Should there be no deserving applicants in one of these departments of study, the income may be used to aid graduate students in other departments.

Forms to be used in applying may be obtained from the Secretary to the President, Wellesley College. The application must be filed before February first. If the scholarship is to be used for graduate study at Wellesley College, the application should be accompanied by admission credentials. Blanks to be used in applying for admission may be obtained from the Committee on Graduate Instruction.

The Loretta Fish Carney Memorial Scholarship, yielding an income of about $\$ 150$, was founded in 1920 by the alumnae and staff of the Boston Normal School of Gymnastics and the Department of Hygiene and Physical Education of Wellesley College; the income of this fund to be awarded, at the discretion of the teaching staff of the department and of the President of the College, to a second-year student in the department.

The Amy Morris Homans Scholarship Fund, yielding an income of about $\$ 300$, was founded in 1924 by the Mary Hemenway Alumnae Association of the Graduate Department of Hygiene and Physical Education in honor of Miss Amy Morris Homans, pioneer and leader in physical education in the United States; the income of this fund to be awarded to a student in the Graduate Department of Hygiene and Physical Education who is in need of assistance and shows proficiency and promise.

The Graduate Study and Research Fund, yielding an annual income of about $\$ 120$, was founded in 1931 by a group of graduate students, and increased in 1936 by the estate of Isabelle Stone, Wellesley ' 05 . The income is available for graduate study or research. Application should be made to the Chairman of the Committee on Graduate Instruction.

The Trustee Graduate Scholarships. Two scholarships yielding an income of $\$ 750$ each have been established by the Trustees of Wellesley College for members of the senior class who are qualified for graduate work. The scholarships may be used for study in this country or abroad. Notice of the conditions of application are sent by the Dean of Instruction in the spring of each year to qualified seniors.

Graduate Scholarships are offered to approved candidates for a Master's degree in residence at Wellesley College. These scholarships provide for (1) one-half of full annual tuition; (2) full tuition; (3) full tuition plus $\$ 100$. Application for one of these scholarships should be made before March first. A form to be used in applying may be obtained from the Secretary to the Deans, Wellesley College. The application should be accompanied by letters of recommendation from persons familiar with the candidate's college work. The award will be made after the candidate's formal application for admission to graduate work has been accepted. Students who do not maintain their work at B grade or above in all courses counting for the degree during the first semester may be required to relinquish their scholarships at midyears. Scholarships are awarded only to fully qualified candidates for a Master's degree. Special graduate students are not eligible for these awards.

Laboratory assistants and other members of the official staff of the College are granted the privileges of graduate study without tuition charge.

## Graduate Study in Classics:

The American School of Classical Studies in Athens offers special opportunity for graduate study in Greek. The income of the Julia Josephine Irvine Fund makes it possible to offer membership without tuition to all graduates and graduate students of Wellesley College who have done sufficient work in Greek and archæology to profit by the opportunity. The object of the School is to furnish an opportunity to study in Greece the literature, art, antiquities, and history of the country under suitable guidance; to prosecute and to aid original research in these subjects; and to assist in the exploration and excavation of classic sites. Three fellowships of $\$ 1,200$ each are awarded annually on the basis of competitive examinations and are open to graduates of the coöperating colleges of which Wellesley College is one. For further information apply to Associate Professor McCarthy.

The American School of Classical Studies in Rome is an integral part of the American Academy in Rome. The object of this School is to promote the study of classical literature in its bearing upon antiquities and history; of classical, Etruscan, and Italian art and archæology, including topography, palæography, and epigraphy, and of the art and archæology of the early Christian, Mediæval, and Renaissance periods within the boundaries of Italy. Duly qualified graduates of Wellesley College are exempt from any charge for tuition. For further information application may be made to Professor Robathan.

Scholarships in the Marine Biological Laboratory at Woods Hole. Admission to courses at Woods Hole is upon a selective basis. Wellesley College offers annually two scholarships to applicants who
are successful candidates. This laboratory is primarily for research, but in the summer courses of instruction are offered, four in zoölogy and one in botany. The purpose of these courses is to aid in the production and training of investigators, and first consideration is given to persons who, whether graduate or undergraduate, give promise of contributing to the advancement of science. Applicants must have completed at least two full college courses in the subject in which they wish to work.

Applicants should state the character of the work to be done, whether botanical or zoölogical, whether courses of instruction are desired, or investigation under direction. All applications should be sent to Associate Professor Creighton or Professor Waterman before April first. These applications will be forwarded to Woods Hole to be acted upon May 15.

# DEGREES, HONORS, AND PRIZES CONFERRED IN 1948 

MASTER OF ARTS

Julia Mary Barnabo, b.a., Regis College, 1946. Chemistry. Mary Ann Boutwell, b.a., Vassar College, 1947. Psychology.
Caroline Barker Buell, b.s., Tufts College, 1941. Botany.
Rosemary Lee Hewlett b.s., Drury College, 1946. Botany.
Suzanne Young Johnston, b.A., Wellesley College, 1946. Chemistry.
Violette Andrée Léonardon, b.a., Rice Institute, 1945. English.
Muriel Dorothy Maines, b.a., Vassar College, 1946. Botany.
Lucinda Moles Pina, bachiller en fil. y let., Inst. del Cardenal Cisneros, 1933. Spanish.

Margaret Richard Muntz, b.a., Mount Holyoke College, 1946. Chemistry. Carol Betty Noble, b.a., Mills College, 1947. Music.
Isabella Geraldine Pennampede, b.a., Boston University College of Liberal Arts, 1947. Italian.
Phyllis Ziegel Phelps, b.s., Tufts College, 1946. Zoology and Physiology.
Elizabeth Eugenie Powelson, b.a., Oberlin College, 1946. Zoology and Physiology
Konstancja Maria Raczynska, agricultural engineer, Warsaw College of Agriculture, 1946. Botany.
Esther Grace Shores, b.a., University of Buffalo, 1946. Psychology.
Rosemary Trompson, b.s., Northwestern State College, 1943. Botany.
Beatriz Maggi de Vieta, doctora en fil. y let., Universidad de la Habana, 1946. English.

## MASTER OF SCIENCE IN HYGIENE AND PHYSICAL EDUCATION

Joan Emily Farrell, b.a., Lawrence College, 1945.
Jean Landis, b.a., San Diego State College, 1940.
Martha Norris Stanton, b.s., Presbyterian College, 1944.
Mary Armstrong Watt, b.s., Simmons College, 1940.
Elise Babcock White, b.s., Russell Sage College, 1933.
Anne Frances Zengerle, b.A., Wellesley College, 1947.

## BACHELOR OF ARTS

Jean Chilton Ibrams
Alice Janet Aeschliman
Adrienne Hildegarde Ahlgren
Marthia Elizabeth Aitren
Elizabeth Davenport Alden
Beatrice Florence Alfke
Dorothy Allen
Emmeline Laighton Allen
Constance Anderson

Elizabeth Lee Andrew
Winifred Jean Angenent
Elizabethi Clarke Annis
Patricia Anthony
Pifyllis Lillian Arlt
Diane Arras
Vasanti Asirvatham
Pauline Auger
Beverly Ayres

Ann Porter Barer
Nancy Lee Baker
Jean Margaret Ballard
Nangy Herbert Barclay
Barbara Chesebrough Barker
Jeanne Barstow
Martha Browning Barton
Nancy Elizabeth Bartram
Margaret Westbrook Batis
Margery Milne Batitin
Elizabeth Beverley Beardall
Marilyn Beidler
Elizabeth Bein
Nancy Janet Bishop
Joan Blackmar
Nancy Watkins Blair
Betsy Blaisdell
Mary Page Blanchard
Ann Blind
Susan Gertrude Blowney
Ruth Coe Boardman
Elizabeth Anne Bond
Carol Edna Bonsal
Jessamine Chase Boord
Harriett Joyce Bootif
Grace Ettie Bowman
Margaret Ruth Bradley
Shirley Bradley
Prudence Pomeroy Brewer
Sally Brittingham
Elizabeth Woodmansee Brown
Judith Steele Brown
Elizabeth Todd Brunhoff
Elizabeth Buchanan
Elizabeth Franges Burroughs
Barbara Ann Butterfield
Christina Wright Caldwell
Margaret Louise Callahan
Dorothy Louise Cammack
Loutse Lucas Carroll
Mary Alice Cary
Barbara Joan Caseley
Leonore Cassel
Audrey May Champerlain
Isabelle Mary Childerhose
Federica Alden Cinelli
Margaret Sanders Clark
Joyce Clarke
Betsy Clute

Lester Cobb
Ansley Coe
Jane Elisabeth Coffey
Lenore Ruth Cohen
Mary Elizabeth Comley
Annabelle Dorothea Cook
Anne Louise Cooper
Margaret Ames Coughlan
Anne Louise Coughlin
Doris Lyman Cross
Eleanor Colson Curtis
Dorothy Louise Davie
Layne Eaton Davis
Rosemary Verner Davis
Elizabeth Alida DeCoster
Martha Louise Denton
Vira Drew deSherbinin
Anne Orr Didrisien
Susan McClintock Doherty
Avn Uebelacker Donald
Jean Ann Donald
Suzanne Helen Dorntge
Nangy Jean Dubois
Cyra Louse Duff
Patricia Ann Dunkel
Margaret Dunlap Edgar
Nangy Edwards
Jean Mildred Emery
Margaret Jean Ennor
Nangy Ellen Evans
Margaret Farquhar
Claire Anne Fearon
June Marie Feinberg
Theodora Lehrer Feldberg
Marilyn Karp Fenton
Ruth Brinton Ferguson
Barbara Jane Ferris
Jean Binghiam Fisher
Charlotte Gertrude Fisiman
Jean Elizabeth Fiske
Mary Patricia Foley
Virginia Ford
Mary Jane Horner Freediey
Dorothy Ann Freeman
Mary deforest Freeman
Dolores Fulton
Joan Ellen Gabler
Mary Alice Garrity
Florence Rita Gater

Susan Margaret Gelsthorpe
Jean Beecher German
Jacqueline Gibson
Mildred Priscilla Gibson
Miriam Louise Gilchrist
Jann Audrey Goehner
Dorothy Ruth Goldstein
Helen Hope Gordon
Edith Dids Graham
Iris Grass
Barbara Russell Gray
Hannah Allen Green
Mary Catherine Gustafson
Helen Margaret Gwydir
Jane Ann Hall
Nancy Jane Halsey
Priscilla May Ham
Mary Elizabeth Hart
Mitchell Campbell Harvey
Patricia Hatry
Sara Rose Heard
Lois Marguerite Hegkman
Patricia Aimée Heilbronn
Loralie Henderson
Margaret Helen Herdeg
Corinne Heurich
Janice Hodgkins
Elizabeth Hodgkiss
Theresa Frances Holly Harriette Lugille Holt Dorothy Honiss
Margaret Holliday Hoon
Anne Hoover
Marjory May Hoprins
Julia Lewis Hornady
Rachel Jean Hoyt
Mollie Jean Hubon
Anne Barr Huiskamp
Dorothy Hundley
Barbara Standish Hunt
Ruth LeBaron Hunt
Ruth Mary Hunter
Elizabeth Pond Huntley
Nancy Jeanne Hutson
Helen Mary Ignatius
Agnes May Jones
Jane Margaret Jones
Barbara Ann Kammer
Vivien Jean Karatz

Deborah Hall Kassor
Gretchen Keehn
Karol Lorraine Kelley
Margaret Anne Kellogg
Janice Theresa Kelly
Joan Harvey Kenick
Joan Rose Kennedy
Nancy Louise Kent
Phyllis King
Nancy Knight
Jean Beatrice Knoghe
Helen Loutse Kuehn
Ruth Kulakofsky
Marguerite Kulsar
Joan Winifred Lancaster
Laura Lane
Olga Catherine Lawes
Dorothy Louise Lawson
Marjorie Jean Lawton
Mary-Ann LeBedoff
Catherine LeFevre
Joan Faraday Levy
Gerda Johanna Lewis
Hilda Fielding Lewis
Nangy Ruth Lewis
Marylou Lindquist
Holly Mann Lockhart
Barbara Mann London
Miriam Carroll Looney
Barbara Ann Loucks
Roberta Frances Lowitz
Elizabeth Knight Loy
Jane Doris Lum
Charlotte Pavey Lupton
Sarah Anne Luten
Ruth Stevens Lyons
Jean Allan Macdonald
Jean Alice MacKinnon
Sarah Ann Maier
Marilyn Ann Mailman
May Field Manny
Rosamond Holme Marble
Aileen Ruth Margolis
Eleanor Mae Margolis
Alma Julia Mastrangelo
Elizabeth Moroney Maxon
Jean Gertrude McBride
Mary Jean McCally
Marion Grace McClurg

Joyce Shirley McCoy
Ann Elizabeth McDonnell
Elena Marîa McGrath
Marguerite Veronica McInerney
Liliane Mary Louise McNayr
Beatrice Memhard
Susan Merriam
Mary Louise Meurk
Vivian Louise Miller
Helen Douglas Milroy
Jean Hamilton Monteith
Bettie Wendell Morris
Betty Ruth Morse
Dorothy Susan Mott
Lois Jean Muir
Micheline Muller
Mary Vernetta Mulvey
Dorothy Mae Mumford
Carol Jean Muntz
Sigrid Elisabeth Nauen
Deborah Gordon Newman
Jean Eastman Nichols
Mildred Louise Nickel
Rosalind Ann O'Brien
Margaret Dawn O'Day
Dorothy Marie Oerting
Carmen Lajune Ogden
Barbara Ann O’Neil
Marion Patricia Ord
Mary Louise Oxholm
Margaret Elizabeth Paine
Natalie Elizabeth Park
Fairlie Maxwell Pasfield
Janet Patterson
Nancy Leith Patterson
Priscilla Candace Patton
Elizabeth Jane Pearson
Natalie Jean Peterson
Muriel Betty Pfaelzer
Gretchen Phillips
Margaret Eleanor Phillips
Nancy Neare Phillips
Anne Leighton Pierce
Rose Pizzimenti
Mary Cordes Platt
Nancy Carrington Plowman
Ann Covington Pond
Sarah Eugenia Powell
Helen Silverstein Ratner

Georgia Gail Ray
Janet Reindel
Ann Maxwell Richard
Alice Hartshorn Richards
Eloise Richberg
Virginia Richie
Helen Marie Rise
Marion Harriet Ritvo
Margaret Dudley Roberts
Ruth Ann Roberts
Ann Harper Robinson
Jeanne Peck Robinson
Judith Roche
Valerie Ann Roemer
Margery Jane Rome
Mary Elizabeth Romig
Ruth Adair Roper
Dorothy Reynolds Rose
Sally Karpeles Rosenau
Lucille Marilyn Rosenfeld
Marian Laura Roth
Harriet Dorothy Rothschild
Amy Devora Rubenstein
Shirley Fredrika Rush
Margaret Sener Rusk
Marie Louise Russell
Martha Skillman Rutherford
Charlotte Wells Ryder
June Elizabeth Sawyer
Barbara Elizabeth Schaefer
Erna Floretta Schneider
Nancy Louise Scofield
Betty Jane Selverstone
Jean Caroline Senger
Nancy Ruth Shapiro
Joan Sherwood
Patricia Siegbert
Beverly Ruth Sitrin
Sara Margaret Smith
Sidney Willis Smith
Laura Lee Snedeker
Mary Snelling
Virginia Lee Snook
Ann Gaddis Snow
Catharine Solberg
Patricia Sollitt
Doris Jane Sommer
Miriam Katherine Thomson
Southwick

Betsy Logkwood Spaulding
Roberta Ann Speier
Martyl Joan Spieler
Doris Marie Sponenberg
Isabel Burnett Sprague
Ruth Elizabeth Sprute
Nangy Helen Stafford
Harriet Jane Stainbagk
Suzanne Stanbro
Virginia Edna Stanley
Louise Joy Starr
Harriet Ann Starzinger
Nangy Jane Steffens
Charlotte Deborah Stone
Mary Helen Stone
Frances Nichols Stratton
Ruth Lois Strauss
Mary Seymour Stringer
Harriet Robb Sultzer
Jeanne Nusbaum Sundheim
Joan Supple
Mary Winn Sydnor
Jean Dennison Taber
Judith Targher
Nangy Taylor
Catherine Inglis Taylor
Gertrude Olwin Ten Eyck
Rebegca Thatgher
Joan Marie Thieman
Anne Carolyn Thompson
Phyllis Lindberg Thompson
Marie Ozine Tifft
Barbara Ruth Tillinghast
Jean Isabelle Tobian
Charlotte Mary Tosiach
Ursula Erika Traugott

Nangy Esther Truax
Dorothy Macdonald Turnbull
Ellie-Phaedra Tzalofoulou
Beverly Blair Ulman
Janet Royle VanArsdale
Lugy Dent Venable
Barbara Anne vonThurn
Katharine Louise Walley
Elisabeth Baldwin Warfield
Caroline Warner
Margaret Stacy Wash
Barbara Elizabeth Wehle
Ruth Helen Weinstein
Elizabeth Ann Weis
Charlotte Sommers Weissman
Frances Ellen Wells
Gwendolyn Lewise Werth
Dorothy Yvonne Eugenie Whissell
Ruth Wigk
Joan Wickwire
Vivian Barbara Wille
Dorothy Ann Williams
Karen Elizabeth Williams
Joan Wilson
Madeleine Wilson
Marjorie Ann Winer
Marjorie Evelyn Wolf
Patricia Jane Wood
Diane Phyllis Wormser
Nancy Wrenn
Roberta Gay Wyman
Mary Harriet Zeller
Virginia VanSolingen Zerega
Winifred Walter Zimmerman
Sylvia Ruth Zura

## TEACHING CERTIFICATE OF THE DEPARTMENT OF HYGIENE AND PHYSICAL EDUCATION

Joan Emily Farrell, b.a., Lawrence College, 1945.
Jean Landis, b.a., San Diego State College, 1940.
Teresa Jane Schug, b.a., Mills College, 1946.
Mary Armstrong Watt, b.s., Simmons College, 1940.
Elise Babcock White, b.s., Russell Sage College, 1933.
Anne Frances Zengerle, b.a., Wellesley College, 1947.

## SENIOR HONORS

Beverly Ayres, Psychology
Elizabeth Buchanan, American Literature Suzanne Helen Dorntge, Medieval Studies
Nancy Jean Dubois, Chemistry
Mildred Priscilla Gibson, English Literature
Patricia Hatry, Political Science Gretchen Keehn, Geography

Margaret Dawn O'Day Physics and Mathematics
Carmen LaJune Ogden, History
June Elizabeth Sawyer, History
Barbara Anne vonThurn, History
Franges Ellen Wells, Physics
Vivian Barbara Wille, Mathematics and Chemistry
Diane Phyllis Wormser, Art
Nancy Wrenn, Botany

## 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.

## DURAN' SCHOLARS

Appointed in 1948
Class of 1948

| Elizabeth Davenport Alden | Marion Harriet Ritvo |
| :--- | :--- |
| Beatrice Florence Alfke | Erna Floretta Schneider |
| Ruth Coe Boardman | Betty Jane Selverstone |
| Prudence Pomeroy Brewer | Beverly Ruth Sitrin |
| Elizabeth Buchanan | Harriet Jane Stainback |
| Louise Lucas Carroll | Mary Helen Stone |
| Gerda Johanna Lewis | Ursula Erika Traugott |
| Barbara Mann London | Caroline Warner |
| Deborah Gordon Newman | Frances Ellen Wells |
| Mary Louise Oxholm | Marjorie Ann Winer |
| Helen Silverstein Ratner | Mary Harriet Zeller |

Class of 1949
Avis Ann Adikes Renate Elizabeth Halley
Edith Suzanne Besser
Janet Calvert Brown
Barbara Alaine Buck
Margaret Virginia Cohn
Joyge Barbara Friedman
Jane Balmer Friedmann
Lila Russ Gantt

Janet Adaline Hawkins
Corinne Rosenfelder Katz
Mary Jane Latsis
Imogene Marie McAuliffe
Amalie Rose Moses
Carol Rogers
Juditil Brooks Wolpert

## WELLESLEY COLLEGE SCHOLARS

Appointed in 1948
Class of 1948
Vivian Louise Miller
Bettie Wendell Morris
Lois Jean Muir
Dorothy Mae Mumford
Jean Eastman Nichols
Janet Patterson
Janet Reindel
Mary Elizabeth Romig
Harriet Dorothy Rothschild
Amy Devora Rubenstein
Shirley Fredrika Rush
Marie Louise Russell
Martha Skillman Rutherford
Charlotte Wells Ryder
Barbara Elizabeth Schaefer
Nancy Ruth Shapiro
Sara Margaret Smith
Sidney Willis Smith
Martyl Joan Spieler
Doris Marie Sponenberg
Jeanne Nusbaum Sundheim
Jean Isabelle Tobian
Beverly Blair Ulman
Barbara Anne vonThurn
Gwendolyn Lewise Werth
Dorothy Yvonne Eugenie Whissell
Vivian Barbara Wille
Karen Elizabeth Williams
Marjorie Evelyn Wolf
Nancy Wrenn

Class of 19.49

Betsy Ancker
Helen Myra Arnstein
Barbara André Barnes
Barbara Beecher
Elizabeth Caroline Bowles
Sara Jane Burrell
Gloria Hollinger Burroughs
Sarah Glasgow Chivvis
Helen Dunsmoor Clark
Martha Mulford Coppess
Winifred Wilma Corey

Jane Elizabeth Curtis Bernice Frances Davidson
Virginia Hartwell Davidson
Nancy Jean Dickson
Patricia Winship Dunham
Carol Ann Ecrberg
Katharine Anne Etter
Barbara Fay
Barbara Jean Ferguson
Ellen Fezandí́
Martha Ellen Fraser

Nancy Ellen Fry
Margaret Goodman
Sarah Elizabeth Goodwin
Carolyn Elizabeth Hall
Marianne Elizabeth Halley
Sarah Anne Hodgman
Margaret Elizabeth Kessler
Neria Hockaday Kohl
Lorelei Ruth Ladner
Ann Louise Lindstaedt
Elizabeth Chase Locke
Betty Jo Morgan
Nancy Betty Neuwirth
Joan Ruth Nill
Leslie Nunn
Marilyn Eugenia Pearson
Sally Perry
Sandra Lee Pletman
Elaine Stacia Pohl
Joan Doris Probst

Polly Putnam
Elizabeth Ann Rean
Virginia Jane Rogers
Barbara Ann Rossland
Mary Jane Shepard
Hsio Hsuan Shim
Margaret Ruth Stanfield
Eleanor Frances Stewart
Barbara Anne Sutton
Ann Baird Sylvester
Gertrude Adell Tower
Harriet Murpiy Tway
Constance Avery Vose
Nancy June Vredenburg
Caroline Evelyn Wang
Ruth Cyril Wasserman
Marcia Ann Watters
Nancy Lee Westwood
Ruth Elizabeth Whitson
June Emma Wilkins

## PRIZES

Cervantes Prize in Spanish: Isabelle Mary Childerhose
Davenport Prize in Speech: Miriam Loulse Gilchrist
Erasmus Prize in History: Phyllis Lindberg Thompson
Isabelle Eastman Fisk Prize in Speech: Jean Worth Newman and Elaine Ruth Rosemeyer
Jacqueline Award in English Composition: Margaret Sanders Clark
Fohn Masefield Prize in Prose Writing: Barbara Standish Hunt and Deborah Gordon Newman
Mary White Peterson Prize in Zoology: Helen Silverstein Ratner
Lewis Atterbury Stimson Prize in Mathematics: Dorothy Louise Lawson
Woodrow Wilson Prize in Modern Politics:Iris Grass
Florence Annette Wing Memorial Prize for Lyric Poetry: Marianne Elizabeth Halley and Charlotte Ann Wall
Natalie Wipplinger Prize in German: Ruth Coe Boardman and Harriet Jane Stainback

## FELLOWSHIP AWARDS FOR 1948-49

## ALICE FREEMAN PALMER FELLOWSHIP

Nancy Lee Beaty, b.a., Wellesley College, 1943; m.a., Yale University, 1947; candidate for the degree of PH.D. at Yale University. English.

FANNY BULLOCK WORKMAN SCHOLARSHIP
Eleanor Rudd Webster, b.A., Wellesley College, 1942; m.A., Mount Holyoke College, 1944; candidate for the degree of ph.D. at Radcliffe College. Chemistry.

## ANNE LOUISE BARRETT FELLOWSHIP

Sarah Jane Mitchell Manley, b.a., Wellesley College, 1945; candidate for the degree of ph.d. at Yale University. Music.

HARRIET A. SHAW SCHOLARSHIP
Sylvia Wisdom Kenney, b.A., Wellesley College, 1944; b.mus., Yale School of Music, 1945; candidate for the degree of ph.d. at Yale University. Music.

## HORTON-HALLOWELL FELLOWSHIP

(In the Gift of the Alumnae Association)
Mary Andrus, b.a., Wellesley College, 1944; candidate for the degree of m.a. at Columbia University. Endocrinology.

GRADUATE SGHOLARSHIPS AWARDED TO MEMBERS OF THE CLASS OF 1948
Prudence Pomeroy Brewer, for graduate work at the School of Fine Arts, New York University.
Dorothy Ann Freeman, for graduate work in medieval studies at Radcliffe College.

## SUMMARY OF STUDENTS

Resident candidates for the M.A. degree ..... 40
Resident candidates for the M.S. degree in H. \& P. E. ..... 15
Resident candidates for the Certificate in H. \& P. E. ..... 18
Candidates for the B.A. degree:
Seniors ..... 364
Juniors ..... 402
Sophomores ..... 435
Freshmen ..... 471
1,672
Non-candidates for degrees ..... 14
1,759
Duplicates ..... 15
Total registration October, 1948 ..... 1,744
Juniors in Europe (Paris, Geneva, and Zurich) ..... 8
Geographical Distribution of Students by Home Address
Alabama South Carolina ..... 4
Arizona Tennessee ..... 14
Arkansas Texas. ..... 24
California ..... 31
Colorado ..... 8
Connecticut ..... 108
Delaware ..... 6
District of Columbia ..... 32
Florida ..... 17
Georgia ..... 6
Illinois ..... 80
Indiana ..... 23
Iowa ..... 12
Kansas ..... 4
Kentucky ..... 15
Louisiana ..... 10
Maine ..... 15
Maryland ..... 41
Massachusetts ..... 250
Michigan ..... 37
Minnesota. ..... 23
Mississippi ..... 1
Missouri ..... 39
Montana ..... 1
Nebraska ..... 7
New Hampshire ..... 22
New Jersey ..... 157
New York ..... 352
North Carolina ..... 7
Ohio ..... 94
Oklahoma. ..... 5
Oregon ..... 5
Pennsylvania ..... 124
Rhode Island ..... 28

## PRESIDENTS OF WELLESLEY CLUBS

## California

Central, Miss Mary Edith Buckley, 541 Blair Avenue, Piedmont 11
Southern, Mrs. Orville L. Routt, 1360 N. Crescent Hts. Blvd., Hollywood
Colorado
Mrs. Hugh Shepherd, 4817 East 17th Avenue, Denver 7
Connecticut
Bridgeport, Mrs. Fritz M. Meyer, 370 Lake Avenue, Bridgeport
Hartford, Mrs. Willard C. Jones, 21 Linnard Road, West Hartford
New Haven, Miss Mary B. Thompson, 103 Linden Street, New Haven 11
Southern, Mrs. Gilson Terriberry, R. F. D. \#2, New Canaan
Waterbury, Mrs. Frank W. Gray, Jr., Breakneck Hill, Middlebury
Delaware
Wilmington, Miss Florence Freeman, 1515 Woodsdale Road, Bellevue Manor, Wilmington

## District of Columbia

Washington, Mrs. George L. Meleney, 5706 York Lane, Bethesda 14, Md.

## Florida

Miami, Mrs. Harold B. Lewis, 3250 S. Miami Avenue, Miami
St. Petersburg, Mrs. Frances B. Eaton, 256 17th Avenue, N. E., St. Petersburg
Georgia
Atlanta, Mrs. William Harry Willson, 69 Maddox Drive, N.E., Atlanta
Illinois
Chicago, Mrs. Howard Goodman, 5533 University Avenue, Chicago 37

## Indiana

Indianapolis, Mrs. Paul W. Burkholder, 21 West 46th Street, Indianapolis 8
Iowa
Mrs. Benjamin S. Willis, 2320 Knapp Street, Ames

## Kentucky

Louisville, Mrs. John A. Laird, 432 Lightfoot Road, Louisville 7

## Louisiana

New Orleans, Mrs. Ralph Nicholson, 1550 Dufossat Street, New Orleans 15

## Maine

Eastern, Miss Mary M. Gibbons, Longacres, R. F. D. \#1, Bangor
Western, Mrs. Kenneth C. M. Sills, 85 Federal Street, Brunswick
Maryland
Baltimore, Mrs. Jessie M. Naylor, 3203 N. Charles Street, Baltimore 18

## Massachusetts

Boston, Mrs. Haskell Cohn, 25 Seaver Street, Brookline 46
Haverhill, Miss Constance Ballou, Bradford Junior College, Bradford
Lowell, Mrs. Norman D. McLoon, 30 Mansur Street, Lowell
Middlesex, Mrs. Charles E. Garvin, 12 Dover Street, South Natick
North Shore, Mrs. Frederick W. Wakelin, 70 Bubier Road, Marblehead
South Shore (Quincy), Mrs. William Cuff, 49 Shepard Road, South Braintree 85
Southeastern, Miss Ruth Congdon, 47 Seventh Street, New Bedford
Springfield, Mrs. William L. Morgan, Jr., Holly Hill, East Longmeadow
Winchester, Mrs. Arthur T. Rogde, 22 Seneca Road, Winchester
Worcester, Miss Virginia J. MacFarland, 182 Millbrook St., Worcester 5

## Michigan

Detroit, Mrs. Sigurd R. Wendin, 291 Cloverly Road, Grosse Pointe Farms 30
Western, Miss Marjory Billow, Box 76, R. F. D. 1, Jones
Minnesota
Twin City (Minneapolis), Miss Pauline Curran, 1234 West Minnehaha Parkway, Minneapolis 9

## Missouri

Kansas City, Mrs. Richard L. Sutton, Jr., 5400 Ward Parkway, Kansas City 2
St. Louis, Mrs. Herbert S. Alcorn, 4 Sappington Spur, Kirkwood 22
New Hampshire
Mrs. Benjamin G. Bundy, Amherst
New Jersey
Central Fersey, Mrs. Lawrence B. Webster, 35 Boudinot Street, Princeton
New Fersey, Mrs. Irving J. Townsend, 17 Columbus Avenue, Glen Ridge
New York
Brooklyn, Mrs. Toufick Fackre, 567 Eighth Street, Brooklyn 15
Buffalo, Mrs. Frederick J. Batson, 21 Bidwell Parkway, Buffalo 13
Eastern, Mrs. Edward Meacham, 149 Rosemont Street, Albany
Elmira, Mrs. Guy E. Stong, 208 Lovell Avenue, Elmira
Ithaca, Miss Rebecca S. Harris, 126 Kelvin Place, Ithaca
Mid-Hudson, Mrs. R. H. Bowden, Beeburn, Garrison
Nassau, Mrs. Hugh G. Bergen, 5 Robbins Drive, East Williston
New York, Mrs. Gus H. Zimmerman, Jr., 76 Glenwood Road, Ridgewood, New Jersey
Queens, Mrs. Donald T. Duckworth, 144-29 35th Avenue, Flushing
Rochester, Mrs. Randall G. Satterwhite, Jr., 8 Barratt Place, Fairport
Schenectady, Mrs. Donald B. MacCollom, 2091 Grand Blvd., Schenectady
Syracuse, Mrs. Ralph Ebbert, 154 Beverly Road, Syracuse 4
Troy, Mrs. Edward C. Pfeffer, 97 23rd Street, Troy
Utica, Miss Ruth W. Auert, 813 Herkimer Road, Utica
Westchester, Mrs. Robert D. Brooks, 275 Quaker Street, Chappaqua
Оніо
Akron, Mrs. James A. Saalfield, 1766 W. Market Street, Akron
Cincinnati, Mrs. Morse Johnson, 1747 E. McMillan Street, Cincinnati 6
Cleveland, Mrs. Whiting Williams, 2257 Tudor Drive, Cleveland 6
Columbus, Mrs. Willard T. S. Jones, 1392 Virginia Avenue, Columbus 12
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## FORMS OF BEQUEST

I give to Wellesley College, a Massachusetts corporation, free and clear of all inheritance taxes, the sum of. $\qquad$ dollars.

I give to Wellesley College, a Massachusetts corporation, free and clear of all inheritance taxes, the sum of dollars, to be called the $\qquad$ Endowment Fund, the income only to be used for the payment of teachers' salaries.

I give to Wellesley College, a Massachusetts corporation, free and clear of all inheritance taxes, the sum of $\qquad$ dollars, to be called the $\qquad$ Scholarship Fund, the income only to be used in aid of deserving students.

If the bequest is residuary, it should read:
"All the rest, residue and remainder of my real and personal estate, I devise and bequeath to Wellesley College, a Massachusetts corporation," etc.


[^0]:    ${ }^{2}$ Absent on leave for the first semester.

[^1]:    ${ }^{1}$ Absent on leave.
    ${ }^{2}$ Absent on leave for the first semester.
    ${ }^{3}$ Absent on leave for the second semester.

[^2]:    ${ }^{1}$ Absent on leave.
    ${ }^{2}$ Absent on leave for the first semester.
    ${ }^{3}$ Absent on leave for the second semester.

[^3]:    ${ }^{1}$ Absent on leave.
    ${ }^{3}$ Absent on leave for the second semester.

[^4]:    ${ }^{1}$ Absent on leave.
    ${ }^{4}$ Appointed for the first semester only. ${ }^{5}$ Appointed for the second semester only.

[^5]:    - Appointed for the first semester only.

[^6]:    * A unit represents one year's study in any one subject, constituting approximately a quarter of a full year's work.

[^7]:    * A student whose work in the first semester meets certain standards set by the department may be exempted from the second semester of the course. If a student fails to pass with credit the second semester of English 100, she will be required to take an additional semester course in the sophomore year.

[^8]:    $\dagger$ English courses with emphasis on writing may not count for distribution.

    * If Interdepartmental Course 103 or 106 is elected, the remaining six hours must be taken in departments not included in the interdepartmental course.

[^9]:    * In the interpretation of this requirement the Department of Geology and Geography shall count as two departments.

[^10]:    *Requires special permission of Dean of Freshmen.

[^11]:    ${ }^{2}$ Absent on leave for the first semester.
    ${ }^{3}$ Absent on leave for the second semester.

    - Appointed for the first semester only.

[^12]:    ${ }^{2}$ Absent on leave for the first semester.

[^13]:    ${ }^{1}$ Absent on leave.

[^14]:    ${ }^{1}$ Absent on leave.

[^15]:    ${ }^{1}$ Absent on leave.
    1 Appointed for the first semester only.
    ${ }^{5}$ Appointed for the second semester only.

[^16]:    ${ }^{2}$ Absent on leave for the first semester.
    ${ }^{3}$ Absent on leave for the second semester.
    $\dagger$ Students making only D in the first semester of 100 will be placed in a special section for the second semester to give them more practice in writing.

    If a student submits papers notably deficient in English as part of her work in any department, she may be referred to the Department of English for such remedial work as is necessary.

[^17]:    * If such students were exempted from course 100 at midyears, they may take a fourth semester of grade II work in writing.

[^18]:    * In special cases, with the permission of the department, a major of 24 hours may be permitted.

[^19]:    $\dagger$ Recommended as a beginning course in the major only for students who have had a thorough survey of English literature in preparatory school. It is inadvisable for students planning to major in English to elect this course in the sophomore year as a beginning course in the major.

[^20]:    * Offered in alternate years.

[^21]:    * Offered in alternate years.

[^22]:    * See Section II, page 101, for opportunities for juniors and seniors to enroll in professional courses and for information relative to the five-year course in hygiene and physical education.

[^23]:    * This course may be elected to fulfill the literature requirement in group I.

[^24]:    * It will be the privilege of students in grade III courses to have access to the manuscripts and early-often contemporary-editions of Italian authors contained in the Frances Pearsons Plimpton Collection.

[^25]:    * It will be the privilege of students in grade III courses to have access to the manuscripts and early-often contemporary-editions of Italian authors contained in the Frances Pearsons Plimpton Collection.

[^26]:    ${ }^{1}$ Absent on leave.

[^27]:    ${ }^{1}$ Absent on leave.

[^28]:    * Offered in alternate years.

[^29]:    ${ }^{1}$ Absent on leave.

[^30]:    * Students who elect practical music are charged at the rate of $\$ 90.00$ for a halfhour lesson per week throughout the year. The charge for the use of a practice studio is $\$ 15.00$ per year for one period daily. The charge for a daily period of organ practice is $\$ 20.00$. Practical music fees are payable in advance by semesters, and are not subject to return or deduction except upon recommendation of both the Dean of Students and the department chairman.

[^31]:    $\dagger$ Course 205 will ordinarily be offered in alternate years.

    * Astronomy 301, to which Physics 301 is prerequisite, may be counted toward a major in physics.
    $\ddagger$ Mathematics 303, if followed by Physics 304 or 305 , may be counted toward a major in physics.
    § Courses 304 and 306 will ordinarily be offered in alternate years; also, courses 307 and 309.

[^32]:    $\dagger$ Courses 304 and 306 will ordinarily be offered in alternate years; also, courses 307 and 309.

[^33]:    ${ }^{1}$ Absent on leave.

[^34]:    ${ }^{1}$ Absent on leave.

[^35]:    ${ }^{3}$ Absent on leave for the second semester.

[^36]:    * A special fee of $\$ 15.00$ is charged for Speech 203. Loans from the Malvina Bennett Fund for this fee are available for a limited number of students. The chairman of the department should be consulted.

[^37]:    * In planning the work of the 350 course and of the seminar, the Committee on Latin-American Studies will take into consideration the special interests of individual students.

[^38]:    ** A student whose interests are primarily in art or literature may, as an exception, be permitted to substitute for the philosophy requirement 9 hours selected from courses in the medieval field in another department.

