ANNOUNCEMENTS
Vol. XXVIII FEBRUARY 5, 1928 No. 14

THE UNIVERSITY OF CHICAGO
The University of Chicago Press
CHICAGO • ILLINOIS

THE SUMMER QUARTER
COURSES IN
ARTS, LITERATURE, SCIENCE, DIVINITY, LAW
MEDICINE, EDUCATION
COMMERCE AND ADMINISTRATION
SOCIAL SERVICE ADMINISTRATION
1928
IMPORTANT NOTICE

Before coming to the University prospective students should in all cases make sure that they are eligible for admission. Graduates of colleges or universities which hold membership in any of the following associations (degrees subsequent to approval by the association) are eligible for admission to the Graduate and Professional Schools and should mail in advance to the University Examiner evidence of graduation—an official letter (diploma not necessary):

- The approved list of the Association of American Universities
- The North Central Association of Colleges and Secondary Schools
- The Association of Colleges and Secondary Schools of the Southern States
- The Association of Colleges and Preparatory Schools of the Middle States and Maryland
- The Northwest Association of Secondary and Higher Schools

All others, whether seeking admission to the Graduate Schools, to a professional school, to the Colleges as candidates for degrees, or as unclassified students, should present their applications and credentials by mail to the University Examiner at least one month before the opening of the quarter, i.e., on or before May 18. For this purpose see the directions on the opposite page. If more detailed information is needed, a blank will be forwarded by the University Examiner. Those failing to make arrangements in advance may be seriously disappointed by being rejected.

Classes are filled in the order of registration; late registrants accordingly have less freedom of election. Credit for a course is granted only in case of satisfactory work following prompt registration and regular attendance.

PROTECTION TO HEALTH

During the first two weeks of residence a medical and physical examination is required of every undergraduate student and strongly recommended in the case of graduate students. This examination is designed to protect the individual against work for which he is physically unqualified, to discover defects and tendencies which may and should be corrected, and to guard the University community against communicable disease.

Vaccination against smallpox, obligatory in the case of undergraduate (including unclassified) students, is strongly recommended for all students. Each student should, therefore, present at the office of the Director of Health Service within the first week of residence a certificate of successful vaccination within ten years. The University medical officers will vaccinate without charge students who are unable to present such certificates.

TO STUDENTS FROM OTHER COUNTRIES

Since all persons not citizens of the United States are subject to examination upon entrance to this country, delays and inconvenience will be reduced to a minimum if those seeking entrance for the purpose of attending the University secure in advance certificates of admission to the University and instructions as to procedure, supplied upon request by the University Examiner.

1 Admission to the Graduate Schools does not imply equivalency of degrees.
2 An unclassified student is not a candidate for a degree.
APPLICATION FOR ADMISSION
TO
THE UNIVERSITY OF CHICAGO
FOR THE
SUMMER QUARTER, 1928

Information under the headings indicated below should be submitted to the University Examiner, University of Chicago, by new students only. Read the directions on the opposite page before filling out the Application for Admission. Those students who have previously attended the University, as well as those who have already received course books or certificates of admission, are not required to submit this information. All former students in good standing will be allowed to re-enter without presentation of the data.

APPLICATION FOR ADMISSION

1. Name in full
   (First name) (Middle name) (Last name)

2. Date

3. Address to which reply should be sent:
   (Street) (City) (State)

4. Date of birth

5. State the full extent of your study, with dates and full time of attendance in each institution:

<table>
<thead>
<tr>
<th>NAME OF INSTITUTION</th>
<th>LOCATION</th>
<th>DATE OF ATTENDANCE</th>
<th>TOTAL MONTHS OF ATTENDANCE</th>
<th>DEGREE* OR DIPLOMA AND DATE RECEIVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>a)</td>
<td></td>
<td>19_ to 19_</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(High school or academy)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b)</td>
<td></td>
<td>19_ to 19_</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Normal school)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c)</td>
<td></td>
<td>19_ to 19_</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(College or university)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d)</td>
<td></td>
<td>19_ to 19_</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Other schools)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Experience (indicate positions held, giving school, firm, or other organization, place, date, type of work, and present occupation)

7. When do you plan to enter the University of Chicago?

   Will you seek a degree from the University of Chicago? _____ What degree? ______

8. Specify the courses in which you desire to enroll—by department and number, e.g., English 141, History 121. Please note prerequisites. (Final registration is dependent upon the approval of the Dean)

* See "1" under "Directions" on opposite page.
9. State in detail your formal and informal preparation for work in the courses named: (Supplement by letter if necessary)

10. If you are a student in another institution, the President, Dean, or Registrar should sign the following statement:

M is a student in good standing in

with (excellent, good, fair, poor) scholarship record, including

hours passed, hours conditioned, hours failed,

and is recommended for admission to the University of Chicago for the Summer Quarter, 1928, to take the following courses:

(President, Dean, Registrar)

11. If you are a teacher, the Superintendent or Principal should sign the following form:

I recommend , a teacher in

schools holding a grade certificate, for admission to the University of Chicago and certify to the accuracy of the statements made in this application.

(Superintendent, Principal)

* Required of all medical students.

DIRECTIONS

1. FOR ADMISSION TO THE GRADUATE SCHOOLS.
   If you have a Bachelor's degree from a standard institution, you should submit an official letter (diploma not required) certifying the degree received and the date you received it.

2. FOR ADMISSION WITH ADVANCED STANDING AS A CANDIDATE FOR A BACHELOR'S DEGREE.
   If you wish to classify and become a candidate for a Bachelor's degree, you should submit complete official credentials with your application.

3. FOR ADMISSION TO THE JUNIOR COLLEGES.
   If you are seeking admission to the Junior Colleges directly from high school, you should write to the University Examiner for an application blank, giving the name and location of the high school from which you graduated and the date of graduation.

4. FOR ADMISSION AS AN UNCLASSIFIED STUDENT.
   If you are not a candidate for a degree, and you have no degree, you should submit official credentials, recommendations, and a letter including, in addition to the information indicated on this page and page 2 of the cover:
   a. References.
   b. Membership and official positions in school or community organizations.
   c. Types of communities, industries, or other regions of life where you have had most experience.
   d. Leading interests.
   e. Plans, including reasons for not seeking a degree.

Submit applications as soon as possible, not later than May 18
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Officers of Administration</td>
<td>2</td>
</tr>
<tr>
<td>General Information</td>
<td>3</td>
</tr>
<tr>
<td>The Graduate Schools and Colleges of Arts, Literature, and Science:</td>
<td></td>
</tr>
<tr>
<td>The Faculties</td>
<td>13</td>
</tr>
<tr>
<td>Courses, Summer Quarter, 1928</td>
<td>22</td>
</tr>
<tr>
<td>The Divinity School:</td>
<td></td>
</tr>
<tr>
<td>The Faculty and Conference</td>
<td>68</td>
</tr>
<tr>
<td>General Information</td>
<td>69</td>
</tr>
<tr>
<td>The Graduate Divinity School</td>
<td>70</td>
</tr>
<tr>
<td>Courses, Summer Quarter, 1928</td>
<td>70</td>
</tr>
<tr>
<td>The Law School:</td>
<td></td>
</tr>
<tr>
<td>The Faculty</td>
<td>75</td>
</tr>
<tr>
<td>General Information</td>
<td>75</td>
</tr>
<tr>
<td>Courses, Summer Quarter, 1928</td>
<td>77</td>
</tr>
<tr>
<td>The Medical Schools:</td>
<td></td>
</tr>
<tr>
<td>The Graduate School of Medicine of the Ogden Graduate School of Science.</td>
<td>79</td>
</tr>
<tr>
<td>The Faculty</td>
<td>79</td>
</tr>
<tr>
<td>General Information</td>
<td>80</td>
</tr>
<tr>
<td>Courses, Summer Quarter, 1928</td>
<td>81</td>
</tr>
<tr>
<td>Rush Medical College</td>
<td>82</td>
</tr>
<tr>
<td>The School of Education:</td>
<td></td>
</tr>
<tr>
<td>The Faculty of the College of Education</td>
<td>83</td>
</tr>
<tr>
<td>General Information</td>
<td>85</td>
</tr>
<tr>
<td>Courses, Summer Quarter, 1928</td>
<td>89</td>
</tr>
<tr>
<td>The School of Commerce and Administration:</td>
<td></td>
</tr>
<tr>
<td>The Faculty</td>
<td>111</td>
</tr>
<tr>
<td>General Information</td>
<td>112</td>
</tr>
<tr>
<td>Courses, Summer Quarter, 1928</td>
<td>112</td>
</tr>
<tr>
<td>The Graduate School of Social Service Administration:</td>
<td></td>
</tr>
<tr>
<td>The Faculty</td>
<td>120</td>
</tr>
<tr>
<td>General Information</td>
<td>120</td>
</tr>
<tr>
<td>Courses, Summer Quarter, 1928</td>
<td>124</td>
</tr>
<tr>
<td>Index</td>
<td>130</td>
</tr>
<tr>
<td>Location of University and Map of Quadrangles</td>
<td>Cover 4</td>
</tr>
</tbody>
</table>
OFFICERS OF ADMINISTRATION

MAX MASON, President of the University, Harper Memorial Library, Room W11.
FREDERIC CAMPBELL WOODWARD, Vice-President and Dean of Faculties, Harper Memorial Library, Room W11.
DAVID HARRISON STEVENS, Assistant to the President, Harper Memorial Library, Room W11.
WALTER A. PAYNE, University Recorder and Examiner, Cobb Lecture Hall, Room 104.
EDITH FOSTER FLINT, Chairman of the Women's University Council, Cobb Lecture Hall, Room 207.
HERVEY FOSTER MALLORY, Secretary of the Home Study Department, Ellis Hall, Room 1.
WILLIAM HAROLD COWLEY, Executive Secretary of the Board of Vocational Guidance and Placement, Cobb Lecture Hall, Room 215.

THE FACULTIES OF ARTS, LITERATURE, AND SCIENCE

GORDON JENNINGS LAING, Dean of the Graduate School of Arts and Literature, Cobb Lecture Hall, Room 116.
HARRY GORDON GALE, Dean of the Ogden Graduate School of Science, Cobb Lecture Hall, Room 116.
CHAUNCEY SAMUEL BOUCHER, Dean of the Colleges of Arts, Literature, and Science, Cobb Lecture Hall, Room 203.
THOMAS VERNON SMITH, Associate Dean of the Colleges of Arts, Literature, and Science, Cobb Lecture Hall, Room 203.
AARON JOHN BRUMBAUGH, MERLE CROWE COULTER, JOHN WILLIAM EDWARD GLATT-FELD, CHESTER NATHAN GOULD, ADELLE DE SALE LINK, BERTRAM GRIFFITH NELSON, DWIGHT ABEL POMEROY, LILLIAN STEVENSON, Cobb Lecture Hall, Room 203: Deans in the Colleges of Arts, Literature, and Science.

CARL FREDERICK HUTH, Dean of University College, Cobb Lecture Hall, Room 202.

THE PROFESSIONAL FACULTIES

SHAILER MATTHEWS, Dean of the Divinity School, Swift Hall, Room 100.
JAMES PARKER HALL, Dean of the Law School, Law Building, Third Floor.
BASIL COLEMAN HYATT HARVEY, Dean of Medical Students, Cobb Lecture Hall, Room 112.
ERNEST EDWARD IRONS, Dean of Rush Medical College, 1758 West Harrison Street.
CHARLES HUBBARD JUDD, Director of the School of Education, Emmons Blaine Hall, Room 199.
WILLIAM SCOTT GRAY, Dean of the College of Education, Emmons Blaine Hall, Room 100.
KARL JOHN HOLTZINGER, Assistant to the Dean of the College of Education, Emmons Blaine Hall, Room 100.
HENRY CLINTON MORRISON, Superintendent of the Laboratory Schools, Emmons Blaine Hall, Room 301.
WILLIAM HOMER SPENCER, Dean of the School of Commerce and Administration, Commerce and Administration Hall, Room 201.
CLARENCE RUFUS ROREM, Assistant to the Dean of the School of Commerce and Administration, Commerce and Administration Hall, Room 201.
EDITH ABBOTT, Dean of the Graduate School of Social Service Administration, Cobb Lecture Hall, Room 112.
GEORGE ALAN WORKS, Ed.D., Dean of the Graduate Library School.
GENERAL INFORMATION

SUMMER CALENDAR, 1928

JUNE 16, Saturday — Registration for the Summer Quarter. It is important that registration for the First Term be perfected on one of these days. Improved facilities have been provided for the admission, registration, and payment of fees of all students in one building, Bartlett Gymnasium, Fifty-seventh Street and University Avenue.

JUNE 18, Monday — Summer Quarter begins.

JUNE 23, Saturday — All Junior College classes meet.


JULY 7, Saturday — All Junior College classes meet.

JULY 24, Tuesday — Examination for the First Term of the Summer Quarter.

JULY 25, Wednesday — First Term of the Summer Quarter ends.

JULY 26, Thursday — Second Term of the Summer Quarter begins.

AUGUST 30, Thursday — Examinations for the Second Term of the Summer Quarter.

AUGUST 31, Friday — Autumn Convocation of the University; Second Term of the Summer Quarter ends.

CORRESPONDENCE

Correspondence with the University should be addressed as follows:
1) Concerning Admissions, to the University Examiner.
2) Concerning Rooms and Housing Accommodations, to the University Cashier.
3) For other information, General Correspondence Bureau, University of Chicago.

THE DEPARTMENTS OF INSTRUCTION

The Graduate Schools of Arts, Literature, and Science afford courses of instruction leading to the degree of Master of Arts or of Science and to the degree of Doctor of Philosophy.

In the Graduate School of Arts and Literature are the advanced courses offered by the Department of Philosophy, Psychology, Education, Economics, Political Science, History, Art, Sociology and Anthropology, Home Economics and Household Administration, Comparative Religion, Oriental Languages and Literatures, New Testament and Early Christian Literature, Comparative Philology, Greek Language and Literature, Latin Language and Literature, Romance Languages and Literatures, Germanic Languages and Literatures, English Language and Literature, and Comparative Literature.

In the Ogden Graduate School of Science are the advanced courses offered by the Departments of Mathematics, Astronomy and Astrophysics, Physics, Chemistry, Geology and Paleontology, Geography, Botany, Zoology, Anatomy, Physiology, Physiological Chemistry and Pharmacology, Pathology, Hygiene and Bacteriology, Medicine, and Surgery.

The Departments of Military Science and Physical Culture are open to all students.

The Colleges of Arts, Literature, and Science, which are subdivided into Senior
Colleges (last two years) and Junior Colleges (first two years), afford courses of instruction leading to the degree of Bachelor of Arts, Philosophy, or Science.

A detailed list of courses offered by these departments will be found on pages 22–67.

The departments of instruction in the Divinity School are the following: Old Testament Literature and Interpretation, New Testament and Early Christian Literature, Christian Theology and Ethics, Church History, Practical Theology—including Preaching and Parish Ministry, Religious Education, and Missions—Comparative Religion, Social Ethics, and Public Speaking. For details, see pages 68–74.

The Law School offers during the Summer Quarter courses in Real Property, Contracts, Agency, Wills and Administration, Suretyship, Public Utilities, Administrative Law and Officers, Evidence, Constitutional Law. Work is provided for both beginning and advanced students. For details, see pages 75–78.

The Graduate School of Medicine of the Ogden Graduate School of Science offers instruction in the Departments of Zoology, Anatomy, Physiology, Physiological Chemistry and Pharmacology, Pathology, Hygiene and Bacteriology, Medicine, and Surgery. At Rush Medical College courses are offered in the Departments of Pathology, Medicine, Pediatrics, Surgery, Obstetrics and Gynecology, Laryngology and Otology, Ophthalmology, and Dermatology. For details, see pages 59–65.

In the College of Education instruction is given in Education, in Special Methods—including Art, Sight Conservation, Library Science, English, Geography, History, Home Economics, Romance, Mathematics, Commerce and Administration, and Natural Science Education—and in Kindergarten-Primary Education. For details, see pages 85–117.

The School of Commerce and Administration offers both undergraduate and graduate work leading to the degree of Bachelor of Philosophy, of Master of Arts, and of Doctor of Philosophy. For detailed list of courses and requirements, see pages 111–119.

The Graduate School of Social Service Administration offers courses leading to the degrees of Master of Arts and Doctor of Philosophy. For details, see pages 118–129.

Routine of admission, registration, etc., will be found on pages 5–6.

THE UNIT OF TIME AND THE UNIT OF WORK

The University year is divided into four "quarters" of about equal length—summer, autumn, winter, and spring. The Summer Quarter is divided into two terms. A course of instruction continues throughout a term or throughout a quarter. A course continuing throughout a term is called a Minor; a course continuing throughout a quarter is called a Major. If double time is given to the work of any one course, it is regarded as a double course—a Double Minor or a Double Major, as the case may be. Students may enter at the beginning of any quarter.

Classes meet four days or five days a week.

THE SUMMER QUARTER

The Summer Quarter is one of the regular quarters of University work. The courses are the same in character, method, and credit value as in other parts of the year. In 1928 the Summer Quarter will begin June 18 and will close August 31. The First Term will begin June 18, the Second Term, July 26. Registration should be perfected on or before the opening day of each term.

Students may enter for either term or for both. Those entering at the beginning of the Second Term may register for courses for which they have had the prerequisites.
Credit will not be given for the First Term of a major or double-major course unless it is indicated in the announcement that it may be taken as a minor or double minor, but students reported with a passing grade, including term examination, may take the work of the Second Term in a subsequent quarter to secure credit for the whole course.

Credit for a course is granted only in case of satisfactory work following prompt registration and regular attendance.

Candidates for the Master’s degree are not credited with residence (three full quarters of residence are required for this degree) if they enter courses scheduled for a term, later than the fifth day of the term, or if they enter courses scheduled for a quarter, later than the seventh day of the quarter. Withdrawals from courses a corresponding length of time before the close of the term or quarter have the same effect.

Normal work for a term is three minors and no student is permitted to register for more than four. University public lectures are provided, which may be attended without charge by all members of the University.

**ROUTINE OF ADMISSION, REGISTRATION, ETC.**

1. Central offices for the admission and registration of students, and for the payment of fees, will be maintained Saturday, June 16, and Monday, June 18, in Bartlett Gymnasium, Fifty-seventh Street and University Avenue.

2. Students seeking admission to the University for the first time should present their credentials either by mail or in person to the Examiner of the University, in accordance with the directions given on page 2 of the cover.

3. A Time Schedule, listing accurately all courses offered, with names of instructors, time and place of meeting, is issued before the opening of the quarter and can be secured at the Information Office. To avoid possible complications each student should secure a copy of this schedule and use it instead of this announcement as a basis for registration.

4. The graduate student, before selecting his courses, should consult with a representative of the Department in which his work is to be done. Departmental representatives will be present in the central registration room June 16 and 18.

5. When registration cards have been properly filled out and approved, class tickets will be issued, which must be presented to the instructors in charge of courses. The student presents the registration card, countersigned by the Dean, at the Cashier’s office, and, on payment of the fees, is given a receipt for tuition.

The name of a student is not sent to instructors on the official class list until registration, including the payments of fees, is completed.

Students who are assigned to student service pay their fees at the beginning of the quarter in cash, and at the end of the quarter, or at such time as the service to which they are assigned is completed, the University will pay them in cash for the work done. This applies, also, to students holding assignments to library or departmental service. Those on library service should report to the General Library and those on departmental service should report to the Cashier on the opening day of the quarter.

6. Certain Junior College courses, marked with a star (*), are subject to the following limitation of credit: (a) Full credit is given only when these courses are taken among a student’s first 18 majors, and the total number so taken may not exceed 9. (b) After a student has credit for 18 majors but fewer than 27, these courses will be credited at one-half major each; after he has credit for 27 majors they will not be credited at all, but any such course may be taken, with the consent of the Dean, on payment of the fee, presumably as a fourth course.
7. An unclassified student becoming classified will receive credit toward his degree for a course taken before classification under the regulations which would have been applicable had he been classified at the time of registration for the course.

8. Students leaving before the end of a course (see also third paragraph, p. 5) may, with the instructor's consent, complete it and obtain credit through the Home-Study Department, but in every case the student, before leaving, should secure from the instructor a written statement of what remains to be done, with an agreement to give him this work by correspondence, and file it with the secretary of that Department, with payment of the appropriate fee. Students who register thus but return to residence before completing the work must complete it by the end of their next quarter of residence. All privilege of completion is limited to the ensuing twelve months.

9. No instructor has authority to close a course or hold the final examination before the appointed time.

FEES FOR MATRICULATION AND TUITION

INCIDENTAL FEES

All tuition is due on or before the first day of each quarter, and is payable without extra fee up to 3:00 p.m. of the fifth day of the quarter at the office of the Cashier, Press Building, Room 1. Registration is not complete until the University bills are paid. Those who fail to meet this obligation are not regarded as members of the University. For failure to pay tuition fees within the first five days of the quarter a fee of $5.00 is added.

1. Matriculation fee.—
   Required of every student on entrance to the University.................... $10.00

2. Tuition fees.—
   The fee stated in each case is that for three majors a quarter. The fee for one term only is one-half of that for the quarter. In all schools where the tuition fee is $70.00 a quarter, there is no reduction for two majors. One-half the full tuition is charged for one major or equivalent. In the Colleges and Professional Schools where the tuition fee is $100.00 a quarter the fee for one, two, or four majors is on a proportionate basis.
   a) Graduate Schools of Arts, Literature, and Science..................... $70.00
   b) Graduate School of Social Service Administration
      Graduate students....................................................... $70.00
      Undergraduate students............................................. $100.00
   c) Divinity School..................................................... $70.00
      Divinity students who need financial assistance may, upon application to the Dean, be granted a tuition voucher not exceeding $55.00 a quarter provided they maintain the grade of scholarship required of those receiving University scholarships.
   d) Colleges of Arts, Literature, and Science............................ $100.00
   e) Unclassified students in any school or college........................ $100.00
   f) School of Education
      Graduate students....................................................... $70.00
      Undergraduate students............................................. $100.00
   g) Law School.............................................................. $100.00
      Candidates for J.S.D. degree (graduate)............................ $70.00
h) Medical students (including Rush Medical College) .................. $100.00
i) School of Commerce and Administration
   Graduate students .............................................. $70.00
   Undergraduate students ...................................... $100.00
j) No registration is permitted for less than a full term (with the exception that students who have attended throughout the First Term, and are able to be present but a portion of the Second Term, may continue as visitors in the same courses for one-half the Second Term upon payment of one-half the usual fee).

3. Laboratory breakage deposit.—
   Students in laboratory courses are required to purchase at the office of the Cashier adequate breakage and supply tickets to be deposited as follows: for courses in Chemistry, with the Curator of Kent Chemical Laboratory; for courses in Physiology, Physiological Chemistry, Botany, Zoology, Anatomy, Pathology, and Hygiene and Bacteriology, at the laboratory supply store in Room 25 of the new Physiology Building. New tickets must be purchased at the opening of each quarter, and a refund of the unused balance on the old tickets can be obtained at the time. In courses requiring the use of a microscope a rental fee, varying with the type of the instrument, is charged.

4. Gymnasium locker fee.—
   For the use of a locker in the dressing-room of the gymnasium a fee of $1.00 per quarter in the men's gymnasium and $2.00 in the women's gymnasium is charged. A small fee is also charged for the use of the tennis courts.

5. Graduation fee.—
   The general graduation fee, including diploma, is $10.00. For the degrees of Ph.D. and J.S.D. the graduation fee, including diploma and hood, is $15.00. Candidates for the A.M., S.M., B.D., and Ph.D. degrees are required to pay a fee for thesis binding and for printing the thesis abstract.

UNIVERSITY RESIDENCE HALLS

The University has twelve residence Halls for students, seven for women and five for men. Rooms in these Halls rent for from $40.00 to $65.00 a quarter. The rental includes cost of heat, light, and care, except that in Drexel House (a residence Hall for women) the rooms are cared for by the occupants. Rooms are for the most part single, but a few in each Hall may be occupied by two students. Application for rooms should be made to the University Cashier, who will, on request, send a diagram of the Halls showing prices of rooms. Each room is furnished with a study-table, chairs, bookcase, dresser, mirror, rug, bedstead, mattress, and bedding, with the exception that in Hitchcock Hall occupants are required to furnish rugs, and in Drexel House, occupants furnish bedding. Rooms may not be sub-rented, nor can exchange or transfer of rooms be made except by permission of the Cashier.

For the Summer Quarter rooms in the Halls will not be ready for occupancy before Saturday, June 16, at 6:00 p.m.

Six of the Halls for women (Beecher, Kelly, Foster, Green, Greenwood, and Kenwood) have separate dining-rooms and parlors. The cost of table-board in these Halls is
$77.00 for the Summer Quarter, or $38.50 for either Term. All students living in these Halls are required to take their meals there.

Board may be obtained also at Hutchinson Commons, the Ida Noyes Refectory, and the Emmons Blaine lunchroom. A cafeteria service is provided, the cost of meals averaging about $7.00 per week. At the Graduate Clubhouse luncheon and dinner are served daily, except Sunday, to graduate students. The service is table d'hote.

HOUSING ACCOMMODATIONS—UNIVERSITY NEIGHBORHOOD

The University of Chicago maintains its Housing Bureau in order to assist students in finding the best accommodations obtainable in the University neighborhood. All rooms on the approved list have been inspected in accordance with certain standards. Particular attention is now given to accommodations for women students. On May 15 the Housing Bureau will issue an up-to-date statement with regard to Summer Quarter housing and this bulletin will be sent to any who request it.

Householders who list rooms with the Bureau must agree to rent exclusively to men or exclusively to women. Married couples may be received in houses renting either to men or to women. A reception room for at least two evenings a week must be provided for women students. No rooms on small inclosed courts are accepted. Students are asked to co-operate with the University by insisting on these requirements even if they do not engage their rooms through the Housing Bureau.

It is advisable for students to reach the University three or four days before the opening of the Quarter, in order that they may become established in satisfactory living quarters before University work begins. Renting by mail is unsatisfactory, as students should make personal inspection before engaging rooms and lists of rooms are not sent out by mail from the Housing Bureau.

As a rule, householders prefer to rent their rooms for the entire quarter. Often when they are rented by the term the price level is slightly higher.

Single furnished rooms off the Quadrangles range in price from $60.00 to $120.00 a quarter. Furnished rooms for two range in price from $84.00 to $150.00, and there are more double rooms than single rooms available. A room with good outside light and air, drop study light, study table, ample closet space, and a comfortable bed will probably cost at least $72.00 a quarter. For men students there will be a limited number of rooms available in fraternity houses, ranging in price from $50.00 to $60.00.

Desirable furnished rooms for light housekeeping are rather difficult to find. They range in price from $40.00 to $85.00 a month. As a rule these are in old apartments, subdivided for the purpose, and sometimes lack adequate facilities. Occasionally rooms with kitchen privileges may be secured at the regular rates with an additional charge of about $12.00 a quarter.

Furnished houses or apartments of from four to ten rooms vary in price from $75.00 to $150.00 a month. In the University neighborhood there are some two- and three-room apartments which rent, unfurnished, for $75.00 a month or more. The Housing Bureau lists only furnished houses and apartments.

There are very few places where board may be obtained with room. It is customary for students to take their meals at the University Commons or at restaurants in the neighborhood. The University Commons provides cafeteria service for men and women at Hutchinson Hall and for women at Ida Noyes Hall. Not less than $7.00 a week should be allowed for table board.
HEALTH SERVICE

The University Health Service is maintained to care for the health of the University students, who are urged to make use of it to the fullest extent, not only when seriously ill, but for minor ailments which would, perhaps, not ordinarily be brought to the attention of a physician. The physicians of the staff will be glad to consult with students on any subject related to health and to try to take the place of the family physician during University residence.

The service provides all ordinary medical and nursing care at the clinic or hospital without charge. A minimum charge will be made for major and elective operations, special nurses, private rooms, medicines (except in the hospital), and special and expensive dressings and appliances. No charge for board and room at the hospital will be made for the first three days of any illness.

ESTIMATE OF EXPENSES

The following table will enable the student to form an estimate of the quarterly expenses, exclusive of tuition and laboratory fees, which are common to all students in the University:

<table>
<thead>
<tr>
<th></th>
<th>Low</th>
<th>Average</th>
<th>Liberal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent and care of room</td>
<td>$48.00</td>
<td>$75.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>Board</td>
<td>$84.00</td>
<td>$100.00</td>
<td>$115.00</td>
</tr>
<tr>
<td>Laundry and pressing</td>
<td>$15.00</td>
<td>$40.00</td>
<td>$50.00</td>
</tr>
<tr>
<td>Textbooks and supplies</td>
<td>$13.00</td>
<td>$25.00</td>
<td>$40.00</td>
</tr>
<tr>
<td>Incidents</td>
<td>$15.00</td>
<td>$35.00</td>
<td>$55.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$175.00</strong></td>
<td><strong>$275.00</strong></td>
<td><strong>$350.00</strong></td>
</tr>
</tbody>
</table>

SUMMER RAILWAY RATES TO CHICAGO

The expense of transportation to Chicago during the summer months is reduced by many railways for persons buying round trip tickets. The announcements of summer reductions are available at local ticket offices throughout the United States, and persons coming to Chicago for the Summer Quarter are advised to make inquiries well in advance of the time of departure. Those who fail to secure such privileges at their local railway offices may find that reduced rates on round trip tickets can be secured during the summer months at other railway centers in their area. The popularity of Chicago as a place for summer residence has caused many railways entering Chicago to give lower rates for the entire season.

SPECIAL SERVICE—CARE OF FUNDS AND TRANSFER OF BAGGAGE

In arranging for funds for use while in Chicago, students are urged not to depend upon personal checks on out-of-town banks. It will be found that bank drafts on Chicago or New York banks, or traveler's checks, are much more acceptable and will involve less delay. Student deposit accounts for those students who wish to put their funds in safe keeping, subject to withdrawal in person only, may be opened at the University Cashier's Office in Room 1 of the Press Building. General information about the University and the city may be obtained at the University Information Office in Room 3, Press Building, where, also, arrangements for the transfer of baggage may be made.
SERVICE IN THE COMMONS

A considerable number of students are employed in the commons, the compensation being furnished in board. Inquiries with regard to this service should be addressed to the Director of the Commons, care of the University of Chicago.

THE BOARD OF VOCATIONAL GUIDANCE AND PLACEMENT

The University, through its Board of Vocational Guidance and Placement, maintains a bureau for the recommendation to teaching positions of students who have been in residence for three or more quarters. For the benefit of summer students who have not fulfilled this residence requirement, a temporary registration is provided. The University does not undertake to recommend these summer registrants, but often it is able to aid them in finding positions. Last year the Board placed nearly a thousand students in positions. The University renders this service to its students without charge. It is extended to students seeking initial placements and to those who seek advancement to better positions. The office of the Board is in Cobb Lecture Hall, Room 215.

LIBRARIES, LABORATORIES, CLINICS, AND MUSEUMS

The Libraries.—The Libraries of the University include the General Library and the Departmental Libraries.

The General Library and the Departmental Libraries in immediate connection with it constitute a reference and circulating library open to all members of the University. From these libraries students may draw nine volumes at one time (but no more than six from any one library), which may be kept two weeks, with privilege of extension of loan in special cases.

Reserved books may be drawn for limited periods in the day and for overnight use.

The Library of the Divinity School, the Library of the School of Education, the Geology and Geography Library, the Biological Library, and the Classical Library are administered under the same rules as the General Library.

The Law Library is conducted as a reference library, chiefly for the use of law students, but open to other members of the University. (See also p. 76).

The Departmental Libraries are primarily for the use of advanced students in the respective departments. Except as above indicated, books are withdrawn only for use overnight or by special permission.

The Libraries are open from 8:00 A.M. to 10:00 P.M. each week day, except that certain Departmental Libraries close at 5:30 P.M. daily and the General Library and Law Library close at 6:00 P.M. Saturday.

The Libraries contain over 760,000 bound books and about 250,000 pamphlets. They receive 4,143 current periodical publications, including, in part, transactions and proceedings of learned societies. Technical periodicals are, as a rule, found in the Departmental Libraries.

The Laboratories.—The Kent Chemical Laboratory and the Ryerson Physical Laboratory contain rooms for special research, small laboratories for work of investigation, large laboratories for general instruction, lecture-rooms, classrooms, library, museum, and offices.

The Hull Biological Laboratories are a group of six buildings devoted to the study
of the anatomical, botanical, and zoological sciences. They are all well equipped for advanced work of investigation.

The Howard Taylor Ricketts Laboratory and the Ricketts Laboratory South house the laboratories of the Department of Hygiene and Bacteriology. These laboratories are well equipped for research work and include chemical laboratories, storerooms, a large lecture room, and two small recitation rooms, together with individual research laboratories.

The Departments of Physiology and Physiological Chemistry and Pharmacology occupy a new building in the medical group, with lecture rooms, storerooms, general laboratories, and laboratories for individual research.

The Department of Pathology is housed in the new medical group with autopsy, preparation and storerooms, a large lecture room, recitation rooms, together with individual research laboratories.

The Psychological Laboratories occupy two buildings, one devoted to work in human psychology and one to the study of animal behavior.

The Home Economics Laboratories for food chemistry, nutrition, dietaries, textiles, costume design, and interior decoration are housed in Emmons Blaine Hall; the Institution Economics Laboratories are in Ida Noyes Hall and the Men's Commons; and the child health studies are made in the laboratory of the School of Education.

The Clinics.—The Albert Merritt Billings Hospital and the Max Epstein Dispensary are the first units of a group of clinics to be built at the Quadangles. The Hospital contains 208 beds for use by the Medical and Surgical Departments, and the Out-Patient Department is of sufficient size to care for several hundred patients daily. The Medical and Surgical Departments occupy separate buildings which contain their laboratories and accommodations for clinical work.

The Museums.—The Walker and Julius Rosenwald Museums contain the collections of fossils of the Department of Geology and various mineralogical, anthropological, paleontological, and geological collections, donated to, or deposited in, the Museums. They contain also the lecture-rooms and libraries of the Departments of Geology and Geography and of the courses in Anthropology.

The Haskell Oriental Museum contains exhibits illustrating the history and achievements of man in Egypt and Western Asia. Egyptian antiquities occupy the first floor and Asiatic antiquities the third. On the first floor too are the seminar rooms of the Department of Oriental Languages and Literatures. The second floor is shared between study collections and the offices of the Museum and of the Oriental Institute.

The Observatory.—The Yerkes Astronomical Observatory at Lake Geneva is situated near Williams Bay, Wisconsin. Its principal instrument is a refracting telescope of forty inches aperture. Advanced students in Astronomy may register for work at the Observatory, spending their whole time at Williams Bay.

**DOCTORS OF PHILOSOPHY AS GUESTS OF THE UNIVERSITY**

The President of the University, on recommendation of a Head of a Department, will welcome Doctors of Philosophy of the University of Chicago as well as of other universities as guests of the University, with the privilege of attending seminars and research courses and of carrying on research in the laboratories and libraries. There will be no charge except for laboratory supplies. Arrangements should be made in advance with the President.
UNIVERSITY PUBLIC LECTURES

A series of public lectures scheduled in the late afternoon and evening hours throughout the Summer Quarter affords an opportunity to students and other members of the University community to hear speakers of authority and distinction.

Detailed announcement of this work will be ready for distribution June 18.

HARRIS FOUNDATION INSTITUTE

The Norman Wait Harris Memorial Foundation is a trust fund presented in 1923 to the University of Chicago. The purpose of the Foundation, as stated in the letter of gift, is "the promotion of a better understanding on the part of American citizens of the other peoples of the world, thus establishing a basis for improved international relations and a more enlightened world order."

The fifth Institute to be conducted on the Foundation will be held during the First Term of the Summer Quarter. Public lectures on foreign investments will be given by experts on the subject from Europe and America. Conferences or round tables will be organized for qualified individuals with a special interest in the subject. For further information concerning conferences and round tables in connection with the Institute, see the Department of Political Science, page 27.

INSTITUTE FOR ADMINISTRATIVE OFFICERS OF INSTITUTIONS OF HIGHER EDUCATION

Supplementing the program of courses offered by the Department of Education for college and university administrative officers (see pp. 96-97) and forming a fitting conclusion to it, an institute consisting of special lectures and conferences to which all officers of administration of higher educational institutions are cordially invited, will be held during the week of July 16. A special announcement of the program of the Institute will be mailed upon application.

RECREATION

The climatic conditions of Chicago during the summer months are excellent, the refreshing lake breeze alleviating the hottest days. The location of the University is especially fortunate, situated on the Midway Plaisance, the connecting link between two of Chicago's most beautiful parks. These parks are within easy walking distance from the University and contain tennis courts, golf courses, bathing beaches, and lagoons for rowing. These are all open to the public.

Opportunities for diversion are numerous. In Jackson Park there are golf courses, and in both Jackson and Washington parks lagoons for rowing. Tennis nets are everywhere in both parks, along the Midway, and some thirty on the campus. Through the Frank Dickinson Bartlett Gymnasium and the Ida Noyes Gymnasium full facilities for physical culture are given to both men and women. The swimming-pools are open daily.

The Reynolds Clubhouse for men occupies a well-appointed clubhouse which provides social privileges for the men of the University. Ida Noyes Hall, a beautiful and completely equipped building, is the center of the social life of the women, who extend hospitality to other members of the University. The Graduate Clubhouse is operated by the University for all graduate and professional students. The house privileges are available to all graduate students without fee. Luncheon and dinner are served daily, except Sunday, table d'hote service.

The Dames Club of the University of Chicago, composed of wives and mothers of students, meets every second and fourth Saturday of the month at 3:00 P.M. in Ida Noyes Hall.
THE GRADUATE SCHOOLS AND COLLEGES OF ARTS, LITERATURE, AND SCIENCE

THE FACULTIES

Max Mason, Ph.D., LL.D., Sc.D., President of the University.
Frederic Campbell Woodward, A.M., LL.M., Vice-President and Dean of Faculties.
Gordon Jennings Laine, Ph.D., LL.D., Dean of the Graduate School of Arts and Literature; Professor of Latin.
Henry Gordon Gale, Ph.D., Dean of the Ogden Graduate School of Science; Professor of Physics.
Chauncey Samuel Boucher, Ph.D., Dean of the Colleges of Arts, Literature, and Science; Professor of History.

Edward Scribner Ames, Ph.D., LL.D., Professor of Philosophy.
Harlan H. Barrows, S.B., Ph.M., Professor and Chairman of the Department of Geography.
Charles Read Baskerville, Ph.D., Professor of English.
Edson Sonderland Bastin, Ph.D., Professor of Economic Geology; Chairman of the Department of Geology and Paleontology.
Leonard Bloomfield, Ph.D., Professor of Germanic Philology.
Katharine Blunt, Ph.D., Professor of Home Economics; Chairman of the Department of Home Economics and Household Administration.
Franklin Bobbitt, Ph.D., Professor of School Administration.
Robert Johnson Bonner, Ph.D., Professor and Chairman of the Department of Greek.
J. Harlen Bretz, Ph.D., Professor of Geology.
Edward Vail Lapham Brown, S.B., M.D., Professor of Ophthalmology.
Carl Darling Buck, Ph.D., Professor of Comparative Philology; Head of the Department of Comparative Philology, General Linguistics, and Indo-Iranian Philology.
Ernest Watson Burgess, Ph.D., Professor of Sociology.
Guy Thomas Buswell, Ph.D., Professor of Educational Psychology.
Anton Julius Carlson, Ph.D., M.D., LL.D., Professor and Chairman of the Department of Physiology.
Harvey Carr, Ph.D., Professor of Experimental Psychology; Chairman of the Department of Psychology.
Shirley Jackson Case, Ph.D., D.D., Professor of the History of Early Christianity.
Charles Joseph Chamberlain, Ph.D., Sc.D., Professor of Plant Morphology and Cytology.

Werrett Wallace Charters, Ph.D., Professor of Education.
Charles Carlyle Colby, E.M., Ph.D., Professor of Geography.
Algernon Coleman, Ph.D., Professor of French.
Arthur Holly Compton, Ph.D., Professor of Physics.

1 This list includes only those who will be in residence during the Summer Quarter, 1928, and, with the exception of the administrative officers, is arranged in alphabetical order according to rank.
ARTS, LITERATURE, AND SCIENCE

HENRY CHANDLER COWLES, Ph.D., Sc.D., Professor of Plant Ecology; Chairman of the Department of Botany.

RONALD SALMON CRANE, Ph.D., Professor of English.

TOM PEETE CROSS, Ph.D., Litt.D., Professor of English and Comparative Literature; Chairman of the Department of Comparative Literature.

EDWIN PRESTON DARGAN, Ph.D., Professor of French Literature.

LEONARD EUGENE DICKSON, Ph.D., Professor of Mathematics.

WILLIAM EDWARD DODD, Ph.D., LL.D., Professor of American History; Chairman of the Department of History.

ELLSWORTH FARIS, Ph.D., Professor of Sociology; Chairman of the Department of Sociology and Anthropology.

FRANK NUGENT FREEMAN, Ph.D., Professor of Educational Psychology.

WILLIAM SCOTT GRAY, Ph.D., Professor of Education.

WILLIAM DRAPER HARKINS, Ph.D., Professor of Chemistry.

BASIL COLEMAN HYATT HARVEY, A.B., M.B., Professor of Anatomy.

LUDVIG HEKTOEN, M.D., Sc.D., LL.D., Professor and Head of the Department of Pathology.

CHARLES JUDSON HERRICK, Ph.D., Sc.D., Professor of Neurology.

JAMES ROOT HULBERT, Ph.D., Professor of English.

THOMAS ATKINSON JENKINS, Ph.D., Litt.D., Professor of the History of the French Language.

EDWIN OAKES JORDAN, Ph.D., Sc.D., Professor of Bacteriology; Chairman of the Department of Hygiene and Bacteriology.

CHARLES HUBBARD JUDD, Ph.D., LL.D., Professor and Head of the Department of Education.

FRANK IHNEMAN KNIGHT, Ph.D., Professor of Economics.

FRED CONRAD KOCH, Ph.D., Professor of Physiological Chemistry; Chairman of the Department of Physiological Chemistry and Pharmacology.

FRANK RATTRAY LILLIE, Ph.D., Sc.D., Professor of Embryology; Chairman of the Department of Zoology; Director of the Marine Biological Laboratory, Woods Hole, Massachusetts.

ROBERT MORSS LOVETT, A.B., Professor of English.

ARNO BENEDICT LUCKHARDT, Ph.D., M.D., Professor of Physiology.

ROLLO LA VERNE LYMAN, Ph.D., Professor of the Teaching of English.

FRANKLIN CHAMBERS MCLEAN, Ph.D., M.D., Professor and Chairman of the Department of Medicine.

JOHN MATTHEWS MANLY, Ph.D., LL.D., Litt.D., Professor and Head of the Department of English.

ALEXANDER A. MAXIMOW, M.D., Professor of Anatomy.

GEORGE HERBERT MEAD, A.B., Professor of Philosophy.

HARRY ALVIN MILLES, Ph.D., Professor of Economics.

HENRY CLINTON MORRISON, S.M., LL.D., Professor of Education.

HAROLD HAYDEN NELSON, Ph.D., Professor of Oriental Languages.

HORATIO HACKETT NEWMAN, Ph.D., Professor of Zoology and Embryology.

WILLIAM ALBERT NITZE, Ph.D., Professor and Head of the Department of Romance Languages and Literatures.

GEORGE TYLER NORTHUP, Ph.D., Professor of Spanish Literature.

ROBERT E. PARE, Ph.D., Professor of Sociology.
THE FACULTIES

DALLAS B. PHEMISTER, M.D., Professor and Chairman of the Department of Surgery.
HENRY WASHINGTON PRESCOTT, Ph.D., Professor of Classical Philology; Chairman of the Department of Latin Language and Literature.
OSWALD H. ROBERTSON, M.D., Professor of Medicine.
EDWARD SAPIR, Ph.D., Professor of Anthropology and General Linguistics.
HERMANN IRVING SCHLESINGER, Ph.D., Professor of Chemistry; Secretary of the Department.
MARTIN SCHUTZE, Ph.D., Professor of German Literature.
PAUL SHOREY, Ph.D., LL.D., LITT.D., Professor of Greek.
CHARLES ALBERT SHULL, Ph.D., Professor of Plant Physiology.
HERBERT ELLSWORTH SLAUGHT, Ph.D., SC.D., Professor of Mathematics.
THOMAS VERNOR SMITH, Ph.D., Professor of Philosophy.
MARTIN SPRENGLING, Ph.D., Professor of Semitic Languages and Literature.
AMOS ALONZO STAGG, M.P.E., A.M., Professor and Director of the Department of Physical Culture and Athletics.
DAVID HARRISON STEVENS, Ph.D., Professor of English.
WILLIAM HAY TALLAISERRO, Ph.D., Professor of Parasitology.
ARCHER TAYLOR, Ph.D., Professor of German Literature; Chairman of the Department of Germanic Languages and Literature.
LOUIS LEON THURSTONE, M.E., Ph.D., Professor of Psychology.
ROLLA MILTON TRYON, Ph.D., Professor of the Teaching of History.
JAMES HAYDEN TUFTS, Ph.D., LL.D., Professor and Head of the Department of Philology.
BERTHOLD LOUIS ULLMAN, Ph.D., Professor of Latin.
JACOB VINER, Ph.D., Professor of Economics.
CLYDE WEBER VOTAW, D.B., Ph.D., Professor of New Testament Literature.
HARRY GIDEON WELLS, Ph.D., M.D., Professor and Chairman of the Department of Pathology.
QUINCY WRIGHT, Ph.D., LL.D., Professor of Political Science.

ALTON STACKHOUSE POPE, M.D., D.P.H., Professorial Lecturer on Epidemiology; Chief, Bureau of Communicable Diseases, Department of Health, Chicago.

JOHN MANN BEAL, Ph.D., Professor of Botany, Mississippi Agricultural and Mechanical College (Summer, 1928).
ERIC TEMPLE BELL, Ph.D., Professor of Mathematics, California Institute of Technology (Summer, 1928).
HAROLD GRANVILLE BLUE, A.M., Professor of Secondary Education, Colorado State Teachers' College, Greeley, Colo. (Summer, 1928).
P. W. BRYAN, Ph.D., Lecturer on Geography, University College, Leicester, England (Summer, 1928).
CARROLL GIDEON BULL, M.D., Professor of Immunology, School of Hygiene and Public Health, Johns Hopkins University (Summer, 1928).
PAUL FRANKLIN CLARK, Ph.D., Professor of Bacteriology, University of Wisconsin (Summer, 1928).
<table>
<thead>
<tr>
<th>Name</th>
<th>Title and Institution</th>
<th>Location and Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>James Willis Clarson, A.M.</td>
<td>Dean of the College of Education, University of Arizona</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Francis William Coker, Ph.D.</td>
<td>Professor of Political Science, Ohio State University</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Robert Digges Wimberly Connor, Ph.B.</td>
<td>Kenan Professor of History and Government, University of North Carolina</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>John Crane, A.B.</td>
<td>Institute of World Current Affairs; Lecturer on Political Science</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Harald Milton Ellis, Ph.D.</td>
<td>Professor and Head of the Department of English, University of Maine</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>John Robert Charles Evans, Ph.D.</td>
<td>Professor of Geology, Brandon College, Brandon, Manitoba, Canada</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Henry Rushton Fairclough, Ph.D., Litt.D.</td>
<td>Professor of Classics, Stanford University</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Emery Nelson Ferris, Ph.D.</td>
<td>Professor of Rural Education (Secondary), Cornell University</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Benjamin Oliver Foster, Ph.D.</td>
<td>Professor of Classical Literature, Stanford University</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Frederick Clifton Grant, S.T.D., D.D.</td>
<td>Dean of the Western Theological Seminary</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>George Depue Hadzsits, Ph.D.</td>
<td>Professor of Latin, University of Pennsylvania</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Max Sylvius Handman, Ph.D.</td>
<td>Professor of Economics, University of Texas</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Paul Hazard, D-ès-L.</td>
<td>Professor of French Literature, Collège de France (Ernest A. Hamill Professor)</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Floyd Nelson House, Ph.D.</td>
<td>Professor and Head of the Department of Sociology, University of Virginia</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Clark L. Hull, Ph.D.</td>
<td>Professor of Psychology, University of Wisconsin</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Roy Ivan Johnson, Ph.D.</td>
<td>Professor of English, Harris Teachers’ College</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Helen Lois Koch, Ph.D.</td>
<td>Professor of Educational Psychology, University of Texas</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Ludvig Köhler, Ph.D.</td>
<td>Professor of Old Testament, University of Zurich, Switzerland</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>William Samuel Krebs, A.M.</td>
<td>Professor of Accounting, Washington University</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Henning Larsen, Ph.D.</td>
<td>Professor of English, University of Iowa</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Harley Farnsworth MacNair, Ph.D.</td>
<td>Professor of History and Government, St. John’s University, Shanghai, China</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Reginald Charles McGrane, Ph.D.</td>
<td>Professor of History, University of Cincinnati</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Frank Le Rond McVey, Ph.D., LL.D.</td>
<td>President, University of Kentucky</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Charles Carroll Marden, Ph.D.</td>
<td>Professor of Spanish, Princeton University</td>
<td>(Summer, 1928)</td>
</tr>
<tr>
<td>Raymond Moley, Ph.D.</td>
<td>Professor of Political Science, Columbia University</td>
<td>(Summer, 1928)</td>
</tr>
</tbody>
</table>
THE FACULTIES

ROBERT BALMAIN MOWAT, M.A. (OXON.), Fellow and Tutor of Corpus Christi College, University of Oxford (Summer, 1928).

WILLIAM ALBERT NOYES, PH.D., LL.D., CHEM.D., Professor Emeritus of Chemistry, University of Illinois (Summer, 1928).

DeWitt Henry Parker, Ph.D., Professor of Philosophy, University of Michigan (Summer, 1928).

William Ramsey, Ph.D., Professor of Greek, University of Saskatchewan (Summer, 1928).

Floyd Wesley Reeves, Ph.D., Professor of Education, University of Kentucky (Summer, 1928).

George Fullmer Reynolds, Ph.D., Professor of English and Chairman of the Department, University of Colorado (Summer, 1928).

Benjamin Willard Robinson, D.B., Ph.D., Professor of New Testament Literature and Interpretation, Chicago Theological Seminary (Summer, 1928).

Ernest Findlay Scott, D.D., Professor of New Testament Criticism, Union Theological Seminary (Summer, 1928).

William Barnard Sharp, M.D., Ph.D., Professor of Bacteriology and Preventive Medicine, School of Medicine, University of Texas (Summer, 1928).

James Eustace Shaw, Ph.D., Professor of Italian and Spanish, University of Toronto (Summer, 1928).

Leslie Snyder, Ph.D., Professor and Head of the Department of Anthropology, University of Oklahoma (Summer, 1928).

Carl Stephenson, Ph.D., Professor of History, University of Wisconsin (Summer, 1928).

William Sentman Taylor, Ph.D., Professor of Psychology, Smith College (Summer, 1928).

Clarence Ward, Ph.D., Professor and Head of the Department of Fine Arts, Oberlin College (Summer, 1928).

Harold Albert Wilson, M.A. (Cambridge), M.Sc., F.R.S., Professor of Physics, Rice Institute (Summer, 1928).

Holbrook Working, Ph.D., Economist, Food Research Institute, Stanford University (Summer, 1928).

Warder Clyde Allew, Ph.D., Associate Professor of Zoology.

Otto Ferdinand Bond, A.M., Associate Professor of Romance Languages in the Junior Colleges; Chairman of Modern Languages in the Junior Colleges.

Frederick Stephen Breed, Ph.D., Associate Professor of Education.

Merle Crowe Coulter, Ph.D., Associate Professor of Plant Genetics.

George Morris Curtis, Ph.D., M.D., Associate Professor of Surgery.

Lester Reynolds Dragstedt, Ph.D., M.D., Associate Professor of Surgery.

Isaac Newton Edwards, Ph.D., Associate Professor of the History of Education.

Louis Reichenthal Gottschalk, Ph.D., Associate Professor of History.

Chester Nathan Gould, Ph.D., Associate Professor of German and Scandinavian Literature.

Carl Henry Grabo, Ph.B., Associate Professor of English.

ALBERT EUSTACE HAYDON, D.B., Ph.D., Associate Professor of Comparative Religion.
FRIEDRICH HILLER, M.D., Associate Professor of Medicine.
P A U L H O D G E S, Ph.D., M.D., Associate Professor of Roentgenology.
K A R L J O H N H O L Z I N G E R, Ph.D., Associate Professor of Education.
G E O R G E C A R T E R HOWLAND, A.M., Associate Professor of the History of Literature.
C A R L F R E D E R I C K H U T H, Jr., A.M., Associate Professor of History.
E I N A R J O R A N S O N, Ph.D., Associate Professor of History; Secretary of the Department.
H A Z E L K Y R K, Ph.D., Associate Professor of Home Economics and Economics.
W I L L I A M J E S S E G O A D L A N D, Ph.D., Associate Professor of Plant Morphology.
E R N E S T P R E S T O N L A N E, Ph.D., Associate Professor of Mathematics.
G E O R G E K O N R A D K A R L LIN N, Ph.D., Associate Professor of Plant Pathology.
C A R L F R E D E R I C K H U M, JR., A.M., Associate Professor of History.
E I N A R J O R A N S O N, Ph.D., Associate Professor of History; Secretary of the Department.
H A Z E L K Y R K, Ph.D., Associate Professor of Home Economics and Economics.
W I L L I A M J E S S E G O A D L A N D, Ph.D., Associate Professor of Plant Morphology.
E R N E S T P R E S T O N L A N E, Ph.D., Associate Professor of Mathematics.
G E O R G E K O N R A D K A R L LIN N, Ph.D., Associate Professor of Plant Pathology.
C A R L R I C H A R D M O O R E, Ph.D., Associate Professor of Zoology.
C L A R E N C E E D W A R D P A R M E N T E R, Ph.D., Associate Professor of Romance Languages.
N E L L I E F L O R E N C E P O P E, A.B., Associate Professor of Institution Economics.
W I L L I A M C L A U D E R E A V I S, Ph.D., Associate Professor of Education.
E D I T H R I C K E R T, Ph.D., Associate Professor of English.
O S W A L D H. R O B E R T S O N, M.D., Professor of Medicine.
L E W I S C A R L Y L E S O R R E L L, A.B., Associate Professor of Transportation and Communication.
A R T H U R L A W R I E T A T U M, Ph.D., M.D., Associate Professor of Pharmacology.
D E R W E N T S T A I N T H O R P E W H I T T L E S E Y, Ph.D., Associate Professor of Geography.
B E N J A M I N H A R R I S O N W I L L E R, Ph.D., Associate Professor of Zoology.
A N N A D R Y D E N W O L F, A.M., Associate Professor of Nursing.
S E W A L L W R I G H T, Sc.D., Associate Professor of Zoology.

W I L L I A M E M E T B L A T Z, Ph.D., Associate Professor of Psychology; Director of St. George’s School for Child Study, University of Toronto (Summer, 1928).
A V E R Y O D E L L E C R A V E N, Ph.D., Associate Professor of American History, University of Illinois (Summer, 1928).
T H O M A S W A R R I N T O N G O S L I N G, Ph.D., Superintendent of Schools, Madison, Wis. (Summer, 1928).
H E R M A N K U R Z, Ph.D., Associate Professor of Botany, Florida State College for Women (Summer, 1928).
E A R L E D O U G L A S M C P H E E, A.M., Associate Professor of Psychology, University of Toronto, Toronto, Canada (Summer, 1928).
C H A R L E S J. M A R T I N, S.B., Associate Professor of Fine Arts, Teachers College, Columbia University (Summer, 1928).
J O H N L L O Y D M E C H A M, Ph.D., Associate Professor of Government, University of Texas (Summer, 1928).
F R A N C I S D. M U R N A G H A N, Ph.D., Associate Professor of Mathematics, Johns Hopkins University (Summer, 1928).
THE FACULTIES

HEBER HINDS RYAN, A.M., Associate Professor of Secondary Education, University of Michigan (Summer, 1928).

EDWARD AYRES TAYLOR, PH.D., Associate Professor of English, Princeton University (Summer, 1928).

GERMAINE VILLEDIEU, A.B., Associate Professor of French, Lake Erie College (Summer, 1928).

RAYMOND WALTER BARNARD, S.M., Assistant Professor of Mathematics.
WALTER BARTKY, PH.D., Assistant Professor of Astronomy.

WILBUR LEE BEAUCHAMP, A.M., Assistant Professor of Education.
S HAMUEL WILLIAM BECKER, M.D., Assistant Professor of Dermatology.

ARThUR GILBERT BILLS, PH.D., Assistant Professor of Psychology.
ARThur WILLIAM Kornhauser, PH.D., Assistant Professor of Psychology.

AARON JOHN BRUMBAUGH, A.M., Assistant Professor of Education.
PAUL ROBERTS CANNON, PH.D., Assistant Professor of Pathology.

MARION E. CLARK, A.M., Assistant Professor of Education.
SAMUEL WILLIAM BECKER, M.D., Assistant Professor of Dermatology.

ARTHUR GILBERT BILLS, PH.D., Assistant Professor of Psychology.

BELA HALPERT, M.D., Assistant Professor of Pathology.

NATHANIEL KLEITMAN, PH.D., Assistant Professor of Physiology.

GEORGE SPENCER MONK, PH.D., Assistant Professor of Physics.

RODNEY L. MOTT, PH.D., Assistant Professor of Political Science.

MAYME IRWIN LOGSDON, PH.D., Assistant Professor of Mathematics.

MARY FAITH MCCAULEY, S.M., Assistant Professor of Institution Economics.

CHARLES PHILIP MILLER, S.M., M.D., Assistant Professor of Medicine.

LLOYD WYNN MINTS, A.M., Assistant Professor of Economics.

NELL MARIAN SAWIN, A.B., Assistant Professor of Institution Economics.

BEULAH MORGAN SMITH, PH.B., Assistant Professor of Institution Economics.

GERTRUDE ELIZABETH SMITH, PH.D., Assistant Professor of Greek.
Lillian Stevenson, A.M., Assistant Professor of Home Economics.
Chester Montague Van Allen, M.D., Assistant Professor of Surgery.
Pierre Robert Vigneron, Agrégé des Lettres, Assistant Professor of French Literature.
Douglas Waples, Ph.D., Assistant Professor of Education.
William Weldon Watson, Ph.D., Assistant Professor of Physics.
H. Fielding Wilkinson, A.B., M.D., Assistant Professor of Otolaryngology.
Theodore Otte Yntema, A.M., C.P.A., Assistant Professor of Accounting.
Thomas Fraser Young, Ph.D., Assistant Professor of Chemistry.

John L. Bracken, A.M., Superintendent of Schools and Lecturer in Extension, Washington University (Summer, 1928).
Juan Cano, A.M., Assistant Professor of Italian and Spanish, University of Toronto (Summer, 1928).
Oscar Berry Douglas, A.M., Assistant Professor of Educational Psychology, Duke University (Summer, 1928).
Charles Warren Everett, Ph.D., Assistant Professor of English, Columbia University (Summer, 1928).
Santiago Gutiérrez, A.M., Assistant Professor of Romance Languages, Ohio State University (Summer, 1928).
Albert Hyma, Ph.D., Assistant Professor of History, University of Michigan (Summer, 1928).
Stewart Armend Koser, Ph.D., Assistant Professor of Bacteriology, University of Illinois (Summer, 1928).
Howard Yale McCluskey, A.B., Assistant Professor of Educational Psychology, University of Michigan (Summer, 1928).
John Clarke Slater, Ph.D., Assistant Professor of Physics, Harvard University (Summer, 1928).
John Webster Spargo, Ph.D., Assistant Professor of English, Northwestern University (Summer, 1928).

Cecelia Evans, Director of the Bureau of Public Health Nursing, Wisconsin State Board of Health (Summer, 1928).
May Kennedy, S.B., Director of the Illinois State School of Psychiatric Nursing (Summer, 1928).
Dorothy Rogers, A.M., Assistant Superintendent of Nurses, Barnes Hospital, St. Louis, Mo. (Summer, 1928).

George W. Bachman, A.M., Instructor in Bacteriology.
John L. Ballif, A.B., Instructor in French in the Junior Colleges.
Frederic Richard Bamforth, A.M., Instructor in Mathematics.
Joyce Alvin Bearden, Ph.D., Instructor in Physics.
William Theodore Beuchamp, Ph.B., Instructor in English.
Herbert Blumer, A.M., Instructor in Sociology.
George V. Bobinskoy, Instructor in Sanskrit.
Russell Lewis Carl Butsch, A.M., Instructor in Education.
Elsa Chapin, A.M., Instructor in English.
Gail Monroe Dack, S.B., Instructor in Bacteriology.
George E. Downing, Ph.B., Instructor in Art.
Florence Farquhar, A.M., Instructor in Institution Economics.
THE FACULTIES

Frederick W. Geers, Ph.D., Instructor in Oriental Languages.
Luther Calvin Gilbert, S.M., Instructor in Education.
Edmund W. Giesbert, Instructor in Art.
Ethel Hahn, Instructor in Art.
Elisabeth Haseltine, Ph.B., Instructor in Art.
Herman Eliot Hayward, S.M., Instructor in Botany.
Mary Elizabeth Koll Heiner, S.B., Instructor in Home Economics.
J. Barton Hoag, Ph.D., Instructor in Physics.
Chester Scott Keefer, M.D., Instructor in Medicine.
Ida Kraus-Ragins, Ph.D., Instructor in Physiological Chemistry.
Mary Horton Langdon, S.B., Instructor in Institution Economics.
Ruth Townsend Lehman, A.M., Instructor in Home Economics.
Adeline de Sale Link, Ph.D., Instructor in Chemistry.
Clemmy Olin Miller, Ph.D., Instructor in Chemistry.
Porter Gale Perrin, A.M., Instructor in English.
John C. Rogers, Ph.D., Instructor in Preventive Medicine.
Durbin Rowland, A.M., Instructor in Romance Languages in the Junior Colleges.
Winfred Lee Sharp, A.M., Instructor in Psychology.
Howard John Shaughnessy, Ph.D., Instructor in School Hygiene.
Mercy Aurora Southwick, M.D., Instructor in Pathological Technique.
Emory Ross Strauser, S.B., Instructor in Anatomy.
Harold C. Voris, A.B., Instructor in Anatomy.
Louis Wirth, Ph.D., Instructor in Sociology.

Emery Winfield Balduf, Ph.D., Associate Director of the Central Y.M.C.A. Schools:
Dean of the College of Arts and Science (Summer, 1928).
Helen Goodrich Buttrick, Ph.B., Instructor in Home Economics (Summer, 1928).
Ruth Cowan, S.M., Instructor in Home Economics (Summer, 1928).
Helen Henderson, Ph.B., Instructor in Home Economics, Normal School, Bowling
Green, Ohio (Summer, 1928).
Mary E. Hipple, A.B., Instructor in Art, The Art Institute (Summer, 1928).
Florence A. Imlay, Instructor in Home Economics; Director of the University Co-
operative Nursery School (Summer, 1928).
B. Eleanor Johnson, A.M., Head of Clothing Department, Stout Institute (Sum-
mer, 1928).
James Maurice McCallister, A.M., Research Worker in Reading Problems, Univer-
sity High School (Summer, 1928).
Ethel Martin, S.M., Instructor in Home Economics (Summer, 1928).
Elsie May Smithies, A.M., Assistant Principal, University High School (Summer,
1928).
Otto Welton Snarr, A.M., Director of Training, State Teachers College, Mankato,
Minnesota (Summer, 1928).
Dorrance S. White, A.M., Head of the Department of Latin and Greek, Ann Arbor
Public Schools, Ann Arbor, Michigan (Summer, 1928).
Robert Carlton Woellner, A.M., Principal, University High School (Summer,
1928).
JARED KIRTLAND MORSE, S.B., Research Associate in Physics.
FELIX WADSWORTH SAUNDERS, S.B., Research Associate in Physiological Chemistry
under the Douglas Smith Foundation.

WALTER BLAIR, A.M., Assistant in English.
CHESTER DAVIS, Assistant in Physiological Chemistry.
JAMES GILBERT EVANS, A.M., Assistant in Economics.
ALICE M. FERGUSON, A.B., Assistant in Institution Economics.
RAY W. FRANTZ, A.M., Assistant in English.
WILLIAM RUSSELL FREDERICKSON, Assistant in Physics.
MARTIN JOSEPH FREEMAN, A.B., Assistant in English.
GEORGE FREDERICK HARSH, A.B., Assistant in Physiological Chemistry.
BERNARD DAVID HOLBROOK, A.M., Assistant in Physics.
SYLVIA GATES HOLTON, A.B., Assistant in Anatomy.
CARL ELLIS HOWE, Ph.D., Assistant in Physics.
EDWARD WALLACE McGILLIVRAY, JR., Assistant in Physical Culture.
IRVING ELKANON MUSKAT, Ph.D., Assistant in Chemistry.
HENRIETTE NAESETH, A.M., Assistant in English.
ISABEL NOBLE, S.M., Assistant in Home Economics.
MOODY ERASMUS PRIOR, A.B., Assistant in English.
MAURICE H. SEEKERS, S.B., Assistant in Pharmacology.
JOYCE MCCLELLAND STEARNS, A.M., Assistant in Physics.
JOHN BROWNSON WATKINS, A.M., Assistant in Economics.
HORACE WILLISTON, A.M., Assistant in English.

COURSES OFFERED: SUMMER QUARTER, 1928

The courses are divided into four groups as follows, the first figure in each number indicating the group in which the course belongs:

101–99. Courses primarily for undergraduates with not more than 18 majors of credit.
201–99.—Courses primarily for undergraduates with more than 18 majors of credit.
301–99.—Informational and advanced technical courses that assume a previous general survey of the field or method or problem treated. Open to undergraduates with 27 majors of credit, including departmental prerequisites.
*401–99.—Pre-research, problem, and research courses.

PHILOSOPHY

206. Aesthetics.—The definition of art and the relation between art and dream, play, science, industry, morality, and religion. The application of general aesthetic principles to the appreciation and criticism of the fine arts. The function of art. Mj. (or M. either Term), 8:00, PROFESSOR PARKER.

207. Introduction to Philosophy.—While the course serves as an introduction to further study in philosophy, the primary aim will be to meet the need of the general student who wishes to gain a method and point of view for considering the meaning of the world and of human life. Prerequisite: one course in the Department, or one in Psychology. Mj. (or M. either Term), 9:00, PROFESSORS AMES AND TuFTS.

211. Modern Philosophy.—A general survey of the philosophic development from Bacon and Descartes to Kant. Lectures on the relations between the philosophical and the political, religious, and scientific movements, with assigned readings of selections from authors discussed. For Senior College and graduate students. Mj. (or M. either Term), 8:00, PROFESSOR SMITH.
212. Movements of Thought in the Nineteenth Century.—The thought of the century will be traced not only in its more formal philosophic aspects, but also as represented in its literary and scientific movements. Romanticism, idealism, positivism, transcendentalism, utilitarianism, and the doctrine of Evolution will be treated. Mj. (or M. either Term) 11:00, First Term, PROFESSOR MEAD; Second Term, PROFESSOR TUFFS.

315. Medieval Philosophy.—A survey of thought from the fifth to the fifteenth century; the influence of Aristotelianism and neo-Platonism in the development of Scholasticism and Mysticism; and the contact with Arabian science. M. First Term, 8:00, PROFESSOR AMES.

324. Advanced Ethics.—Sidgwick’s Methods of Ethics and Green’s Prolegomena to Ethics. Present Problems. Mj. 1:30, PROFESSOR SMITH.

326. Philosophy of Value.—The general nature of value; the classification, specific character, and interrelations of the chief types of value; principles of criticism of value. Mj. (or M. either Term), 9:00, PROFESSOR PARKER.

350. French Philosophy in the Nineteenth Century.—The peculiar form in which the philosophic problem took in France over against Positivism, the Spiritualistic philosophy of France, and the mechanistic interpretation of nature. The form of the problem found in the philosophies of Renouvier and Bergson will be especially considered. M. First Term, 10:00, PROFESSOR MEAD.

354. Plato.—Selected dialogues will be read in Jowett’s translation. Emphasis will be placed upon the fundamental conceptions and their permanent significance. A. E. Taylor’s commentary will be used in connection with the text. Mj. 2:30, PROFESSOR TUFFS.

PSYCHOLOGY

101. Introductory Psychology.—This course is prerequisite to all other courses in the department. Prerequisite: 9 majors. Mj. sec. a, 8:00, sec. b, 11:00, MR. SHARP.

235. Business Psychology.—Mj. 1:30, ASSISTANT PROFESSOR KORNAUER. (See p. 113 for description.)

305. Philosophical Problems in Psychology.—Philosophical implications of the various conceptions of awareness, introspection, stimulus, and self, and of the handling of such special problems as imagery, meaning, and instinct. The relations of psychology to the other sciences. Prerequisite: 3 majors in Psychology, or Psychology 101, or its equivalent, and 2 majors in Philosophy. Mj. (or M. either Term), 9:00, ASSISTANT PROFESSOR BILLS.

311. Experimental Psychology.—Training course for teaching and research. Lectures and laboratory work on the sensory processes. Prerequisite: 3 majors in Psychology. Mj. lectures, 1:30; laboratory, 1:30-3:30, ASSISTANT PROFESSOR BILLS.

321. Fundamentals of Statistics.—Frequency tables, frequency polygons, linear and non-linear relations, linear equations, measures of central tendency, measures of variability, the binomial expansion, the probability curve, the probability distribution, the normal distribution, the correlation table, coefficients of correlation. Mj. 9:00, PROFESSOR THURSTONE.

322. Principles and Methods of Aptitude Testing.—The theoretical basis and some of the more important statistical procedures of deriving batteries of aptitude tests. Prerequisite: Psychology 320 and 321. M. First Term, 11:00, PROFESSOR HULL.

337. Special Studies in Industrial Psychology.—A survey of the more important psychological problems of industry, with a critical review of theoretical discussions and experimental investigations. Topics dealt with include labor unrest, monotony and fatigue in industry, incentives, analysis of work methods, external conditions of efficiency, vocational selection, etc. Prerequisite: 36 majors or Psychology 235 and C. & A. 245. Mj. 2:30, ASSISTANT PROFESSOR KORNAUER.

341. Comparative Psychology.—A study of the intelligent capacity of animals with an attempt to trace the phylogenetic development of human intelligence. Prerequisite: 3 majors in Psychology. M. Second Term, 10:00, PROFESSOR CARR.
357. Abnormal Psychology.—A study of mental abnormalities, particularly of the functional types, for light upon psychological theory and upon problems of human adjustment. For graduate students. DM. First Term, 3:30–5:30, PROFESSOR TAYLOR.

358. The Psychology of Suggestion.—A study of the main phenomena of suggestion that have been experimentally investigated. Graduate students with one major of experimental psychology. M. First Term, 10:00, PROFESSOR HULL.

418. Space Perception.—Lectures, demonstrations, and readings. Prerequisite: 2 majors of experimental psychology. M. Second Term, 11:00, PROFESSOR CARR.

423. Theory of Psychological Measurement.—The quantitative methods of experimental psychology and mental measurement. For graduate students. Prerequisite: Psychology 321 and one major of Experimental Psychology. Mj. 10:00, PROFESSOR THURSTON.

Attention is called to related courses in Education, Sociology and Anthropology, Philosophy, Neurology, and Physiology.

EDUCATION
(See pp. 83–110)

ECONOMICS

Theory and method are emphasized in the Summer Quarter program in Economics.

For announcements concerning lectures and conferences on the Harris Foundation relating to international affairs, see page 12.

102. *The Economic Order I: The Productive Process.—Course 102 is the first course in a three-major general survey of the economic order; its structure, its institutions, its operation. Mj. (or M. either Term), 8:00, MR. EVANS AND MR. WATKINS.

201. Intermediate Economic Theory.—An analysis of the principles governing the relative prices and values of commodities and the forces governing the distribution of the product of industry among the factors of production. The principles developed will be tested in the light of actual price movements and the course of production, interest rates, wages, and rent. Mj. 8:00, ASSISTANT PROFESSOR NEELOVE.

202. Economic Order.—A rapid survey of the structure, institutions, and operation of the economic order (covering substantially the same ground as Economics 102 and 103). The course is designed for the more mature students with a good background of general information who desire an introduction to economics and modern economic problems. Prerequisite: 18 majors. Mj. 9:00, MR. WATKINS.

210. Introduction to Accounting.—This course is designed to serve as an introduction to the entire field of accounting. The primary emphasis of the course is placed on the use of the accounting reports, and the methods by which the information needed for the preparation of such reports may be made available. The first half of the course is intended to give the student an understanding of the steps that compose what may be called the accounting process, and of that process as a whole. The second half of the course takes up in greater detail the various forms of records which facilitate the recording and analysis of business transactions. Throughout the course the principles considered are developed by means of class discussion and illustrative laboratory exercises. In these exercises the aim is to keep the amount of bookkeeping routine at the lowest point which is consistent with a thorough understanding of the principles involved. Prerequisite: Economics 103 and 9 majors. Mj. (or M. First Term), 9:00 and 10:00, MR. GRAHAM.

211. Introduction to Statistics.—This course is intended to familiarize students with the elementary principles of statistics as applied in the scientific study and interpretation of economic and social phenomena. The topics considered include the general characteristics of the statistical method, the definition of statistical units, accuracy and approximation, the nature and causes of error, classification, frequency distributions and frequency curves, the several forms of average and their appropriate uses, rates and

*Limited-credit course; see page 5.
percentage results, and the collection of original statistical material. The methods discussed in the lectures are applied and tested in laboratory exercises and in the solution of assigned problems. Prerequisite: Economics 103, and 9 majors. Mj. 11:00, Assistant Professor Yntema.

220. Economic History of the United States.—This is a general survey of the evolution of industrial society in the United States from the colonial settlements down to the present, greater emphasis being given to the period since 1860. The course centers about the problem of how the people of the country have endeavored to provide for a more complete satisfaction of their economic wants; the devices, methods, and institutions which have been developed in this endeavor; an analysis of how far and why these have functioned with success or have failed; and the problems that have arisen in the process of these developments. Attention is given to the forces representing the working out of the principles of economics and to the interaction between the economic and the social and political conditions and institutions. The primary object of the course is to supply a background of knowledge of past experience and a sense of evolutionary development. Prerequisite: 2 majors in the department or 18 majors in college. Mj. 1:30, Mr. Evans.

293. Teaching of Secondary-School Economics.—M. Second Term, 8:00, Mr. Shields. (See p. 11 for description.)

294. The High-School Business Curricula.—M. Second Term, 9:00, Mr. Shields. (See p. 114 for description.)

301. Neo-Classical Economics.—A study of the general body of economic thought which centers about the theory of value and distribution and is regarded as "orthodox theory." It will include the exposition of a modern system of this character and some comparison of the view of different writers, and is preparatory to a more critical examination of this body of doctrine. Open to graduate students and to advanced undergraduates on permission of the instructor. Mj. 9:00, Professor Viner.

302. History of Economic Thought.—The course combines a brief survey of the whole field of economic thought with a more intensive study of the "classical school" of British economists. In the survey part of the course the emphasis is placed on the relation between economic thought and the cultural and economic life of the different peoples and periods. Some of the great contrasts in the character of economic life and in the attitude toward it which mark antiquity, the middle ages, and the successive periods of modern times receive special consideration. The gradual separation of a body of doctrine and pure science of economics or price theory, is made the background of the discussion of the classical school. A considerable fraction of the work of the course is given to a few of the most important classical writers whose doctrines are studied in relation to the problems and discussions of today. Prerequisite: an advanced course in Economic Theory. Mj. 8:00, Professor Knight.

303. Modern Tendencies in Economics.—A critical study of controversial questions in the general body of orthodox theory, and of some modern departures from orthodox theory. The discussion will cover questions as to the selection of problems in economic theory, methods, tools of thought, assumptions, laws and standards of validity appropriate to the central body of economic thought under present conditions. Prerequisite: Econ. 301 and 302 or the equivalent. Some knowledge of elementary mathematics, and ability to read German or French will be useful. Mj. 10:00, Professor Knight.

310. Statistical Analysis of Commodity Prices.—The economic theory of the determination of commodity prices, the statistical methods available for quantitative study of commodity prices, and the results of some of the more important studies of this type. Prerequisite: 27 majors, including elementary course in statistics. Mj. hours to be arranged, Professor Working.

312. Correlation, Curve-Fitting, and Theory of Sampling.—This course covers the theory and the fundamental mathematical processes involved in the measurement of relationships between two or more variables, the calculation of trends, and the estimation of the reliability of conclusions based on statistical data. Prerequisite: 18 majors, including elementary course in statistics. Mj. hours to be arranged, Professor Working.
322. The Industrial Revolution as a Form of Economic Development.—As it developed in England during the eighteenth century, the Industrial Revolution will be considered as the typical form of development characterizing the world economically in the last hundred years. Other forms of this revolution will also be considered by a study of the manner in which it came to Germany, France, Spain, Mexico, Japan, India, and China, in order to ascertain the typology of the movement. An effort will be made to study the effect of the Industrial Revolution upon the communities which furnished the raw materials needed by the industrialized countries in order to bring out the manner in which the industrial capitalism of the industrial countries was accompanied by an agrarian capitalism in the agricultural countries. Prerequisite: 36 majors or 27 majors with a grade of B. Mj. 1:30, Professor Handman.

323. Economic History and Economic Theory.—An effort will be made in this course to ascertain the extent to which man's economic experience can be utilized for purposes of understanding and controlling man's economic behavior. The organization of this experience brings into the foreground the question of method, and an attempt will be made to evaluate the various methods which have been used in economics as well as those in use among the sciences dealing with materials most akin to the materials of economics. The comparative method, the historical, the genetics, the evolutionary, and the cyclical will each be considered in their appropriate settings. A rapid survey of the economic history of the Ancient Orient and of Western Europe will furnish the factual basis for a judgment as to the proper method. Prerequisite: 36 majors or 27 majors with a grade of B. Mj. 11:00, Professor Handman.

330. Banking.—The Federal Reserve system is compared with central reserve banking systems of various countries with respect to bank policy and organization. Rediscount and open-market operations of central banks, the relationship between note issue and credit expansion, and the problem of credit control receive special attention. Changes in banking theory and practice resulting from the war are analyzed. Recent legislative proposals are surveyed and criticized. Prerequisite: 36 majors, or course 230 and 27 majors with an average of B. Mj. 9:00, Assistant Professor Mints.

331. Money.—Methods of analysis of the trend of gold production and changing practice in the monetary use of gold are examined. Price movements in the United States and Europe during and since the war are studied. Proposals for price stabilization are compared and criticized. A comparison is made of leading explanations of changes in the purchasing power of money. Recent attempts at statistical verification of certain explanations are studied. The forms of maladjustment between individual prices and groups of prices receive attention. Prerequisite: Econ. 330 or equivalent (330 and 331 may be taken simultaneously). Mj. 11:00, Assistant Professor Mints.

340. Trade Unions.—This course aims to acquaint the student with the mental character and activities of American unions and to explain scientifically the concrete and general union phenomena. After giving a summary sketch of the history of the organized labor movement, it takes up union structure and government, philosophy, policies, and methods of organized labor. Original sources are used along with the secondary sources, and as far as possible the student is brought into contact with men, organizations, and activities studied. Prerequisite: Mj. 8:00, Professor Mills.

353. International Economic Policies.—The course is a survey, with particular reference to the United States, of the international aspects of the economic policies and activities of governments. The topics dealt with include: the fundamentals of the theory of international trade; the purpose, structure, and history of tariffs, tariff bargaining policies; commercial treaties; methods of commercial diplomacy; unfair competition in international trade; economic aspects of colonial policies; the open-door policy in dependencies and spheres of influence; international capital investments; the international aspects of patent, trade-mark, and copyright legislation; the national control of raw materials; the international aspects of shipping and railroad policies; international waterways and fisheries; the economic aspects of the Peace Treaty. Prerequisite: 36 majors, or 27 majors with an average of 3 grade points. Mj. 10:00, Professor Viner.

440. Research in Labor Problems.—Special topics are taken up for intensive investigation and report. Class meetings are devoted to discussion of method and criti-
cal examination of results. Each student regularly confers with the instructor as he carries forward his individual piece of work. Registration may be made for one, two, or three majors. Prerequisite: Econ. 340, 341, C. & A. 345, and permission of the instructor. Hours to be arranged. PROFESSOR MILLIS.

Attention is called to the offerings of the School of Commerce and Administration on pages 111–19.

213. Managerial Accounting.
235. The Manager's Administration of Finance.
245. The Manager's Administration of Personnel.
255. Public Regulation of Business.
268. The Technique of Business Communication.
277. The Manager's Administration of Production.
278. Cost Accounting.
287. Purchasing.
293. The Teaching of Secondary School Economics.
294. The High-School Business Curricula.
309. Economics of Business.
314B. Governmental Uses of Accounting.
315. Accounting Theory.
356. An Introduction to the Study of Law and Business.
358. The Law of Risk-Bearing, Labor, and Business Associations.
367A. Railway Organization and Operation.
367B. Highway Transportation.
375. Risk and Its Administration.
379. Technology of Commodities I, II.
386. Special Studies in Market Administration.
387. Foreign Trade.
388. Special Studies in Terminal Marketing.
395. The Teaching of Typewriting.
396. The Teaching of Stenography.
397. Materials and Tests for the Teaching of Shorthand.
398. The Teaching of Accounting.

POLITICAL SCIENCE

For announcements concerning lectures and conferences on the Harris Foundation relating to international affairs, see page 12.

301. American Government.—An intensive study of some significant aspects and problems of the American system of government, federal and state, designed especially for teachers of civics. Graduate course, open to Seniors with 27 majors. Mj. (or M. either Term), 9:00, ASSISTANT PROFESSOR MOTT.

302. Central European Politics.—This course will deal primarily with the post-war evolution of Czechoslovakia, Austria, and Hungary with special emphasis on their major political problems, both internal and external. M. First Term, 11:00, MR. CRANE.
303. Comparative Government.—An advanced study of the principal political forms and methods on a comparative scale. First Term, a study of English government and politics; Second Term, a study of other modern political systems. Mj. (or M. either Term), 10:00, Assistant Professor Motte.

336. Comparative Political Parties.—American politics largely considered in the light of the ideas, achievements, and influence of important leaders including Jefferson, Hamilton, Marshall, Clay, Jackson, Greeley, Weed, Lincoln, Bryan, Roosevelt, La Follette, Wilson, and others. The required reading in the course is largely drawn from the best recent biographies of these leaders supplemented by some descriptive and analytical political works. Mj. (or M. either Term), 1:30, Professor Moley.

349. The Administration of Criminal Justice.—The organization and practical operation of those institutions, state and Federal, which are concerned with the administration of justice in criminal cases. Court organization, systems of law and procedure, the selection of judicial personnel, the functions and responsibilities of the bar, and the administration of police, prosecution, probation, and parole. Attention will be focused upon the political, administrative, medical, and sociological problems involved. Mj. 11:00, Professor Moley.

358. Recent Political Theory.—A study of leading political ideas in recent times and today; democracy and aristocracy, collectivism and individualism; socialism, bolshevism, syndicalism, guild socialism, and fascism; state sovereignty and pluralism. Mj. 9:00, Professor Coker.

361. The International Law of Peace.—Sources and sanctions of international law; recognition, intervention, jurisdiction, nationality, protection of citizens abroad, diplomatic and consular practice, the interpretation of treaties. Prerequisites: 27 majors or consent of the instructor. Special arrangement for prelegal students by consultation. Mj. 8:00, Professor Wright.

365. Treaties.—The treaty-making process; treaty interpretation; termination of treaties; diplomatic background of selected treaties. Prerequisite: Political Science 362 or 371. M. Second Term, 11:00, Professor Wright.

384. Recent Developments in American Constitutional Doctrine.—This course will be concerned primarily with problems of current interest in American constitutional law, and will cover such topics as the following: the police power of Congress under the commerce and taxing clauses; due process of law and the police power of the states; enforcement of prohibition by injunction; the Supreme Court and unconstitutional legislation; the process of constitutional amendment; freedom of speech under the Constitution; judicial powers of the houses of Congress. Mj. 10:00, Professor Coker.

HISTORY

For announcements concerning lectures and conferences on the Harris Foundation relating to international affairs, see page 12.

121. History of Civilization: The Early Period.—The first of a series of three courses forming a survey of the History of Civilization and designed to meet the needs of first-year students. Course 121 carries the development of civilization from primitive man to the period of the Roman Empire and the rise of the Christian church. Mj. (or M. either Term), 10:00, Assistant Professor Gillespie.

173. History of the United States: Division and Reunion, 1840–1928.—The last of a series of three courses giving a survey of the history of the United States, with special emphasis on the political and constitutional development. These courses form an intermediate group, advised especially for the second year. Prerequisite: 9 majors. Mj. (or M. either Term), 9:00, Professor McGrane.

Note.—The prerequisite for all Senior College courses in History (numbered from 201 to 299) is 18 majors, or consent of the instructor. When Senior College courses are taken for graduate credit additional work is required, and only a limited number of such courses may be offered for the Master's and Doctor's degrees.

206. A Survey of Oriental History.—Mj. (or M. either Term), 2:30, Professor Nelson (see Oriental Languages 318, p. 39 for description).

* Limited-credit course; see page 5.
209. History of Antiquity V: The Roman Empire.—A brief study of the origin and
growth of imperial power in its several transformations to Justinian; the expansion
of the Empire and the tendencies toward disintegration; the struggle with the barbarians;
the conflict of religions and the triumph of Christianity; social structure and the eco-
nomic problems of the Empire; provincial and municipal administration; taxation; the
development and administration of the Roman Law. Continuing course 208. Mj. (or
M. either Term), 1:30, ASSOCIATE PROFESSOR HUTH.

211. The Dark Ages, 180 A.D. to 814 A.D.—The imperial monarchy; the reforms
of Diocletian and Constantine; the rise of the Christian church and the papacy; the
barbaric migrations to the formation of the Romano-Frankish Empire. Mj. (or M.
either Term), 10:00, ASSOCIATE PROFESSOR JORANSON.

229. The Renaissance.—A survey of European civilization in the fourteenth and
fifteenth centuries. The revival of learning in Italy and Germany will be emphasized.
Mj. (or M. either Term), 2:30, ASSISTANT PROFESSOR HYMA.

234. The French Revolution and Napoleon.—The States-General; the National
Assembly; the Legislative Assembly; the Convention; the Directory; the Consulate and
the Empire; the Restoration; relations of France with Europe. Mj. (or M. either
Term), 10:00, ASSOCIATE PROFESSOR GOTESCHALK.

236. Europe from 1870 to 1919.—A survey of the domestic history of the principal
European states and their international relations. The treatment of domestic history
will be primarily from the political side, but some attention will be devoted to social and
economic development. Prominence will be given to accounts of the personality and the
influence of leading and secondary statesmen. Mj. (or M. either Term), 11:00, MR.
MOWAT.

245. The Far East in the Nineteenth and Twentieth Centuries.—A survey of the
development of China and Japan and of their relations with the West. Mj. (or M.
either Term), 8:00, PROFESSOR MACNAIR.

262. English History, 1558–1783.—Mj. (or M. either Term), 9:00, ASSISTANT
PROFESSOR DAVIES.

272. The American Colonies in the Seventeenth Century.—The course will cover
the period from 1600 to 1689, dealing with the founding of England’s American colonies,
their political, social, and economic development, and their relations to each other and
to the British Empire as a whole. Mj. (or M. either Term), 10:00, PROFESSOR CONNOR.

282. Hispanic-American History: The Republican Period, 1810–1927.—The wars
of independence; establishment of government in the independent Hispanic-American
states; evolution of republics. Special attention will be devoted to political theories and
institutions; the struggle for political stability; diplomatic and commercial relations;
contemporary problems and conditions in politics and society. Mj. (or M. either Term),
9:00, ASSOCIATE PROFESSOR MECHAM.

288. History of the West, 1815–60.—Mj. (or M. either Term), 11:00, ASSOCIATE
PROFESSOR CRAVEN.

Note.—The prerequisite for all graduate courses in History (numbered from 301 to 399) is 27 majors,
or consent of the instructor. In addition, most graduate courses in European History require a reading
knowledge of at least one foreign language, usually French or German. Specific prerequisites, if any, are
stated under each course.

305. Greek Constitutional History.—The development of Greek political theory
and institutions from the earliest times to the league states of the third century B.C.
Mj. (or M. either Term), Tu., F., 2:30–4:30, ASSOCIATE PROFESSOR HUTH.

322. Medieval France.—Studies covering the formation of feudal France, its
culture and institutions, the revival of the monarchy, the rise and failure of the states-
General, the Hundred Years’ War, the defeat of Burgundy, the establishment of royal
despotism, and civilization under the Valois kings. Prerequisite: Reading knowledge of
French, or consent of the instructor. Mj. (or M. either Term), 8:00, PROFESSOR STREPHEINSON.

324. Europe and the Near East in the Middle Ages: The Crusades.—Shifting of
the Roman center of gravity to the East; the lure of the Holy Land; pilgrimages;
“Syrians” in the West; New Persia; the rise of Islam; relations of the Frankish monarchs
with the caliphs of Bagdad; the Byzantine Empire vs. the Fatimites and the Seljūq Turks; causes, history, and influence of the Crusades; careers of the Latin states in the Levant; successive ascendency of Mongols, Mamelukes, and Ottoman Turks. The economic, social, and cultural aspects will be emphasized throughout. Prerequisite: Reading knowledge of either German or French, or consent of the instructor. Mj. (or M. either Term), Tu., F., 4:30-6:30, ASSOCIATE PROFESSOR JORANSON.

333. The Reformation.—Stress will be laid on the causes of the Reformation, on the careers of Luther, Zwingli, and Calvin, and on the Catholic Reformation. Mj. (or M. either Term), 1:30, ASSISTANT PROFESSOR HVA.

344. The French Revolution, 1795-99.—A continuation of course 343 [given in 1927], through the Directory and up to the consulate of Napoleon Bonaparte. Prerequisite: Reading knowledge of French, or consent of the instructor. Mj. (or M. either Term), 9:00, ASSOCIATE PROFESSOR GOTTSCHALK.

350. Foreign Rights and Interests in China.—A survey of the relations of China with foreign peoples during the nineteenth century, with special reference to the rise of foreign privileges and the present status of these interests. Mj. (or M. either Term), 10:00, PROFESSOR MACNAIR.

356. European Diplomacy, 1916-25.—The chief problems of the diplomacy and international relations of the War and the post-War period will be orally discussed. Each member of the class will be expected to prepare a bibliography and to write an essay on a particular subject to be arranged with the instructor. Prerequisite: Reading knowledge of one modern foreign language. Mj. (or M. either Term), M., Th., 4:30-6:30, MR. MOWAT.

365. England under the Tudors.—Mj. (or M. either Term), 11:00, ASSISTANT PROFESSOR DAVIES.

370. Problems in English Social and Economic History, 1850–1928.—Such problems as the following will be studied: English industries and foreign trade, involving the questions of markets, foreign competition, tariff reform, imperialism, and the effects of the World War; agriculture and the land; trade-unionism in its legal and economic aspects; the socialist movement; the Labor Party; special industrial problems, such as that of the coal industry; social legislation; unemployment; public education. Mj. (or M. either Term), 8:00, ASSOCIATE PROFESSOR GILLESPIE.

379. The United States since the Civil War: The Age of Big Business, 1877–1913. —Mj. (or M. either Term), 9:00, ASSOCIATE PROFESSOR CRAVEN.

384. The Preliminaries of the American Revolution.—A general survey of the development of the British Empire during the eighteenth century, followed by an intensive study of the period from 1763 to 1775. Mj. (or M. either Term), M., Th., 2:30-4:30, PROFESSOR CONNOR.

388. History of the United States: The Jacksonian Era.—A study of the social, political, economic, and intellectual activities of the people of the United States during this period. Mj. (or M. either Term), 11:00, PROFESSOR MCGRANE.

392. History of the United States: The Lower South, 1833–61.—Limited to graduate students. Mj., 1:30, PROFESSOR DODD.

399. Inter-American Relations.—This course deals with the origin and development of the present-day problems of Hispanic America in the field of foreign relations. It treats of the diplomatic relations of the Hispanic-American states with each other and primarily with the United States. Special emphasis on international rivalries, the Monroe Doctrine, Pan-Americanism, Caribbean problems, and Mexican relations. Mj. (or M. either Term), 8:00, ASSOCIATE PROFESSOR MEHAM.

NOTE.—The prerequisite for all seminars in History (numbered from 401 to 499) is 36 majors plus ability to meet the particular requirements of the course or courses desired. Before registering for a seminar it is advisable to ascertain from the instructor or from an authorized departmental representative the specific conditions of admission.

427. The Rise of Medieval Towns.—Studies connected with the problem of municipal origins, particularly in France and England. Prerequisite: Reading knowledge of Latin and French, or consent of instructor. Mj. W., 2:30-4:30, PROFESSOR STEPHENSON.

494. The Compromise of 1850.—Mj. W., 4:30-6:30, PROFESSOR DODD.
ART

RELATED COURSES IN THE OTHER DEPARTMENTS

Political Science 302. Central European Politics.


Special Methods 342.1 The Technique of Teaching History in the Secondary School.

Special Methods 344.1 Curriculum Problems in Secondary-School History.

Special Methods 345.1 The Teaching of the Social Studies other than History in the Secondary School.

Special Methods 392.1 The Supervision of History and the Other Social Studies.

ART

A. THE HISTORY OF ART

274B. Painting of the High Renaissance in Italy, Spain, and Flanders.—The High Renaissance in Italy: Leonardo da Vinci, Michelangelo, Raphael, and their followers; the Venetian school from Giovanni Bellini through Titian and Tintoretto. The entry of Italian influence into Spain and the painting of Ribera, Zurbarán, El Greco, Murillo, and Velázquez. The painting in Flanders of Rubens and Van Dyck. M. First Term, 2:30, Mr. Downing.

286. History of Prints: Woodcut, Engraving, Etching, and Lithograph.—A brief survey of the process, origin, and history of prints from the fifteenth century to the present day. Mj. (or M. either Term), 1:30, Miss Hahn.

288. Book Illustration.—The history and types of illustration from the early fifteenth-century woodcut book pages to the modern printed illustration. Mj. (or M. either Term), 11:00, Miss Hahn.

353. Principles and Character of Architectural Development.—An investigation and analysis of the structural elements of architecture, and a detailed consideration and appreciation of outstanding monuments of architectural history. Limited to 30. M. First Term, 9:00, Professor Ward.

355. Studies in the Appreciation of the Pictorial Arts.—Lectures, required reading, and individual exercises. The appreciation of painting developed through a study of the principles of composition, through an analysis of the works of old and modern masters, and through a critical study of the aims and achievements of schools and movements in painting, with special emphasis on Impressionism and Post-Impressionism. Prerequisite: 27 majors, including 6 majors or equivalent in Art. M. Second Term, 10:00, Associate Professor Martin.

372A. Italian Sculpture.—A study of Italian sculpture from the Early Christian Sarcophagi through the Medieval and early Renaissance periods. Limited to 30. M. First Term, 10:00, Professor Ward.

B. THE THEORY AND PRACTICE OF ART

216. Color.—Lectures and laboratory work dealing with the use of color in fine and industrial arts. Prerequisite: one major in Art. Limited to 30. DM. First Term, 8:00–11:30, Mr. Downing.

221. Advanced Design.—Lectures and laboratory work dealing with the development of design motives from natural forms, and the applications of principles of design in typical problems. Prerequisite: Art 210 or 220. Limited to 25. DM. Second Term, 12:30–4:00, Mr. Giesbert.

230. Outdoor Painting.—An attempt to familiarize the student with the artist’s approach and methods in outdoor painting. The motif will be sought and studied, then painted. Drawing and composition of figures, buildings, etc., will be considered along with landscape studies. Limited to 25. DM. First Term, 12:30–4:00, Mr. Giesbert.

1 For detailed information concerning the course, see page 103.
245. Modeling.—Lectures and laboratory work dealing with the place of modeling in the arts, with practice in typical problems in relief and in the round. Limited to 15.
DM. First Term, 8:00-11:30, Miss Haseltine.

246. Advanced Modeling.—A continuation of course 245 with more advanced problems planned to interpret various styles of sculpture. Prerequisite: Art 245 or its equivalent. Limited to 15. DM. Second Term, 8:00-11:30, Miss Haseltine.

314. Advanced Painting and Composition.—Lectures, studio work, criticism, and directed research in advanced painting and composition. A broad survey of recent and present-day tendencies and movements in painting, with opportunity for practice and experiment in new and old techniques and methods. Some outdoor landscape painting will be given, in addition to work in the studio. Prerequisite: 27 majors, including Art 214 or equivalent. M. Second Term, 8:00-10:00, Associate Professor Martin.

C. COURSES IN THE TEACHING OF ART (see page 100)

Special Methods 215. Teaching of Art in Elementary Schools.
Special Methods 217. The Teaching of Industrial Arts.
Special Methods 311. Organization and Administration of Art Education.
Special Methods 312. Supervisor’s Course in Art Education.
Practice Teaching.—See Announcements of School of Education.

SOCIOLOGY AND ANTHROPOLOGY

110. Introduction to the Study of Society.—Designed to give the student orientation in the social sciences and a working system of thought about society: human nature; society and the group; isolation and social contact; communication, imitation, and suggestions as forms of interaction; social forces; competition and conflict; accommodation and assimilation; social control, collective behavior and social progress. Application of sociological concepts to problems, such as movements of population, immigration, race prejudice, poverty, and crime. This course confers no credit as graduate work. Prerequisite: 9 majors in college. Mj. 9:00, 10:00, Dr. Wirth; 11:00, 1:30, Mr. Blumer.

220. Introduction to Social Psychology.—An introductory course dealing with the origin and development of personality in the individual as the result of the presence of and contact with his fellows. Emotion and emotional expression; gesture and the rise of communication; nature and significance of language; conscious and unconscious imitation; objectivity and self-consciousness; society as an organization of interacting personalities. This course is co-ordinate with course 230 and both are prerequisite to the advanced courses in the division of Social Psychology. Prerequisite: Sociology 110 or 27 majors. Mj. 9:00, Professor Faris.

264. The Growth of the City.—A consideration of the ecological factors determining the distribution and movement of population and the formation of communities in the urban area. Mj. 11:00, Professor Burgess.

282. General Introduction to Linguistics.—Fundamental problems of language; linguistic elements; linguistic processes; form in language; types of linguistic morphology; linguistic change; language, race, and culture. Languages spoken by primitive peoples. Mj. 9:00, Professor Sapir.

290. Ethnology.—Primitive culture. Several types of primitive social organizations will be studied in detail, and results will be applied to the solution of various theories relative to the origin, development, and spread of cultures. Methods of anthropological research in social customs, religion, art, mythology, etc., will be stressed. Mj. 10:00, Professor Sapir.

316. European Sociology from the Beginning of the Nineteenth Century.—Studies in nineteenth century origins of modern sociology, based on a survey of selected writings of European economists, political scientists, historians, and early sociologists. Prerequisite: 36 majors or consent of instructor. Mj. 9:00, Professor House.
317. History of Sociology in the United States.—A comprehensive survey of American sociological literature from its beginnings to about 1914, with particular emphasis upon distinguishable separate trends and their influence upon one another. Prerequisite: 36 majors or consent of the instructor. Mj. 2:30, Professor House.

320. Social Attitudes.—The elemental instincts and impulses; types of temperament and character; the nature of the inhibitions in individuals and groups through which social attitudes are developed and fixed; race prejudice, ethnocentrism, and prestige; a determination of the private moral life going on in the individual in contrast with the more formal preceptual and conventional moral code of society; a comparison of the mores of different races, historical epochs, and social classes; the use of biographies and other personal documents. Prerequisite: 36 majors. Mj. 10:00, Professor Faires.

373. Crime and Its Social Treatment.—This course outlines a method of investigation of delinquency, juvenile and adult, from the standpoint of human nature and social control. Case studies of disorders of conduct and of the criminal behavior of individual delinquents are investigated with special reference to the influence of family and neighborhood environments. An effort will be made to discover and define typical home and neighborhood situations with reference to their influence upon specific types of delinquency. Programs for the social treatment of crime including changes in the police system and criminal procedure, the modification of the physical structure of penal and reformatory institutions, and their economic, educational, and social reorganization, the classification of offenders for separate treatment, the "honor system," limited self-government, parole and probation will be compared and criticized with respect to their values for the prevention of crime and the restoration of the offender. Prerequisite: Sociology 270, or 351, or Psychology 356. Mj. 1:30, Professor Burgess.

387. Prehistoric Archaeology.—(a) Prehistoric Europe, (b) Prehistoric America. This course outlines methods of investigation, and handling of archaeological data. Mj. 11:00, Professor Spier.

399. The Psychology of Culture.—An inquiry into the shifting connotations of the term "culture"; the patterning of human conduct; the relationship of the individual to society, and the meaning of the concept "psychology of culture." Psychological and anthropological points of view will be combined and, so far as possible, reconciled. Mj. 10:00, Professor Spier.

470. Methods of Research in the Social Sciences.—The purpose of this course is to present and, as far as possible, demonstrate, using for illustration investigations in progress, the practical application of research methods to the investigation of typical sociological problems. It is limited to graduate students who have had some experience in research work. Students electing this course will be expected to submit, in advance of admission, the outline of a project approved by some member of the department in this or other universities in which they have been students. The course will consist of lectures, demonstrations, and a clinic meeting twice a week. Prerequisite: Consent of instructor. D.M. First Term, Tu., Th., 3:30-5:30, Professor Faire.

HOME ECONOMICS AND HOUSEHOLD ADMINISTRATION

FOOD AND NUTRITION

103A. Introduction to Nutrition and Dietaries.—A course designed for the general student who desires to be intelligent on the problem of human nutrition but is unable to take all the prerequisites for the more advanced courses (especially Home Economics 314). The requirements of the body for energy, protein, minerals, vitamins are considered and diets planned to supply these requirements for the various ages and occupations. Rational dietary correction of under and over weight and of constipation are included, and the general application of diet to health is emphasized. M. First Term, lectures, Tu., W., F., 11:00; laboratory, M., 10:00-12:00, Mrs. Martin.

104. Food and Its Preparation.—An introduction to the study of food. The course includes: the preparation of food, with experimental studies to develop the reasons for the methods used and explanation of the changes which take place; organization of work and equipment with reference to time-saving methods; the value of typical
foods in the diet; the geography of food production; and a discussion of the simpler manufacturing processes. Limited to 18. Mj. (or M. either Term), 1:30-3:30, Miss Lehman.

206B. The Science of Cooking.—It is the purpose of this course to give the student a general view of what has been done to apply science, particularly chemistry, to the solution of cooking problems, to make practical use of this knowledge, and to open up new problems for research. The literature will be reviewed and typical experiments made on the relation of manipulation of doughs and reaction time of baking powders to quality of cakes and muffins. Prerequisite: Home Economics 104 and 216. Limited to 18. M. First Term, 8:00-10:00, Assistant Professor Halliday and Miss Noble.

216. Chemistry of Food I.—Chemistry of fats, carbohydrates, proteins, ash constituents, with special emphasis upon the composition and nutritive value of such foods as meat, flour, milk, and butter. Laboratory work is partly qualitative and partly quantitative. Prerequisite: Organic Chemistry. Mj. (or M. either Term), lectures, Tu., Th., 10:00; laboratory, M., W., F., 10:00-12:00, First Term, Professor Blunt and Miss Cowan; Second Term, Assistant Professor Halliday and Miss Noble.

312A. Nutrition.—Processes of digestion and metabolism and the nutritive requirements of the body, giving a scientific basis for the work in dietaries. Laboratory work: experiments on digestion and qualitative and quantitative urine analysis in connection with special diets; simple nutrition experiments with rats. Prerequisite: Home Economics 216 and Physiology. M. First Term, lectures, W., F., 1:30; laboratory, Tu., Th., 12:30-3:30, Miss Cowan.

314. Dietaries.—Food requirements of individuals and families as modified by age, sex, and activity. Cost of food in relation to food value. Special diet for cases requiring simple corrective treatment as constipation, under and over weight. Infant feeding. Diet of older children. The school lunch. Adequate diet with costs for a family. Prerequisite: Home Economics 312A. Mj. (or M. First Term), 10:00-12:00, Assistant Professor Roberts and Mrs. Martin.

320A. Diet in Disease.—Study of the diet in such diseases as diabetes, gout, nephritis, gastric disturbances, arteriosclerosis; visits to hospital dietary departments. Prerequisite: Home Economics 312A and 314A. M. Second Term, 2:30; laboratory, M., 1:30-3:30, ———.

321A. Chemistry of Food. II.—A continuation of Home Economics 216 with greater emphasis on quantitative methods. Analysis of fruit juices including hydrogen ion concentration by electrometric titration and indicator methods; the use of the Van Slyke amino nitrogen apparatus; chemistry of plant colors; determination of carbon dioxide in baking powders. Prerequisite: Home Economics 216. M. First Term, lectures, Tu., Th., 1:30; laboratory, W., F., 12:30-3:30, Assistant Professor Halliday and Miss Noble.

323A. Problems in the Chemistry of Cooking.—Application of chemical methods to cooking problems such as determination of losses in vegetables cooked by various methods and determination of hydrogen ion at which vegetables change color in cooking and gelation occurs in jellies. Prerequisite: Home Economics 321A. Limited to 16. M. Second Term, 8:00-10:00, Assistant Professor Halliday and Miss Noble.

326A. Selected Problems in Nutrition.—The course may include one of the following problems for a minor or two for a double minor: (a) digestibility or balance experiments on human subjects; (b) energy metabolism (human calorimetry); (c) nutrition experiments with rats; (d) mineral analysis of foods. Prerequisite: Home Economics 321A and Quantitative Analysis. M. or D.M., Second Term, lectures, W., 3:30; laboratory, 8 or 16 hours a week, to be arranged, Professor Blunt and Miss Cowan.

412. Readings in Nutrition.—A critical study of recent literature in nutrition for the purpose of acquainting experienced students with recent researches in the field and the methods of investigation employed. The topics discussed will include mineral metabolism, especially calcium, vitamins, rickets, composition and metabolism of protein, diet and pellagra, energy metabolism, dietary studies, carbohydrate and fat metabolism, diet in diabetes, iodine, organic acids. Prerequisite: Home Economics
312A and 314A. Mj. (or M. either Term), Tu., Th., 3:30–5:30; Professor Blunt and Miss Cowan.

429. Research in Food and Nutrition.—Individual research along such lines as metabolism and diet of underweight, overweight, and normal women and children, animal-feeding experiments, food chemistry, chemical changes in cooking, etc. For properly trained graduate students on permission of the instructor. May also be registered for as Chemistry 460. Mj. (or DM. either Term), hours to be arranged, Professor Blunt, Assistant Professors Roberts and Halliday.

CHILD STUDY

236A. Child Care.—Designed for those preparing to give instruction in the care of children and also for those having direct care of children. Problems of prenatal life and infancy, adequate prenatal care, diet in pregnancy and lactation, standards for normal growth, breast and artificial feeding, habit formation, general care and hygiene. Prerequisite or parallel: Home Economics 103 or 314, or for non-Home Economics students, 18 majors. M. Second Term, 9:00, Assistant Professor Roberts and Mrs. Martin.

237. Psychological Study of Young Children.—Psychological concepts and methods applied to the study of the pre-school child. A course designed to be of use to those responsible for the training of young children in the home or nursery school, and to those giving instruction in such training. Observation in a Nursery School affiliated with the University. Prerequisite: one major in Psychology. Mj. (or M. either Term), 8:00, Professor Koch.

316A. Nutrition Work with Children.—Causes and effects of malnutrition; height and weight standards; methods of judging nutrition; the nutrition class movement; methods by which the school can improve the nutrition of children through its regular activities. For teachers, supervisors, nutrition workers, and others concerned with the health of children. Prerequisite for Home Economics students, Home Economics 314; for teachers or social workers, 3 majors in Education or in Sociology. Non-Home Economics students are advised to take Home Economics 103 as prerequisite or parallel. M. First Term, 9:00, Assistant Professor Roberts; repeated M. Second Term, 1:30, Mrs. Martin.

317A. Practice in the Feeding and Physical Care of Children in the Nursery School.—A practical application of principles of child-feeding and care to the children in the University Co-operative Nursery School. A limited number of students will work with the nursery lunch. Each student will have charge of three or more children at lunch and will make them her special objects of study. A few other students may have other special problems of physical care. Prerequisite: Home Economics 236 and 314. Limited to 10. M. First Term, 11:00–1:30, Miss Imlay.

337. Psychology of Children.—A continuation of the work in Home Economics 237, open to students with adequate psychological background desiring to specialize in work with the children of the home or the nursery school, and in the teaching of child development. Special attention will be given to techniques for evaluating various phases of development, to diagnosis of behavior difficulties, and to remedial procedures. Experience in the actual management of children will be afforded each student. Prerequisite: Home Economics 237, and at least 2 majors of Psychology. Mj. (or M. either Term), 10:00, Professor Koch.

439. Research in Child Study.—Open to properly prepared graduate students on consent of the instructors. Mj. (or DM. either Term), hours to be arranged, Assistant Professor Roberts and Professor Koch.

HOME MANAGEMENT

246. Household Organization.—A course designed to develop judgment in the purchase of modern labor-saving equipment, and in the analysis of home-making activities. Comparative studies of the factors determining price and effectiveness of equipment. Time and motion studies on various household processes. A study of the
commercial laundry problem on the basis of cost and health factors. Planning of home and demonstration kitchens from the efficiency standpoint. Field trips to city supply houses and plants to supplement the class work of the first part of the course, and a laboratory period once a week during the second part. Prerequisite: General Chemistry, Elementary Economics or 2 majors in Home Economics. Mj. (or M. either Term), 11:00; occasional laboratory, Second Term, M., 10:00-12:00, Mrs. Heiner.

248. Economics of the Household.—In this course a systematic study is made of those economic problems that most directly touch the welfare of the family in modern industrial society. It includes a discussion of the size, sources, and factors determining family incomes, of the problems of buying under existing market conditions, and of the actual results of household expenditures as shown in the food, clothing, shelter, etc. of the nation as a whole and of various groups. The changes that have taken place in the economic basis of family life are analyzed, and special emphasis is placed upon the relationship between the general economic organization and the nature of the family’s livelihood and the way it is secured. Prerequisite: Elementary Economics. Mj. (or M. either Term), 1:30, Associate Professor Kyrk.

343. Economics of Consumption.—A critical survey of the studies that have been made of the consumption habits of various communities and classes and an analysis of other sources of information. The treatment of consumption in economic literature and the “laws” of consumption will be examined. Special attention will be given to the buying problem of the consumer in the present market situation and the effect upon habits of consumption. Prerequisite: Elementary Economics. Mj. (or M. either Term), 2:30, Associate Professor Kyrk.

346. Equipment Testing.—A course designed to give practical experience in the selection and use of labor-saving equipment through laboratory experiments and investigation under varying household conditions. Individual problems. Prerequisite: Home Economics 246A or college Physics and practical experience with equipment. Mj. (or M. either Term), 2:30-4:30, Miss Heiner.

449. Research in Home Management and Economics of the Household.—Individual research in special problems of home management and economics of the household. Open to properly prepared graduate students on permission of the instructors. Mj. hours to be arranged, Associate Professor Kyrk and Mrs. Heiner.

TEXTILES, CLOTHING, AND RELATED ART

151A. Principles of Garment Construction.—Drafting of patterns and construction of cotton or linen dresses with consideration of principles involved. Open to (1) those who enter with 1 unit of admission credit in Textiles and Clothing, (2) those who pass a technical test in sewing. Limited to 24. M. First Term, 8:00-10:00, Miss Henderson.

251. Advanced Garment Construction.—Practice in the application of the principles of costume design; the development of technique in the construction of silk and wool garments from the standpoint of materials and their influence upon design; economics in relation to dress. Prerequisite: Home Economics 261. Limited to 20. Mj. (or M. either Term), 10:00-12:00, Miss Johnson.

254. Textiles.—A study of the chief textile fibers and analyses of fabrics. The aim of the work with fibers is to form a basis for an understanding of fabrics. It includes identification of fibers by microscopic, chemical, and physical means; study of methods of production of raw materials, and of manufacturing processes as related to quality of fabrics. The study of fabrics is based upon the analysis of many different materials to find the relation between quality and the fiber, weave, finish, adulteration, and cost of the fabric. Lectures, laboratory, and field work. Limited to 20. Prerequisite: General Chemistry. Mj. (or M. either Term), 1:30-3:30, First Term, Miss Henderson; Second Term, Assistant Professor Stevenson.

261A. Costume Design.—A study of the elements of design involved in costume. The course includes a discussion of the fundamental principles of design, their application to the selection and adaptation of clothing, and the influence of the principles of
garment construction on clothing design. Limited to 24. Prerequisite: 1 major in Art and Home Economics 151. M. First Term, 1:30-3:30, MRS. BUTTRICK.

261B. Costume Design.—An analysis of color and the use of color theory in the selection and design of garments. Limited to 24. Prerequisite: 1 major in Art and Home Economics 151. M. First Term, 8:00-10:00, MRS. BUTTRICK.

263. Interior Decoration I: Household Design.—A course designed to establish definite standards for the planning of the house and apartment. A study of the fundamental principles of design and their application to the proper treatment of interiors and the selection of furniture and accessories. Field trips. Prerequisite: 1 major in Art.
Limited to 24. Mj. (or M. either Term), 10:00-12:00, ASSISTANT PROFESSOR CLARK.

354. Textile Economics I.—The topics considered in the course include: methods of production and marketing of wool, as an introduction to the problems of pure textile legislation and the standardization of textiles and clothing; a study of special articles of clothing such as hosiers, glove-silk fabrics, gloves, shoes, and leather goods. The object of the study is to become familiar with types and qualities as related to raw materials, processes of construction, and special brands. Occasional field trips. Prerequisite: Home Economics 151 and 254 and Elementary Economics. Mj. (or M. either Term), 8:00, ASSISTANT PROFESSOR STEVENSON.

356A. Textile Testing.—Methods used in the physical and chemical examination of textiles and their commercial significance. Demonstration and use of apparatus used in commercial laboratories. Prerequisite: General Chemistry and 2 majors in Home Economics including 254, or 4 majors in Chemistry. M. First Term, 10:00-12:00, ASSISTANT PROFESSOR STEVENSON.

363. Interior Decoration III: History of Furniture.—Historic survey of architecture and furniture, and its influence upon modern interiors and furniture. Lectures and field work. Prerequisite: Home Economics 263. Mj. (or M. either Term), 9:00, ASSISTANT PROFESSOR CLARK.

459. Research in Textiles and Clothing.—Individual research in special textile and clothing problems. Open to properly prepared graduate students on permission of the instructor. Mj. hours to be arranged, ASSISTANT PROFESSOR STEVENSON.

469. Research in Related Art.—Individual research in interior decoration and costume design. Open only to properly prepared graduate students on permission of the instructor. Mj. hours to be arranged, ASSISTANT PROFESSOR CLARK.

INSTITUTION ECONOMICS

271. Institution Cooking.—Deals with problems involved in preparation of food in large quantities: standardization of formulas in relation to quantity, manipulation, and cost; efficiency of different methods of serving; requirements of different types of institutions; use of power equipment. Study includes breads, sandwiches, cakes, deserts (including puddings, fruits, pastries, and frozen types). Lunchrooms and bakery of University used as laboratories. Primarily for advanced undergraduate students preparing for administrative food work in high schools, colleges, hospitals, or in commercial fields, and for teachers of college courses in Institution Economics. Prerequisite: Home Economics 206. Mj. (or M. either Term), lectures, M., F., 9:00; laboratory, Tu., W., Th., 8:00-10:00, MRS. LANGDON and ASSISTANT.

272. Institution Cooking.—Continuation of 271. Deals with the same problems outlined in 271 but in connection with other food materials. Study includes: vegetables, salads, salad dressings, meats, meat substitutes, sauces, gravies, and soups. Laboratory practice is provided in the kitchens of the University Commons. Prerequisite: Home Economics 206. Mj. (or M. either Term), lectures, M., F., 2:30; laboratory, Tu., W., Th., 2:30-5:00, ASSISTANT PROFESSOR SAWIN AND MISS FERGUSON.

285. Practice in Institution Management.—So conducted as to give the student first-hand experience with problems of institution management. Practice is had in actual management, under supervision, at the various centers of the University Commons. Primarily for advanced undergraduate students preparing for administrative
positions. Prerequisite: 2 majors in Institution Economics. Mj., lectures, Tu., 2:30; practice hours to be arranged, Miss FARQUHAR.

376. Marketing.—Deals with the production, distribution, and storage of food supplies with a view to developing accurate judgments of quality, grades, and cost to guide the purchase of foods. Major topics: commercial producing areas; organization of the produce market; fresh, canned, and dehydrated fruits; fish; poultry. For advanced undergraduate and graduate students preparing for administrative positions and for teachers of college courses in Institution Economics. Prerequisite: General Chemistry, Elementary Economics. Mj. (or M. either Term), lectures, M., Tu., W., 10:00; laboratory, Th., 10:00-12:00; field work, Saturday morning, ASSISTANT PROFESSOR MCAULEY.

380. Institution Organization and Administration. I.—A study of the principles of industrial organization and administration which apply to school lunchrooms and other public and private institutions such as high school lunchrooms, college dormitories, hospitals, cafeterias, commercial tea rooms. Major topics: effective relation of the physical parts of the unit; types of organization; functions of the departments and of staff. For advanced undergraduate and graduate students preparing for administrative positions and for teachers of college courses in Institution Economics. Prerequisite: Elementary Economics and 2 majors in Institution Economics. Mj. (or M. First Term), lectures, Tu., W., Th., 1:30; laboratory, F., 1:30-4:30; field trips to be arranged, ASSOCIATE PROFESSOR POPE.

381. Institution Organization and Administration. II.—Continues the work of Institution Economics 380. Topics: cost of production, overhead, distribution of expense; records, inventories; specific administrative problems in care of building, general equipment, and food supplies. For advanced undergraduate and graduate students preparing for administrative positions and teachers of college courses in Institution Economics. Prerequisite: Institution Economics 380. Mj. (or M. either Term), lectures, Tu., W., F., 8:00; laboratory, Th., 8:00-10:00; field trips to be arranged, ASSOCIATE PROFESSOR POPE and ASSISTANT.

383. Equipment.—Deals with the large stationary equipment and power equipment for the various departments of an institution. Study is made of materials, construction, operation, installation, and use of equipment; floor plans; specifications. Layouts for specific situations are made with floor space and equipment drawn to scale for the making of blue prints. For advanced undergraduate and graduate students preparing for administrative positions and teachers of college courses in Institution Economics. Prerequisite: Institution Economics 380. Mj. (or M. either Term), lectures, W., Th., F., 9:00; laboratory, Tu., 8:00-10:00, ASSISTANT PROFESSOR SMITH.

384. Institution Equipment.—A continuation of Institution Economics 383, with special emphasis on utensils, service-room and dining-room equipment. Suitability and cost of equipment for school lunchrooms, tea rooms, cafeterias, and other institutions will be considered. Prerequisite: Institution Economics 380. Mj. (or M. either Term), lectures, M., Tu., W., 8:00; laboratory, F., 8:00-10:00, Miss HIPPEL.

389A. Special Studies of Institution Problems.—This course is designed to aid administrators of the food and living units of institution groups. Special topics to be considered those of equipment engineering. Prerequisite: Institution Economics 383. M. First Term, lectures, Tu., W., Th., F., 3:30, M. WEBER.

389B. Special Studies of Institution Problems.—Special topics to be considered: office and store-room administration, food-cost accounting, personnel management. Prerequisite: 2 majors in Institution Economics. M. Second Term, lectures, Tu., W., Th., F., 3:30, ______________.

RELATED COURSES IN THE TEACHING OF HOME ECONOMICS

(see p. 104)

Special Methods 251. Methods of Teaching Home Economics.

Special Methods 352A. The Home Economics Curriculum.
ORIENTAL LANGUAGES—NEW TESTAMENT

Special Methods 353A. Problems in Teaching Home Economics.
Special Methods 355. Supervision of Home Economics.
Special Methods 356. Problems in Training Teachers of Home Economics.
Special Methods 459. Research Problems in Home Economics Education.

COMPARATIVE RELIGION

341. The Idea of God in the Great Religions.—Mj. (or M. either Term), 3:30, ASSOCIATE PROFESSOR HAYDON.

351. Types of Religious Philosophy (Oriental and Western).—Mj. (or M. either Term), 2:30, ASSOCIATE PROFESSOR HAYDON.

ORIENTAL LANGUAGES AND LITERATURES

301. Hebrew Language.—Mj. 8:00, ASSOCIATE PROFESSOR GRAHAM.

309. Isaiah, Chapters 1-39.—Mj. (or M. either Term), 11:00, ASSOCIATE PROFESSOR GRAHAM.

318. Survey of Oriental History.—Mj. (or M. either Term), 10:00, PROFESSOR NELSON.

329. Manners and Customs of the Hebrews.—Mj. (or M. either Term), 2:30, PROFESSOR KOHLER.

342. The Moslem World to the Crusades.—Mj. (or M. either Term), 9:00, PROFESSOR SPRENGLING.

354. History and Judaism.—Mj. (or M. either Term), 1:30, ASSOCIATE PROFESSOR GRAHAM.

368. The Elements of General Phonetics.—M. First Term, 10:00, PROFESSOR SPRENGLING.

375. Elementary Assyrian.—Mj. 2:30, DR. GEERS.

391. Introduction to Hieroglyphics.—Mj. 9:00, PROFESSOR NELSON.

402. Amos and Hosea.—Mj. (or M. either Term), 3:30, PROFESSOR KOHLER.

409. Babylonian Historical Inscriptions.—Mj. (or M. either Term), 3:30, DR. GEERS.

437. Research in Arabic.—Mj. hours to be arranged, PROFESSOR SPRENGLING.

470. Research in Old Testament.—Mj. hours to be arranged, ASSOCIATE PROFESSOR GRAHAM.

NEW TESTAMENT AND EARLY CHRISTIAN LITERATURE

3302. The Literature of the New Testament.—Occasion, purpose, and content of each book of the New Testament, with special emphasis upon Paul’s letters in relation to his career and upon the Synoptic Gospels in relation to each other and to their sources. Prescribed in the Chicago Theological Seminary. Mj. (or M. either Term), 10:00, PROFESSOR ROBINSON.

305. The Teaching of Jesus.—Character of the sources of information; circumstances under which the teaching was transmitted; analysis and classification of its content as reported in the Gospels; its significance for Jesus and for the believers who collected and used the accounts. A Group II course. M. Second Term, 9:00, PROFESSOR SCOTT.

311. Jesus and His Contemporaries.—Jesus making friends and enemies; the causes of his death; the effect of his work upon his contemporaries. M. Second Term, 8:00, PROFESSOR CASE.

328. New Testament Interpretation and Criticism.—The Jewish conception of sacred books and manner of interpreting them; understanding and use of the New
Testament writings in the ancient period, the Renaissance, the Reformation, and the modern period; rise of the historical, grammatical, and literary methods; the elements of scientific interpretation; its bearing on the homiletic use of the New Testament. Mj. (or M. either Term), 1:30, Professor Votaw.

344. Rapid Reading of the New Testament in Greek.—The books to be read will be selected with reference to the needs of those who elect the course. Mj. (or M. either Term), 2:30, Professor Votaw.

357. The Gospel of Luke.—M. First Term, 9:00, Professor Grant.

358. The Gospel of John.—Essential characteristics; author and purpose; Johannine conception of Jesus; interpretation of chapters of the Gospel in the light of the Ephesian situation and the religious language and ideas of the time. Mj. (or M. either Term), 11:00, Professor Robinson.

359. The Epistle to the Romans.—Introduction; analysis of argument; study of the leading terms of the epistle as a foundation for the inductive study of the Pauline theology; interpretation. M. Second Term, 11:00, Professor Scott.

360. The Epistle to the Galatians.—M. First Term, 11:00, Professor Grant.

COMPARATIVE PHILOLOGY, GENERAL LINGUISTICS, AND INDO-IRANIAN PHILOLOGY

307. Greek Dialects.—Buck's Introduction to the Study of the Greek Dialects, revised edition. M. First Term, 10:00, Professor Buck.

310. Sanskrit (Elementary Course).—Whitney's Sanskrit Grammar and Lanman's Sanskrit Reader. Mj. 1:30, Mr. Bobrinsky.

312. Introduction to Vedic Study.—Lanman's Reader, Macdonell's Vedic Reader and Vedic Grammar. Mj. 2:30, Mr. Bobrinsky.

GREEK LANGUAGE AND LITERATURE

Elementary courses are offered for two classes of students: (a) those who enter college without receiving full credit for the preparatory work in Greek and (b) those who desire to begin Greek in the college and proceed to the degree of Bachelor of Arts. The latter class of students will ordinarily satisfy the requirements in Greek for this degree by courses 101, 102, 103, 104, 105, 106, 107, but course 104 may be omitted by those who read at least 12 books of the Odyssey in connection with course 105. In this way the full requirements may be satisfied by six courses.

101. Elementary Greek.—This course is adapted to two classes of students: (a) those who have never studied Greek and (b) those who desire to review rapidly the elements of Greek. Mj. (or M. either Term), 9:00, Professor Ramsay and Assistant Professor Smith.

212. Homer: “Odyssey,” Books xiii-xxiv.—Selections from the earlier books will be assigned for special reading or read by the instructor. This course may be substituted for either 104 or 105 in satisfaction of the requirements for the A.B. degree. Mj. (or M. either Term), 10:00, First Term, Professor Ramsay; Second Term, Assistant Professor Smith.

325. Lysias.—Selected speeches. M. Second Term, 9:00, Professor Bonner.

353. Euripides.—Bacchae, Ion, and Iphigenia at Aulis. Mj. (or M. First Term), 11:00, Professor FaiCLOUGH.

355. Aristophanes.—First Term, lectures with illustrative readings. Each member of the class will select one play to prepare for credit. Second Term, reading and interpretation of the Knights. Mj. (or M. either Term), 2:30, First Term, Professor Shorey; Second Term, Professor Bonner.
362. Theocritus and Greek Pastoral Poetry.—Lectures, readings, and reports. Mj. (or M. First Term), 10:00, Professor Fairclough.

400. Research Course.—To be elected only after consultation with the instructor. M. First Term, 3:30, Professor Shorey.

LATIN LANGUAGE AND LITERATURE

204. Pronunciation of Latin and Formation of Latin Words.—For teachers of Latin. Pronunciation and significant features of word-formation. M. First Term, 11:00, Professor Buck.

244. The Writing of Latin.—Exercises in simple prose narrative, developing correctness of expression and a feeling for idiom. M. Second Term, 9:00, Mr. White.

256. The Teaching of Latin in the High School.—The content of the course; values, aims, and methods; correlation with English; devices to stimulate interest; special attention to the work of the first two years. Mj. (or M. either Term), 8:00, Professor Ullman and Mr. White.

317. Cicero: "Orations."—Selected orations, with special regard to historical background and rhetorical form. M. First Term, 9:00, Professor Ullman.

321. Lucretius.—Books I, III, and V of the De rerum natura, with special reference to content and style. Mj. (or M. First Term), 1:30, Professor Hadzsits.

322. Catullus.—Reading of the poems, with general consideration of the Greek background, the characteristics of the New Poets, and the later development of the Latin lyric. Mj. 10:00, Professor Prescott.

336. Livy.—The first decade of Livy's history; special studies in Livy's style. Mj. (or M. First Term), 9:00, Professor Foster.

350. Roman Private Life.—A systematic treatment with illustrations (by lantern views, photographs, etc.) from the remains of ancient art and, in particular, from the remains discovered in Pompeii, Herculaneum, and Rome. Mj. 10:00, Professor Laing.

361. The Latin Novel: Apuleius.—Interpretation of the Metamorphoses and general account of the development of the novel in Greece and Italy. Mj. 11:00, Professor Prescott.

377. Latin Elegy: Propertius.—Interpretation of Propertius, and comparative study of Tibullus. Mj. 11:00, Professor Foster.

381. Roman Festivals.—A study from original sources, literary and epigraphic. M. First Term, 2:30, Professor Hadzsits.

382. Roman Ideas of Immortality.—Readings in Cicero (Tusculan Disputations i, De Senectute, Sowmium Scipionis, etc.) and other literary as well as epigraphic sources. M. Second Term, 2:30, Professor Hadzsits.

RELATED COURSES IN OTHER DEPARTMENTS

Comparative Philology 204. Pronunciation of Latin and Formation of Latin Words.

History 209. History of Antiquity V. The Roman Empire.

ROMANCE LANGUAGES AND LITERATURES

The work in Romance languages during the Summer Quarter is planned with the following general aims in view: (a) to provide material for those working toward a graduate degree, (b) to give adequate training and practice to those wishing to teach the languages, (c) to meet the needs of undergraduate students who wish to continue French and Spanish and to begin or continue Italian.

Regular elementary courses in French and in Spanish are not given.
LA MAISON FRANÇAISE

Dorcas J. Perrenoud, Directrice

Through the liberality of private citizens and of the French government, the University maintains a well-equipped Maison française at 5810 Woodlawn Avenue. It is open to graduate and undergraduate women; table board is also available to a limited number of men (and, during the Summer Quarter, of men) possessing the necessary qualifications.

The Maison française is under the direction of Mlle Dorcas J. Perrenoud, to whom students should apply for the terms and the requirements for entrance. The prices of rooms by the quarter are $53.00, $62.00, $66.00, and $76.00, the room rent being payable in advance to the Cashier of the University. The cost of table board, at the rate of $8.00 a week, is payable for the quarter to the Directrice on the first day of the quarter. A deposit of $5.00 is required with each application for room; it should be sent to Mlle Perrenoud, and will be returned to an applicant canceling her reservation only if the cancellation is received at least three weeks before the opening of the quarter.

Applicants for rooms should also present the following credentials: (1) a record of academic standing; (2) a statement of ability to understand and speak simple current French; (3) a declaration of the applicant's purpose: teaching, travel, etc.

A. FRENCH

101G. French for Reading Requirements.—An intensive elementary course designed to enable the graduate student to qualify for the reading requirements in French for advanced degrees. Its primary object is to establish the ability to read French. The foundation of a correct pronunciation is laid through phonetic study and drill. Reading accompanies the analysis of the language and is extended into the field of interest of the individual student. Conferences and reading reports. Bond, Introduction to the Study of French and Torre de France; Rambaud, Civilisation française. Non-credit course. Does not qualify for higher courses. MJ: 9:00 and 11:00, Associate Professor Bond.

103. Intermediate French.—Emphasis on linguistic fluency and accuracy both in comprehension and in reproduction. Continued stress on pronunciation and the understanding of spoken French. Phonetic and grammar review. Dictation and memorization. Résumés and short themes in French. Instruction largely in French. Reading of approximately 800 pages of more difficult French, of which 200 pages are in correlation with other courses. Bond, Review Essentials of French Grammar; Woodbridge, La Semeneuse. Prerequisite: one and one-half or two units of high-school French or two majors of college French. MJ: 9:00, MR. ROWLAND.

105. Advanced French.—Conducted in French. Careful reading of more difficult modern texts, with increased attention to their character as literature. Weekly written summaries based on the reading. Continued study of idioms. Class and collateral reading of about 500 pages from three or more of these texts: Balzac, Eugène Grandet, or selected stories; Rostand, les Romanesques or Cyrano de Bergerac; Renan, Ma soeur Henriette; Musset, Trois comédies; Michelet, Histoire de France; Anatole France, Cranqueville and Other Stories; Canfield, French Lyrics. Extensive reading of approximately 1,000 pages. Prerequisite: three or three and one-half years of high-school French, or four majors of college French. MJ: 1:30, MR. ROWLAND.

205. La Phonétique française.—Cours élémentaire. Les sons, la syllabe, le groupe de force, l'intonation, etc. Exercices pratiques de prononciation. No graduate credit. Prerequisite: 8 majors in French. MJ: (or M. either Term), 8:00, MR. BAILLIF; 2:30, Associate Professor Villedieu.

* Limited-credit course; see page 5.
217. Composition française.—Exercices pratiques, à l'usage de ceux qui se préparent à l'enseignement. Prerequisite: 8 majors in French. Mj. (or M. either Term), 1:30, ASSOCIATE PROFESSOR VILLEDIEU.

247. Nineteenth-Century Poetry.—From Lamartine through Verlaine, including the Romanticists and Parnassians. Prerequisite: 9 majors in French, including 181 or 182. Mj. (or M. either Term), 9:00, PROFESSOR DARGAN.

305. Practical Phonetics.—A study of the pronunciation of modern spoken French. The sounds and their production, the stress-group, intonation of the spoken phrase. Use of the phonograph in preparation. Exercises on the various types of prose and poetry. Roset, Exercices pratiques d'articulation et de diction. Prerequisite: 3 years of college French and consent of the instructor. Mj. 3:30, ASSOCIATE PROFESSORS PAMENTER AND VILLEDIEU.

319. Problems of Teaching French.—Pronunciation, grammar, testing, and literary appreciation in elementary and advanced courses; pedagogical bibliography; the "methods," their history and value. Prerequisite: 9 majors in French. Students in this course must pass on the second day of the quarter a qualifying examination on power to read, to pronounce, and to write French. Mj. 2:30, PROFESSOR COLEMAN.

327. Explication de textes (prose).—Explication et commentaire détaillés, en français, de textes en prose tirés des écrivains du XIXᵉ siècle (Chateaubriand). Cours spécialement destiné aux étudiants qui se préparent à l'enseignement du français. Prerequisite: graduate standing. Mj. 9:00, ASSISTANT PROFESSOR VIGNERON.

339. Nineteenth Century Realism.—Prerequisite: graduate standing. Mj. (or M. either Term), 1:30, PROFESSOR COLEMAN.

350. Le Théâtre français contemporain.—Lectures et comptes rendus. Prerequisite: 9 majors in French, including 181 or 182. Mj. (or M. either Term), 8:00, ASSISTANT PROFESSORS VIGNERON.

399. Anatole France.—A study of his mind and his work: lectures, readings, and reports. Prerequisite: 9 majors in French, including 181 or 182. Mj. (or M. either Term), 10:00, PROFESSOR DARGAN.

401. Seminar: Méthodologie de l'histoire littéraire.—Suggestions et direction. Mj. M., 4:30-6:30, PROFESSOR HAZARD.

415. Old French Phonology and Dialects.—Development of the tonic vocalism from Vulgar Latin to Old French as a basis for the study of the Old French dialects. Mj. 10:00, PROFESSOR JENKINS.


437. Action et Réaction.—Études sur les cosmopolites français au XVIIIᵉ et au XIXᵉ siècle. Mj. Tu., W., Th., 11:00, PROFESSOR HAZARD.

475. La Píldade.—A study of the Renaissance doctrine of Imitation, as applied to French poetry after 1549. Special emphasis will be laid on the works of Du Bellay, Ronsard, and d'Aubigné, followed by a short account of the Renaissance drama. Mj. (or M. either Term), 9:00, PROFESSOR NITZE.

B. ITALIAN

103. Intermediate Italian.—Verga, 1 Malavoglia. Mazzoni e Piccoli, Antologia Carduciana. Oral work, dictation, and composition. Prerequisite: Italian 102 or equivalent. Mj. 11:00, PROFESSOR SHAW.

390. Dante: La Vita Nuova.—Comment on the text, and lectures; collateral reading and reports. Prerequisite: 103 or its equivalent. Mj. (or M. either Term), 10:00, PROFESSOR SHAW.
C. SPANISH

103. Intermediate Spanish.—Emphasis on facility and accuracy in the reading of standard literary Spanish, and on formal composition. Increased oral practice. Grammar review; dictation; original themes. Attention to current events in Spanish countries. Intensive reading of 125 pages; extension reading, 1,000 pages, of which a portion deals with Spanish and Spanish-American geography, history, and institutions. Hanley, Review Essentials of Spanish Grammar; Castillo and Watson, Trosos de castellano; Valdés, La Hermana San Sulpicio. Prerequisite: one and one-half or two units of high-school Spanish or two majors of college Spanish. Mj. 10:00, ASSISTANT PROFESSOR RANSMEIER.

105. Advanced Spanish.—Careful reading and discussion, with the view of increasing vocabulary and ability in composition, of approximately 400 pages selected from such tests as: Blasco Ibáñez, La Barraca; Benavente, Tres comedias; Alarcón, El sombrero de tres picos. Extensive reading of 800 to 1,000 pages. Prerequisites: three or three and one-half units of high-school Spanish or four majors of college Spanish. Mj. 1:30, ASSISTANT PROFESSOR RANSMEIER.

182. Survey of Spanish Literature, 1616-1898.—A general survey. Lectures and illustrative readings. Required for all sequences in Spanish. Prerequisite: 6 majors in Spanish. Mj. (or M. either Term), 2:30, ASSISTANT PROFESSOR GUTIERREZ.

217. Composición.—Curso para maestros. Ejercicios de composición, de estilo, y de dicción. Limited to 20 students. Prerequisite: 8 majors in Spanish, including Romance 111 or 117. Mj. (or M. either Term), 1:30, ASSISTANT PROFESSOR GUTIERREZ.

259. Teatro moderno.—Desde moratín hasta nuestros días. Prerequisite: 7 majors in Spanish, including 181 or 182. Mj. (or M. either Term), 8:00, ASSISTANT PROFESSOR CANO.

319. Problems of Teaching Spanish.—Pronunciation, grammar, testing, and literary interpretation in elementary and advanced courses; pedagogical bibliography. Prerequisite for undergraduates: 9 majors in Spanish. Mj. 2:30, ASSOCIATE PROFESSOR PARMENTER.

329. Explicación de textos.—Poesía y prosa del siglo XIX. Prerequisite: graduate standing and ability to speak and understand Spanish. Mj. 9:00, ASSISTANT PROFESSOR CANO.

331. Old Spanish Texts.—Prerequisite: graduate standing. Mj. 1:30, PROFESSOR MARDEN.

344. The Spanish Epic.—Popular and clerical: Berceo, the Apolónio and the Alexandre. Prerequisite: graduate standing. Mj. (or M. either Term), 2:30, PROFESSOR MARDEN.

365. The Picaraesque Novel.—The Spanish romance of roguery as a literary genre. Lazarillo de Tormes and another text will be read in class. Prerequisite: 8 majors in Spanish, including 181 or 182. Mj. (or M. either Term), 10:00, PROFESSOR NORTHUP.

395. Don Quijote.—The life and works of Cervantes. Selected chapters. Prerequisite: 8 majors in Spanish, including 181 or 182. Mj. (or M. either Term), 11:00, PROFESSOR NORTHUP.

D. PROVENCAL AND GENERAL ROMANCE

301. Introduction to the Graduate Study of Romance Languages.—Survey of the general Romance field; methods of study and research; problems of thesis-writing and printing. A: Outline of Romance bibliography. B: Characteristics of the Romance languages. Mj. (or M. either Term), Tu., F., 4:30-6:30, PROFESSOR JENKINS.

405. Experimental Phonetics.—An introduction to the investigation of phonetic phenomena by the use of objective methods. Each student will undertake a problem in his major language—French, Italian, or Spanish. Prerequisite: some knowledge of

* Limited-credit course; see page 5.
phonetic principles (French or Spanish 305 recommended), and consent of the instructor. Mj. hours to be arranged; first meeting, first Tuesday of the quarter at 4:30, ASSOCIATE PROFESSOR PARMENTER AND MR. BALLIF.

GERMANIC LANGUAGES AND LITERATURES

101G. German for Reading Requirements.—An elementary course for graduate students who wish to qualify for the reading requirements in German. A rapid survey of the sounds of German is followed by an inductive analysis of the structure and forms of the language based on the reading texts. Oral and written drill are strictly subordinated to the principal aim, the ability to read. Ample reading experience extending to the student's special field of interest. Non-credit course. Hagboldt and Kaufmann, A Modern German Grammar; Inductive Readings in German, Book I; Allen, German Life. Mj. 9:00, 11:00, ASSISTANT PROFESSOR KUNSTMANN.

103. *Intermediate German.—Aim: to enable the student to use German as a tool-subject. Practice in writing and speaking simple German. Grammar review. Vocabulary building. Free and formal composition. Extensive reading of 500 pages, of which 100 pages are on the student’s major subject. Oral and written reports, partly in German. Prerequisite: one and one-half or two units of high-school German or two majors of college German. Mj. 10:00, DR. BALDUF.

105. Advanced German.—Reading course in eighteenth-century masterpieces, both narrative and dramatic, with increased attention to their character as literature. Continued study of vocabulary and idiom leading to a ready reading ability. Weekly themes on collateral readings. Schütze, Inductive Readings in German, Book V; Hagboldt, Essentials in German Reviews. Prerequisite: three or three and one-half units of high-school German, or four majors of college German. Mj. 8:00, DR. BALDUF.

216. Introduction to Goethe.—Mj. 9:00, PROFESSOR TAYLOR.

269. Modern German Literature.—Literary movements from 1898 to the present. Mj. 2:30, PROFESSOR SCHÜTZE.

283. Middle High German.—Mj. 9:00, ASSOCIATE PROFESSOR GOULD.

302. German Grammar.—The forms and syntax of present-day German. Mj. 2:30, PROFESSOR BLOOMFIELD.

303. Gothic.—Introduction to Germanic linguistics. Mj. 1:30, PROFESSOR BLOOMFIELD.

312. Icelandic.—Mj. 8:00, ASSOCIATE PROFESSOR GOULD.

350. Introduction to the Study of Medieval Literature.—Mj. 11:00, ASSISTANT PROFESSOR SPARGO.

371. Modern Scandinavian Literature.—In English, with readings in English. Mj. 10:00, ASSISTANT PROFESSOR SPARGO.

475. The German Volkslied.—Mj. W., 3:30-5:30, PROFESSOR TAYLOR.

490. The Romantic Movement.—Mj. Th., 4:30-6:30, PROFESSOR SCHÜTZE.

ENGLISH LANGUAGE AND LITERATURE

Undergraduates.—All undergraduates are required to complete courses 101 and 103 unless exempted by the Examiner. Students whose principal department is English must in addition complete a total of nine courses, including 130, 131 or 132, 141, one from courses 202-5, two in related materials (as two in novel, drama, American literature, etc.), two in materials written before 1800 (i.e., two from such courses as 257, 258, 281, 287 or from 343-46), and electives as agreed upon in conference with the Departmental Counselors. Of the last eighteen courses taken by students majoring in English, twelve must be Senior College courses in English or in related departments. Related departments may include: other language departments, history, philosophy, art, and

*Limited-credit course; see page 5.
any department that obviously joins with English in fitting the undergraduate for a specific career.

Graduates.—For the degree of Master of Arts eight majors (courses) of graduate work in English are required, including one major of Old or Middle English (normally 321 or 351). The student must make a satisfactory showing in a Preliminary Written Examination (held at 9 a.m. in Cobb Hall 110 on June 30, 1926). This examination may not be postponed without departmental permission; it should be taken during the first quarter of residence. For the degree of Doctor of Philosophy, as well as for that of Master of Arts, full details as to requirements will be found in the departmental Announcements. Courses numbered below 225 do not carry graduate credit, and not more than two courses numbered from 225 to 299 may be counted toward the Master’s degree.

Course Prerequisites.—English 101 is necessary for admission to other Junior College courses. English 130 and 141 are required on all sequences in English unless the student enters with advanced standing, including credits for these courses or for 140 as a substitute for 130. Credit for English 101 and 130 gives admission to English 247-49; all other courses numbered above 200 require a minimum total of 18 majors, including 101, 103, and 130, and many have special prerequisites. Courses numbered between 301 and 400 are designed for graduate students in their first or second year of work, but undergraduates with 27 majors and a B average in English may also enter such courses.

English Composition.—Course 101 is required in the first six months of the student’s residence; 103 is required during the second year. These courses are prerequisite to higher courses in composition. An advanced course in composition (202 or 205 normally) is required of students majoring in English; 210 or 211 may be elected, subject to the approval of the instructor when he has seen the student’s work.

101. * Rhetoric and English Composition: Introductory College Course.—Short themes and other exercises. Mj. 8:00, Miss Naeseth.

103. English Composition.—Required of all candidates for degrees who have completed 9 majors in the Junior Colleges, including English 101. Mj. 8:00, sec. a, Mr. Frantz; 10:00, sec. b, Mr. Blair; sec. c, Mr. Prior; sec. d, Mr. Williston.

130. Introduction to the Study of Poetry.—Mj. (or M. either Term), 9:00, Miss Chapin and Mr. Frantz.

132. Introduction to the Study of Fiction.—Mj. 10:00, Mr. Perrin.

141. Shakspere.—The reading and interpretation of representative plays. Prerequisite: English 101 and 130. Mj. (or M. either Term), sec. a, 8:00, Miss Chapin; sec. b, 11:00, Mr. Perrin.

202. English Composition.—Advanced composition: exposition. Prerequisite: 18 majors including English 103 (or its equivalent by advanced standing). Mj. 11:00, Mr. Freeman.

210. English Composition.—Prerequisite: The equivalent of 202 or 205 and the permission of the instructor. Mj. 1:30, Professor Lovett.

218. Fundamentals of Effective Speech.—(Not open to students who have had English 116.) Mj. (or M. First Term), 9:00, Associate Professor Nelson.

221. Vocal Interpretation of Shakspere.—Mj. (or M. First Term), 10:00, Associate Professor Nelson.

247. English Literature: 1798-1832.—Prerequisite: English 130 (or a survey course). Mj. (or M. either Term), 10:00, Associate Professor Grabo.

249. English Literature: 1832-1900.—Prose. Prerequisite: English 130 (or a survey course). Mj. (or M. either Term), 9:00, Assistant Professor Everett.

* Limited-credit course; see page 5.
266. American Literature: the New England Group.—A study of the major New England poets and essayists and of their immediate followers. Prerequisite: 18 majors of college work, including credit in English 103, 130 or 140, and 141. Mj. (or M. either Term), 8:00, PROFESSOR ELLIS.

301. The Bibliography and Methods of English Literary History.—Required of all candidates for the degree of Doctor of Philosophy. Mj. 1:30, PROFESSOR CRANE.

321. Old English (beginning course).—The prose in Bright’s Anglo-Saxon Reader, and elementary grammar. Mj. 8:00, PROFESSOR LARSEN.

323. Old English: “Beowulf.”—Reading of the text and examination of some of the problems connected with the poem. Mj. 9:00, PROFESSOR LARSEN.

331. The History of Middle English Literature.—M. First Term, Prerequisite: English 321. Tu., Th., 2:30-4:30, PROFESSOR CROSS.

333. “Piers the Plowman.”—A study of the poem with its social and religious background. Prerequisite: English 351. Mj. 11:00, PROFESSOR HULBERT.

344. English Literature, 1599-1660.—Prerequisite: 27 majors, including English 103, 130 (140), and 141. Mj. (or M. First Term), 1:30, PROFESSOR LOVETT.

345. English Literature, 1744-88.—Prerequisite: 27 majors, including English 103, 130 (140), and 141. Mj. (or M. First Term), 11:00, ASSISTANT PROFESSOR EVETT.

351. Chaucer.—An introductory course for students having no previous training in Middle English. Mj. (or M. First Term), 10:00, PROFESSOR HULBERT.

353. Shakespeare.—The plays after 1600 in sequence. For graduates only. Mj. 3:30, PROFESSOR BASKERVILL.

383. English Drama from 1660-1642.—Prerequisite: 27 majors, including English 103, 130 (140), and 141. Mj. (or M. either Term), 9:00, First Term, ASSISTANT PROFESSOR TAYLOR; 9:00, Second Term, PROFESSOR REYNOLDS.

401. Seminar.—For candidates for the Ph.D. degree. Mj. hours to be arranged, PROFESSOR MANLY.

402. A Dictionary of American English.—Mj. hours to be arranged, PROFESSOR CRANE AND MR. WATSON.

446. Studies in the Literary Theory of the Later Eighteenth Century.—Mj. W., F., 2:30-4:30, PROFESSOR CRANE.

447. Studies in the Romantic Movement.—Mj. 11:00, ASSISTANT PROFESSOR CRANE.

451. Chaucer.—Rapid reading and discussion of his work. Prerequisite: English 351. Mj. 3:30, ASSISTANT PROFESSOR RICKERT.

463. Studies in the Literary Criticism of the Renaissance.—Mj. W., F., 4:30-6:30, PROFESSOR BASKERVILL.

465. Studies in American Literature of the Revolutionary Period.—Mj. 9:00, PROFESSOR ELLIS.

481. Studies in the Medieval Drama.—Mj. Tu., Th., 4:30-6:30, PROFESSOR MANLY.

482A. Elizabethan Drama: A Study of Popular Types of Plays.—M. First Term, 10:00, ASSISTANT PROFESSOR TAYLOR.

482B. Elizabethan Drama: A Study of the Manner of Staging Plays.—M. Second Term, 10:00, PROFESSOR REYNOLDS.

493. The Editing of a Text: Chaucer.—Mj. W., F., 4:30-6:30, PROFESSOR MANLY.

RELATED COURSES IN OTHER DEPARTMENTS


Comparative Literature 390. Ballad and Epic.
COMPARATIVE LITERATURE

205. Dante in English.—Readings in Dante's works, especially *The Divine Comedy*. Mj. (or M. either Term), 10:00, ASSOCIATE PROFESSOR HOWLAND.

210. Dramatists of the Present Day.—A study of the most significant authors and movements of the present day in Continental Europe. Mj. (or M. either Term), 11:00, ASSOCIATE PROFESSOR HOWLAND.

390. Ballad and Epic.—M. First Term, W., F., 2:30-4:30, PROFESSOR CROSS.

RELATED COURSES IN OTHER DEPARTMENTS

English 301. The Bibliography and Methods of English Literary History.—

See also English 331, French 434.

DEPARTMENT OF MATHEMATICS

101. Plane Trigonometry.—Prerequisite: Admission Algebra and Geometry. Mj. (or M. First Term), 8:00, ———.

103. Plane Analytic Geometry.—The use of the notion of co-ordinates (a) as an aid in algebraic problems, (b) for the study of geometry, in particular the geometry of straight lines and conic sections. Prerequisite: Plane Trigonometry. Mj. (or M. First Term), 9:00, DR. BAMFORTH.

218. Differential Calculus.—An introductory course, with numerous applications of the fundamental principles to the tracing of curves and the solution of simple problems of geometry and mechanics. Prerequisite: Trigonometry, and preferably Analytic Geometry, with which it may, however, be taken simultaneously. Mj. (or M. First Term), 11:00, ASSOCIATE PROFESSOR MURNAGHAN.

219. Integral Calculus.—An elementary course, presupposing a good knowledge of the elements of differential calculus. The purpose is to develop a comprehension of the nature of integration in connection with numerous applications to simple problems of geometry, mechanics, and physics. Prerequisite: Mathematics 218. Mj. (or M. First Term), 11:00, ASSISTANT PROFESSOR GRAVES.

220. Advanced Calculus.—Emphasizes the definite integral as a sum and its far-reaching range of applications, together with the more theoretical aspects of the differential calculus, including partial derivatives, development in series, multiple integrals, Green's theorem, and analogous theorems in space. Prerequisite: Mathematics 215, 216 or 218, 219. Mj. 2:30, ASSISTANT PROFESSOR BARNARD.

229. Synthetic Projective Geometry.—The fundamental notions of projective geometry treated synthetically. Prerequisite: Mathematics 103. Mj. (or M. First Term), 9:00, ASSOCIATE PROFESSOR LANE.

231. Solid Analytic Geometry.—Co-ordinate geometry of curves and surfaces in three-dimensional space, in particular, those of the first and the second degree. Prerequisite: Mathematics 103 and 215 or 218, and preferably of 222. Mj. 10:00, ASSISTANT PROFESSOR LOGSDON.

247. Differential Equations.—A study of the more common types of ordinary differential equations, especially those of the first and second orders, with emphasis on geometrical interpretations and applications to geometry, elementary mechanics, and physics. Prerequisite: Mathematics 218, 219, or 215, 216, and preferably 220. Mj. (or M. First Term), 8:00, DR. BAMFORTH.

306. Introduction to Higher Algebra.—Matrices; bilinear, quadratic, and Hermitian forms; linear transformations; invariant factors and elementary divisors. Based on chapters iii–vi of Dickson's *Modern Algebraic Theories*. Prerequisite: Mathematics 222 and graduate registration. Mj. (or M. First Term), 1:30, ASSISTANT PROFESSOR BARNARD.

310. Theory of Functions of a Complex Variable.—The fundamental developments of the theory according to the schools of Cauchy and Weierstrass; simple applications to geometrical and physical problems. Prerequisite: Differential Equations and Definite Integrals. Mj. (or M. First Term), 2:30, PROFESSOR BELL.
320. Topics in the Theory of Numbers.—Representation of integers by quadratic form in \( n \) variables. Waring's theorem on sums of powers and generalizations, including sums of values of polynomials. Reports on recent literature. Prerequisite: theory of congruences. Mj. Summer (or M. First Term), 9:00, Professor Dickson.

338. Applications of Analysis to the Arithmetic of Quadratic Forms.—The problem of numbers of representations in quadratic forms in \( 2, 3, 4, 5, 6, 7, 8, 9, 10 \) indeterminates will be treated, with some consideration of the general case, and properties of the representations will be derived by analytical methods, particularly with reference to recent work. Prerequisite: Mathematics 304. Mj. (or M. First Term), 1:30, Professor Bell.


375. Higher Plane Curves.—The polar theory. Covariant curves- Plücker's formulas. Elimination. The Puiseux developments. Linear and superlinear branches. Decomposition of a singularity by means of quadratic transformations. Special study of cubics and quartics. Prerequisite: Mathematics 308 or courses insuring equivalent mathematical maturity. Mj. 11:00, Assistant Professor Logsdon.

380. Projective Differential Geometry. I.—This is an introductory course to the modern theories of projective differential geometry of three dimensions. Prerequisites: Mathematics 247 and 308 or the equivalent. Mj. (or M. First Term), 8:00, Associate Professor Lane.

399. Modern Hydrodynamical Theory.—Particular attention will be given to the applications to aeronautics. The theory of two-dimensional flow will be discussed in detail and the Kutta-Jonkowsky formula for the lifting force on airplane wings developed. Prandtl's theory of induced drag and his boundary layer theory will follow. Prerequisite: Mathematics 310. Mj. (or M. First Term), 10:00, Associate Professor Murnaghan.

421. Thesis Work in Algebra and the Theory of Numbers.—Professor Dickson and Assistant Professor Barnard.

441. Thesis Work in Analysis.—Assistant Professor Graves.

465. Reading and Research in Foundations of Mathematics and General Analysis. —Assistant Professor Barnard.

481. Thesis Work in Differential Geometry.—Associate Professor Lane.

485. Thesis Work in Algebraic Geometry.—Assistant Professor Logsdon.

499. Thesis Work in Applied Mathematics.—Assistant Professor Bartky.

Students interested in professional courses in the field of mathematics should consult page 105 in the Announcements of the School of Education for descriptions of the following courses: Introduction to the Teaching of Mathematics in the Secondary Schools; The Technique of Teaching in Secondary Schools; Curriculum Problems in Mathematics; The Supervision of Mathematics.

ASTRONOMY AND ASTROPHYSICS

101. Descriptive Astronomy (shorter course.)—An elementary course, dealing with fundamental facts, principles, and methods. Frequent access to the students' observatory. Mj. (or M. First Term), 10:00, Assistant Professor Bartky.

323. Introduction to Celestial Mechanics II.—Special cases of the problem of three bodies; the lunar theory geometrically considered; variation of the elements of an orbit and absolute perturbations. Mj. 9:00, Assistant Professor Bartky.

370-495. Research Courses at the Yerkes Observatory.—The Yerkes Observatory is open only to graduate students who have completed the necessary preliminary studies.
and have had the requisite experience in practical laboratory and observatory work. Students wishing to work at the Observatory should first correspond with or consult the Director of the Yerkes Observatory, Williams Bay, Wisconsin, and obtain his approval. DMj. or 3Mjs. PROFESSORS AND INSTRUCTORS resident at Yerkes Observatory.

PHYSICS

121. Mechanics, Molecular Physics, and Heat.—A general college course in mechanics, molecular physics, and heat presented from the experimental point of view, not containing demonstration lectures. Prerequisite: entrance Physics or Physics 102 and Trigonometry. Mj. (or M. First Term), 7:00-9:00, Mr. Stearns.

122. Electricity, Sound, and Light.—A general college course in electricity, sound, and light presented from the experimental point of view, not containing demonstration lectures. Prerequisite: Physics 121 or Physics 111 and 112. Mj. (or M. either Term), 10:00-12:00, Mr. Fredrickson.

205. Lecture Demonstration Course.—A course of demonstration lectures covering the entire field of Physics designed to supplement courses 121 and 122. Special attention is given to modern points of view, the kinetic theory of heat, the atomic theory of electricity, and the electrical theory of matter receiving especial attention. The attempt is made to repeat a majority of the classical demonstrations of Kelvin, Faraday, Thomson, and others. This course includes the demonstration lectures of courses 111, 112, and 113. Prerequisite: Physics 121 and 122 or their equivalent. Mj. (or M. either Term), 9:00, Mr. Howe.

215. Radio Telegraphy and Telephony I.—A course of lectures and laboratory work consisting of elementary considerations of the fundamental laws and their applications to the circuits of modern radio telegraph and telephone systems. Experimental adjusting of radio circuits. Prerequisite: Physics 111 and 112. Mj. (or M. First Term), 12:30-2:30, Dr. Hoag.

254. Electricity and Magnetism.—A course in the mathematical theory of Electricity and Magnetism, with applications to electrical and magnetic apparatus and measurements. Prerequisite: Physics 113 or 122, and calculus. Mj. (or M. First Term), 9:00, Assistant Professor Slater.

262. Experimental Physics (Advanced): Molecular Physics and Heat.—A course of advanced laboratory work involving the determination of vapor pressures and densities, coefficients of friction of gases and liquids, molecular electrical conductivities, freezing- and boiling-points, latent and specific heats, high and low temperatures, radiation constants, etc. Prerequisite: Physics 113 or 121. Mj. 12:30-2:30, Dr. Bearden.

264. Experimental Physics (Advanced): Electricity and Magnetism I.—Laboratory work of the same grade as courses 262 and 263, but consisting of measurements in Electricity and Magnetism. Prerequisite: Physics 113 or 122. Mj. 2:30-4:30, Assistant Professor Watson.

312. Electromagnetic Theory.—Preliminary study of electrostatics and magnetostatics; magnetic field of currents and electromagnetic induction of currents; Maxwell’s dynamical theory of electromagnetic induction of currents; Maxwell’s equations and theory of light; stresses in the electromagnetic field; Poynting’s theorem; the electron theory of insulators and conductors; equations for moving media; electromagnetic momentum; variation of mass with velocity; radiation from moving charges; relativity and electromagnetic theory. Mj. (or M. either Term), 9:00, Professor Wilson.

331. Spectroscopy and Astrophysics.—Atomic and molecular spectra. Methods of excitation and correlation with astrophysical observations. Theories of temperature ionization. Other stellar spectral investigations and their physical significance.Astrophysical evaluation of physical constants. Theories of stellar evolution and structure of the universe. Prerequisite: Physics 113 or 122 and calculus. Mj. (or M. either Term), 8:00, Assistant Professor Monk.

336. X-ray Crystal Analysis.—Introduction to crystallography and geometrical theory of crystals, X-rays; analysis of single crystals by reflection, powdered crystal method, Laue spots; application of X-ray methods to determination of atomic radii;
CHEMISTRY

chemical analysis; density; molecular structure; etc. For students in Physics, Geology, Chemistry. Mj. Summer (or M. First Term), 1:30, Mr. Morse.

339. Research in Crystal Analysis.—Experimental technique in growing crystals, preparation of crystal sections, X-ray analysis of crystals by methods of rotating crystal. Laue spots and powdered crystals, interpretations of X-ray photographs and construction of lattice models. For students desiring higher degrees. Prerequisite: 336, X-ray crystal analysis. Mj. or DMj. hours to be arranged, Mr. Morse.

342. Experimental Physics.—A course of laboratory work, chiefly devoted to the repetition of classical experiments, such as determination of the mechanical equivalent of heat; Maxwell’s “V”; Hertian oscillations; relative and absolute wave-lengths, etc., 10 hours a week. Prerequisite: Physics 262, 263, and 264. Mj. or DMj. (or M. or DM. either Term), PROFESSORS GALE AND COMPTON.

345. Radioactivity and Discharge through Gases.—A laboratory course for Senior College and graduate students. Absorption of radium rays, active deposits and their decay, radium determination, scintillations, range of a-rays, determination if “e” and “e/m” for electrons, discharge tubes, thermionic emission, three electrode tubes, electron scopes and electrometers. Prerequisite: Physics 264. Mj. (or M. either Term), 2:30-4:30, Dr. Hoag.

356. Modern Spectroscopy.—The Rutherford atom, the Bohr-Sommerfeld theory of atomic structure, energy levels, ionization and radiation potentials, spectral series, fine structure, Stark effect, Zeeman effect, theories of Bach, Landé, Hund, etc. Prerequisite: college physics and calculus. Mj. (or M. either Term), 10:00, PROFESSOR GALE.

359. Molecular Spectra and Related Topics.—The quantum theory of molecular spectra, intensities, term formulas, isotope effect, Zeeman effect, Hund’s theory, molecular models, molecular dissociation, etc. Prerequisite: two years of college physics and calculus. Mj. (or M. First Term), 1:30, ASSISTANT PROFESSOR WATSON.

362. X-rays and Electron Theory.—A study of the nature and properties of X-rays and of the information which they give concerning the nature of matter, treated mainly from the standpoint of the classical electron theory. The scattering of X-rays as a means of finding the number and distribution of the electrons in matter, the structure of crystals, intensity of X-ray reflection, refraction and absorption of X-rays. Prerequisite: Physics 254 and Mathematics 247. Mj. 8:00, PROFESSOR COMPTON.

392. Wave Mechanics.—The new wave mechanics of Schrödinger and its application to various problems of radiation and atomic structure. Prerequisite: Physics 356 or equivalent. Mj. (or M. either Term), 11:00, ASSISTANT PROFESSOR SLATER.

401. Research Course.—This course is intended for graduate students who are prepared to undertake special research. Except in the case of a purely mathematical problem, the entire time is to be devoted to work in the laboratory. Mj. or DMj. (or M. or DM. either Term), PROFESSORS GALE, COMPTON, AND WILSON.

499. Physics Club.—This organization, consisting of all instructors and graduate and advanced students in the Department, meets on Thursday of each week from 4:30 to 6:00 for the discussion of recent research.

CHEMISTRY

Undergraduate students, with the exception of medical students, are required to take two half-major courses, in case they wish to register for any of the courses offered as half-majors.

Credit will be allowed for a term’s work in courses 104, 105, 120, 121, 140, 141, 240, 241, 242, 251, 252, 261, 291, 302, 303, 305, 325, 326, 337, 338, 351, 362, 381, 390, and research courses. Courses 105, 121, 251, 252, 302, 305, 306, 325, 326, 351, and research courses (except 421) may be started the second term.

104. General Inorganic Chemistry (sequel to admission chemistry).—Classroom, 6 hours a week; laboratory work, 12 hours a week. Prerequisite: Preparatory Algebra and Preparatory Physics and Chemistry. (Students who have had their preparatory
work over five years ago must consult the instructor before registering.) D.M. First Term, classroom, 1:30; laboratory, M., Tu., W., Th., 9:00-12:00, Dr. Link.

In cases of conflict in the laboratory hours in 101, 102, 194, and 105 arrangements may be made to work Tu., 1:30-4:30, or W., 9:00-12:00, but not at any other time.

105. General Inorganic Chemistry (Continuation of 104).—Hours and prerequisites, see above. D.M. Second Term, Dr. Link.

Courses 104 and 105, which are consecutive, cover metallic and non-metallic elements and the fundamental principles of chemistry. The conceptions of chemical equilibrium and the modern theory of solutions are freely used.

Note.—Advanced students taking laboratory work in other courses in Chemistry may register for the "lectures only" of 104 or 105 as a minor.

120. Elementary Organic Chemistry, I.—Prerequisite: Chemistry 103 or 105 with a grade of C or better. D.M. First Term, lectures, 5 hours a week, 1:30; laboratory work, 12 hours a week, M., Tu., W., Th., 2:30-5:30, Assistant Professor Glattfeld.

121. Elementary Organic Chemistry, II.—Prerequisite: Chemistry 120 or its equivalent. Carbohydrates, amino-acids, the aromatic series, D.M. Second Term, lectures 5 hours a week, 1:30; laboratory work 12 hours a week, M., Tu., W., Th., 2:30-5:30, Assistant Professor Glattfeld.

Note.—The lectures of courses 120 and 121 may be taken without the laboratory work by students who have had adequate laboratory work in Organic Chemistry.

140. Qualitative Analysis.—Prerequisite: General Chemistry with a grade of C or better. Mj. Lectures, M., Th., 8:00; laboratory, 8 hours a week, Dr. Miller.

Notes.—1. The first few weeks a lecture will be given every day. Provision will be made for a morning and an afternoon laboratory section.
2. The lectures of this course deal with the chemistry of the analytical reactions, and special attention is given to the development and application of the laws of equilibrium and of solutions. The course is, in an important sense, one in advanced General Chemistry.
3. Students who have had Qualitative Analysis may register for the "lectures only" as a half-major.
4. Students who wish to go on in Chemistry and have a grade lower than C may repeat the classroom work as a half-major in order to advance their grade.

141. Qualitative Analysis (continuation of course 140).—Laboratory work, 8 hours a week mornings or afternoons. Mj. Lectures, Tu., F., 2:30, Dr. Miller.

240. Quantitative Analysis I.—Laboratory work 8 hours a week, in volumetric and gravimetric analysis. Prerequisite: Qualitative Analysis 140 with a grade of C or better and Chemistry 141. Mj. (or M. First Term), lectures, W., 2:30; second weekly classroom meeting by arrangement, Assistant Professor Noyes.

Note.—There will be morning and afternoon sections. The first week a lecture will be given, W., Th., and F. Students report the first day of the quarter for laboratory assignment. Students who have had Quantitative Analysis may register for the lectures only as a half-major.

241. Quantitative Analysis.—A special course for pre-medical and medical students, including the elements of gravimetric and volumetric analysis. Prerequisite: Chemistry 140 with a grade of C or better. §Mj. Lectures, W., 2:30; laboratory, 4 hours a week; second weekly classroom meeting by arrangement, Assistant Professor Noyes.

See note under course 240.

242. Quantitative Analysis II.—Laboratory work, 10 or 12 hours a week. Prerequisite: Chemistry 240 Mj. (or M. or D.M. First Term), lectures, M., 2:30; first week, M. and Tu., Assistant Professor Noyes.

251. Advanced Quantitative Analysis.—Laboratory work 10 hours a week per major, lectures 1 hour per week. Work may be chosen among the following subjects: Water Analysis, Food Analysis, Iron and Steel Analysis, Gas Analysis, Mineral Analysis. Prerequisite: Chemistry 242. §Mj. or Mj. (or M. or D.M. either Term), Assistant Professor Noyes.

252. Electrical Methods of Analysis.—Laboratory work 10 hours a week per major and one lecture a week, Th., 2:30. Electrometric titrations and electrolytic analysis. Prerequisite: Chemistry 242 and 261. §Mj. or Mj. (or M. or D.M. either Term), Assistant Professor Noyes.

Note.—Students may not take more than a total of one and one-half majors of work for credit in courses 251 and 252.

261. Elementary Physical Chemistry.—Prerequisite: college physics, college algebra, and Quantitative Analysis. The lectures may be taken as a half-major by stu-
dents who have had laboratory work in physical chemistry. Mj. Lectures, 3 hours a week, W., Th., F., 11:00; laboratory work, M., Tu., 8:00-11:00, Th., F., 1:30-4:30, ASSISTANT PROFESSOR YOUNG.

Note.—Graduate students should note that this course is a prerequisite to the sequence of graduate courses in Physical Chemistry 301-33, beginning in the Autumn Quarter, and are advised to take this course in the Summer Quarter if they have not had its equivalent.

Note.—Advanced students in Physics are excused from the Quantitative Analysis requirement.

295, 296, 297, 298. Research for Undergraduates.—Undergraduates who have 24 majors of credit may, after consultation with the head of the department, be admitted to partnership in research work in order to give them an insight into the methods and objectives of investigation in the various fields of chemistry. They will, in these courses, act as assistants to staff members or to the more mature research students in connection with some specific problem being studied at the time. Each course will carry one major of credit and only one course may be taken in any quarter. The work will be under the direction of members of the staff.

302. Advanced Inorganic Chemistry.—Properties of hydrogen and hydrides, peroxides, theories of oxidation, corrosion, etc. Prerequisite: Elementary physical and organic chemistry. M. Second Term, lectures, Tu., W., Th., F., 8:00, PROFESSOR SCHLESINGER.

Note.—Students may register for courses 302 and 381 together as 302, 381, a major for the whole Quarter.

305, 306. Inorganic Preparations.—Laboratory work, 10 or 20 hours a week. Classroom, 1 hour a week by arrangement. Prerequisite: Quantitative Analysis (2 majors) and Physical Chemistry, and (for course 306) a reading knowledge of German. Each Mj. (or DM. either Term), PROFESSOR SCHLESINGER.

325, 326. Organic Preparations.—Laboratory work, 10 to 20 hours a week. Classroom, one hour a week. Prerequisite: Quantitative Analysis (2 majors), Organic Chemistry, and (for course 326) a reading knowledge of German or French. Each Mj. (or DM. either Term), ASSISTANT PROFESSOR RISING.

337. Selected Topics of Organic Chemistry.—The electron theory of valence, atomic and molecular volumes; molecular refraction; condensation; molecular re-arrangements. Prerequisite: Elementary organic chemistry. M. First Term, lectures M., Tu., W., Th., 3:30, PROFESSOR W. A. NOYES, Sr.

338. Special Topics of Organic Chemistry.—Stereochemistry; free radicals; diazo-chemistry, etc. Prerequisite: Elementary organic chemistry. M. Second Term, lectures M., Tu., W., Th., 3:30, DR. MUSKAT.

Note.—Students may register for courses 337 and 338 as a major for the whole Quarter.

351. Organic Elementary Analysis.—Determinations of carbon, hydrogen, and nitrogen by combustion. Laboratory work 60 hours. Required of all candidates for the Ph.D. and S.M. degrees in Organic Chemistry. M. First Term, DR. MUSKAT; Second Term, ASSISTANT PROFESSOR RISING.

Note.—This course must be completed in a single term.

362. Physical Chemistry: Electrochemistry.—Prerequisite: Chemistry 361 or its equivalent. Mj. Lectures, W., Th., F., 9:00; laboratory, M., Tu., 9:00-12:00, or Th., F., 1:30-4:30, First Term, PROFESSOR HARKINS; Second Term, ASSISTANT PROFESSOR YOUNG.

381. The Structure of the Atom and Valence.—A non-mathematical course on the nucleus of the atom as related to atomic evolution, and on the arrangement of the planetary electrons as related to valence. Prerequisite: Chemistry 261 or its equivalent in physics. M. First Term, lectures Tu., W., Th., F., 8:00, PROFESSOR HARKINS.

Note.—Students may register for courses 302 and 381 together as 302, 381, a major for the whole Quarter.

390. Studies in the History of Chemistry.—Prerequisite: 27 Majors of College work including 8 majors of Chemistry. Seminar. M. First Term, M., W., 4:30, PROFESSOR W. A. NOYES.

402. Master's Dissertation in Organic Chemistry.—Mj. or DMj. (or M. or DM. either Term), ASSISTANT PROFESSOR GLATTFELD.
404. Master's Dissertation in Qualitative Analysis or Organic Chemistry.—Mj. or DMj. (or DM. either Term), Assistant Professor Rising.
405. Master's Dissertation in Quantitative Analysis and Physical Chemistry.—Same schedule as course 404, Assistant Professor Noyes.
406. Master's Dissertation in Physical Chemistry.—Same schedule as course 404, Assistant Professor Young.
408. Master's Dissertation in Organic Chemistry.—See 404, Dr. Miller.

Candidates for the Ph.D. degree, who have fulfilled the preliminary work (see "Requirements for Degrees" in the Announcements of the Department of Chemistry), will usually take a major of work introductory to research in one of the following courses, after conference with the Chairman of the Department, before being assigned a problem in research. Whenever the preparation warrants it, however, work on a problem will be started at once.

420. Research in Organic and Physico-Organic Chemistry (for Ph.D. and S.M.).—Laboratory work, 10-40 hours a week. Mj. or DMj., (or DM. or 2 DM. either Term), Professor Stiegitz and Dr. Muskat.
421. Research in Physical Chemistry and Radioactivity (for Ph.D. and S.M.).—DM. (or 2 DM. First Term), Professor Harkins.
422. Research in Inorganic Chemistry (for Ph.D. and S.M.).—Laboratory work 10-40 hours a week. Mj. or DMj. (or DM. or 2 DM. either Term), Professor Schlesinger.
424. Research in Organic Chemistry (for Ph.D. and S.M.).—Same schedule as for 422, Assistant Professor Glattfeld.
426. Research in Organic Chemistry (for Ph.D. and S.M.).—Same schedule as 422, Assistant Professor Rising.
427. Research in Photochemistry and Sub-Atomic Phenomena (for Ph.D. and S.M.).—Same schedule as 422, Assistant Professor Noyes.
428. Research in Physical Chemistry (for Ph.D. and S.M.).—Same schedule as 422, Assistant Professor Young.

Club Meetings.—Meetings of the Kent Chemical Society will be held twice a month. They may be attended by anyone interested. The subjects for the meetings will be announced at least one week in advance.

450. Independent Research.

RELATED COURSE IN THE DEPARTMENT OF HOME ECONOMICS

Home Economics 429. Research in Food and Nutrition.

GEOLGY AND PALEONTOLOGY

1. RESIDENCE COURSES

101. *Geologic Processes (Introductory Course).—The earth's surface features, treated with special reference to their origin and significance; agencies effecting changes in geographic features; physiographic changes in progress; genetic geography. The course includes an introductory study of common rocks and rock-forming minerals. About two hours laboratory work per week and occasional field trips on Saturdays. Mj, 8:00, Professor Evans.

104. Historical Geology (Introductory Course).—The history of the earth is the central theme. Hypotheses for the origin of the earth are considered. Climatic changes and changes in the earth's surface configuration through geologic time and the causes which have brought them about are discussed. Through most of history runs the story of the evolution of living forms ancestral to the earth's present faunas and floras. An introduction to further work in geology and of general interest to those not specializing in the science. About 2 hours a week laboratory work and occasional field trips on Saturdays. Prerequisite: Geology 101, 102, 103, or 18 majors. Mj, 11:00, Professor Evans.

* Limited-credit course; see page 5.
II. FIELD COURSES

Remarks.—An announcement giving full details concerning the Summer field courses of the Department may be obtained by addressing the Chairman, Department of Geology and Paleontology, Rosenwald Hall, University of Chicago. The field is the geologist's laboratory which he can best make use of in the summer. All geology students who have had Geology 101 and 104 or their equivalents are urged to devote the summer to field work. Among the field courses primarily for undergraduates, Geology 208 is particularly recommended for those whose geologic interests are general or who are especially interested in the processes that have shaped the land surface. Geology 209 is particularly recommended for those planning to take up Petroleum Geology or Paleontology. The regions where these two courses are given are, however, so different that the student would do well, if possible, to take both courses.

In addition to the field courses listed below, credit may be granted, under certain restrictions, to graduate students for geologic field work undertaken on their own resources or under approved governmental surveys. Plans for such work must be discussed with the Chairman of Department and approved in advance by him and by the Dean of the Ogden Graduate School of Science. The member of the staff within whose special field the proposed work will continue for full credit. Credit will not ordinarily be granted for commercial field work.

208. Field Geology (first course outside Chicago).—In this course the student is trained in interpretation of Proterozoic and early Paleozoic stratigraphy. Pre-Cambrian structures, paleography, physiography, and glacial geology. Various igneous and sedimentary rocks, and their metamorphosed equivalents, and varied phases of glacial drift are studied. Methods of observation, measurement and recording of geological data. The region to be studied in 1928 is the vicinity of Devils Lake, Wisconsin. The course begins June 18 and continues for four weeks. This work, satisfactorily completed, and a satisfactory report, completed before the end of the Autumn Quarter, gives 1 ½ majors credit. Prerequisite: Geology 104 or equivalent. Course limited to 12. Men and women admitted. Students must register and make the required deposit with the instructor by June 1. This applies to both sections. First Term, Professor Bastin; repeated in September, Professor Bretz.

209. Field Geology.—A course given at the Missouri Field Station in Ste Genevieve County, Missouri, designed to give the student practical training in field methods of Geological Survey work. Each member of the class will prepare a finished geological map of the area studied, showing the stratigraphy and structure of the region. In a small district surrounding the Field Station headquarters, a geological section extending from the Cambrian to the Middle Mississippian, can be studied, as well as structural features, especially faulting, of great interest. The field work and map will be the basis for the preparation of a formal geological report which will be required for full credit. In 1928 the field work is scheduled to be from June 18, and will continue for four weeks, after which the report will be written. A major credit will be given on completion of the field work, and a satisfactory report completed before the end of the Autumn Quarter will entitle the writer to an additional ½ major. Limited to men. Registration only after consultation with the instructor. Prerequisite: Geology 104. Geology 217 or 260 are desirable antecedents.

309. Field Geology (Second Course).—The region studied in 1928 will be (1) the Channeled Seablands of the Columbia Plateau in Washington, and (2) that part of British Columbia lying between the Columbia and Fraser rivers which can be entered by railroad or highway. The work will be research, the chief problem being the cause of the Spokane flood, which occurred during Pleistocene time. The district will be traversed by motor cars, with side trips on foot. Satisfactory completion of the field...
work will give 1 major credit, and an acceptable report, due October 1, gives an additional $ major. Prerequisite: Geography 216, and 208 or 209, or equivalents. Applicants must consult the leader before registration. Registration must be completed by July 1. Class limited to 7 men who can and will "rough it." The party will meet at Spokane, Washington, July 20, and the work will continue for 4 weeks. PROFESSOR BRETZ.

369. Field Geology (Second Course).—This course is conducted at the Missouri Field Station in Ste Genevieve County, Missouri, at the same time with Geology 209. The work will consist of more independent studies which may be along the lines of Paleontology, or of stratigraphy and structure. Prerequisite: Geology 209. Registration only after consultation with the instructor. 1 or 1½ Mj; First Term, _____.

429, 439, 449, 459, 469, 479, 489.—Under these course numbers, provision is made for advanced field work along the lines of Sedimentation and Stratigraphy (429), Structural Dynamic Geology (439), Petrology (449), Economic Geology (459), Invertebrate Paleontology (469), Vertebrate Paleontology (479), and Paleobotany (489). The work is mainly individual and independent but conducted with the advice and critical oversight of members of the Department. It may form the basis for the Doctor's dissertation. Registration only after consultation with the Chairman of the Department. Credit depends on work done.

GEOGRAPHY

141. Geography of North America.—A survey of the principal economic activities in each of the major geographic regions of North America from the standpoint of their relation to the natural environmental complex. Emphasis is placed on the regional equipment for industry in the several divisions of the continent. Prerequisite: Geography 111 or 211, with a grade not lower than C or equivalent. Mj. (or M. First Term), 9:00, PROFESSOR COLBY.

201. Elements of Geography (for Senior College Students).—An introductory world-wide survey of the distribution and characteristics of the elements of the natural environment (climate, land forms, soils, surface and ground waters, natural vegetation, and mineral deposits) with particular reference to the bearing of the natural environment on the economic life of social groups. Field trips on two or three Saturdays. Prerequisite: 18 majors of college work or consent of Department. DM. First Term, 1:30-3:30, ASSISTANT PROFESSOR PLATT.

211. Economic Geography (for Senior College Students).—A world-wide survey of the distribution and characteristics of major economic pursuits as far as they are related to the natural environment. This course, together with Geography 201, is intended to comprise a unit of work for two groups of students: (1) those who will use it as a foundation for work in regional geography, and (2) those whose interest is satisfied with a bird's-eye view of the field of geography. Field trips on two or three Saturdays. Prerequisite: Geography 201 or Geography 101 and 18 majors of college work. DM. Second Term, 1:30-3:30, ASSOCIATE PROFESSOR WHITTLESEY.

226. Conservation of Natural Resources.—The natural resources of the United States as factors in national development. The exploitation of soils, forests, mineral resources, etc.; the current movement to conserve natural resources; the reclamation of arid and swamp lands; the reduction of erosion; the development of scientific forestry; the elimination of waste in mining; the effective use of mineral fuels and metals; the improvement and extension of waterways; the use and control of water power; the prevention of floods; the problems of water supply. Prerequisite: 18 majors of college work. Mj. (or M. either Term), 9:00, PROFESSOR BARROWS.

254. Economic Geography of Great Britain and Ireland.—In this course Great Britain and Ireland will be divided into major regions on a geographical basis, and in connection with each region the relations between environmental factors and the activities of the people, regarded as producers and consumers of economic products, will be studied. This will involve, so far as relevant, an examination of the agricultural, mining, fishing, and manufacturing industries; the transportation systems; the sites of towns and cities; the distribution of population; and the relief, structure, and climate. Prerequisite: Geography 141, or equivalent, and 18 majors of college work. Mj. (or M. First Term), 10:00, PROFESSOR BRYAN.
271. Historical Geography of the United States.—The geography of the United States in the past. The relations between earth conditions and earth resources, on the one hand, and the settlement and development of the country on the other; the adjustments of a rapidly expanding people to varied environments; the evolution of the environmental relationships of the people in selected areas of the country. Prerequisite: 18 majors of college work. Desirable antecedent: Geography 141. Mj. (or M. First Term), 11:00, PROFESSOR BARROWS.

312. Ocean Trade and Transportation.—A survey of present-day overseas commerce and transportation and an analysis of the underlying geographic and economic principles. Major commercial divisions and trade regions of the world; ocean trade routes; the function and importance of ports and the distribution and importance of coaling stations; ocean carriers and their cargoes; the relation of fluctuations in the movements of commodities to ship management; the British merchant marine, the factors in its development, and its relation to the foreign trade of the United Kingdom; present employment of the American merchant marine and the problems connected with its development. Prerequisite: Geography 111 and 141, at least one course in Economics, and 27 majors of college work. Mj. (or M. First Term), 8:00, PROFESSOR COLBY.

354. Map Studies in the Geography of the British Isles.—This course will involve (1) a discussion of methods of map study applicable to small areas, and (2) an examination, by means of large scale maps issued by the British and Irish Ordnance Surveys, of districts selected as typical, detailed bits of the regions discussed more generally in Geography 254. Although each course is complete in itself, the two may be taken together advantageously. The underlying object of the map studies will be the correlation of human activity and physical environment. Prerequisite: Geography 141, or equivalent, and 27 majors of college work. Mj. (or M. First Term), 2:30, PROFESSOR BRYAN.

366. Field Studies of Contrasted Geographic Complexes.—Five weeks will be spent in the field, the time being divided between the Door Peninsula of Wisconsin and the Upper Peninsula of Michigan. This arrangement permits the study of several simple, yet contrasted, geographic complexes: (1) iron ore and the mining settlement, (2) Great Lakes fish and the fishing village, (3) forests and the logging camp, (4) cool weather and scenery and the summer resort, and (5) distinctive combinations of soil and climate with associated farming communities. The survey of each of these choroi will involve first-hand collection of geographic data by means of maps and questionnaires, as well as the use of published information. Before leaving a place the findings of the group will be collated into a joint report on its geography. The course is intended for undergraduates and graduates who are specializing in geography, whether or not they have had previous field experience. Individual assignments will be adjusted to suit the varied needs of the members of the group, but by the end of the term, all, in addition to framing a clear picture of life in the environments studied, should have acquired a degree of skill in field mapping, in obtaining information from local sources, and in organizing the findings into a report. Prerequisite: 5 majors of geography and written consent of either the instructor or Professor Jones. Group limited to 12. Mj. First Term, ASSOCIATE PROFESSOR WHITTLESEY.

466. Advanced Field Course.—In 1928, the course will be conducted in Central Mexico. Intensive studies will be made of one or more of the compact and strikingly developed communities on the Plateau, in the Sierra Madre, and in the Tierra Caliente. The party will reach the area by the overland rail route from the American border, will stop at selected places in the vicinity of Mexico City and on the descent through the Sierra Madre to the Port of Vera Cruz, and will return by boat to the United States. Credit for satisfactory field work and an acceptable report, due October 1, 2 majors. Prerequisite: Geography 366 or equivalent, and consent of instructor. Second Term, ASSISTANT PROFESSOR PLATT.

486. Research Course.—Advanced work on selected topics will be arranged with individual students prepared to undertake semi-independent work. Mj. or Dmj. PROFESSORS BARROWS AND COLBY, ASSOCIATE PROFESSOR WHITTLESEY, AND ASSISTANT PROFESSOR PLATT.

490. Dissertations in Geography.—Mj. Summer, hours to be arranged, PROFESSORS BARROWS AND COLBY, ASSOCIATE PROFESSOR WHITTLESEY, AND ASSISTANT PROFESSOR PLATT.
RELATIVE COURSES IN THE TEACHING OF GEOGRAPHY (see page 102)

Special Methods 233. Introduction to the Teaching of Geography.
Special Methods 334A. Curriculum Problems in Elementary Geography.

BOTANY

102. Elementary Botany II.—A course presenting the evolution and classification of the plant kingdom. Prerequisite to all other courses offered by the Department except 101 and 105. Mj. lectures, M., W., 10:00; laboratory, Tu., Th., F., 10:00-12:00, Mr. Hayward and Mr. Beal.

105. Evolution, Heredity, and Eugenics.—A consideration of the facts upon which the evolutionary concept is founded; the theories which have been advanced to explain how evolution takes place; the laws of inheritance and related phenomena in plants and animals, with practical applications; inheritance in man and its possibilities. No prerequisite. Mj. lectures daily, 9:00, Associate Professor Coulter.

107. The Summer Flora.—The identification of the summer seed plants and ferns of the Chicago region, to acquire familiarity with the distinguishing features of the great groups and with the use of manuals. Prerequisite: Botany 102. M. or DM. Second Term, M., Tu., W., Th., 1:30-5:30, Associate Professor Kurz.

204. Methods of Plant Histology.—Principles and methods of killing, fixing, embedding, sectioning, staining, mounting, drawing, reconstructing, and use of microscope. This course is prerequisite to research in morphology. Prerequisite: Botany 101 or equivalent. DM. First Term, lecture M., 1:30; laboratory daily, 8:00-10:00; Tu., W., Th., F., 1:30-3:30, Associate Professors Land and Kurz.

207. General Morphology of Thallophytes.—A thorough study of a series of algae and fungi forms the basis of lectures upon the morphology and classification of these groups. Mj. (or M. either Term), lectures, Tu., Th., 11:00; laboratory M., W., F., 10:00-12:00, Associate Professors Land and Kurz.

237. Applied Ecology.—The application of ecology to agriculture, horticulture, floriculture, and forestry. The ecology, origin, and distribution of cultivated plants, useful wild plants and weeds. Prerequisite: Botany 203. M. Second Term, lectures daily, 8:00, occasional field trips, Professor Cowles.

240. General Plant Pathology.—A survey of the field of plant pathology, dealing with the nature, causes, symptoms, relation to environmental factors, economic importance, and control of the common diseases of plants, with special consideration of the life-histories of the pathogenes. The lectures and laboratory work are designed for students who wish to become acquainted with the subject matter of plant pathology as well as for those who choose this field for their major. Prerequisite: Botany 102. Mj. lectures, M., W., 8:00; laboratory, Tu., Th., F., 8:00-10:00, Associate Professor Link.

250. Plant Genetics.—A consideration of the facts and theories of heredity as applied to plants. Prerequisite: Botany 105, or equivalent. Mj. or DM. lectures daily, 10:00, Associate Professor Coulter.

299. Honors Course in Botany.—Open only to candidates for Honors in Botany or with the permission of the Department Counselor. Mj. Summer, Autumn, Winter, Spring, Members of the Department.

312. Special Morphology of Pteridophytes.—Similar in method and purpose to course 312. Prerequisite: Botany 102 and 204. Mj. lectures, M., W., 9:00; laboratory 8:00-10:00, Professor Chamberlain.

317. Cytology.—The structure and life-history of the plant cell. Special attention is given to the bearing of cytology upon theories of heredity and evolution. Prerequisite: Botany 204. Mj. lectures M., W., 2:30; laboratory Tu., Th., F., 1:30-3:30, Professor Beal.

322. General Plant Physiology III.—A continuation of courses 320 and 321, presenting a general survey of constructive metabolism and related processes. Pre-
requisite: Botany 120 and 321. Mj. lectures Tu., Th., 8:00; laboratory M., W., F., 8:00-10:00, ASSISTANT PROFESSOR EATON AND ASSISTANT.

323. Plant Microchemistry.—The isolation and identification of organic and inorganic substance found in plant tissues, by micro-technical methods. These methods are of especial value in the localization of plant substances and in the study of metabolism of plants. Prerequisite: Botany 320, 321, 322, and Chemistry 120. Desirable antecedents: Chemistry 140. Mj. lecture Tu., 1:30; laboratory M., W., Th., F., 1:30-3:30, ASSISTANT PROFESSOR EATON.

334. Physiographic Ecology.—Origin and development of the various plant associations, especially such as are found in the United States and Canada. Prerequisite: 5 majors of Botany including 106 (or 107) and 203, or Geography, or Geology. M. or DM. First Term, lectures, Tu., Th., F., 8:00; field work all day Saturday, ASSISTANT PROFESSOR FULLER.

335. Forest Ecology.—The activities of trees and the structure and role of their various organs; trees in relation to climate, soil, and organic environment; forest successions and its causes; the great forest formations of the United States and Canada. Prerequisite: Botany 102. Mj. lectures Tu., Th., 9:00; laboratory M., W., F., 8:00-10:00, PROFESSOR COWLES AND ASSISTANT PROFESSOR FULLER.

336. Field Ecology.—The whole time of the student will be required during the period spent in the field. Prerequisite: Botany 334. 1-4M, after consultation with instructor. First Term (Utah), PROFESSOR COWLES; Second Term (British Columbia), ASSISTANT PROFESSOR FULLER.

340. Advanced Plant Pathology.—Intensive study of representative non-parasitic and parasitic diseases occurring on the following plants: truck, orchard, cereal, fiber, forage, timber, shade, and ornamental. Both production and market aspects will be considered and stress will be laid upon control measures in their relation to cultural, shipping, and storage practices. Laboratory work and individual conferences with occasional lectures, Tu.-F., 10:00-12:00. Prerequisite: Botany 240. Mj. ASSOCIATE PROFESSOR LINK.

427. Growth and Movement.—A continuation of courses 325 and 326, with special reference to the methods and results of recent research on the problems of growth, development, and movements of plants. Prerequisite: Botany 230, 321, 322. Desirable antecedents: Botany 325 and 326. Mj. lectures M., W., 1:30; laboratory by appointment, PROFESSOR SKULL AND ASSISTANT PROFESSOR EATON.

428. Problems in Phytochemistry.—A laboratory course dealing with methods of isolation and identification of phytochemical products. Prerequisite: Botany 326 and Physiological Chemistry 201. Mj. hours by appointment, PROFESSOR SKULL.

436. Problems in Field Ecology.—Designed for students who have had 336. Prerequisite: Botany 334. Hours are arranged individually. Mj. or DMj. PROFESSOR COWLES AND ASSISTANT PROFESSOR FULLER.

499. Research in Botany.—Open to students whose training enables them to be independent. Mj. or DMj. MEMBERS OF THE DEPARTMENT.

Students interested in professional courses in the teaching of science should consult the Announcements of the School of Education, page 106.
205. Vertebrate Zoology.—Comparative anatomy, development, and phylogeny of vertebrates. Prerequisite: Zoology 103 or equivalent. Mj. 8:00–10:00, ASSOCIATE PROFESSOR MOORE.

220. Vertebrate Embryology.—Lectures, 3 hours a week; demonstrations and laboratory work, 6 hours a week. Prerequisite: Zoology 203 or equivalent. Mj. lectures, W., Th., F., 1:30; laboratory, M., Tu., 1:30–4:30, ASSOCIATE PROFESSOR MOORE.

290. Undergraduate Honors in Zoology.—Informal, individual supervision of laboratory, library, or field work in zoology leading to a comprehensive examination for departmental honors. Open to qualified students with their major sequence in zoology. Registration only after consent of the Department and of the instructor concerned. Mj.–3Mj., PROFESSOR NEWMAN (First Term only), ASSOCIATE PROFESSORS ALLEE, WRIGHT, and WILLIER.

304. Animal Ecology.—A general survey of the relations between animals, and their environment, illustrated by field and laboratory studies upon the nature and evolution of animal communities in the Chicago area. Prerequisite: Zoology 107, or equivalent. Mj. (or M. First Term), lectures, W., Th., F., 9:00, laboratory and field work as arranged. ASSOCIATE PROFESSOR ALLEE.

312. Physiological Genetics.—Discussion of the effects of genes on the development of characteristics involving consideration of the kinds of processes known to be influenced by genes and of such phenomena as dominance, multiple allelomorph, polymery, and chain effects and of interrelations of genetic and environmental factors. Prerequisites: Zoology 310 and 318. DM. Second Term, ASSOCIATE PROFESSOR WRIGHT.

318. Embryology.—The early stages of development of invertebrates and vertebrates, including maturation and fertilization of the ovum, cleavage, and the formation of the germ layers; origin of the embryo. Embryological theories. Embryological technique. Prerequisite: Zoology 201, 202, 205, or their equivalents. Mj. 10:00–12:00, ASSOCIATE PROFESSOR WILLIER.

330. Marine Biology (at the Marine Biological Laboratory at Woods Hole, Mass.).—Credit is given at the University of Chicago for courses taken at this laboratory. Registration at Woods Hole only. DMj. Summer, PROFESSOR LILLIE.

350. Problems in the Biology of Sex.—Individual instruction and investigation of special topics in the biology of sex. Prerequisites: Zoology 103, 205, 220 or equivalents. Registration only after consultation with instructor. Mj. ASSOCIATE PROFESSOR MOORE.

360. Problems in Animal Behavior and Ecology.—Individual instruction in beginning research in laboratory, field, or library problems for advanced undergraduate or graduate students. Mj. 3Mj. or M.–3Mj. (either Term), ASSOCIATE PROFESSOR ALLEE.

407. Organic Symmetry and Twinning.—An analysis of the basis of symmetry in organisms, of the phenomena of asymmetry and reversed symmetry, and especially of the causes and consequences of twinning. DM. First Term, PROFESSOR NEWMAN.

451. Zoological Problems.—Research at the Marine Biological Laboratory, Woods Hole, Massachusetts. Prerequisite: such of the elementary courses as are essential to the special topic undertaken. Registration at Woods Hole only. 2 or 3Mj. PROFESSOR LILLIE.

452. Zoological Problems.—Research. Mj., DMj., or 3Mj. PROFESSOR NEWMAN (First Term only), ASSOCIATE PROFESSORS ALLEE, WRIGHT, MOORE, and WILLIER.

ANATOMY

201, 202, 203, 204. Human Dissection.—Courses 201 and 202, Dissection of upper and lower extremities. 1Mj. Course 203, Dissection of thorax and abdomen. 1Mj. Course 204, Dissection of head and neck. 1Mj. 2:30–5:30, PROFESSOR HARVEY AND MR. STRAUER.

210. Splanchnology, Histology, and Cytology.—A brief course on the structure of the cell and elementary tissues will be followed by a study of the structure of the various viscera. Mj. laboratory, M., Tu., W., Th., F., 9:00–11:00, PROFESSOR BENSLEY AND MISS HOLTEN.

315. Elementary Comparative Neurology.—Lectures primarily for graduate students in psychology. M. First Term, 3:30, PROFESSOR HERRICK.
317. Neurology.—Elementary histology and anatomy of the nervous system and sense organs. Prerequisite: Anatomy 210. Mj. lectures, M., Tu., 11:00; recitation, Tu., 12:00; laboratory, W., Th., F., 11:00-1:00, PROFESSOR HERRICK AND MR. VORS.

331. Immunology.—Mj. or DMj. DR. ROGERS.

341. Advanced Anatomy.—Opportunities will be offered for advanced work in neurology and human embryology. Mj. or DMj. PROFESSORS BENSLEY, HERRICK, AND HARVEY.

428. Neurological Research.—Mj. or DMj. PROFESSOR HERRICK.

433. Research in Immunology.—Open to a restricted number of qualified investigators. Mj. or DMj. DR. ROGERS.

441. Anatomical Research.—Suitably trained and endowed students may undertake the original investigation of anatomical problems. Mj. or DMj. PROFESSORS BENSLEY, HERRICK, AND HARVEY.

PHYSIOLOGY

101. Physiology of the Human Body.—An introductory and elementary course. Covering the main facts and important recent advances in human physiology, foods, nutrition, personal hygiene, and laws of health, primarily for undergraduate students who desire this knowledge as a part of their educational equipment for life, but who are unable to devote more of their college time to this subject. Lectures, 3 hours a week; laboratory demonstrations, 4 hours a week. Mj. lectures, W., Th., F., 1:30; laboratory, M., Tu., 1:30-3:30, PROFESSORS CARLSON, LUCKHARDT, AND ASSISTANTS.

201. Physiology of Blood, Circulation, and Respiration.—Lectures and recitations, 3 hours a week; laboratory work, 6 hours a week. Prerequisite: Physiology 102 (or equivalent) and Physiological Chemistry. Mj.

202. Physiology of Gastrointestinal Activity, Secretion, Absorption, Metabolism, Internal Secretion, Animal Heat, and Muscle.—Lectures and recitations, 3 hours a week; laboratory, 6 hours a week. Prerequisite: Physiology 301. Mj. lectures, M., Tu., W., 8:00; laboratory, Tu., F., 8:00-11:00, PROFESSORS CARLSON, LUCKHARDT, AND ASSISTANTS.

302. Physiology of Digestion, Metabolism, and Excretion.—Lectures, 3 hours a week; recitations, 1 a week; laboratory, 5 hours a week. Prerequisite: Physiological Chemistry (or equivalent) and Physiological Chemistry, Mj.

(a) PHYSIOLOGICAL CHEMISTRY

201. Chemical Physiology of the Cell.—Chemistry of carbohydrates, fats, and proteins. Lectures, 3 a week; recitations, 1 a week; laboratory, 5 hours a week. Prerequisite: Inorganic, Qualitative Analysis, Quantitative Analysis, and Organic Chemistry. Mj. lectures, M., Th., F., 1:30; laboratory, Tu., W., 1:30-4:30, DR. KRAUS-RAGINS AND ASSISTANTS.

302. Chemistry of Digestion, Metabolism, and Excretion.—Lectures, 3 a week; recitations, 1 a week; laboratory, 5 hours a week. Prerequisite: Physiological Chemistry

1 Note.—This course will be given only in case the registration of qualified students reaches fifteen.
201 or the equivalent. Mj. lectures, M., Tu., W., 9:00; laboratory, Th., F., 2:30–5:30, Professor Koch.

303. Physicochemical Methods Applied to Biochemistry.—Practical exercises in physicochemical methods which are finding application in biological problems—determination of osmotic pressure, freezing- and boiling-points, conductivity, optical activity, surface tension, hydrogen ion concentration, velocity of reactions, colloidal precipitation, etc. Prerequisite: Quantitative Analysis, Physiological Chemistry 201 and 302, and preferably also Physical Chemistry. §Mj., Mj., or DMj. hours to be arranged, Assistant Professor Hanke and Mr. Saunders.

311. Quantitative Methods of Urine and Blood Analysis.—Mj. Professor Koch.

313. Methods of Quantitative Analysis in Physiological Chemistry as Applied to Plant and Animal Tissues.—Prerequisite: Physiological Chemistry 201 and 302 and Quantitative Analysis. Mj. Professor Koch.

315. Methods of Quantitative Analysis of a Protein.—Prerequisite: Quantitative Analysis and Physiological Chemistry 201. Mj. Dr. Kraus-Ragins.

321. Biochemical Preparations.—Prerequisite: Physiological Chemistry 201. Mj. Dr. Kraus-Ragins.

322. Biochemical Preparations.—Continuation of 321. Mj. Professor Koch and Dr. Kraus-Ragins.


332. Carbohydrate Metabolism.—DM. First Term, Professor Shaffer.

401. Research in Physiological Chemistry.—Mj. or DMj. Professor Koch and Assistant Professor Hanke.

410. Seminar in the Physiology Group.—A joint seminar in Physiology, Physiological Chemistry, and Pharmacology. Discussion of important books, papers, and research reports. Weekly. No credit. Conducted by the members of the staffs.

(b) PHARMACOLOGY

351. Pharmacology.—Lectures, twice a week; recitations, once a week; laboratory, 6 hours a week. Prerequisite: Physiological Chemistry 201 and 205, Anatomy 317, and Physiology 301, 302, and 303. Mj. lectures and recitations, M., Tu., W., 11:00; laboratory, M., Tu., 1:30–4:30, Associate Professor Tatum, and Assistants.

352. Special Problems in Pharmacology.—Mj. or DMj. Associate Professor Tatum.

451. Research in Pharmacology.—Mj. or DMj. Associate Professor Tatum.

PATHOLOGY

301. General Pathology and Pathological Histology.—A practical laboratory course in general pathology supplemented by the study of gross specimens, and by recitations in general pathology. DM. First Term, 8:00–11:00 (daily, including Saturday), Associate Professor Long, Assistant Professors Cannon and Halfpert, and Assistants.

302. Pathology of Infectious Granulomas and Tumors (continuation of 301).—DM. Second Term, 8:00–11:00 (daily, including Saturday), Associate Professor Long, Assistant Professors Cannon and Halfpert, and Assistants.

303. Advanced Pathology.—Open to a limited number of students who have credit in general pathology. Laboratory work will be given in pathological technique, the study and recording of autopsies, and special pathological material. Mj. hours to be arranged. Professor Wells and Dr. Southwick.

401. Research in Pathology.—Open to a limited number of specially qualified students. Mj. or DMj. Professors Heitoten and Wells, Associate Professor Long, and Assistant Professors Cannon and Halfpert.
HYGIENE AND BACTERIOLOGY

101. Personal Hygiene.—The elements of normal growth, functions, toleration limits, physical diagnosis, prodromes of disease conditions, and the essentials of personal health maintenance and of corrective therapeutics. For non-medical students. M. First Term, lectures and demonstrations, M., Tu., W., Th., 8:00, Professor Sharp.

201. General Bacteriology.—Lectures on the fundamental facts of bacteriology, including brief discussions of the industrial and hygienic applications of bacteriology. Yeasts and molds and several groups of bacteria are studied in the laboratory. Designed for general scientific students. Prerequisite: Chemistry 101, 102, and 103 (or 104 and 105), and Zoology 103 or equivalent. Mj. M.—F., 1:30–3:30, Assistant Professor Koser.

202. The Pathogenic Bacteria.—This course deals with the characteristics of pathogenic micro-organisms, with infection and immunity and with specific infectious diseases. In the laboratory the student has opportunity to isolate and identify bacteria from pathologic material, to study the effect of bacteria and their products on animals, and to obtain practice in clinical laboratory methods. Prerequisite: Bact. 201. Mj. M.—F., 9:00–11:00, Professor Clark and Dr. Dack.

210. Public Hygiene.—An introductory course dealing with problems of community hygiene such as water supply, sewage disposal, food supply, infant welfare, tuberculosis, insect-borne infections, etc. The elements of vital statistics are presented. Open to all college and graduate students. Prerequisite: 9 majors. Mj. Tu., W., Th., F., 11:00, Dr. Bachman.

315. Immunity in Relation to Preventive Medicine.—Historical and current views on the nature and mechanisms of immunity; methods of artificially producing immunity; the use of antitoxic and other sera in the treatment of disease; the use of antibodies in the diagnosis of diseases. Prerequisite: Bacteriology 301. Mj. M.—F., 10:00–12:00, Professor Bull.

320. Parasitology.—Designed to give a general survey of our knowledge of the parasites of man. It consists of three approximately equal parts dealing with (1) insects of medical importance, (2) helminthology, and (3) protozoology. Particular stress is laid upon the diagnostic and public-health aspects of these parasites which are caused by animal parasites or are carried by insects. Prerequisite: consent of the Department and Zoology 103. Mj. M.—F., 1:30–3:30, Professor Taliaferro.

332. Epidemiology.—Prerequisite: Bacteriology 202 or 203 and 210. M. Second Term, M., Tu., W., Th., 8:00, Dr. Pope.

370. Advanced Bacteriology, Parasitology, Immunology, and Public Health.—This course is open to a limited number of qualified students and to graduates in medicine who wish to prepare for research or to obtain special training in some of the branches of public health work. The facilities of the University and of local health agencies are available for work in the laboratory, field inspection and sanitation, vital statistics, public health administration, etc. Prerequisite: Bacteriology 301 or equivalent. Mj. hours to be arranged. Professors Jordan and Taliaferro.


401. Sanitary Surveys.—A limited number of advanced students may register with the Head of the Department for the sanitary survey of some selected city or town, the work to cover a detailed study of vital statistics, water supply, milk supply, food supply, health administration, and other factors. Registration for this course after consultation only. By special permission, may be taken out of residence. Mj. Professor Jordan.

410. Research (Masters' Dissertations).—Mj. or DMj. hours to be arranged, Professors Jordan and Taliaferro.

420. Research (Doctors' Dissertations).—Mj. or DMj. hours to be arranged, Professors Jordan and Taliaferro.

Bacteriology Club.—Meetings Thursdays at 3:30. Students in courses 370, 410, and 420 are expected to attend. Students in other courses are welcome.

RELATED COURSE IN THE DEPARTMENT OF EDUCATION

Education 209. School Hygiene.
MEDICINE

I. GENERAL MEDICINE

301-3. Medical Diagnosis.—These courses are preliminary to the study of patients and of disease as it occurs in man, and are offered for the benefit of those students who desire a formal link between the basic sciences and medicine. While each course separately is listed as ½ major, not more than a total of one major of credit in the department will be allowed under 301-3.

301. The Examination of Patients.—An introductory course in medical diagnosis, including the theory of diagnosis, the assembling and recording of data, and the physical examination of patients. M., First Term, 6 hrs. a week. Dr. Keefer.

302. Chemistry as Applied to Diagnosis.—A practical course in the application of chemical methods to the study of disease. M., First Term, 6 hrs. a week. Assistant Professor Letter.

303. Biological Methods as Applied to Diagnosis.—A practical course in the application of biologic methods (bacteriologic, serologic, microscopic, etc.) to the study of disease. M., Second Term, 6 hrs. a week. Assistant Professor C. P. Miller.

321. Clinical Lectures in General Medicine.—½ Mj. Tu., Th., S., 11:00-12:00, Professor McLean and Others.

323. Practical Work in the Out-Patient Department.—M. or Mj., 12 hours a week. Professor Robertson and Staff.

324. Clinical Clerkships.—1 Mj. per month, when taken in combination with other clerkships, or with suitable arrangements for remainder of the quarter. Includes course 325. By arrangement only. Prerequisite: Permission of the instructor. (Students may not register for more than ½ Mj. additional while acting as clinical clerks). Hours to be arranged. Dr. Keefer and Others.

325. Ward Visits.—½ Mj. (included also in 324). M., Tu., W., Th., F., 9:00-10:00 Professor McLean and Staff.

401-3. Research in General Medicine.—Open to qualified students by arrangement with the Chief of the Division concerned. Mj., DMj., or 3 Mjjs. per Quarter.

401. Chemical Division.—Professor McLean.

402. Physiological Division.—

403. Biological Division.—Professor Robertson.

II. DERMATOLOGY

405. Research in Dermatology.—Open to qualified students by arrangement with Chief of the Division. Mj., DMj., or 3 Mjjs. per Quarter. Assistant Professor Becker.

III. NEUROLOGY

406. Research in Diseases of the Nervous System.—Open to qualified students by arrangement with the Chief of the Division. Mj., DMj., or 3 Mjjs. per Quarter. Associate Professor Hiller.

IV. ROENTGENOLOGY


361. Advanced Roentgenology.—Intensive theoretical and practical work in the Division of Roentgenology, to include taking some part in investigations in progress 10, 20, or 30 hours a week. Mj., DMj., or 3 Mjjs. By arrangement only.

404. Research in Roentgenology.—Open to qualified students by arrangement. Mj., DMj., or 3 Mjjs. Associate Professor Hedges.
SURGERY

302. Amphitheater Clinic.—W., 11:00-12:00 each quarter; 1 major credit is accorded at the end of three quarters’ attendance, PROFESSOR PHEMISTER.

303. Clinical Clerkship in Hospital.—The student works as a member of a team responsible for the care of patients and for the investigation of disease. 9:00-5:00 daily each quarter, PROFESSOR PHEMISTER, ASSOCIATE PROFESSORS CURTIS AND DRAGSTEDT, ASSISTANT PROFESSOR VAN ALLEN.

311. Clinical Ophthalmology.—A combined external disease and ophthalmoscopic course given in the dispensary, wards, operating rooms, and laboratory. This includes training in the use of instruments, in history writing, determination of central and peripheral vision, intraocular tension, and description of external and fundus diseases. The laboratory exercises consist of study and drawing of prepared specimens of the more important eye diseases. Laboratory 5-15 hours weekly, ½ to 1½Mj. 8:00-12:00, PROFESSOR BROWN AND STAFF.

321. Clinical Otolaryngology.—Lecture and clerkship. Mj. M., F., S., 8:00-12:00, ASSISTANT PROFESSOR WILKINSON AND STAFF.

402. Research in Surgery.—Mj. to 3Mj. PROFESSOR PHEMISTER, ASSOCIATE PROFESSORS CURTIS AND DRAGSTEDT, ASSISTANT PROFESSOR VAN ALLEN.

403. Seminar.—Weekly. No credit. PROFESSOR PHEMISTER AND STAFF.

NURSING

202. The Teaching of the Principles and Practice of Nursing.—A study of the aims and objectives of the principles and practice of nursing as taught to first-year students; selection and organization of subject matter; methods of teaching; evaluation of textbooks and reference books; use of illustrative material; the planning and equipping of a nursing laboratory. Students will be expected to organize and teach demonstration lessons for their own class. For instructors, head nurses, and supervisors. Prerequisite: Introductory Psychology. 8 hours a week; DM. Second Term, 10:00-12:00, Miss Kennedy.

205. Supervision in Schools of Nursing.—An introductory course for instructors, supervisors, and head nurses, dealing with the problems of ward and department supervision in relation to the organization of the school of nursing and hospital. Emphasis will be made upon the co-ordination of theory and practice of the student nurse. Lectures and class discussions, 8 hours a week. DM. First Term, 10:00-12:00, Miss Rogers.

210. Field of Public Health Nursing.—An introductory course presenting a survey of the field of public health nursing with special reference to community problems and co-operation with various social agencies. Lectures, 4 hours a week; field visits by special arrangement. M. First Term, 9:00, Miss EVANS.

211. Supervision in Public Health Nursing.—This course deals with the practical problems of organization and supervision in public health nursing; the daily planning of field service; and the introduction of new workers into the field. Limited to students having had field experience. Lectures and round-table discussions 4 hours a week; field visits by special arrangements. M. First Term, 10:00, Miss EVANS.

PHYSICAL CULTURE AND ATHLETICS

The Department of Physical Culture and Athletics will continue its work during the Summer Quarter. The required work of the undergraduate student will be done as far as possible in the open air. The natatoriums in both Bartlett and Ida Noyes gymnasiums will be open daily, and special opportunities will be offered for advanced and individual work. Students are not permitted to register for these courses unless regular academic work is being pursued.
Training for Athletic Coaching.—Under the direction of expert coaches and instructors, the Department of Physical Culture and Athletics, while not attempting normal instruction in various athletic sports, will offer the following courses in football, basket-ball, and track and field athletics for students in the University who wish to coach the above-mentioned branches of sport.

The following courses, none of which yield academic credit, are offered:

**MEN**

112. Basket-Ball: Practice in Play and Methods of Coaching.—First Term, Tu., W., Th., F., 2:45-4:30, ASSISTANT PROFESSOR NORGREN.

122. Swimming: Instruction.—Sec. a, M.–F., 11:00-12:00; sec. b, M.–F., 3:00-4:00, MR. MCGILLENWAY. Natatorium open 10:30-1:00 and 3:00-6:15.

125. Form and Methods in Track and Field Athletics.—First Term, Tu., Th., 3:30-4:30, PROFESSOR STAGG.

131. Football: Evolution and History, Study of Rules, Technique of Play, Typical Formations on Offense and Defense with Demonstration Practice.—Tu., W., Th., 4:45-6:00, PROFESSOR STAGG. The work in the Second Term will be conducted by ASSISTANT PROFESSOR CRISLER and will be illustrated by practical demonstrations.

**WOMEN**

9:00—Swimming, Beginning
   *Class Golf*
   Tennis
   Archery
   Rhythms

10:00—Swimming, Beginning
   *Tennis*
   Corrective
   *Golf Class*

10:35—Swimming, Intermediate—Tu., W., Th., F.

11:00—Swimming, Beginning—M., Tu., W., Th.


1:00—Pageantry, M., Tu., W., Th.

1:35—Swimming, Beginning—M., Tu., W., Th.

2:00—Swimming, Beginning—M., Tu., W., Th.

2:30—Swimming, Beginning and Intermediate—M., Tu., W., Th.
   Swimming, Open Hour—2:30 to 3:30, Friday.

3:30—Swimming, Intermediate and Advanced
   *Class Golf*
   Archery
   Rhythms
   Folk Dancing
   Corrective

4:00 Tennis—M., Tu., W., Th.

4:30—Swimming, American Red Cross Life-Saving
   *Rhythms*
   *Class Golf*

5:00—Swimming, Open Hour
   Golf

7:00—Social Dancing—Th.
   Swimming, Open Hour—Tu.

Non-credit
With the co-operation of the War Department of the Federal Government, the University maintains a Field Artillery unit of the Reserve Officer's Training Corps. The entire course covers a period of four years, but with the approval of the Faculty it may be completed in three. It is designed to prepare a student for a commission in the Field Artillery Reserve, which will be offered him upon satisfactory completion of the work.

The course in Military Science is so co-ordinated with the strictly academic work that completion of certain academic courses is credited toward a commission and military courses are credited as general electives toward the usual degrees. For Military Science taken as an extra, that is, in addition to a normal program of three majors, there is, under existing regulations, no additional charge.

The courses are elected as are any others in the University, and every male student acceptable to the Professor of Military Science and Tactics, physically fit for military service, is eligible for enrolment. The strictly military subjects are taught by army officers detailed for the purpose.

During the Summer Quarter no regular courses are scheduled, as R.O.T.C. camp work occurs at this time, but instruction in the various subjects may be given by a regular Army Officer to students who have missed courses in the Autumn, Winter, or Spring Quarter. For such instruction special arrangement is necessary in each case.
THE DIVINITY SCHOOL

THE FACULTY AND CONFERENCE

MAX MASON, Ph.D., LL.D., Sc.D., President of the University.
FREDERICK CAMPBELL WOODWARD, A.M., LL.M., Vice-President and Dean of Faculties.
SHAILER MATHEWS, A.M., D.D., LL.D., Dean of the Divinity School; Professor of Historical Theology; Chairman of the Department of Systematic Theology.

WILLIAM CLAYTON BOWER, A.M., Professor of Religious Education.
SHIRLEY JACKSON CASE, Ph.D., D.D., Professor of the History of Early Christianity; Chairman of the Department of Church History.
CHARLES WHITNEY GILKEY, B.D., D.D., Professor of Preaching.
ARTHUR EUSTACE HAYDON, A.M., B.D., PH.D., Associate Professor of Comparative Religion.

EDNA L. ACHESON, A.M., Supervisor, Elementary Church School, Munn Avenue Presbyterian Church, East Orange, N.J. (Summer, 1928).
W. H. GREAVES, Professor of Public Speaking, Victoria College, Toronto (Summer, 1928).
HUGH HARTSHORNE, Ph.D., Character Education Inquiry, Teachers College, Columbia University (Summer, 1928).
GENERAL INFORMATION

ADMISSION

1. The Divinity School is open to students of all denominations of Christians. Women are admitted on equal terms with men. The instruction is intended for ministers, missionaries, theological students, Christian teachers, and others intending to take up some vocational religious work. College graduates are admitted to the Graduate Divinity School. Persons who have not had collegiate training and who wish to pursue studies for which they are prepared are admitted to the English Theological Seminary.

2. Time of entrance.—The First Term begins Monday, June 18, the Second, Thursday, July 26. Students may enter for either Term.

3. Credentials.—Each applicant for admission must present a ministerial license or a certificate of ordination, or a letter of approval from the church of which he is a member.

ROOMS, BOARD, AND GENERAL EXPENSES

1. Expenses.—The fee for instruction (including incidental and library fees) is $70 a quarter. One-half the full tuition fee is charged for one major or equivalent. In the case of those entering the University for the first time, there is a matriculation fee of $10.00. Students who need the assistance may upon application to the Dean be granted a tuition voucher for $55 a quarter provided they maintain the grade of scholarship required of those receiving University aid. The Divinity Halls (dormitories) accommodate 140 students. The amount charged for the use of the rooms is merely sufficient
to cover the cost of heat, light, and care, and averages about $30.00 per quarter. In the University Commons meals are served on the cafeteria plan, the minimum cost averaging about $7.00 per week.

Rooms in the Halls may be engaged in advance, but they will not be ready for occupancy before Saturday, June 16, at 6:00 P.M. Temporary accommodations near the University may be obtained before that date. Applications for rooms should be sent to the Cashier of the University. No rooms will be reserved except upon deposit of $5.00.

2. Payment of bills.—All bills are payable at the beginning of each Term. Registration is not complete until all University fees have been paid at the Cashier's office, and no student is enrolled as a member of the class for which he has registered until this is done.

3. There are frequent opportunities for supplying churches in the city and surrounding towns, for which a reasonable compensation may be expected; but such work can be done only by those who have had experience in preaching, and may be undertaken only under the direction of the Dean, and with the provision that it shall not occasion the absence of the student from any regular recitation or lecture.

THE GRADUATE DIVINITY SCHOOL

COURSES OFFERED: SUMMER QUARTER, 1928

OLD TESTAMENT LITERATURE AND INTERPRETATION

(See ORIENTAL LANGUAGES AND LITERATURES, p. 39)

NEW TESTAMENT AND EARLY CHRISTIAN LITERATURE

See p. 39

CHRISTIAN THEOLOGY AND ETHICS

Christian Theology

201. Religious Problems of Students.—Limited to those engaged in religious or personnel work in colleges. M. First Term, 10:00, PROFESSOR MATHEWS.

S302. Systematic Theology I.—Mj. (or M. either Term), 10:00, PROFESSOR McGIFFERT.

S316. Schleirmancher and Ritschl.—Mj. (or M. either Term), 11:00, PROFESSOR McGIFFERT.

341. Christian Ethics.—M. Second Term, 8:00, PROFESSOR G. B. SMITH.

351A. Christian Theology and the Theory of Evolution.—M. Second Term, 9:00, PROFESSOR G. B. SMITH.

361. Psychology of Religion.—Mj. (or M. either Term), 1:30, PROFESSOR WIEMAN.

365. Religious Aspects of the Theory of Knowledge.—M. First Term, 2:30, PROFESSOR WIEMAN.

366. Religious Aspects of the Theory of Values.—M. Second Term, 2:30, PROFESSOR WIEMAN.

Social Ethics

S246. Personality Studies in Rural Life.—Based on source material gathered from life-situations and on supplementary readings. M. First Term, 2:30, MR. HUTCHINSON.

S249. Ethical and Social Problems in Chicago.—A social observation and discussion course. Class meeting twice each week, two hours at a session. One day devoted

1 Courses marked S are given by the Chicago Theological Seminary.
342. The Church and Society.—M. First Term, 11:00, PROFESSOR MATHEWS.

345. Religion and the Major Social Evils.—A case study of individuals, in which there will be an attempt to discover the major evils which prey upon the life of man. Special attention will be given to the part which religion plays in a man’s struggle against these evils. This course is calculated to develop the student’s power to diagnose personal and social situations which affect the life of the individual. M. 2:30, Second Term, PROFESSOR KINCHELOE.

352. The Church and the Family.—A historical introduction and a discussion of the types of families in America. M. Second Term, 8:00, PROFESSOR HOLT.

346. The Town and Country Church.—A course dealing with the motivation and organization of modern rural life, and the part which the church may play in this process. M. Second Term, 9:00, PROFESSOR HOLT.

348. The Urban Community and the Church.—A study of the reactions which the Protestant church is making to urban environment. M. Second Term, 3:30, PROFESSOR KINCHELOE.

349. Ethical Problems in the Industry.—A study of the situations growing out of industrial relations between Hart, Schaffner & Marx and the Amalgamated Garment Workers. M. First Term, 8:00, MR. MULLENBACH.

CHURCH HISTORY

3301. Christianity in the Roman Empire.—The development of the church in its relation to the political, social, intellectual, and religious life of the ancient world. The expansion of Christianity, the growth of church government, the development of the dogma, and the evolution of Christian ethics in the ancient East and West until the recognition of the Christian church as the imperial state church. The effect of the decline of the Graeco-Roman civilization upon the Christian church. The formation of Eastern orthodoxy, the significance of Augustine, and the importance of the Roman papacy for the survival of the church in the West. Mj. (or M. either Term), 8:00, ASSISTANT PROFESSOR PAUCK.

303. Christianity and the American People.—A survey of the rise and development of Christianity in America. The significance of religion in the founding of the colonies and the development of their life; the rise of denominational organizations and the development of church institutions; influence of the church on the rise of nationalism; religious forces in the critical periods of American history; development of religion amidst conditions peculiar to America. A Group II course. Mj. (or M. either Term), 2:30, PROFESSOR SWEET.

311. Jesus and His Contemporaries.—Jesus making friends and enemies; the causes of his death; the effect of his work upon his contemporaries. M. Second Term, 8:00, PROFESSOR CASE.

315. Christianity in Ancient Society.—The attitude of Christians toward their environment and the process by which Christianity captured the Roman Empire. M. Second Term, 9:00, PROFESSOR CASE.

3338. Great Christian Leaders.—A survey of the history of Christendom under a biographical aspect. The life and work of great Christian personalities seen as dramatizations of the culminating periods of Christian history. Mj. (or M. either Term), 9:00, ASSISTANT PROFESSOR PAUCK.

342. The Continental Reformation.—Condition of Europe, social, political, and religious, in the early sixteenth century. Luther and the rise of Protestantism. Reconstruction of the church in Germany. Zwingli and the Reformation in German Switzerland. Calvin and the organization of the Reformed church. Revival of the Roman church. Later phases of the Reformation. Mj. (or M. either Term), 10:00, PROFESSOR McNEILL.

D344. Progress of Religious Liberty.—Development of the theory and practice of intolerance; medieval solidarity and the pioneers of liberty; effect of the Renaissance
on civil and religious liberty; the rise of national churches; attitudes of Roman Catholicism and Protestantism toward freedom of conscience; non-conformity in England; growth of religious liberty in America. M. Second Term, 9:00, ASSOCIATE PROFESSOR GARRISON.

346. Puritanism and Nonconformity.—The Puritan type in religion; expressions of Puritanism in the Reformation period; the Marian exiles and the rise of Puritanism; Separatism and Presbyterianism in the Elizabethan period; Puritanism and the Stuart monarchy; triumphs and failures of Puritanism; the principles of comprehension, toleration, and uniformity in the Restoration epoch; the Great Ejection; survival and development of con-conformity; non-conformity and the Evangelical Revival. Mj. (or M. either Term), 11:00, PROFESSOR MCNEILL.

D353. Christian Union and Co-operation.—A survey of the unity and divisions of the church from New Testament times to the Reformation; plans for reunion since the Reformation; present status of the problem and present-day co-operative and federative activities of the churches. M. First Term, 9:00, ASSOCIATE PROFESSOR GARRISON.

S358. History of the Church of Russia.—The development of the Russian Orthodox church from the time of introduction of Christianity to the present day; a detailed study of the Russian church under the Soviet régime. Mj. (or M. either Term), 1:30, DR. SPINKA.

366. The Church and the Early Frontier.—The westward movement of population following the Revolution; frontier life; religious motives in frontier settlement; frontier revivals; the rise of the camp-meeting and other frontier institutions; adjustments of the churches to meet the needs of the New West; types of frontier preaching; the pioneer missionary and the outstanding religious leaders of the frontier; the rise of the Disciples and the Cumberland Presbyterian churches and other frontier schisms; rivalries and controversies among frontier churches. Mj. (or M. either Term), 3:30, PROFESSOR SWEET.

D388. History of the Disciples.—Historical and philosophical backgrounds; religious conditions in America at the beginning of the nineteenth century; beginning of an independent movement; early relation and separation of Baptists and Disciples; growth, development of organization, and progress of thought among the Disciples; their journalistic, educational, and missionary enterprises. Mj. (or M. either Term), 8:00, ASSOCIATE PROFESSOR GARRISON.

PRACTICAL THEOLOGY

Preaching and Parish Ministry

S201. The Business Administration of the Church.—A study of the pastor’s relations to the church and community, including the principles of church finance, advertising and publicity, office management, correspondence, filing, conventions, and the general organization of the church. M. Second Term, 11:00, MR. CASHMAN.

300. Sermon-Making.—A study of plan and structure. M. First Term, 2:30, PROFESSOR GILKEY.

S301. Principles of Preaching.—Nature and function of the sermon; sources, development, content, literary form, aim, component parts, and logical and psychological sequence. Inductive study of typical preachers. Mj. (or M. either Term), 9:00, PROFESSOR DAVIS.

S302. Preparation and Delivery of Sermons.—Practice in preaching, with criticism by the class and the instructor. M. Second Term, 8:00, PROFESSOR DAVIS.

S315. Christian Worship.—Christian worship is defined and its importance enforced. The origin and comparative worth of the great liturgies are studied. Liturgical forms appropriate to the major and minor occasions for their use are constructed. M. First Term, 11:00, MR. VOGT.
320. Organization of Church Work.—A study of the modern church as a religious group organized under pastoral leadership for specific purposes. M. Second Term, 2:30, Assistant Professor Holman.

321. The Case Method in Church Work.—The purpose of the course is to prepare the student for the religious care of a modern parish. The theory of pastoral service is studied; specific cases presenting moral and religious problems are discussed; the diagnosis and treatment of cases of conscience are practically considered. M. First Term, 8:00, Professor Davis.

Religious Education

241. Psychology Applied to Religious Education.—The principles and methods of psychology applied to the processes of religious education. The laws of learning in relation to the development of religious concepts, ideals, habits, and attitudes. Practice in the analysis of the common assumptions, practices, and techniques of religious education. M. Second Term, 11:00, Assistant Professor Chave.

250. Supervision of Elementary Religious Education.—M. First Term, 8:00, Miss Acheson.

251. Methods of Teaching in Elementary Religious Education.—M. First Term, 9:00, Miss Acheson.

340. Principles of Religious Education.—The fundamental task of the religious educator. The nature of religion, the goal of religious education, the principles of education in their moral and religious significance, the developing religious experience in modern life in the light of genetic and social psychology. Mj. (or M. either Term), 11:00, Professor Soares.


351. The Religious Education of the Adult.—The psychology of early maturity and of middle life. The significance of vocation, parenthood, and the major crises of life. The problems of mental reconstruction and of the higher social attitudes. The larger opportunities of the church in adult development. M. Second Term, 10:00, Professor Soares.

354. The Technique of Teaching.—A study of the historical development of method. The basic psychological factors involved in the learning process. An analysis of the process involved in the enrichment and control of experience in terms of religious ideals and purposes. Mj. (or M. either Term), 1:30, First Term, Professor Bower. Second Term, Assistant Professor Chave.


366. The Religious Education of the College Student.—The religious problems of student life. The principles involved in organizing a program of religious education to meet these problems. Limited to those engaged in religious and personnel work in college. M. First Term, 10:00, Professor Soares.


369. Student Counseling.—A study of the chief problems of undergraduate students in personality adjustments and the most advisable procedure which counselors may use in aiding them to meet these situations. Limited to those engaged in religious and personnel work in college. M. First Term, 1:30, Mr. Edwards.

453. Curriculum Construction.—A critical study of the processes of research, construction, and experimentation involved in a scientific procedure in curriculum-making in religious education. The application of these processes to actual curriculum construction. M. First Term, 11:00, Professor Bower.
Religious Literature and Drama

S332. Biographies.—Biographical studies of men and women who have profoundly affected humanity, in order to discover and test their sources of power. Mj. (or M. either Term), 8:00, PROFESSOR EASTMAN.

S333. Religious Drama.—Study and analysis of the best religious dramas and pageants now available. Mj. (or M. either Term), Tu., Th., 3:30-5:30, PROFESSOR EASTMAN.

Missions

380. Introduction to the Missionary Enterprise.—Actual situations which confront the Christian church as an aggressive and expanding body in a world of change; the missionary function of the Christian church; the character of the Christian message; the missionary aim and motive; the organization, work, and support of mission societies; the missionary task of the pastor. Mj. (or M. either Term), 1:30, ASSOCIATE PROFESSOR BAKER.

391. Interracial Contacts.—Typical cases; factors (biological, economic, political, religious, emotional) which produce conflict; efforts at reconciliation and adjustment; relation to missionary activity and to the ideal of world-fellowship. Mj. (or M. either Term), 2:30, ASSOCIATE PROFESSOR BAKER.

PUBLIC SPEAKING

221. Fundamentals of Speech.—Advanced practical training for ministers and other workers in the field of religion; correction of mannerisms; development of effective mental, physical, and vocal habits for speaking and reading; special attention to individual needs. The students meet as a class two hours a week during three quarters, and also receive private instruction by appointment. Prescribed. Mj. for three quarters Tu., Th., 3:30, PROFESSOR GREAVES.

222. Speaking and Reading.—The development of personal power through oral interpretation of masterpieces of literature and through preparation and delivery of short sermons and addresses. M. First Term, 2:30, PROFESSOR GREAVES.

223. Vocal Expression for the Minister.—Training for pulpit and platform; the delivery of original sermons and addresses; oral reading of the Bible, hymns, great sermons, and masterpieces of literature. M. Second Term, 2:30, PROFESSOR GREAVES.

THE LAW SCHOOL

THE FACULTY

MAX MASON, Ph.D., LL.D., Sc.D., President of the University.
FREDERIC CAMPBELL WOODWARD, A.M., LL.M., Vice-President and Dean of the Facul-
ties.

JAMES PARKER HALL, A.B., LL.B., Dean of the Law School; Professor of Law.
EDWIN MERRICK DODD, Jr., A.B., LL.B., Professor of Law (1927–28).
ERNST FREUND, Ph.D., J.U.D., Professor of Law.
EDWARD WILCOX HINTON, LL.B., Professor of Law.
KENNETH CRADDOCK SEARS, A.B., J.D., Professor of Law.
ARTHUR HAROLD KENT, A.B., J.D., Associate Professor of Law.
WILLIAM LESTER EAGLETON, S.B., J.D., Assistant Professor of Law.

Joseph Warren Madden, A.B., J.D., Professor of Law, University of Pittsburgh
(Summer, 1928).
Rollen Morris Perkins, A.B., J.D., J.S.D., Professor of Law, University of Iowa
(Summer, 1928).

FREDERICK WILLIAM SCHENK, Librarian.
RUTH BRADLEY, Secretary.

GENERAL INFORMATION

The University of Chicago Law School was established in 1902. It aims to give a
thorough legal training to students whose education and maturity have fitted them to
pursue serious professional study. The method of instruction employed—the study and
discussion of cases—is designed to give an effective knowledge of legal principles and
to develop the power of independent legal reasoning. The course of study offered, re-
quiring three academic years for completion, is not local in its scope, but constitutes
a thorough preparation for the practice of law in any English-speaking jurisdiction.
By taking advantage of the quarter system students may complete the course in two
and one-fourth calendar years.

The Summer Quarter.—Regular courses of instruction are continued through the
Summer Quarter, and its work counts toward a degree like that of any other quarter.
The courses offered are substantially changed from summer to summer, and full work
is provided for both advanced and beginning students. The former may continue their
work during the summer, thus shortening the calendar time for the three-year course
without reducing the period of actual residence; and beginning students may commence
the study of law in the summer, to be continued either in the autumn or during the
next summer. The courses to be given in successive summers are so arranged that either
a first- or second-year student may take one, two, or three quarters in succession in the
summer only before continuing in a following Autumn Quarter. This plan offers ad-
vantages to school or college teachers intending to practice law who desire to complete

This list includes only those who will be in residence during the Summer Quarter, 1928.
part of their preparation for the bar before leaving their positions to enter a law school, to students in other law schools who wish to do extra work, and to practitioners who desire systematically to pursue particular subjects.

**Building and Library.**—The Law School occupies a building within the University quadrangle, erected especially for it in 1904. It is three stories high, 175 feet long and 80 feet wide, built of stone in the English Gothic style of architecture, and is thoroughly equipped for its purpose.

The law library contains over 53,000 volumes. Except a few county court decisions, it includes all of the American, English, Irish, Scotch, Canadian, Australian, New Zealand, and higher Indian reports, with their digests; all past and present codes and statutory revisions of those jurisdictions; the recent South African reports; all English, Irish, and Scotch statutes, and (except the early laws of some of the older states) nearly all of the session laws of all the American states and Canadian provinces; all collateral reports and series of classified cases in use; an extensive collection of treatises, periodicals, trials, and legal miscellany, including a large amount of old English historical material; and a working library in French, German, Spanish, and Mexican law.

Students in the Law School may use the other University libraries, containing over 800,000 volumes.

**Admission requirements and degrees.**—Only college graduates or students who have had college work equivalent to three years in the University of Chicago are admitted as candidates for the degree of Doctor of Law (J.D.), which is conferred upon college graduates only. The University permits one year of law to be counted as the fourth year of college work, and confers an academic Bachelor's degree upon candidates for J.D., who are not already college graduates and who have completed one year in the Law School, thus enabling them to obtain the academic and the professional degree in six years.

In rare instances students over twenty-three years old who cannot meet the foregoing requirements will be admitted as unclassified students if the Law Faculty is convinced that their previous training will enable them satisfactorily to pursue the work. Such students are not candidates for a degree.

Degrees are conferred upon candidates therefor who have completed the professional course of 27 majors of law work, distributed over nine quarters of law-school residence, with an average standing 10 points above the passing mark.

Information regarding the graduate law degree (J.S.D.) will be furnished upon request to the Dean.

**Admission to advanced standing.**—Students from other law schools of high grade, who are otherwise qualified to enter the School, may receive credit, not ordinarily exceeding five quarters and 15 majors in amount, for the satisfactory completion of work done there similar in character to that required at this School. Graduates of approved law schools may receive a maximum of two years of credit. Such credit, in whole or in part, may be given conditionally or upon examination.

Law work done elsewhere by students while inadmissible for a degree here will be credited toward it only upon examinations taken after they become admissible.

No credit will be given for work not done in residence at a law school.

**Routine of entrance.**—Applications and correspondence should be directed to the University of Chicago Law School, Chicago, Illinois. A student from another institution should present his diploma or certificate of graduation; or, if he does not hold a degree
COURSES IN LAW

equivalent to three years of college work in the University, he should bring a detailed statement of his work. Blank forms for such statements will be sent upon application. All credentials should be presented at the office of the Dean in the Law Building. In cases of doubt correspondence is invited upon these matters before the student presents himself for admission. Directions for matriculation and registration will be furnished in the Dean's office.

Other information.—For information regarding the system of dividing work in the University into quarters and terms; regarding majors and minors; regarding fees, rooms, board, and expenses; and regarding University privileges and other general matters, see these Announcements, pp. 3-12.

Detailed announcement.—The announcement of the Law School for 1928-29, to be published about May 1, containing detailed information concerning the work and regulations of the School, will be sent to anyone upon application to the Dean.

COURSES OFFERED: SUMMER QUARTER, 1928

M. = Major course, four hours weekly for the quarter. M. = Minor course, four hours weekly for one term. DM. = Double Minor course, eight hours weekly for one term. With the permission of the Dean, courses continuing through both terms of the quarter may be taken for the First Term only, but no examination may be taken until the student later completes the course. When only the first half of a subject is given, credit is provisional until it is completed in a later quarter. Twelve to fourteen hours weekly constitute full work. By special permission a maximum of sixteen hours may be taken.

I. FIRST-YEAR COURSES
(The work of the first year is required.)

1A. Contracts I.—Mutual assent and its communication; offers and their expiration or revocation; consideration; requisites of contracts under seal; rights of beneficiaries; joint and several contracts. Williston, Cases on Contracts (2d ed.) (part). DM. First Term, daily, 9:00, M., W., F., 11:00, ASSOCIATE PROFESSOR KENT.

3. Real Property.—Tenure, estates, seisin, future and incorporeal interests, joint ownership, disseisin, uses and trusts; adverse possession, prescription, accretion; mode of conveyance; execution of deeds; description of property; creation of easements; estates created; covenants for title; estoppel; priority, notice, and record. Bigelow, Introduction to Real Property, and Aigler, Cases on Titles to Real Property. 1½ hrs. M., W., Th., F., 8:00; Tu., Th., 11:00, PROFESSOR MADDEN.

4. Agency.—Nature of relation; appointment; liabilities of principal: torts, contracts, crimes, admissions; liabilities of agent; parties to writings; undisclosed principal; obligations between principal and agent; delegation of agency; termination of agency; ratification. Kent, Cases on Agency. DM. Second Term, daily, 9:00; M., W., F., 11:00, PROFESSOR SEARS.

II. SECOND- AND THIRD-YEAR COURSES
(These courses are elective and need not be taken in any fixed order.)

15. Wills and Administration.—Testamentary capacity; dispositions in contemplation of death; execution, revocation, republication, and revival of wills; descent; liability of heirs for debts; probate and administration; title and powers of executors and administrators; payments of debts, legacies, and distributive shares. Costigan, Cases on Wills. DM. Second Term, daily, 10:00; Tu., 8:00; M., W., 12:00, ASSISTANT PROFESSOR EAGLETON.

30. Suretyship.—Kinds of suretyship; statute of frauds; surety's defenses due to original defects in his obligation or its subsequent discharge; surety's right of subrogation, indemnity, contribution, and exoneration; creditor's right to surety's securities. Ames, Cases on Suretyship. DM. Second Term, daily, 9:00; M., W., F., 11:00, PROFESSOR PERKINS.
42A. Public Utilities.—Public regulation and control of business; constitutional
limitations; supervision of utilities; service; liability; rates: judicial review, value, rate
of return, allocation of earnings and costs, value of service, excessive or deficient earn­
ings; Interstate Commerce Acts. Robinson, Cases on Public Utilities. DM. First
Term, daily, 10:00; Tu., 8:00; M., W., 12:00, Professor Dodd.

64. Constitutional Law II.—General scope of powers of federal government;
money, banking, postal, and military powers; citizenship and suffrage; foreign rela­
tions, Indians, aliens; territories, dependencies, new states; federal taxation; regulation
of commerce; national prohibition; inter-governmental relations; state laws impairing
obligations of contracts; retroactive civil laws; jurisdiction of federal courts. Hall,
Cases on Constitutional Law and Supplement (part). [Course 63 is not a prerequisite.]
DM. First Term, daily, 9:00; M., W., F., 11:00, Professor Hall.

67. Administrative Law and Officers.—Administrative power and action: discre­
tion; form and proof of official acts; notice; hearing and evidence; execution. Relief
against administrative action: action to recover damages; specific relief (extraordinary
legal remedies); jurisdiction, conclusiveness, and judicial control. Freund, Cases on
Administrative Law. Mj. daily, 1:30 (to August 16), Professor Freund.

86. Evidence.—The court and jury: presumptions and burden of proof; judicial
notice; admission and exclusion of evidence. Witnesses: competency; privileges; exam­
ination. Hearsay: exceptions to hearsay rule: former testimony; dying declarations;
admissions and confessions; statements against interest; regular entries; official entries
and certificates; reputation; statements of relationship; spontaneous statements. Opinions
and conclusions from lay and expert witnesses. Circumstantial evidence: character;
conduct; miscellaneous facts; physical objects. Preferred evidence: attesting
witnesses; original documents. Extrinsic evidence to contradict, vary, explain, or
apply written instruments. Hinton, Cases on Evidence. 1½ Mjs. daily, 2:30–3:45, Pro­
fessor Hinton.

1 Not credited toward a law degree if taken before courses 1, 2, and 3.
THE MEDICAL SCHOOLS

THE GRADUATE SCHOOL OF MEDICINE OF THE OGDEN GRADUATE SCHOOL OF SCIENCE

THE FACULTY

MAX MASON, Ph.D., LL.D., Sc.D., President of the University.
FREDERIC CAMPBELL WOODWARD, A.M., LL.M., Vice-President and Dean of the Faculties.
HENRY GORDON GALE, Ph.D., Dean of the Ogden Graduate School of Science.
BASIL COLEMAN HYATT HARVEY, A.B., M.B., Dean of Medical Students; Professor of Anatomy.

ROBERT RUSSELL BENSLEY, A.B., M.B., Sc.D., Professor and Chairman of the Department of Anatomy.
EDWARD VAIL LAPHAM BROWN, S.B., M.D., Professor of Ophthalmology.
ANTON JULIUS CARLSON, A.M., Ph.D., M.D., LL.D., Professor and Chairman of the Department of Physiology.
LUDVIG HEKTOEN, M.D., Sc.D., LL.D., Professor and Head of the Department of Pathology; Director of the John McCormick Institute for Infectious Diseases.
CHARLES JUDSON HERRICK, Ph.D., Professor of Neurology.
EDWIN OAKES JORDAN, Ph.D., Sc.D., Professor of Bacteriology and Chairman of the Department of Hygiene and Bacteriology.
FRED CONRAD KOCH, Ph.D., Professor of Physiological Chemistry and Chairman of the Department of Physiological Chemistry and Pharmacology.
ARNO BENEDICT LUCKHARDT, Ph.D., M.D., Professor of Physiology.
FRANKLIN CHAMBERS MCLEAN, Ph.D., M.D., Professor and Chairman of the Department of Medicine.

DALLAS B. PHEMISTER, M.D., Professor and Chairman of the Department of Surgery.
OSWALD H. ROBERTSON, M.D., Professor of Medicine.
WILLIAM HAY TALLAFERRO, Ph.D., Professor of Parasitology.
HARRY GIDEON WELLS, A.M., Ph.D., M.D., Professor and Chairman of the Department of Pathology; Director of the Oto S. A. Sprague Memorial Institute.
GEORGE MORRIS CURTIS, Ph.D., M.D., Associate Professor of Surgery.
LESTER REYNOLD DRAGSTEED, Ph.D., M.D., Associate Professor of Surgery.
FRIEDRICH HILLER, M.D., Associate Professor of Medicine.
PAUL C. HODGES, Ph.D., M.D., Associate Professor of Roentgenology.
ESMOND RAY LONG, Ph.D., M.D., Associate Professor of Pathology.
CARL RICHARD MOORE, Ph.D., Associate Professor of Zoology.
ARThUR LAWRIE TATUM, Ph.D., M.D., Associate Professor of Pharmacology.
SAMUEL WILLIAM BECKER, M.D., Assistant Professor of Medicine.
PAUL ROBERTS CANNON, Ph.D., Assistant Professor of Pathology.
BÉLA HALPERT, M.D., Assistant Professor of Pathology.
MARTIN EDWARD HANKE, Ph.D., Assistant Professor of Physiological Chemistry.
NATHANIEL KLEITMAN, Ph.D., Assistant Professor of Physiology.

1This list includes only those who will be in residence during the Summer Quarter, 1928.
LOUIS LEITER, PH.D., M.D., Assistant Professor of Medicine.
CHARLES PHILIP MILLER, JR., S.M., M.D., Assistant Professor of Medicine.
CHARLES HENRY SWIFT, PH.D., M.D., Assistant Professor of Anatomy.
CHESTER MONTAGUE VAN ALLEN, M.D., Assistant Professor of Surgery.
H. FIELDING WILKINSON, A.B., M.D., Assistant Professor of Otolaryngology.
GEORGE W. BACHMAN, PH.D., Instructor in Hygiene and Bacteriology.
GAUL MONROE DACK, S.B., Instructor in Bacteriology.
CHESTER SCOTT KEEFER, S.B., M.D., Instructor in Medicine; Resident Physician in the Albert Merritt Billings Hospital.
IDA KRAUS-RAGINS, PH.D., Instructor in Physiological Chemistry.
JOHN C. ROGERS, PH.D., Instructor in Preventive Medicine.
MERCY AURORA SOUTHWICK, M.D., Curator and Instructor in Pathological Technic.
EMORY ROSS STRAUSER, S.B., Instructor in Anatomy.
HAROLD C. VORIS, A.B., Instructor in Anatomy.
FELIX WADSWORTH SAUNDERS, S.B., Douglas Smith Fellow in Physiological Chemistry.

CARROLL GIDEON BULL, M.D., Professor of Immunology, School of Hygiene and Public Health, Johns Hopkins University (Summer, 1928).
P. FRANKLIN CLARK, PH.D., Professor of Bacteriology, University of Wisconsin (Summer, 1928).
PHILIP SHAFFER, PH.D., Professor of Biological Chemistry, Washington University, St. Louis (Summer, 1928).
WILLIAM BARNARD SHARP, PH.D., M.D., Professor of Bacteriology and Preventive Medicine, School of Medicine, University of Texas (Summer, 1928).
ALTON STACKHOUSE POPE, M.D., D.P.H., Department of Health, City of Chicago (Summer, 1928).
STEWART ARNENG KOSER, PH.D., Assistant Professor of Bacteriology, University of Illinois (Summer, 1928).

GENERAL INFORMATION

The Medical Schools of the University include (1) The Graduate School of Medicine of the Ogden Graduate School of Science, (2) Rush Medical College, and (3) The Rush Post-Graduate School of Medicine.

The Graduate School of Medicine of the Ogden Graduate School of Science was organized in 1924. Its purpose is to serve the Medical Sciences by research and teaching. It is a part of the Ogden Graduate School of Science and its work is done on the University Quadrangles in close contact with that of other departments of this school—Physics, Chemistry, Biology, etc. Departments devoted to the pre-clinical sciences were provided for when the University was founded, and established shortly thereafter. Their primary purposes were the development of the sciences and the training of scientists. Since 1899 they have included among the courses offered all those required in the first two years of work leading to the degree of Doctor of Medicine as well as those leading to the degrees of Bachelor of Science, Master of Science, and Doctor of Philosophy.

With the definite organization of the Medical School there have been added on the Quadrangles clinics and departments devoted to the clinical medical sciences, similarly related to the Ogden Graduate School of Science and with the same general character and purpose. The work of these departments leads to the degrees of Doctor of Medicine, Master of Science, and Doctor of Philosophy.

Candidates for the degree of Doctor of Medicine do the work of the first two years
in the Graduate School of Medicine of the Ogden Graduate School of Science on the Quadrangles of the University. The work of the third and fourth years may be done either in the Graduate School on the Quadrangles or in Rush Medical College at 1758 West Harrison Street.

The requirements for the fifth year may be satisfied either by a year of advanced work in some branch of medical science acceptable to the Faculty of the Graduate School of Medicine, or by a year of successful internship in an approved hospital.

In the Summer Quarter, 1928, courses are offered in all departments on the Quadrangles and in Rush Medical College on the West Side. Students having the prerequisites may register for any of the courses offered, but students regularly admitted to the Graduate Medical Schools have prior consideration in registration for courses required in those schools.

To students in good standing in other medical schools who seek admission to the Graduate Medical Schools of the University of Chicago with advanced standing, the Summer Quarter offers an excellent opportunity to adapt their work to the sequence of courses offered in this University.

Attention is called to the following courses offered during the Summer Quarter which will be of special interest and value to practitioners of medicine:

In Anatomy: courses 341, 428, 433, and 441.
In Physiology: courses 407, 409, and 411.
In Physiological Chemistry: courses 303, 311, 313, 315, 321, 331, 351.
In Pathology: courses 301 and 401.
In Hygiene and Bacteriology: courses 315, 320, 370, 401, 410, and 420.
In Rush Medical College—courses in all departments.

Any student seeking regular admission to the Medical Schools is requested to write to the University Examiner for an application blank which should be filled out fully and returned, together with an official itemized transcript of his college record, including a statement of his high-school record and a letter of honorable dismissal. The Examiner will evaluate these credentials, and will notify the student and the appropriate Dean promptly if the requirements for admission are fulfilled. If the requirements are not fulfilled the Examiner will send a list of deficiencies to the student. The Committee on Admissions meets regularly in June and February of each year.

A student seeking admission to the Medical Courses for the Summer Quarter only, not as a candidate for a degree, should not fail to mail in advance to the University Examiner the information indicated on the blank “Application for Admission” in the front of these Announcements.

Advanced courses may not be taken before prerequisite courses have been completed. With the approval of his Department, an instructor may make the completion of studies in related Departments a prerequisite for any course.

Qualified practitioners may register as unclassified or as graduate students. More detailed information in reference to the courses in medicine at the University, including Rush Medical College, is contained in the Announcements of the Medical Schools, which will be furnished on application to the University of Chicago. See also pages 5 and 6 of these Announcements.

Students who are candidates for Masters’ or Doctors’ degrees in the Medical Departments should obtain copies of the Announcements of the Graduate Schools and Colleges of Arts, Literature, and Science and of the Handbook of the Graduate Schools.
COURSES OFFERED: SUMMER QUARTER, 1928

ZOÖLOGY
See pp. 59–60

ANATOMY
See pp. 60–61

PHYSIOLOGY
See p. 61

PHYSIOLOGICAL CHEMISTRY AND PHARMACOLOGY
See pp. 61–62

PATHOLOGY
See p. 62

HYGIENE AND BACTERIOLOGY
See p. 63

MEDICINE
See p. 64

SURGERY
See p. 65

RUSH MEDICAL COLLEGE

The courses in the third and fourth years of the Medical Schools are continued at Rush Medical College during the Summer Quarter in the Departments of Pathology, Medicine, Pediatrics, Surgery, Obstetrics and Gynecology, Laryngology and Otology, Ophthalmology, and Dermatology.

There will be opportunity for a limited number of qualified special students to take work in these departments.

Post-graduate courses in Otolaryngology, Ophthalmology, Dermatology, and Radiology for a limited number of qualified students who are able to spend one or more years in study are continued during the Summer Quarter. In Radiology, courses for shorter periods may be arranged. Registration in post-graduate courses is subject to approval of the Chairman of the department concerned and of the Dean. Students desiring to register should, before coming to Chicago, write to the Dean, who will advise them as to the courses offered.

For further particulars consult or address the Dean or Registrar of Rush Medical College, 1758 West Harrison Street, Chicago, Illinois.
THE SCHOOL OF EDUCATION

THE FACULTY OF THE COLLEGE OF EDUCATION

MAX MASON, Ph.D., LL.D., Sc.D., President of the University.
FREDERIC CAMPBELL WOODWARD, A.M., LL.M., Vice-President and Dean of Faculties.
CHARLES HUBBARD JUDD, Ph.D., LL.D., Director of the School of Education; Professor and Head of the Department of Education.
WILLIAM SCOTT GRAY, Ph.D., LL.D., Dean of the College of Education; Professor of Education.
GUY THOMAS BUSWELL, Ph.D., Secretary of the Department of Education; Professor of Educational Psychology.
KARL JOHNN HOLZINGER, Ph.D., Assistant to the Dean of the College of Education; Associate Professor of Education.

FRANKLIN BOBBIOTT, Ph.D., Professor of Educational Administration.
WILLIAM WALLACE CHARTERS, Ph.D., Professor of Education.
FRANK NUGENT FREEMAN, Ph.D., Professor of Educational Psychology.
ROLLO LAVERNE LYMAN, Ph.D., Professor of the Teaching of English.
HENRY CLINTON MORRISON, S.M., LL.D., Professor of Education.
GEORGE WILLIAM MYERS, Ph.D., Professor of the Teaching of Mathematics and Astronomy.
ROLLA MILTON TRYON, Ph.D., Professor of the Teaching of History.
GEORGE ALAN WORKS, Ed.D., Professor of Library Science Education and Dean of the Graduate Library School.

FLORENCE EILAU BAMBERGER, Ph.D., Professor of Education, Johns Hopkins University (Summer, 1928).
HAROLD GRANVILLE BLUE, A.M., Professor of Secondary Education, Colorado State Teachers College, Greeley, Colorado (Summer, 1928).
JAMES WILLIS CLARSON, A.M., Dean, College of Education, University of Arizona (Summer, 1928).
EMERY NELSON FERRISS, Ph.D., Professor of Rural Education (Secondary), Cornell University (Summer, 1928).
ROY IVAN JOHNSON, Ph.D., Professor of English, Harris Teachers College (Summer, 1928).
FRANK LE ROND McVEY, Ph.D., LL.D., President, University of Kentucky (Summer, 1928).
FLOYD WESLEY REEVE, Ph.D., Professor of Education, University of Kentucky (Summer, 1928).

1 This list includes only those who will be in residence during the Summer Quarter, 1928.
Zonia Baber, S.B., Associate Professor Emeritus of the Teaching of Geography and Geology.

Arthur Gibbon Bovée, Ph.B., Assistant Professor of the Teaching of French.

Frederick Stephen Breed, Ph.D., Associate Professor of Education.

William Henry Burton, Ph.D., Associate Professor of Education.

Elliot Rowland Downing, Ph.D., Associate Professor of the Teaching of Science.

Isaac Newton Edwards, Ph.D., Associate Professor of Education.

William Claude Reavis, Ph.D., Associate Professor of Education.

Emily Jane Rice, Ph.B., Associate Professor Emeritus of the Teaching of History.

Alice Temple, Ph.B., Associate Professor of Kindergarten-Primary Education.

William Garrison Whitford, S.M., Associate Professor of Art Education.


William Emet Blatz, Ph.D., Associate Professor of Psychology, University of Toronto, Toronto, Canada (Summer, 1928).

Thomas Warrington Gosling, Ph.D., Superintendent of Schools, Madison, Wisconsin (Summer, 1928).

Joseph Marr Gwinn, A.M., LL.D., Superintendent of Schools, San Francisco, California (Summer, 1928).

Earle Douglas McPhee, A.M., Associate Professor of Psychology, University of Toronto, Toronto, Canada.

Heber Hinds Ryan, A.M., Associate Professor of Secondary Education, University of Michigan (Summer, 1928).

Wilbur Lee Beauchamp, A.M., Assistant Professor of Education.

Ernst R. Bresluch, Ph.D., Assistant Professor of the Teaching of Mathematics.

Aaron John Brumbaugh, A.M., Assistant Professor of Education.

Beulah I. Coon, A.M., Assistant Professor of Home Economics Education.

Howard Copeland Hill, Ph.D., Assistant Professor of the Teaching of Social Sciences.

Katharine Martin, Assistant Professor of Kindergarten-Primary Education.

Edith Putnam Parker, S.M., Assistant Professor of the Teaching of Geography.

Douglas Waples, Ph.D., Assistant Professor of Education.

John L. Bracken, A.M., Superintendent of Schools and Lecturer in Extension, Washington University (Summer, 1928).

Oscar Berry Douglas, A.M., Assistant Professor of Educational Psychology, Duke University (Summer, 1928).

Howard Yale McCluskey, A.B., Assistant Professor of Educational Psychology, University of Michigan (Summer, 1928).

Russell Lewis Carl Butsch, A.M., Instructor in Education.

Luther Calvin Gilberg, S.M., Instructor in Education.

Grace Storm, A.M., Instructor in Kindergarten-Primary Education.

J. Olga Adams, Ph.B., Teacher in Kindergarten, University Elementary School (Summer, 1928).

Fred G. Anibal, A.M., Instructor in Science, University High School (Summer, 1928).
GENERAL INFORMATION

LOCATION OF SCHOOL

The School of Education of the University of Chicago occupies the block bounded on the north by Fifty-eighth Street, on the east by Kenwood Avenue, on the south by
the Midway Plaisance, and on the west by Kimbark Avenue. It may be reached by the Illinois Central Railroad suburban trains to Sixtieth Street station, by the Cottage Grove Avenue electric cars (Fifty-fifth Street cars) to Kenwood Avenue (walk four blocks south), by the Sixty-third Street electric cars from Englewood railway station to Kenwood Avenue (walk four blocks north), and by the South Side Elevated Railway to Dorchester Avenue station (walk four blocks north).

THE SCHOOL OF EDUCATION

The School of Education of the University of Chicago is made up of four divisions: the Graduate Department of Education, the College of Education, the University High School, and the University Elementary School.

The Graduate Department offers courses in the history of education, in educational psychology, in methods of teaching, and in the organization, administration, and supervision of school systems. Its work is designed to prepare advanced students to give courses in education in colleges and normal schools, to prepare supervisors for various grades of schools, and to introduce students of special departments to the general principles which may be applied in the organization and presentation of subject matter in their respective departments.

The College of Education provides professional training for superintendents, principals, supervisors, critic teachers, and for teachers in the kindergarten-primary grades and in high schools. It also provides advanced work for students of experience and maturity who have not yet completed a college course but wish to prepare themselves for special types of professional service.

The University High School and the Elementary School fulfill the functions of training-schools for students preparing to teach and to supervise. They are at the same time attached to the college and graduate departments as laboratories. The courses of study and the general principles of organization in both of these schools are subjects of study and attention on the part of all members of the departments in the College and University.

The Elementary School and the High School are not in session during Summer Quarters. A nursery, a kindergarten, a first-grade group, and a second-grade group will be in session daily from 9:00 to 11:30 during the First Term of the Summer Quarter, 1928. A limited amount of observation will be allowed to members of certain classes in the Department of Kindergarten-Primary Education.

ADMISSION AND REGISTRATION

The routine of admission and registration is described on pages 5-6 of these Announcements. Students who have never attended the University of Chicago should make application for admission by mail, using the directions opposite page 2 of the cover.

Undergraduate students register regularly for three courses. They may not register for less than two. Only one of these courses may be taken as a "visitor." Registration as a "visitor" must be indicated on the student's registration card. Students are not permitted to carry "visiting" courses only; they must register for one or more courses for credit. Registration for more than three courses is limited to students who have previously attended the University and who have made an average of three grade points or better; the approval of the Dean and the Medical Adviser is also required.
Students wishing to take courses in the Departments of Art Education, Home Economics Education, or Kindergarten-Primary Education must consult the appropriate Departmental Counselor before registering. This applies to both graduate and undergraduate students.

Registration must be completed in person; the University does not register students by mail.

CANDIDATES FOR UNDERGRADUATE DEGREES

Students who expect to become candidates for degrees in the College of Education should read the Announcements of the School of Education, a copy of which will be sent upon request.

CANDIDATES FOR HIGHER DEGREES

Students who are candidates for Masters' or Doctors' degrees in the Department of Education should secure copies of the Announcements of the Graduate Schools and Colleges of Arts, Literature, and Science, the Announcements of the School of Education, and the Handbook of the Graduate Schools which contain full details with regard to requirements. Candidates for Masters' degrees should secure from Room 121, Kimbark Hall, mimeographed copies of directions for the preparation of Masters' dissertations.

Candidates for the degree of Master of Arts in the Department of Education are required to complete eight graduate majors or the equivalent in minors and majors, and to prepare an acceptable thesis on a subject approved by the Department at least one quarter before the degrees are conferred. Furthermore, they must meet the qualitative standards required by the Department relating to graduate courses in Education. The sequence to the Master's degree must include courses as indicated below:

1. One major from the group entitled Survey of Current Problems. (See Education 301.)

2. One major from the group entitled Courses in Scientific Technique. (See Education 305, 306, and 307). In addition, students taking the Master's degree in Summer Quarters are required to register for Education 309A.

3. Two majors selected from two of the first seven subdivisions of the group entitled Systematic Studies of Specific Fields. (See Education 310 to 371A inclusive.)

4. Additional courses, totaling four majors or the equivalent in majors and minors, to prepare for efficiency in specific types of professional work. These courses may be elected wholly or in part from courses numbered 316 to 371A inclusive. One major may be selected from each of two of the following subdivisions of courses: Special Types of Education; Supervision of School Subjects; Special-Methods Courses. Additional courses may be elected from these subdivisions provided they relate to the thesis problem. Students interested in courses in the Special Methods Departments should consult the statements concerning graduate sequences in the introductory material of such Departments in the annual Announcements of the School of Education.

No course may be presented for the Master's degree in Education which has been taken more than five years prior to the final examination for the degree.

Master's dissertations for students in residence the First Term must be presented in final form to the Secretary of the Department, Room 121, Kimbark Hall, not later than Friday, July 27. Dissertations for students not in residence the First Term must be presented not later than Monday, July 2.
RESERVATIONS IN LIMITED COURSES

Many of the advanced courses in the Department of Education are restricted to a limited number of students as indicated in the descriptions of the courses. The requests for registration in such courses frequently exceed the limit set for the size of the class. Students may make reservations in limited courses by supplying the Committee on Admissions of the Department of Education with evidence that they are qualified for such courses. Such evidence should cover the following points:

a) Previous degrees, institutions, and dates.
b) Previous courses in Education, where and when taken.
c) Present teaching position, including subjects taught.
d) Plans for future professional work.
e) Reasons for taking the course.

In order to have places reserved in limited courses, students must have the facts mentioned in the hands of the Secretary of the Department of Education not later than two weeks prior to the opening date of the quarter. Students should clearly understand that the only method of reserving places in limited courses is to supply the information required in time to be acted upon by the Committee.

The steps above should not be interpreted as those which secure admission to the University. All questions relating to admission to the University should be referred to the University Examiner.

COURSES FOR SUPERINTENDENTS, PRINCIPALS, AND SUPERVISORS

The courses which are given in the Department of Education during the Summer Quarter are planned primarily to meet the needs of students who are interested in administrative and supervisory problems and in instructorships in Education.

Students who have less than three majors in Education are required to register first for undergraduate courses in the Department of Education and for special-methods courses. The undergraduate courses are numbered 201 to 242, and are described on pages 89-91. Special-methods courses are described on pages 98-107 inclusive.

A large number of advanced and specialized courses in administration and supervision have been provided for students who have had three or more majors in Education. These courses are described on pages 91-98. Additional courses of special value to supervisors are given by the special-methods departments of the College of Education. They are described on pages 98-107.

SPECIAL COURSES AND CONFERENCE CONCERNING COLLEGE AND UNIVERSITY ADMINISTRATIVE PROBLEMS

A special series of courses has also been organized for college and university administrative officers, namely, Education 375A, 375B, 377A, 377B, 378A, 378B, 379A, 379B. In addition to this sequence of courses, there will be a general conference concerning college and university administrative problems during the week of July 16 to which officers of such institutions are most cordially invited. Arrangements have been made for those who attend the conference to visit classes and to enjoy other University privileges without the payment of fees.
THE NUMBERING SYSTEM

The courses are divided into four different grades which may be briefly characterized as follows:

101–99.—Introductory or elementary courses primarily for undergraduate students with not more than 18 majors of credit.

201–99.—Survey or informational courses primarily for undergraduate students with more than 18 majors of credit.

301–99.—Systematic studies of specific fields and methods of scientific study primarily for graduate students who have fulfilled prerequisites. Open to advanced undergraduate students with at least 27 majors, including specific prerequisites. Those who have not fully met these requirements cannot register for the courses of this group.

Specific prerequisites for the courses in the Department of Education are three courses in Education. If a student has completed only one or two courses in Education, he must register for a sufficient number of undergraduate courses before he will be permitted to register for courses of this level. Certain exceptions to this general requirement are indicated in connection with courses 329 and 380.

401–99.—Advanced specialized and research courses for graduate students who have had six or more majors in Education and who fulfill specific requirements.

COURSES OFFERED: SUMMER QUARTER, 1928

EDUCATION

UNDERGRADUATE COURSES

201A. Introduction to the Scientific Study of Education.—This course introduces students to a study of current educational problems and to scientific methods of solving them. Basic text: Judd, Introduction to the Scientific Study of Education. Reports required of each member of the class. Primarily for advanced undergraduate students. Education 101 or 201 required of all students taking sequences in Education or in Kindergarten-Primary Education who have not had its equivalent but credit will not be given for both Education 101 and 201. M. First Term, repeated M. Second Term, 8:00, ASSISTANT PROFESSOR BRUMBAUGH.

203A. General Methods of Teaching in Elementary Schools.—The following topics are discussed: broadening purposes of elementary education, selecting and organizing subject matter, project teaching, interest, drill, supervised study, individual differences. Basic text: Parker, General Methods of Teaching in Elementary Schools. Primarily for advanced undergraduate students. Credit will not be given for both Education 203 and 204. Advised prerequisite: Education 101 or 201. M. Second Term, 1:30, SUPERINTENDENT BRACKEN.

203B. Types of Teaching in Elementary Schools.—Lectures and readings on methods of teaching the following: handwriting, spelling, arithmetical calculation, beginning reading, understanding social life, problem-solving, skilful silent reading, communicating ideas, habits of harmless enjoyment, civic-moral training. Basic text: Parker, Types of Elementary Teaching and Learning. Credit will not be given for both Education 203 and 204. Advised prerequisite: Education 101 or 201. M. First Term, 1:30, SUPERINTENDENT BEATTY.

204A. Methods of Teaching in Junior and Senior High Schools.—A general-methods course for prospective high-school teachers. The following topics are discussed: broadening purposes of high-school education, selection and arrangement of subject matter, training in motor skill, foreign-language instruction, problem-solving, acquiring ideas and meanings, training in expression and enjoyment. Basic text: Parker, Methods
of Teaching in High Schools. Credit will not be given for both Education 203 and 204. Advised prerequisite: Education 101 or 201. M. First Term, 9:00, ASSISTANT PROFESSOR BRUMBAUGH; repeated M. Second Term, 12:30, MR. MCCALLISTER.

204B. Methods of Teaching in junior and Senior High Schools.—A continuation of Education 204A. The following topics are discussed: self-activity and apprehension, influence of age on learning, interests, individual differences in capacity, supervised study, the use of books, conversational and laboratory exercises, questioning, measuring the results of teaching. Credit will not be given for both Education 203 and 204. Advised prerequisite: Education 101 or 201. Basic text: Parker, Methods of Teaching in High Schools. M. First Term, 12:30, MR. MCCALLISTER; repeated M. Second Term, 9:00, ASSISTANT PROFESSOR BRUMBAUGH.

206A. Introduction to the Psychology of Junior and Senior High School Subjects. —A psychological analysis of the various junior and senior high-school subjects; discussion of the mental processes involved in teaching and learning each; the significance of individual differences; proposals and reasons for the reorganization of high-school courses as discussed in recent educational writings. Prerequisite: 1 major in Psychology. In addition, students are advised to take Education 101 or 201 before entering this course. M. First Term, repeated M. Second Term, 10:00, ASSOCIATE PROFESSOR RYAN.

207. Class Organization, Management, and Testing in Elementary Schools.—Deals with scientific management of classroom procedures outside the field of instructional methodology. Topics, first half: principles of scientific management, technique of testing, heterogeneous grouping, homogeneous grouping, the individual system, plans of promotion, and differentiation of courses. Practical work with test materials is provided. Topics, second half: organization of supervised study, size of class groups, schedule of recitations, management of physical conditions and material supplies, control of behavior, new types of examinations, assignment of marks, and a system of records. For elementary-school teachers. Prerequisite: Education 101 or 201. Mj. (or M. either Term), 2:30, MR. SNARR.

208. Class Organization, Management, and Testing in Junior and Senior High Schools.—Deals with scientific management of classroom procedures outside the field of instructional methodology. Topics, first half: principles of scientific management, technique of testing, heterogeneous grouping, homogeneous grouping, the individual system, plans of promotion, and differentiation of courses. Practical work with test materials is provided. Topics, second half: organization of supervised study, size of class groups, schedule of recitations, management of physical conditions and material supplies, control of behavior, improved methods of examining, assignment of marks, and a system of records. For high-school teachers. Credit will not be given for both Education 202 and 208. Prerequisite: Education 101 or 201. Mj. (or M. either Term), 11:00, ASSOCIATE PROFESSOR BRED.

209. School Hygiene.—School hygiene and health education including a background of personal and community hygiene. Topics: sanitation of schools including lighting, ventilation, and open-air schools; physiological bases of hygiene; factors influencing normal growth and nutrition; hygiene of exercise; recognition of skin and communicable diseases; the extent and control of physical defects; posture; accident prevention and first aid; mental hygiene; methods of teaching health. Advised prerequisite: Education 101 or 201. Mj. (or M. either Term), 3:30, DR. SHAUGHNESSY.

210. History of Modern Education.—Educational progress in Europe and the United States from 1400 to the present. A deliberate attempt is made throughout to connect social, religious, economic, and political changes with educational changes and to show how the former precede and determine the latter. Major topics: the influences of the Renaissance and the Reformation on education; ideas and influences of educational reformers; the influence of the scientific spirit and the rise of democracy on education; development of systems of education; types of schools developed; development of significant factors of educational practice. Prerequisite: Education 101 or 201. Mj. (or M. either Term), 1:30, PROFESSOR BLUE.

233. The Supervision of the Teaching Staff.—Presents the problems, principles, and procedures of educational supervision. Major topics: place of supervision in the
education program, standards for judging teaching, the technique of diagnosis and criticism, the supervisor and course of study-making, research and experimental study of classroom problems, and scientific study of supervision. A general course for superintendents, supervisors, principals, and experienced teachers. Prerequisite: 2 majors in Education. Credit will not be given for both Education 233 and 333. Mj. (or M. either Term), 12:30, Mr. Gilbert.

242A. The Curriculum.—Considers the nature of the curriculum, elementary and secondary, that is dictated by actual human needs. Deals with the technique of curriculum-making and with the curriculum of social, civic, moral, occupational, and practical arts education; also with training in matters of health, recreation, literature and general reading, music, art, science, English and foreign languages. For teachers, supervisors, and principals. Prerequisite: 2 majors in Education. Credit will not be given for both Education 242 and 342. M. First Term, repeated M. Second Term, 1:30, Mr. Gilbert.

GRADUATE COURSES

I. SURVEY OF CURRENT PROBLEMS

301. Current Problems in Education as Revealed through School Surveys.—Includes an extensive study of current problems in various types and phases of education as revealed through school surveys. Methods of studying these problems and current tendencies in survey recommendations are considered. Extensive reading of survey literature required. Problems are assigned for investigation. Required of all candidates for the Master's degree. Limited to graduate students who have had 3 or more majors in Education. Sections limited to 40. Mj. sec. a, 8:00, Professor Gray; sec. b, 12:30, Mr. Butsch; sec. c, 3:30, Mr. Snarr.

II. COURSES IN SCIENTIFIC TECHNIQUE

305. Educational Bibliography and Methods of Historical Research.—Designed to familiarize the student with the use of bibliographical guides to educational literature. A study of the principles of historical research with special reference to educational history, preparation of bibliographies, documentation, practical exercises in documentary interpretation and historical criticism. Primarily for graduate students who have had 3 or more majors in Education. Limited to 40. Mj. (or M. either Term), 9:00, Associate Professor Edwards.

306. Experimental Education.—The purpose of this course is to acquaint the student with the most important problems and methods in experimental education through selecting, planning, carrying on, and reporting upon an experiment, and through serving as a subject in the experiments made by other members of the class. Experiments are made in the general fields of learning, the psychology of the school subjects, and mental measurement. Primarily for graduate students who have had 3 majors in Education and 1 major in Psychology. Limited to 30. Mj. sec. a and sec. b, 10:00-12:00, Professor Freeman and Assistant Professor Douglas.

307A. Statistical Methods Applied to Educational Problems.—Considers elementary methods for dealing quantitatively with educational facts. Provides exercises in tabulation, graphical representation, classification, and in the calculation of such measures as averages, percentiles, and measures of dispersion. Illustrative material will be taken from typical studies in school finance, child accounting, and standardized tests. Primarily for graduate students who have had 3 or more majors in Education. Sections limited to 40. M. First Term, sec. a, 11:00, Professor Clarson; sec. b, 2:30, Associate Professor Holzinger; repeated M. Second Term, 12:30, Professor Clarson.

307B. Statistical Methods Applied to Educational Problems.—The chief topics considered are correlation and regression. Primarily for graduate students who have had 3 or more majors in Education. Students registering for this course must have completed Education 307A or its equivalent. Sections limited to 40. M. First Term, 12:30, Professor Clarson; repeated M. Second Term, sec. a, 11:00, Professor Clarson; sec. b, 2:30, Associate Professor Holzinger.
309A. Educational Research.—During the First Term of the Summer Quarter all candidates in the last quarter of their work for the Master's degree are required to register for this course unless their theses have been accepted prior to the opening of the quarter. The course consists of a critical review of the methods employed in collecting and preparing for presentation the materials submitted for the Master's dissertation. Reports are required of members of the class. During the Second Term the course is repeated and is open to students who will complete their course and residence requirements but who will need further time for the completion of their theses. All registrations must be approved by the instructor. M. First Term, repeated M. Second Term, 3:30, Professor Buswell.

III. SYSTEMATIC STUDIES OF SPECIFIC FIELDS

History of Education

316. History of American Education.—Origin and development of American educational institutions, 1607-1920. The European background and modifications made to meet the needs of the colonists. Evolution of state systems of public instruction. The influence of social, religious, economic, and political conditions on education; types of educational institutions established, their administrations, support, curriculum, practices, methods, and ideals. Primarily for graduate students who have had 3 or more majors in Education. Mj. (or M. either Term), 11:00, Mr. Nason.

Educational Administration and Supervision

318. Constitutional and Legal Basis of Public-School Administration.—A study of judicial decisions relating to education in order to discover the legal principles involved in practical problems of public-school administration. Major topics: creation and alteration of districts, rules and authority of boards, control of school property, management of funds, liability of districts and district officers, taxation, employment and dismissal of teachers, rights and duties of parents and pupils, discipline and punishments, studies and textbooks. Primarily for supervisory and administrative officials who have had 3 or more majors in Education. Limited to 40. Mj. (or M. either Term), 8:00, Associate Professor Edwards.

324B. The School Revenue.—For executives of local school systems, members of state departments of education, and others interested in the problems which arise out of the raising of school money. Taxation inequalities and equalization devices, the state and federal units, possible solutions of revenue problems. Prerequisite: 3 majors in Education. Limited to 40. M. First Term, 8:00, Professor Morrison.

328A. The Administrative Management of Pupils.—Considers the problems and principals in relation to attendance, organization, classification, and promotion of pupils. Topics: the school census bureau; regularity and punctuality in attendance; means of securing co-operation of parents; classification of pupils; marking systems; promotion plans; acceleration, retardation, and elimination of pupils; vocational and continuation schools. Primarily for graduate students who have had 3 or more majors in Education. M. First Term, 8:00, Superintendent Gwinn; repeated M. Second Term, 8:00, Superintendent Gwinn.

320. Educational and Vocational Guidance.— Treats problems centering around individual adjustment and guidance essential to pupil progress at the junior and senior high school levels. Topics: need for personnel adjustment; history of educational guidance and personnel administration; practices in counseling and guidance; school personnel records; use of mental and aptitude tests using occupational information, follow-up and placement administration. Primarily for graduate students who have had 3 or more majors in Education. Mature students with business or personnel experience may be admitted with the approval of the instructor. Mj. (or M. either Term), 3:30, Mr. Woellner.

332. The Administration of the Teaching Staff.—This course deals with the problems that arise in connection with the administration of the teaching staff. Such problems as the following will be considered: training, certification, recruitment, placement, promotion, training in service, tenure, rating, teaching load, salary schedules, professional ethics, legal and social status, professional organizations, health and leisure,
activities, problems; have pupils; administration of in the character 337A. TENDENT BRACKEN. Term, 2:30, SUPERINTENDENT GOSLING.

335A. Duties of City School Superintendents.—Major topics: legal and professional status of the superintendent, essential qualifications, analysis of administrative duties, organization of duties for efficient administration, executive functions, administration of personnel, administration of school plants and equipment, administration of curriculum and instruction, relation to the public. Primarily for city-school superintendents and for those interested in school administration who have had 3 or more majors in Education. M. First Term, 9:00, SUPERINTENDENT OWEN; repeats M. Second Term, 9:00, SUPERINTENDENT GOSLING.

336. The Organization and Administration of the High School.—Analytical study of the principal and the principalship; qualifications, duties, and responsibilities of principals; organization of the principalship for effective management; office practices of principals; personnel administration of pupils and teachers; direction and supervision of extra-curriculum activities; organization and administration of instruction; supervision of instruction; leadership in the school community. For high-school principals and superintendents who have had 3 or more majors in Education. Prerequisite: 3 majors in Education. Mj. (or M. either Term), 2:30, ASSOCIATE PROFESSOR REAVIS.

337A. The Study and Supervision of the High-School Girl.—History and present status of the dean of girls; preparation and qualifications of a dean of girls; organization of the dean’s office; necessary equipment; records; the adolescent girl; girls’ organizations; administrative devices for keeping in touch with girls and parents; medical records—their purpose and use; a social program; the delinquent girl; a brief discussion of the case-history method of adjusting girls’ problems. For women interested in the work of dean of girls or assistant principal. Prerequisite: 3 majors in Education and at least 3 years of teaching experience. M. First Term, 12:30, MISS SMITHIES.

337B. The Study and Supervision of the High-School Girl.—A continuation of 337A. Intensive work will be given on diagnosis of specific cases. Major topics: the detailed technique used in the case-history method of studying girls; the technique of the interview; the relation of a dean of girls to vocational guidance; a dean’s relation to character development; the group conference—its place in the dean’s calendar; health problems; standards for evaluating the work of a dean of girls. Prerequisite: 3 majors in Education, including 337A. M. First Term, 1:30, MISS SMITHIES.

338. Junior High School Organization and Administration.—Deals with the development of the junior high school idea, special functions, nature of the junior high school child, problems of counseling and guidance, organization and administration of pupil activities, functional reorganization of the curriculum, improvement of teaching, steps in the organization of a junior high school. Primarily for graduate students who have had 3 or more majors in Education. Mj. (or M. either Term), 3:30, ASSOCIATE PROFESSOR REAVIS.

340A. Duties of the Elementary-School Principal.—Deals with the work of the principal in the administration and supervision of elementary schools. Topics treated: evolution of the building principal; opportunities for a professional career in the elementary-school principalship; analysis of duties; office organization; management of pupils; administration of building, grounds, and supplies; supervision of instruction; inventories and reports; community contacts; professional improvement. Primarily for elementary-school principals who have had 3 or more majors in Education. M. First Term, 2:30, SUPERINTENDENT BEATTY; repeats M. Second Term, 2:30, SUPERINTENDENT BRACKEN.
342. The Curriculum.—Treats the objectives of public education, elementary and secondary, in the light of current human needs. Then views the content of the curriculum along its several lines in terms of these objectives. Gives special attention to education for citizenship, health, recreation, occupations, languages, practical arts, fine arts, and general intellectual vision. For teachers, supervisors, and administrators. Prerequisite: 3 majors in Education. Mj. (or M. either Term) 10:00, PROFESSOR BOBBITT.

343. The Administration of Elementary School Curriculum Studies.—This course is intended primarily for superintendents, principals, and chairmen and members of committees in charge of curriculum reorganization in public-school systems. Its purposes are two in number: (1) to present methods of organizing curriculum staffs and committees and procedures in planning the work. (2) to present the curriculum research literature in each subject and descriptions of recently organized curricula. Primarily for graduate students who have had 3 or more majors in Education. Mj. 3:30, PROFESSOR CHARTERS.

344A. The Junior High School Curriculum.—Bases for the development and organization of junior high school curricula, current practices, problems of instruction. Laboratory work in curriculum construction required. Primarily for graduate students who have had 3 or more majors in Education. M. First Term, repeated M. Second Term, 11:00, ASSOCIATE PROFESSOR RYAN.

345. The High-School Curriculum.—A study of the high-school curriculum from the standpoint of the place and function of the secondary school in the educational system, the characteristics and needs of adolescence, and the needs of American society. The historical development of high-school curricula and theories and principles of curriculum-making. Examples of recent curricula and courses of study will be critically examined. For high-school teachers, high-school principals, and superintendents. Prerequisite: 3 majors in Education, including Education 342 or equivalent. Mj. (or M. either Term), 10:00, PROFESSOR PERKISS.

350. Introduction to Educational Psychology.—This course treats of the psychological facts and principles which are involved in the solution of various educational problems. An analysis is made of such problems as arise in connection with the curriculum, methods of instruction, classification, management, and guidance. Psychological facts which are necessary to solve these problems are sought and their bearing upon the educational problems are discussed. Emphasis is laid upon the results of scientific study. Prerequisite: 3 majors in Education and 1 major in Psychology. Mj. (or M. either Term), 9:00, PROFESSOR FREEMAN.

353B. Mental and Physical Growth of Children.—A critical study of certain major topics of mental development, such as the beginning of mental life, certain instinctive tendencies, growth in general intelligence, growth in specific mental capacities, development of certain forms of behavior including language, drawing, and play. For graduate or advanced undergraduate students who have had 3 or more majors in Education and 1 major in Psychology. Limited to 40. M. First Term, 2:30, PROFESSOR BUSWELL.

354A. Psychology of Elementary Education.—Traces the changes which take place in the mental processes of pupils when they learn the elementary-school subjects. Prerequisite: 3 majors in Education and 1 major in Psychology. M. First Term, repeated M. Second Term, 1:30, PROFESSOR JUDD.

355A. Psychology of Secondary Education.—Deals with the mental and social development of secondary school pupils and with psychological problems arising in the administration of secondary education. Prerequisite: 3 majors in Education and 1 major in Psychology. M. First Term, repeated M. Second Term, 2:30, PROFESSOR JUDD.

357A. Psychology of Learning.—The nature of different types of learning; appreciation of the principles which underlie successful guidance of learning; types of learning; methods, conditions, and incentives; individual differences in learning; general effect of learning or transfer of training. Constant reference to experimental literature. Primarily for graduate students. Prerequisite: 3 or more majors in Education or Psychology. M. First Term, 8:00, ASSOCIATE PROFESSOR MCPHEE; repeated M. Second Term, 8:00, ASSISTANT PROFESSOR MCCLUSKY.
360A. Psychopathic, Retarded, and Mentally Defective Children.—Review of the psychology, causes, treatment, and prevention of feeblemindedness; the psychology and school care of the more remediable types, such as defectives, slow or borderline children, and those who are physically defective; the diagnosis and treatment of modern delinquents; the problem of delinquency in present-day social community programs. Primarily for graduate students with 3 majors in Education. M. Second Term, 9:00, ASSOCIATE PROFESSOR BLATZ.

361A. Mental Hygiene.—A system of envisaging the motives influencing the behavior of children in a social environment, controlled and free. Emphasis is placed on objective measurement of personality development as it involves formal educational practice. Special problems are analyzed and details of treatment suggested. Primarily for graduate students with 3 majors in Education. M. Second Term, 8:00, ASSOCIATE PROFESSOR BLATZ.

Tests and Measurements

363A. Mental Tests.—History of mental tests; characteristics of modern tests; types of tests; principles of selection, design, and application; uses and results of tests in school, industry, and court; bearing on problems of mental development and heredity. Methods of conducting tests are discussed and demonstrated, but technical training in testing is not given. Prerequisite: 3 majors in Education and 1 major in Psychology. M. First Term, 9:00, ASSOCIATE PROFESSOR MCPHEE; repeated M. Second Term, 9:00, ASSISTANT PROFESSOR MCCUSKYE.

364A. The Use of Achievement Tests in Improving Instruction in the Elementary School.—The significance of the testing movement; available tests and scales; basis for the critical evaluation of tests; technique of administering and scoring tests; methods of tabulating and interpreting results; use of results in diagnosis, classification, guidance, and supervision. Extensive laboratory experimentation with test materials. Individual projects in the construction of objective examinations and the planning of testing programs. For superintendents, supervisors, or teachers of experience who have had 3 or more majors in Education. Limited to 40. M. Second Term, 10:00, ASSOCIATE PROFESSOR BREED.

364B. The Use of Achievement Tests in Improving Instruction in the High School.—The same as 364A applied to high-school instruction. Limited to 40. M. First Term, repeated M. Second Term, 1:30, MR. MCCALLISTER.

Educational Methods

367A. General Technique of Instruction in the High School.—Dealing with teaching procedure applicable in junior and senior high schools and junior college. Mastery of the learning units, fallacies in lesson-learning, direct teaching, fundamentals of operative technique, science and history teaching, development of study ability. Recommended but not required that students elect 367A as preliminary to 367B to be offered in 1929. Primarily for graduate students who have had 3 or more majors in Education. M. First Term, 9:00, PROFESSOR MORKISON.

370A. Investigations of Study Habits.—An analysis of the study habits of upper-grade and high-school pupils, the factors conditioning effective study, diagnosis of pupil difficulties, corrective and remedial teaching. Primarily for graduate students who have had 3 or more majors in Education and teaching experience. M. First Term, repeated M. Second Term, 12:30, ASSISTANT PROFESSOR BEAUCHAMP.

371A. Methods of Teaching Ideals.—A survey of the methods of teaching ideals and the development of traits of personality will be made. Emphasis will be laid upon the organization of projects with a view to their being studied during the ensuing year under school conditions by teachers enrolled in the course. Prerequisite: 3 majors in Education. M. First Term, repeated M. Second Term, 2:30, PROFESSOR CHARTERS.

372. Investigations of Problems in High-School Teaching.—A study of methods of investigation which teachers in service may themselves apply in the solution of significant problems. Each student selects and plans the investigation of some one problem. For experienced teachers who have had 3 or more majors in Education. Limited to 40. Mj. (or M. either Term), 8:00, ASSISTANT PROFESSOR WAPLES.
374. Health Education in the Schools.—School hygiene and health education from the viewpoint of the administrator. Topics: a résumé of the evolution, objects and methods of the modern health program; the school as a local point in the health of the pre-school child; the school nurse as a link between pupil, home, and school; the value of physical education and games; hygienic management of the school day; the need and uses of special classes; measurement of health instruction; the organization of medical inspection, physical education and health education. Prerequisite: 3 majors in Education including Education 209 or equivalent. Mj. (or M. either Term), 2:30, DR. SHAUGHNESSY.

375A. Organization and Administration of Normal Schools and Teachers' Colleges.—Deals with the origin, development, and functions of teacher-training institutions in the United States; duties of administrative officers, teachers, and boards of control; problems of standardization. A special study is made of the organization and development of curricula, and the transition of normal schools to teachers' colleges. Prerequisite: 3 majors in Education. M. Second Term, 8:00, PRESIDENT BROWN.

375B. Supervision and Improvement of Instruction in Normal Schools and Teachers' Colleges.—Deals with the methods of testing and improving instruction; organization of the training school; conduct of practice teaching; classification of pupils; general administrative measures for promoting instructional and supervisory efficiency. Special emphasis is given to problems of critic teachers in teacher-training institutions. Extensive reading required. Prerequisite: 3 majors in Education. M. Second Term, 9:00, PRESIDENT BROWN.

377A. The Nature, Organization, and Control of Higher Education.—Considers types and forms of organization of higher-educational institutions; discusses constitutions, the functions of Boards of Trustees, their relation to educational officers, alumni representation on Boards of Trustees, public and private relationships, and the direction of educational purposes. M. First Term, 8:00, PRESIDENT MCVEY.

377B. The Administration and Supervision of Academic Work in Colleges and Universities.—Considers the functions of educational officers, including presidents and deans, the selection of personnel, examination of curricula, and the supervision and testing of the results of instruction. M. First Term, 9:00, PRESIDENT MCVEY.

378A. The Financial Administration of Higher Institutions.—This course considers the following problems: financial organization of normal schools, colleges, and universities; the functions of business officers; methods of budget accounting and control; account books and records; financial reports; the computation of unit costs. Primarily for graduate students who have had 3 or more majors in Education. M. Second Term, 10:00, PROFESSOR REEVES.

378B. The Financial Administration of Higher Institutions.—The following problems are considered: the investment of endowment funds; the remuneration of teachers; teachers' pensions; student fees; the administration of scholarship and loan funds. Numerous financial studies of institutions of higher learning will be presented. Primarily for graduate students who have had 3 or more majors in Education. M. First Term, 10:00, PROFESSOR REEVES.

379A. Problems of Deans, Registrars, Other Administrative Officers, and Faculty Committees.—The problems of administrative officers and faculty committees will be considered at length, with emphasis upon statistical analysis and graphical representation of data collected as a part of office routine. The following topics will be considered: making, keeping, and analyzing records of students, faculty, and alumni; studies relating to the college constituency; the organization of classes; the measurement of the teaching load; the utilization of plant space. Primarily for graduate students who have had 3 or more majors in Education. M. Second Term, 11:00, PROFESSOR REEVES.

379B. Problems of Deans, Registrars, Other Administrative Officers, and Faculty Committees.—The following problems will be considered: student scholarship; grading systems; problems relating to college reorganization; studies relating to the selection,
retention, and promotion of students; general personnel problems; standards in higher education. Techniques employed in college and university self-surveys will be developed. Primarily for graduate students who have had 3 or more majors in Education. M. First Term, 11:00, Professor Reeves.

389. Industrial Education.—Deals with the problems in education arising from the adjustment and preparation of pupils entering industrial pursuits at various levels. Attention is directed to the study of industries in education and to the place of education in the industries. Major topics presented: historical background, intermediate industrial courses, continuation and evening schools, unit trade courses, factory schools, industrial surveys, administration of Smith-Hughes Act, state and city programs. Primarily for graduate students who have had 3 or more majors in Education. Mature students with business or personnel experience may be admitted with the approval of the instructor. Mj. (or M. either Term), 2:30, Mr. Woellner.

Supervision of School Subjects

390A. Supervision of Instruction in Reading: Elementary Schools.—Summarizes results of scientific studies of elementary-school reading; interprets these results in terms of aims of reading, a program of instruction, methods of teaching, materials of instruction, testing, diagnosis; determines problems requiring further investigation. Special attention is given to the problems of reorganizing and improving instruction in harmony with the results of scientific studies. Various supervisory procedures are considered. Primarily for supervisors, critic teachers, principals, and superintendents who have had 3 or more majors in Education. M. First Term, repeated M. Second Term, 9:00, Professor Gray.

391A. Supervision of Instruction in Spelling.—Considers the problems of teaching spelling, uses the results of investigations, and suggests opportunities for research. Topics: selection of the spelling vocabulary, the gradation of words, organization of lesson units and special exercises, methods of instruction and study direction, diagnosis and remedial treatment of disability, and the measurement of spelling achievement. Primarily for superintendents, supervisors, principals, and teachers who have had more than 3 majors in Education. Limited to 40. M. First Term, 10:00, Associate Professor Breed.

392. The Supervision of History and the Other Social Studies.—Summarizes the results of recent investigations; surveys recent innovations and tendencies in the field; interprets the results of the foregoing in terms of objectives, courses of study, measuring results, methods of procedure, library-laboratory equipment, visual aids, and fundamental elements; emphasizes problems requiring further investigation. For supervisors, critic teachers, principals, superintendents, and teachers of special methods in schools of education and normal schools. Prerequisite: 3 majors in Education. Limited to 40. Mj. (or M. either Term), 10:00, Professor Tryon.

393A. Supervision of English in Elementary Schools.—Problems, principles, and procedures of supervision. Making a course of study; selecting materials and equipment; criticism of technique of teaching; remedial work with teachers. For superintendents, principals, supervisors, and teachers of methods in normal schools. Prerequisite: 3 majors in Education and 4 majors in English. Limited to 50. M. First Term, repeated M. Second Term, 11:00, Professor Johnson.

395A. Supervision of Science Teaching.—The curriculum outlined in specific objectives; pupil activities to accomplish the same; types of learning in science; check lists of desirable points to watch in supervision; selection and improvement of the science teacher; present conditions in science teaching and methods for improving them. Primarily for superintendents, principals, supervisors, and critic teachers. Prerequisite: 3 majors in Education. Limited to 40. M. First Term, repeated M. Second Term, 1:30, Assistant Professor Beauchamp.

396. Supervision of Geography in Elementary and Secondary Schools.—Problems of supervision relating specifically to Geography. Class participation in the investigation of (1) trends in the teaching of Geography as revealed in texts, tests, curricula,
surveys, current educational literature, and classroom practice, (2) methods of evaluating materials, organization, and technique employed in the teaching of geography, and (3) means of improving instruction in the subject. For supervisors, critic teachers, principals, and superintendents. Prerequisite: 3 majors in Education. Limited to 40. Mj. (or M. First Term), 10:00, ASSISTANT PROFESSOR PARKER.

397A. Investigations in Arithmetic.—A survey of the results of scientific studies relating to arithmetic. Organizes material around three major topics: (a) the mental processes of pupils in working examples and problems; (b) the materials of arithmetic, including textbooks, practice exercises, and supplementary devices; (c) methods of teaching arithmetic. Emphasizes acquaintance with the experimental literature of this subject. Open to supervisors, principals, superintendents, and graduate students who have had 3 or more majors in Education. Limited to 40. M. Second Term, 2:30, PROFESSOR BUSWELL.

Special-Methods Courses

For special-methods courses which count in fulfilling requirements for the Master's degree in Education, see descriptions of "Graduate Sequences" in the various special-methods departments as given in the Announcements of the College of Education, 1928-29.

IV. ADVANCED SPECIALIZED AND RESEARCH COURSES

407. Statistical Methods: Advanced Course.—An advanced critical study of the methods of statistical treatment of school facts. Open only to advanced graduate students who have had 6 or more majors in Education, including an elementary course in statistics. Limited to 40. Mj. 1:30, ASSOCIATE PROFESSOR HOLZINGER.

417. Principles of Educational Administration.—Considers the general principles that should govern the administration and supervisory organization and procedures in managing the several fundamental portions and aspects of a school system. Makes application of the principles to the problems involved in the distribution and placement of the several powers and duties of the various members of the school system. For advanced graduate students who have had 6 or more majors in Education. Limited to 40. Mj. (or M. First Term), 11:00, PROFESSOR BOBBITT.

409. Research Problems in Education.—Consists of personal conferences with students who are carrying on independent research. Open only on permission of the instructor to advanced graduate students who have had 9 majors in Education and who can show evidence of ability in research by a written report of a completed investigation which is equivalent to a Master's thesis. Mj. or DMj. Hours to be arranged, PROFESSOR JUDD.

SPECIAL METHODS DEPARTMENTS

LIBRARY SCIENCE EDUCATION

The work in Library Science Education is planned for two groups of workers in the field of Library Science, namely, school librarians and teachers of professional librarians.

The courses under the heading of Professional Courses for Teachers of Librarians are planned for students who are familiar with the subject matter of library science and who are or intend to be teachers of the subject. The courses are designed to meet the needs of four groups of students: (1) teachers in library schools; (2) teachers in library training classes; (3) teachers of library science courses in colleges and universities, in teachers' colleges and normal schools, in high schools, and in summer sessions; and (4) inexperienced teachers under appointment for similar positions. Individual and group conference hours will be arranged; the latter at times may be by topic, e.g., library school, training class, etc. The courses are planned primarily for graduate students but undergraduate students who are experienced teachers will be admitted.
Permission to enter the courses listed in this group is subject to the approval of Dean Works.

The courses under the heading of School Library Technique are designed both for persons teaching in library schools and for school librarians. The instructors of these courses will hold individual conferences with school librarians concerning their problems.

Concerning the routine of admission to the University; see pages 5–6; concerning matriculation and registration fees, see pages 6–7.

SCHOOL LIBRARY TECHNIQUE

206A. The Elementary School Library.—Management and use; relation to school; selection of material; ways of stimulating voluntary reading. Students will have direct contact with a library collection, and opportunity for projects and investigations which meet their own needs. M. First Term, 10:00, Miss Colburn; repeated M. Second Term, 10:00, Miss Logasa.

208A. The Use of Libraries in Junior and Senior High Schools.—The purpose is to develop ability to use the school library for (a) reading, (b) study, (c) reference. Major topics: adolescent characteristics as they affect reading experiences; ways and means of stimulating voluntary reading; correlation of the school library with the teaching and social activities of the school; devices which make quick and accurate library service possible. This is a reading and laboratory course in which students may undertake research problems in the University High School library. M. First Term, repeated M. Second Term, 8:00, Miss Logasa.

PROFESSIONAL COURSES FOR TEACHERS OF LIBRARIANS

301A. Problems in Education for Librarianship.—A course considering plans for the improvement of the curriculum, methods and operation of agencies which train for librarianship in the light of recent studies of curriculum construction, adult education, extension service, and library work with public schools; in particular stressing the additional efforts needed to properly prepare students for the increasingly diversified tasks of the modern library. About one-half of the course will be devoted to the discussion of curriculum construction. The instructors will be assisted on occasions by several leading librarians. M. Second Term, 11:00, Professor Works, Associate Professor Howe, and Others.

302A. Principles of Educational Psychology Applied to Education for Librarianship.—The course will review those aspects of educational psychology which have most obvious application to courses in librarianship and will provide opportunity to study their practical applications. Among the chief topics are the psychology of learning, the theory and practice of examinations, tests and individual differences, the psychology of reading and writing, the development of reading interests, and the psychology of personal relations. M. Second Term, 2:30, Professor Freeman.

303A. Problems in the Teaching of Library Science.—The course will apply to the teaching of library science some of the techniques developed in the scientific study of the teaching process. Problems such as the following will be studied: the preparation and administration of courses of study, the selection and development of appropriate traits of personality, the use of instruction sheets and practice sheets, the coordination of practice work and class work in library schools, assignments and reviews, the conduct of class exercises. Each student will be expected to study and report in detail on some one problem of teaching. M. Second Term, 1:30, Professor Charters.

SIGHT CONSERVATION EDUCATION

The courses announced in this department are designed for advanced students of administrative, pedagogical, and ocular problems which arise in educational work with children suffering from permanently defective vision. Two types of students may be admitted to the courses given in this department: (a) teachers of the rank of seniors
who have had at least three majors in Education including elementary courses in sight conservation work, and (b) administrative and supervisory officers who are responsible for the organization, administration, and supervision of sight conservation work in school systems who will complete an assigned series of parallel readings which provide a necessary background. The courses announced in this department have been made possible through the active co-operation of members of the Department of Ophthalmology and of Education.

COURSES OF INSTRUCTION

321A. Administrative and Pedagogic Problems of Sight Conservation Classes.—A discussion course. Topics for special investigation will be assigned each member of the class for the purpose of stating the problem, reviewing the literature, and making investigations with a view to carrying these problems forward in their own work during the school year. Special conference hours with each student for the consideration of special problems will be assigned. Prerequisite: 3 majors in Education and previous training in sight conservation work. Limited to 16. Group discussion M., Tu., W., Th. M. Second Term, 8:00, Miss Lawes and Mrs. Hathaway.

323A. Ocular Problems of Sight Conservation Work.—A lecture and clinical course. The greater part of the work will be done in the laboratory of the new Division of Ophthalmology of the Medical School of the University of Chicago. Each student will be assigned at least two full laboratory periods a week. Clinical laboratory periods, 9:00-12:00, Monday to Saturday, inclusive. Prerequisite: 3 majors in Education and previous training in elementary eye work. Limited to 16. Lectures, Friday. M. Second Term, 8:00, Drs. Wilder, Brown, Royer, and Bothman.

ART EDUCATION

Opportunity is offered in this department for supervisors and teachers of art to supplement their technical training in art by specialized training in education as applied to art. The Department presents a group of professional courses dealing with the general problems of art education in public schools, with the organization, administration, and supervision of art work, and with special methods and research in art education. Students in this department have three opportunities for service in the public school: (1) supervision and administration, (2) teaching and classroom technique, and (3) original research and investigation within the field of art education. Co-operation with the Department of Art in the Colleges of Arts, Literature, and Science makes it possible to provide unusual advantages for both the technical and professional training of teachers, supervisors, specialists, and investigators in the fields of Art and Art Education.

The work of the Department of Art Education is organized primarily to meet the needs of graduate students. Adequate provision is also made for advanced undergraduate students who are planning to teach in public or normal schools.

For additional details concerning the graduate and undergraduate courses in Art Education, see the annual Announcements of the School of Education.

THE TEACHING OF ART IN ELEMENTARY AND SECONDARY SCHOOLS

215A. The Teaching of Art in Elementary Schools.—Deals with the problems of illustration and picture study with special reference to methods of presentation. Topics discussed: types of learning, project teaching, lesson plans, classroom management, materials and subject matter adapted to interests and capacities of different ages. For grade teachers, art teachers, and supervisors of art. Prerequisite: 3 majors in Art and Education 101 or 201, and 203. M. First Term, 8:00-10:00, Miss Todd.
215B. The Teaching of Art in Elementary Schools.—Deals with the problems of color, design, appreciation, and construction with special reference to methods of presentation. Topics discussed: materials and subject matter adapted to interests and capacities of pupils of different ages; types of learning; project teaching; lesson plans; classroom management. For grade teachers, art teachers, and supervisors of art. Prerequisite: 3 majors of Art and Education 101 or 201, and 203. M. First Term, 12:30-2:30, Miss Todd; repeated M. Second Term, 8:00-10:00, Miss Williams.

217. The Teaching of Industrial Art.—A study of the problems in teaching design and crafts in the upper grades and junior high school. Topics: educational values, basis for organizing the course of study, the aesthetic element in industry, standards of attainment, underlying principles which guide instruction, correlation with other subjects. Typical problems in clay, leather, wood, tin, copper, wood-block printing, and book binding. For teachers of the intermediate grades and junior high schools. Prerequisite: 2 majors in Art and 2 majors in Education. Limited to 20. Mj. (or M. either Term), 2:30-4:30, Miss Blankmeyer.

219A. Introduction to the Teaching of Art in Secondary Schools.—Deals with the selection and presentation of subject matter and illustrative material in junior high schools. Emphasis placed on the problem of developing units of instruction in drawing, design, project work, and art appreciation. Relation of art to other subjects in the curriculum, appropriate texts, supplies, and equipment will be considered. Lectures and practical problems. For Senior College students preparing to teach art. Prerequisite: 3 majors in Art and Education 101 or 201, and 204. M. First Term, 10:00-12:00, Mrs. Lee; repeated M. Second Term, 12:30-2:30, Miss Williams.

219B. Introduction to the Teaching of Art in Secondary Schools.—Deals with the selection and presentation of subject matter and illustrative material in senior high schools. Topics considered: organization of the course of study and methods of procedure, correlation, lesson plans and outlines for the presentation of units in drawing, design, craft work, art appreciation, and survey of art. Demonstration lessons and special methods in the teaching of fine, industrial, commercial art, and history of art will be presented. For Senior College students preparing to teach art. Prerequisite: 3 majors in Art and Education 101 or 201, and 204. M. First Term, 12:30-2:30, Miss Lee.

ORGANIZATION, ADMINISTRATION, AND SUPERVISION OF ART EDUCATION

311. Curriculum Problems in Art Education.—Deals with the problems of curriculum construction, analysis and organization of subject matter, and investigations within the field of art. Topics discussed: (First Term) general art course, special courses, correlated picture study, sources of supplies and supplementary materials, symbolism; (Second Term) analysis of art structure as a basis for the organization of subject matter, nomenclature and principles of art, significance of new movements in art in relation to the curriculum. For supervisors of art, teachers of art and household art, and advanced students in Art Education. Prerequisite: 3 majors in Art and 2 majors in Education. Mj. (or M. either Term), 8:00, Associate Professor Whitford.

312. The Supervision and Teaching of Art.—A survey of the field of modern art education. First half deals with the general problems of the supervisor; history of the art curriculum; present tendencies in art education; organization and administration of the course of study; social, vocational, and leisure time objectives; suggestions for research work. Second half deals with devices for the improving of instruction; the learning process in art; the child as a factor in art education; habits; skills; attitudes; ideals, and appreciations; correlations; tests and measurements; recent investigations within the field of art. For supervisors of art, teachers of art, and advanced students of art education. Prerequisite: 3 majors in Art and 2 majors in Education. Mj. (or M. either Term), 10:00, Associate Professor Whitford.

Subject-matter courses in Art are offered by the Department of Art in the Graduate Schools and Colleges of Arts, Literature, and Science. Descriptions of these courses appear on pages 31-32.
ENGLISH.

The courses in this Department are planned for two groups of students: (1) for graduate students, superintendents, principals, supervisors of English, and instructors of methods in English; (2) for experienced teachers of English in junior and senior high schools.

The various phases of English in the primary grades are covered by courses in the Kindergarten-Primary Education Department. Investigations in various aspects of English and the problems of supervising English teaching receive attention in Special Methods (English) 398 and 399, and in Education 390A and 393.

Graduate students who wish to secure professional training may elect advanced courses in the Department of Education and in the Department of English in the College of Education. Sequences leading to the Master's degree in Education should be arranged and thesis subjects selected in consultation with the instructor in charge of the special-methods courses in English.

295. Introduction to the Teaching of English in Secondary Schools.—The selection and presentation of materials in literature and composition for junior and senior high school instruction; critical study of accepted teacher and pupil activities; classroom procedures; typical units of work; preparation of teaching plans; consideration of individual pupil needs, of classroom equipment, and of testing and measuring pupil products. For senior college students preparing to teach English. First Term, emphasis upon composition; Second Term, literature. Prerequisite: Education 101 or 201, and 204, or equivalents. Mj. (or M. either Term), 10:00, Professor Johnson.

398. Technique of English Instruction in Secondary Schools.—Evaluation of methods of instruction with special reference to the findings of recent investigations and experiments; analysis of learning activities in composition and literature; outlining and beginning individual experiments under supervision. For experienced teachers, principals, critic teachers, and heads of departments. Prerequisite: Special Methods (English) 295 or equivalent, and 4 majors in English. Limited to 50. Mj. (or M. either Term), 8:00, Professor Lyman.

399. Curriculum Problems in Secondary-School English.—Current tendencies in curriculum-making; critical evaluation of courses of study; practice in organizing various types of subject matter for various school situations. First Term, junior high school problems; Second Term, senior high school problems. For experienced teachers, principals, critic teachers, and heads of departments. Prerequisite: Special Methods (English) 295 or equivalent, and 4 majors in English. Limited to 50. Mj. (or M. either Term), 9:00, Professor Lyman.

GEOGRAPHY

Courses in this Department are planned for (1) teachers or prospective teachers in elementary and secondary schools; (2) supervisors, superintendents, and principals; (3) teachers of geography in normal schools; and (4) students making or preparing to make special investigations in the teaching of geography.

Graduate students who have specialized in geography in their undergraduate training may elect courses in the Department of Education and in the Department of Geography in the College of Education which lead to the Masters' degrees in Education. Such students should arrange their programs of courses and select thesis subjects in consultation with the instructor in charge of the special-methods courses in Geography, and should then submit them to the Secretary of the Department of Education for approval.

Courses in the Department of Geography in the College of Education may be counted in partial fulfilment of the requirements to be met by undergraduate and graduate students specializing in Geography (see the Announcements of the Department of Geography).
THE SCHOOL OF EDUCATION

COURSES OF INSTRUCTION

233. Introduction to the Teaching of Geography.—Problems in the selection and presentation of units in Geography for elementary and secondary schools. Illustrative geographic units at various levels; classroom procedures; the technique of using pictures, maps, graphs, games, texts, and library and museum materials effectively; the testing of achievement, and the specific attainments for which teachers of geography should strive. For students preparing to teach geography and for teachers and supervisors of geography in elementary or secondary schools. Prerequisites: Education 201 and 204 and Geography 101 and 111, or equivalents. Mj. (or M. either Term), 8:00, ASSISTANT PROFESSOR PARKER.

334A. Curriculum Problems in Elementary Geography.—Analysis of current curriculum situations, and critical evaluation of curricula in elementary geography. Individual experimentation, under guidance, in the compilation and organization of geographical material in accordance with basic principles of curriculum-making. For teachers and supervisors of elementary geography. Prerequisite: Special Methods (Geography) 233 or 333. M. First Term, 9:00, ASSISTANT PROFESSOR PARKER.

HISTORY, CIVICS, AND OTHER SOCIAL STUDIES

The courses in this Department are designed to meet the needs of two groups of students: (1) graduate students in Education, History, Sociology, Economics, and Political Science; (2) experienced and inexperienced teachers of History and the other social studies in junior and senior high schools.

Graduate students who wish to secure professional training may elect advanced courses in the Department of Education and in the Department of History in the College of Education. Sequences leading to the Master's degree in Education should be arranged and thesis subjects selected in consultation with the instructor in charge of the special-methods courses in History. All sequences and thesis subjects should be approved by the Secretary of the Department of Education.

242. Introduction to the Teaching of History and the Other Social Studies in the Secondary School.—An introductory view of the aims and principles of teaching history, civics, economics, sociology, and political science in the junior and senior high schools. The following problems are considered in detail: activities of the class period, teaching procedures, classroom equipment, tests and examinations, illustrative materials, selecting and teaching units of instruction, and aids for beginning teachers in the field. For teachers of history and the other social studies. Prerequisite: Education 101 or 201, and 204. Mj. (or M. either Term), 9:00, PROFESSOR TRYON.

342. The Technique of Teaching History in the Secondary School.—An advanced study of investigations, experiments, practices, and tendencies in junior and senior high school history with special reference to teaching technique, study habits in history, the management of collateral reading, the selection and evaluation of library equipment and supplies, and provisions for making the subject concrete. For teachers, heads of departments, supervis ors, critic teachers, and teachers of special methods. Prerequisite: Special Methods (History) 242 or equivalent, and 6 majors in History. Mj. (or M. either Term), 1:30, ASSISTANT PROFESSOR HILL.

344. Curriculum Problems in Secondary-School History.—Deals with methods of determining the content of history in junior and senior high schools; brief history of the present course of study; investigations in the field; organization for teaching purposes of materials in Ancient, Medieval and Modern, Early European, Modern European, World, and American history; making and administering tests; selecting and teaching historical terms and persons; making historical maps. For teachers, heads of departments, critic teachers, and teachers of special methods. Prerequisite: Special Methods (History) 242 or equivalent, and 6 majors in History. Mj. 11:00, PROFESSOR TRYON.

345. The Teaching of the Social Studies Other than History in the Secondary School.—Deals with methods of determining the content of community civics, economics, sociology, advanced civics, and problems of democracy; selection and organiza-
tion of material in each of the foregoing fields; recent progress in the social studies; library and laboratory equipment; special methods of procedure; making and administering tests. Constant reference will be made to related scientific studies. For teachers, heads of departments, supervisors, critic teachers, and teachers of special methods. Prerequisite: Special Methods (History) 242 or equivalent, and 6 majors in Social Studies other than History. Mj. (or M. either Term), 2:30, ASSISTANT PROFESSOR HILL.

HOME ECONOMICS EDUCATION

Opportunity is offered in this Department for supervisors and teachers of home economics to supplement their subject-matter courses in home economics by specialized training in home economics education. The courses are planned for teachers in elementary and junior and senior high schools, for supervisors in city and state systems, for instructors in home economics education in normal schools, colleges, and universities, and for graduate students wishing to prepare theses on problems in the teaching of home economics.

The subject-matter courses in Home Economics (Food and Nutrition, Home Management, Child Study, Textiles and Clothing, Institution Economics) have been transferred to the Graduate Schools and Colleges of Arts, Literature, and Science. Descriptions of these courses appear on pages 34-39. Graduate and undergraduate students who wish to secure degrees in Home Economics combining courses in Home Economics and Home Economics Education should consult the Chairman of the Department of Home Economics and Household Administration.

Graduate students of Home Economics who wish to secure the Master's degree in Education should arrange sequences in consultation with the instructor in charge of the special-methods courses in Home Economics Education. All sequences and thesis subjects should be approved by the Secretary of the Department of Education. Undergraduate sequences in Education, Home Economics Education, and Home Economics may also be arranged.

The co-operation between the Department of Home Economics and Household Administration and the Department of Home Economics Education makes it possible to provide unusual opportunity for the training of teachers, supervisors, and investigators in home economics.

251. Methods of Teaching Home Economics.—The function of home economics in the elementary and high school, relation between various phases of the subject, types of organization in different school systems, analyses of textbooks and typical courses of study, selection of subject matter, supplementary reading and illustrative material, discussion of project teaching and general laboratory methods, study of equipment, and the teachers' responsibilities to school and community activities. Prerequisite: 2 majors in Education and 3 majors in Home Economics. Mj. (or M. either Term), 11:00, Miss LEHMAN.

352A. The Home Economics Curriculum.—Recent surveys and investigations bearing on the curriculum; methods employed in different types of investigations; precautions necessary in scientific studies; results of past studies evaluated to determine facts now available as basis of aims, content, equipment; present curricula, courses of study and texts critically examined in the light of these facts. Further research and investigations needed. Prerequisite: 2 majors in Education, 4 majors in Home Economics and a course equivalent to Special Methods (Home Economics Education) 251. M. First Term, 9:00, ASSISTANT PROFESSOR COON.

353A. Problems in Teaching Home Economics.—Present-day methods of teaching home economics evaluated in terms of temporary and permanent results obtained and desired; investigations bearing on methods critically studied; further investigations needed; means of testing results of instruction; types of learning required in different
phases of home economics; a variety of teaching methods analyzed as applied to high
school, evening, part-time, extension, and college classes; organizing individual units
for specific groups according to different methods; planning tests for these units. Prereq-
quisite: experience in teaching home economics and a course equivalent to Special
Methods (Home Economics Education) 251. Mj. (or M. either Term), 9:00, Assistant Pro-
fessor Coon.

355. Supervision of Home Economics.—Principles of supervision and techniques
involved in the supervision of instruction in home economics in junior and senior high
schools, evening, and part-time schools; responsibilities of teacher trainers and super-
visors evaluated in relation to the importance of each in the progress of education;
difficulties of teachers and means of helping the teachers overcome these; measuring
the growth of a teacher; organization and administration of a state or city supervisory
department or teacher-training department in an institution. Prerequisite: successful
experience in teaching home economics and a course equivalent to Special Methods
/Home Economics Education) 251. Mj. (or M. either Term), 12:30, Assistant Pro-
fessor Coon.

356. Problems in Training Teachers of Home Economics.—A course for teacher
trainers with experience. A critical evaluation of present practices in the teacher-train-
ing departments of home economics; detailed study of one or two specific responsibili-
ties, such as the content and methods of teaching the special-methods course, provisions
for and supervision of student teaching, testing the growth of teachers, and developing
qualities necessary for success. Registration only with approval of instructor. Mj. (or
M. either Term), 10:00, Assistant Professor Coon.

459. Research Problems in Home Economics Education.—Open only to candidates
for higher degrees who are working on experimental and statistical investigations. Mj.
Hours to be arranged, Miss Lehman.

MATHEMATICS

The work of this department is designed to meet the needs of students who are
preparing: (1) to teach secondary mathematics (grades VII to XII); (2) to teach math-
ematics in normal schools and schools or colleges of education; (3) to supervise the teach-
ing of mathematics in elementary, secondary, or normal schools.

Graduate students who have specialized in mathematics in their undergraduate
work and who wish to secure professional training may elect advanced courses in the
Department of Education and in the Department of Mathematics in the College of
Education. Sequences leading to the Master's degree in Education should be arranged
and thesis subjects selected in consultation with the instructor in charge of the special-
method courses in Mathematics. All sequences and thesis subjects should be approved
by the Secretary of the Department of Education.

272. Introduction to the Teaching of Mathematics in Secondary Schools.—Objectives
of secondary-school mathematics beginning with the seventh grade; classroom and
pupil equipment; activities of the class period; principles of the selection and organiza-
tion of instructional materials; teaching procedures; standardized tests and scales and
practical uses of improved class examinations; consideration of needs of the individual
pupil; diagnosis and typical difficulties. For students preparing to teach in junior or
senior high schools. Prerequisite: 3 majors in college mathematics, and Education 101
or 201, and 204. Mj. (or M. either Term), 11:00, Professor Myers.

372. Technique of Teaching Mathematics in Secondary Schools.—A critical survey
of problems relating to the technique of teaching; analysis of experiments and investiga-
tions concerned with methods of presentation; development of a testing program aiming
to improve instruction and to determine the results of teaching. For graduate students
who have had Special Methods (Mathematics) 272 or its equivalent, and for teachers
with two or more years of experience. Prerequisite: 3 majors in college mathematics.
Mj. (or M. either Term), 1:30, Assistant Professor Breslich.
373. Curriculum Problems in Mathematics.—Critical evaluation of recent developments and changes in the subject; analytical study of recent investigations, committee reports, courses of study, and textbooks; organizing secondary-school mathematics into units of instruction; an individual project to be undertaken by each student. For experienced high-school teachers, department heads, and supervisors. Prerequisite: 3 majors of college mathematics, and Special Methods (Mathematics) 272 or equivalent. Mj. (or M. either Term), 12:30, ASSISTANT PROFESSOR BRESLICH.

376. Supervision of Mathematics.—The principles, techniques, and problems of supervising mathematics in both elementary and secondary schools, recent movements in mathematics, course of study, testing the products of teaching, critical selection of materials and tests, remedial teaching and training teachers in service, reports and critical studies of important problems. For superintendents, principals, supervisors, instructors of special methods in schools of education and normal schools. Prerequisite: Special Methods (Mathematics) 272 or its equivalent. Mj. (or M. either Term), 10:00, PROFESSOR MYERS.

THE DEPARTMENTS OF ROMANCE LANGUAGES AND LITERATURES

COURSES OF INSTRUCTION

FRENCH

319. Problems of Teaching French.—Prerequisite: 9 majors in French. Mj. 2:30, PROFESSOR COLEMAN.

SPANISH

319. Problems of Teaching Spanish.—Prerequisite: 9 majors in Spanish. Mj. 2:30, ASSOCIATE PROFESSOR PARMENTER.

For the descriptions of the foregoing courses, see pages 43-44.

THE SCHOOL OF COMMERCE AND ADMINISTRATION—

PROFESSIONAL COURSES

COURSES OF INSTRUCTION

293. The Teaching of Secondary-School Economics.—Prerequisite: 18 majors. M. Second Term, 8:00, MR. SHIELDS.

294. The High School Business Curricula.—Prerequisite: 18 majors. M. Second Term, 9:00, MR. SHIELDS.

395. The Teaching of Typewriting.—Prerequisite: a knowledge of the theory of touch typewriting. M. First Term, 9:00, MISS BREWINGTON.

396. The Teaching of Stenography and Shorthand.—Prerequisite: a knowledge of the theory of shorthand. M. First Term, 8:00, MISS BREWINGTON.

398. The Teaching of Accounting.—Prerequisite: 1 year in accounting or consent of instructor. M. Second Term, 8:00, ASSISTANT PROFESSOR ROREM.

For the descriptions of the foregoing courses, see the Announcements of the School of Commerce and Administration.

THE TEACHING OF SCIENCE

The courses in this Department are intended to meet the needs of (1) students who are preparing to teach the biological or physical sciences in junior and senior high schools and in normal schools, (2) experienced teachers who are preparing for positions as supervisors or heads of departments, (3) teachers in normal schools or schools of education who are giving courses in the methods of science instruction, and (4) graduate students who wish to prepare theses on problems in the teaching of science.

Graduate students who have specialized in science and who wish to secure professional training may elect advanced courses in the Department of Education and in the
Department of the Teaching of Science in the College of Education for the Master's degree. Sequences leading to the Master's degree in Education should be arranged and thesis subjects selected in consultation with the instructor in charge of the special-methods courses in the Department of the Teaching of Science. All sequences and thesis subjects should be approved by the Secretary of the Department of Education.

289A. Introduction to the Teaching of Science.—Objectives, principles of selection, and organization of the materials for the course of study, methods of instruction, and tests. Recent research on the problems of science teaching is reviewed and applications of the results made to teaching procedures in the several sciences. The course gives ideals of excellence in science instruction, knowledge that is basic to skill in teaching and familiarity with the best techniques. Prerequisite: 3 majors in science and Education 101 or 201, and 204. M. First Term, repeated M. Second Term, 8:00, Mr. Frank.

382A. The Teaching of General Science.—Considers the causes leading to the introduction of general science, the present-day types of courses, the technique of instruction, and the methods of measuring the results of instruction with a view to their evaluation on the basis of recent research. Prerequisite: 2 majors of biological science and 2 majors of physical science and Special Methods (Science) 289A, or two years' experience in teaching science. M. First Term, repeated M. Second Term, 11:00, Mr. Anibal.

384. The Teaching of Physiology and Hygiene.—A brief résumé of the history of the teaching of physiology and hygiene in the public schools. Topics: aims of such instruction, problems of curriculum construction, and the modern techniques of teaching; critical reviews of literature and current practices. Prerequisite: Physiology 101 or equivalent and Special Methods (Science) 289A. Mj. (or M. either Term), 9:00, Mr. Frank.

385. Technique of Teaching Science.—History of methods in science teaching; types of learning and the corresponding techniques of instruction in physics, chemistry, biology, etc. A critical examination of research in methods, and application of results to instruction in the several sciences. Summaries of literature on the proper methods in demonstration, field trips, projects, supervised study in science, to discover the debatable points and to formulate plans for research. For experienced teachers and heads of science departments. Prerequisite: Special Methods (Science) 289A or its equivalent and two years' experience in teaching science. Mj. (or M. either Term), 2:30, ASSOCIATE PROFESSOR DOWNING.

389. The Science Curriculum.—History of its development. Principles of selection and organization of subject matter. A critical analysis of present courses in elementary science, general science, biology, chemistry, and physics to discover essential steps in revision. Each student will start research on some one problem, including a review of related literature. For experienced science teachers and heads of science departments. Prerequisite: Special Methods (Science) 289A or its equivalent and two years of science teaching. Mj. (or M. either Term), 3:30, ASSOCIATE PROFESSOR DOWNING.

KINDERGARTEN-PRIMARY EDUCATION

The courses offered by this Department are designed to meet the needs of three classes of students: (1) supervisors and critic teachers who wish to do advanced work in this Department; (2) teachers of experience who are preparing for positions in teachers' colleges and in normal training schools or for kindergarten-primary supervision in city systems; (3) students who are preparing to teach in nursery schools or in the kindergarten and primary grades in public or private schools.

The courses listed below, from 205A to 220B inclusive, are undergraduate courses and are planned primarily for classroom teachers; those from 301A to 340B, inclusive, are for graduate and advanced undergraduate students who are preparing for supervisory or teaching positions. It is desirable, however, for many of the latter group to take some of the undergraduate courses to supplement previous training.
Several of the major courses in the Department of Kindergarten-Primary Education are divided into minor courses during the Summer Quarter. The letter A following the number of a course indicates the first half of a course and the letter B the second half of a course. These courses are so organized for the Summer Quarter that a student may begin the work of a major course with either minor. This arrangement makes it possible for a student to take both minors during one term or to complete the major during the quarter, or to take one half of a course one summer and the remainder of the course the next summer.

Students who anticipate registering in this Department for the whole or either term of the Summer Quarter are urged to classify early in order that careful attention may be given to their programs. The Department will be glad to correspond with prospective students.

A list of the courses to be given during each term of the Summer Quarter, 1928, follows:

**First Term**

- 205B. Primary-School Methods: Reading.
- 208A. Primary-School Methods: Number.
- 211A. Primary-School Methods: Nature Study.
- 212. Literature for Kindergarten and Primary Grades.
- 215A. Manual Arts for the Kindergarten and Grades I–III.
- 218. Physical Education: Plays and Games.
- 220A. The Kindergarten-Primary Curriculum.
- 301A. Learning Problems of Children in the Preschool and Primary Grades.
- 305A. The Supervision of Language in Grades I–VI.
- 305B. The Supervision of Reading in Grades I–VI.
- 330B. Kindergarten-Primary Supervision: General Problems.
- 335B. Critic Teaching in the Kindergarten and Primary Grades.
- 340B. Intelligence Tests for Primary Grades.

**Second Term**

- 205A. Primary-School Methods: Language, Spelling, and Writing.
- 205B. Primary-School Methods: Reading.
- 208A. Primary-School Methods: Number.
- 212. Literature for the Kindergarten and Primary Grades.
- 215A. Manual Arts for Kindergarten and Grades I–III.
- 220B. The Kindergarten-Primary Curriculum.
- 305B. The Supervision of Reading in Grades I–VI.
- 325A. The Development and Present Status of Nursery-Kindergarten-Primary Education.
- 335A. Normal-School Curricula for the Training of Teachers.
- 205A. Primary-School Methods: Language, Spelling, and Writing.—Discusses principles and methods in the teaching of oral and written composition, spelling, and writing. Major topics: relation of these subjects to others in the curriculum, material and motivation for oral expression and composition, selection and teaching of spelling words, early writing lessons. M. Second Term, 1:30, Miss Johnson.
205B. Primary-School Methods: Reading.—A continuation of course 205A. Discusses methods of teaching reading in the primary grades. Major topics: material and procedure followed in teaching reading in the pre-primer, primer, and reader stages; the value of tests in oral and silent reading; the practical work of diagnosing and instructing remedial cases. M. First Term, sec. a, 1:30; sec. b, 2:30, Miss Smith; repeated M. Second Term, 2:30, Miss Rice.

208A. Primary-School Methods: Number.—Deals with the organization of subject matter, the concrete material used in teaching the subject, the relation of number to other subjects in the curriculum, methods of presentation. Special topics: number projects, incidental number work, the combinations, the fundamental processes, informal and standardized tests. For kindergarten and primary teachers and supervisors. M. First Term, 8:00, Miss Champion; repeated M. Second Term, 12:30, Miss Johnson.

210. Community Life, History, and Civics in the Primary Grades.—Deals with the selection of material adapted to the first three grades of the elementary school, various methods of presenting selected material, lesson plans and devices. Topics included: home and community life; celebration of holidays; farm life; social types, such as the Indian, shepherd, and viking; local and colonial history. Mj. (or M. either Term), 10:00, Miss Storm.

211A. Primary School Methods: Nature Study.—A study of the subject matter; principles for the selection of materials suitable for the kindergarten and grades I-III; standards for the organization of this material; methods, including excursions, collections, and profitable types of indoor lessons; the relation of Nature Study to the curriculum as a whole; informal tests. Animals and physical nature materials are studied and used as illustrative subject matter. M. First Term, 9:00, Miss Champion.

212. Literature for the Nursery, Kindergarten, and Primary Grades.—Stories and poems suitable for each grade; standards of selection; sources of material; the art of story-telling; practice in story-telling; selection of literature suitable for dramatization. The first half deals with the selection of material for the nursery, kindergarten, and first grade. The second half considers the needs of the second and third grades. Mj. (or M. either Term), 11:00, Assistant Professor Martin.

215A. Manual Arts for the Kindergarten and Grades I-III.—Principles and methods underlying the use of materials in the kindergarten and primary grades with special reference to modern methods of experimentation and problem-solving. Practical work with nature materials, clay, paper, textiles, and wood in connection with the development of individual and group projects. Sections limited to 35. M. First Term, sec. a, 12:30, sec. b, 2:30, Miss Paine; repeated M. Second Term, 1:30, Miss Rice.

218A. Physical Education: Plays and Games.—A study of children’s natural play activities as a basis for the organization and development of a course of study for the early years. Dramatic plays, folk games, ball games, and simple dance forms with reference to their elements of interest and physical and social values. Observations, readings, and reports. Limited to 35. M. First Term, 3:30, Miss Adams.

220A. The Kindergarten and First-Grade Curriculum.—Deals with the principles which control the selection and organization of the subject matter of the curriculum for the kindergarten and first grade. Curriculum objectives and curriculum outlines presented and discussed. Evolution of the modern kindergarten and first-grade curriculum considered. Prerequisite: 3 majors in Kindergarten-Primary Education. M. First Term, 10:00, Assistant Professor Martin.

220B. Curriculum for Grades II and III.—A continuation of course 220A. Deals with the principles which control the selection and organization of the subject matter of the curriculum for grades II and III. Curriculum objectives and curriculum outlines presented and discussed. Prerequisite: 3 majors in Kindergarten-Primary Education. M. Second Term, 10:00, Assistant Professor Martin.

301A. Learning Problems of Children in the Preschool and Primary Grades.—Deals with the nature of learning and its relation to educational procedure in the nursery school, kindergarten, and primary grades. Special emphasis upon the guidance of learning processes in the preschool period. Observation in the demonstration classes. For
supervisors and teachers of young children. Prerequisite: 3 majors in Education and 1 major in Psychology. M. First Term, 8:00, Miss Monroe.

305A. The Supervision of Language in Grades I–VI.—Deals with general problems of technique in the supervision of oral and written composition, spelling, and writing. Topics: aims, content, and organization in oral and written composition; use of standard tests in writing and spelling; recent progress in the teaching of these subjects. Prerequisite: two years of professional training including 3 majors in Education or Kindergarten-Primary Education. M. First Term, 11:00, Miss Storm.

305B. The Supervision of Reading in Grades I–VI.—Problems of critic teachers and supervisors, selection of material, progressive methods of teaching reading, uses of standard tests, examination of courses of study of progressive schools, standards of attainment for each grade. Prerequisite: two years of professional training including 3 majors in Education or Kindergarten-Primary Education. M. First Term, 12:30, Professor Bamberger; repeated M. Second Term, 11:00, Miss Storm.

325A. The Development and Present Status of Nursery-Kindergarten-Primary Education.—Origin and development of the primary school, the kindergarten, and the nursery school as separate units; the kindergarten-primary unification; the relation of the nursery school to the kindergarten and the home. Contributions of recent investigations and experiments in the field, particularly that part of it which is covered by the preschool and first-grade years. Prerequisite: 3 majors in Education or Kindergarten-Primary Education. M. Second Term, 9:00, Associate Professor Temple.

330A. Kindergarten-Primary Supervision: Analysis and Constructive Criticism.—Standards according to which teaching may be judged, observation and criticism of demonstration teaching, methods of improving instruction. For advanced students who have had two or more years of professional training, including 3 majors of Education. M. First Term, 9:00, Associate Professor Temple.

330B. Kindergarten-Primary Supervision: General Problems.—Deals with such supervisory problems as the unification of the kindergarten and the primary grades, the teacher's part in the making of the curriculum, the organization of teachers' meetings, professional growth of teachers in service. For advanced students who have had two or more of professional training, including 3 majors of Education. M. First Term, 1:30, Professor Bamberger.

335A. Normal-School Curricula for the Training of Teachers.—Deals with knowledge, skills, attitudes, and personal qualifications possessed by the successful teacher, organization of the curriculum and training with reference to these requirements, content and organization of specific normal-school courses. Primarily for critic teachers and students preparing to teach in normal and training schools. Prerequisite: two years of professional training, including 3 majors in Education or Kindergarten-Primary Education. M. Second Term, 8:00, Associate Professor Temple.

335B. Critic Teaching in the Kindergarten and Primary Grades.—Deals with the organization and supervision of student observation, participation, and teaching. Primarily for critic and prospective critic teachers. Prerequisite: two years of professional training, including 3 majors in Education or Kindergarten-Primary Education. M. First Term, 8:00, Associate Professor Temple.

340B. Tests for Primary Grades.—The second half of Kindergarten-Primary Education 340, dealing with intelligence tests. History of testing movement; development of tests for kindergarten and primary grades; survey of available tests, uses and results of these tests in classification and in classroom situations; demonstration and discussion of methods of conducting tests. For supervisors and experienced teachers. Prerequisite: 3 majors in Education. M. First Term, 10:00, Miss Monroe.

Note.—A nursery, a kindergarten, a first-grade group, and a second-grade group will be in session daily from 9:00 to 11:30 during the First Term. A limited amount of observation will be allowed students registered in this Department. Miss Adams, Miss Jacob, Miss Hardy, Miss Polkinghorne, Miss Barnet.
THE SCHOOL OF COMMERCE
AND ADMINISTRATION

THE FACULTY

Max Mason, Ph.D., LL.D., Sc.D., President of the University.
Frederic Campbell Woodward, A.M., LL.M., Vice-President and Dean of Faculties.
Leon Carroll Marshall, A.M., LL.D., Director of Economics and Business; Professor of Economics.
William Homer Spencer, J.D., Dean of the School of Commerce and Administration; Secretary of the Department of Economics; Professor of Business Law.
Emery T. Filbey, Director of the Institute of Meat Packing; Professor of Industrial Education.
Dwight Abel Pomeroy, J.D., Dean of Pre-Commerce Students in the Colleges of Arts, Literature, and Science; Assistant Professor of Business Law.
Clarence Rufus Rorem, A.M., C.P.A., Assistant to the Dean of the School of Commerce and Administration; Assistant Professor of Accounting.
Elmer Lamont Rhoades, S.B., Assistant Director of the Institute of Meat Packing; Assistant Professor of Marketing.

Harry Alvin Millis, Ph.D., Professor of Economics.
Frank Hyneman Knight, Ph.D., Professor of Economics.
Jacob Viner, Ph.D., Professor of Economics.
Edward Augustin Duddy, A.M., Associate Professor of Marketing.
Raleigh Webster Stone, Ph.D., Associate Professor of Industrial Relations.
Lewis Carlyle Sorrell, A.B., Associate Professor of Transportation and Communication.
Jay Finley Christ, A.B., J.D., Assistant Professor of Business Law.
Harvey Charles Daines, A.M., B.C.S., C.P.A., Assistant Professor of Accounting.
John Cecil Dinsmore, Ph.B., Assistant Professor of Marketing.
Arthur William Kornhauser, Ph.D., Assistant Professor of Psychology.
Stuart Putnam Meech, Ph.B., Assistant Professor of Financial Organization.
Lloyd Wynn Mints, A.M., Assistant Professor of Economics.
Samuel Henry Nerlove, A.M., Assistant Professor of Risk and Risk-Bearing.
James Lindsey Palmer, A.M., C.P.A., Assistant Professor of Marketing.
Elmer Lamont Rhoades, S.B., Assistant Professor of Marketing.
Theodore Otte Ynema, A.M., C.P.A., Assistant Professor of Accounting.
Ann Brewington, A.M., Lecturer on Secretarial Training.
Harold Gustave Shields, Lecturer in Economics.
James Gilbert Evans, A.M., Assistant in Economics.
John Brownson Watkins, A.M., Assistant in Economics.

1 This list includes only those who will be in residence during the Summer Quarter, 1928.
GENERAL STATEMENT

The School of Commerce and Administration was organized in 1898 in response to the growing demand for courses within the University which should aid in fitting men for careers in the practical professions of the various branches of business and philanthropic service. A reorganization of the work occurred in 1902. Since that date it has ranked as a separate professional school.

The field of the School covers both graduate and undergraduate work. The entrance requirements and the amount of work required for the Bachelor's degree (four years) are the same as in the other undergraduate colleges of the University. In accordance with the general organization of the University, the first two years of college work constitute the junior college work; the third and fourth years constitute senior college work. Upon the satisfactory completion of the undergraduate work the degree of Ph.B. is conferred. Students may then undertake graduate work leading to the degrees of A.M. and Ph.D. For information regarding the requirements for admission, admission to advanced standing, routine of entrance, fees, board, rooms, expenses, and other general matters, see these Announcements, pp. 3-12.

The work of the Summer Quarter, 1928, is arranged with particular reference (a) to the needs of teachers of business subjects in both secondary schools and colleges, (b) to the needs of graduates of agricultural colleges who are interested in the managerial aspects of the handling of food and agricultural products, and (c) to the needs of those preparing for business.

It is impracticable to offer here descriptions of all courses available for students in this School. They have access to the resources of the entire University. The following statement of courses of instruction will be understood to cover only those semi-professional and professional courses which are more commonly taken by students of the School of Commerce and Administration.

Note.—Courses are open to graduate and undergraduate students in Arts, Literature, and Science, Social Service Administration, and Education in the Summer Quarter.

COURSES OFFERED: SUMMER QUARTER, 1928

For explanation of the numbering system, see p. 22.

213. Managerial Accounting.—This course approaches the subject of accounting from the manager’s viewpoint. It deals with the use of records in controlling administrative activities as opposed to the usual type of accounting course which is primarily concerned with the construction and operation of double-entry accounting books.

An attempt is made to determine the various classes of activities over which the executives of a business must exercise control, and to discuss in connection with each class of activities four things: (1) the main problems which arise, (2) the standards and records needed in the solution of these problems, (3) the co-ordination of these activities with those of the other functional groups by means of a budget, and (4) the construction and use of reports as a means of securing the information necessary to accomplish the foregoing. The following topics with appropriate subdivisions are discussed in the order named: the need and nature of standards and records, administrative reports, sales control, production control, purchase control, plant and equipment control, branch-
house control, personnel control, expense control, investment control, credit control, control of liabilities, financial control, the estimated financial reports, proprietorship control, profits control and distribution, organization for standards and records control.

The technique of accounting records is not emphasized, but attention is given to the construction and operation of the records as a basis for the control of each class of activities. Extensive laboratory work on problems is given in connection with each topic.

This course should be of service to the following: (a) those preparing for business administration or for the profession of public accounting; and (b) teachers of accounting who have not studied accounting from the managerial point of view. Prerequisite: course 210 (100) or a first course in accounting. Mj. 8:00, ASSISTANT PROFESSOR DAINES.

235. The Manager's Administration of Finance.—A study of the tasks of the financial executive in a going business organization. The course is developed by means of cases and problems dealing with: financial policies, methods, and practices in raising capital; development of internal organization and procedures for control of financial activities; the relation of financial administration to business administration. Prerequisite: Economics 230 or equivalent. Mj. (or M. First Term), 10:00, ASSISTANT PROFESSOR MECH.

Psychology 235. Business Psychology.—A study of: (1) psychological facts and principles applicable in business and everyday life, and (2) psychological methods of attack upon business problems. For Commerce and Administration students. Prerequisite: Psychology 101. Limited to 35. Mj. 1:30, ASSISTANT PROFESSOR KORNHAUSER.

245. The Manager's Administration of Personnel.—A survey of the problems of labor administration which confront the manager of an industrial enterprise. The emphasis of the course is upon the problems of how to get men to work together effectively. Among the specific topics treated are: (1) the factors making for ineffective work, such as labor turnover, absenteeism, withheld effort, personal incapacities of health, training, etc., disharmonies of relationship between management and the worker; (2) methods of securing effective effort, such as the proper administration of the labor supply and the selection of workers, promotion, demotion, transfer, and discharge; the regularization of employment; education and training; safety and health; "welfare work"; hours of labor; wages and rewards; joint relations with employees, whether through shop committees, unions, or industrial councils, etc.; (3) the organization and functions of a personnel department and its place in a business organization. Investigations are assigned on special topics and the student is expected to do field work upon some phase of employment problems. Prerequisite: Economics 240 or equivalent. Mj. 9:00, ASSISTANT PROFESSOR STONE.

255. Public Regulation of Business.—This course will be devoted to a consideration of problems confronting the business man under laws regulating business activities. The policies and administrative machinery of the government will be studied in relation to: (a) the general welfare of the country, (b) labor, (c) finance, (d) production, (e) marketing, (f) risk and risk-bearing, (g) transportation and communication, and (h) business associations. Prerequisite: 18 majors. Mj. 10:00, ASSISTANT PROFESSOR CHRIST.

266. The Technique of Business Communication.—This course has a threefold purpose: (1) to give such information about the communicating activities of business and to develop such skill in the presentation of business material as all business workers need; (2) to provide part of the foundation necessary for an advanced study of correspondence and advertising; and (3) to furnish commercial teachers a broad background for their specialized courses in business English, correspondence, salesmanship, advertising, and office management. Prerequisite: English 101 and 9 majors. Mj. (or M. either Term), 10:00, ASSISTANT PROFESSOR DUDY.

277. The Manager's Administration of Production.—A survey course of the production field designed both for those who plan to specialize in manufacturing and for those who desire only a general knowledge of this subject to supplement work in other fields of business administration. The first part of the course takes up the means
of production, functional organization, materials, equipment in general, power production, internal transportation equipment, tools and workers, and the maintenance of equipment of all kinds. The second part of the course is devoted to a study of the development of manufacturing standards; the establishment of standard routing for orders, the making of time studies, the determination of quality and quantity standards, and the preparation of instruction cards and standard practice instruction. Theory and practice are shown to be interlocking and mutually supplementary. The third part of the course deals with the control of operations; the master-schedule, planning and scheduling, purchasing, receiving and storing, dispatching of work through the factory, movement of materials, inspection, stocking and shipping, and the necessary records for the control of all these activities. Prerequisite: Commerce and Administration 214. Mj. 12:30, Mr. Mitchell.

278. Cost Accounting.—A course in the theory and practice of industrial cost accounting as a means of control of a business. Methods for the determination of the cost of the product in as much detail as may be desirable are developed. Particular attention is given to the analysis, classification, budgeting, accumulation, and distribution of expenses. The use of labor-saving mechanisms, the designing of forms and the visualized presentation and use of supplementary statistics are studied. Prerequisite: Commerce and Administration 214 and 277. Mj. 10:00, Mr. Mitchell.

285. Market Management.—A study of marketing from the point of view of those who manage marketing activities in various types of business. The course gives an introduction to the analysis of marketing situations; market research; the formulation of marketing programs; the use of such administrative instruments as the product, salesmen, distributors, and advertising; and organization for the control of marketing activities. Considerable case material is used to illustrate policies and methods. Prerequisite: Economics 280 or equivalent. Mj. 11:00, Assistant Professor Palmer.

287. Purchasing.—A study of the functions of the purchasing department in the modern industrial organization. This course deals not only with the theory and ethics of modern purchase methods but discusses in detail standards, analyses, sources of supply, and price tendencies. The important details to be considered in the purchase of coal, lumber, and other basic products will also be considered. Much of the work consists of an analysis of actual business cases. Prerequisite: 18 majors. Mj. 8:00, Assistant Professor Dinsmore.

293. The Teaching of Secondary School Economics.—This course is designed to aid teachers of high-school and Junior College economics and other social sciences in organizing and presenting available material. The purpose of economic study, the importance of this study, its position among the social sciences, and its relation to the other subjects of the curriculum are considered. The methods best adapted to presenting social-economic material are considered, and the possibilities of correlation are discussed. Available textbooks and other literature are canvassed with suggestions for their adaptation in accomplishing the purposes determined. A feature of the course which has proved most valuable is a "model course" in the form of material which has been tested in use. This model course gives teachers completely organized material which they can place in the hands of their students.

The course will provide a broad outlook upon business organization, civics, and allied social and business subjects. Teachers of civics, history, accounting, commercial law, and business writing, as well as teachers of economics should find it serviceable. Prerequisite: 18 majors. M. Second Term, 8:00, Mr. Shields.

294. The High-School Business Curricula.—This course is planned for teachers and supervisors of commercial subjects and for superintendents and principals. The first section of the course leads toward inquiry for subject matter with which to make certain modifications of existing curricula; the latter part is concerned with materials. In the first part attention will be given to recent research in commercial education and in the latter portion of the course the student is allowed considerable liberty to explore material and methods in the fields which are of greatest interest to him. Prerequisite: 18 majors. M. Second Term, 9:00, Mr. Shields.

309. Economics of Business.—This course presupposes familiarity with the policies and operations of business units, an acquaintance with the main features of our economic
order, some appreciation of the social significance of these phenomena, and a working knowledge of accounting and statistics.

An analysis of the mechanism of our price system is the immediate objective of the course. This study involves both the generalizations of orthodox theory and some of the more recent contributions, especially those of quantitative character. Particular attention is given to border-line topics, such as the bearing of marketing activities and of financial operations on demand, valuation in economics and accounting, economic and accounting costs, decreasing returns in business, economies of production, restrained competition, problems of joint costs (and of overhead costs as a special case), economic theory in wage questions, the rôle of tariff, taxation and immigration policies. When possible, cases and problems are utilized in the discussion. Prerequisite: 27 majors with an average of B. Mj. 1:30, ASSISTANT PROFESSOR Yntema.

314B. Governmental Uses of Accounting.—This course is divided into two main parts. The first deals with the general problem of governmental financial control, and the extent to which accounting methods found successful in private business can be adapted to public administration. The discussion will center around such topics as the following: general and special funds; income and expense classification; auditing; uniform statements; costs of specific services.

The second part will be devoted to a study of ways in which governments use accounting to control the policies and procedures of private business enterprise. Mention will be made of the accounting activities of such agencies as the Federal Trade Commission, Interstate Commerce Commission, State and Local Utility Commissions, and State Bank Examining Departments. The course consists of lectures and discussion, with selected readings on special topics. M. Second Term, 9:00, ASSISTANT PROFESSOR Korem.

315. Accounting Theory.—The nature and purpose of accounting, the philosophy of real, nominal and mixed accounts; the necessity and technique of periodic adjustments; the construction of financial statements; the problems and functions of account classification; the theory of operating and non-operating incomes; the theory of operating and non-operating expenses; the general principles of valuation; the description and valuation of assets; the description and valuation of liabilities; the problems of capital stock, surplus, reserves, and sinking funds; the use and significance of financial statements in management. The course is an intensive study of accounting principles, given for prospective executives, public accountants, private accountants, and teachers of accounting. Prerequisite: Commerce and Administration 213 and 278 or their equivalents. DM. First Term, 8:00-10:00, PROFESSOR Krebs.

317. Public Accounting Practice and Procedure.—This course analyzes the work of the public accountant and discusses the nature and method of performing each class of his activities. In this connection the work of the accountant as a consultant, as an adviser on income-tax matters, in installing accounting systems, and in carrying on financial and industrial investigations is discussed.

Inasmuch as the constructive audit still remains the single greatest function of the public accountant the major part of the course is devoted to auditing practice and procedure. The fundamental principles and accepted procedures of present-day auditing will be given thorough consideration. Prerequisite: Commerce and Administration 315. Mj. 2:30, ASSISTANT PROFESSOR Daines.

336. Problems in Business Finance.—The problems of financing a going concern by issue of stocks and bonds; problems of expansion of capital, of dividend policy will be studied. Then the extraordinary financing problems of promotion, combination and merger, receivership, reorganization, and dissolution will be analyzed. Prerequisite: Commerce and Administration 235 and permission of instructor. Mj. (or M. First Term), hours to be arranged, ASSISTANT PROFESSOR Meechi.

Psych. 337. Special Studies in Industrial Psychology.—A survey of the more important psychological problems of industry, with a critical review of theoretical discussions and experimental investigations. Topics dealt with include labor unrest, monotony and fatigue in industry, incentives, analysis of work methods, external conditions of efficiency, vocational section, etc. Prerequisite: permission of the instructor. Mj. hours to be arranged, ASSISTANT PROFESSOR Kornhauser.
346. Special Studies in Industrial Government.—A study of the experience in industrial relations of a number of specific concerns; an examination of practical experiments with shop committees, profit-sharing, stock ownership, and other plans. An attempt will be made to study a number of these experiments in the field. Prerequisite: 36 majors or Commerce and Administration 245, or permission of instructor. Mj. or DMj. hours to be arranged, ASSOCIATE PROFESSOR STONE.

356. An Introduction to the Study of Law and Business.—In this course an attempt is made (1) to provide teachers of business law in colleges and secondary schools with an appreciation of appropriate teaching materials and teaching methods; (2) to give the student an understanding of the processes of enforcing legal rights; (3) to indicate the place of law and legal institutions in economic organization; and (4) to develop a working knowledge of the fundamental concepts of the law of torts, contracts, agency, and property. Prerequisite: 27 majors. DM. First Term, 8:00-10:00, ASSISTANT PROFESSOR POMEROY.

357. The Law of Market Practices and Financing.—The law and the market, which deals (1) with market transactions, such as bailments, pledges, and sales; (2) with market practices, practices unfair to one's competitors and practices injurious to the public. The law and finances, in which a study is made (1) of the legal aspects of devices for securing money and credit; (2) of the legal aspects of devices for securing creditors; and (3) of the rights of creditors. Prerequisite: 27 majors. DM. Second Term, 8:00-10:00, PROFESSOR SPENCER.

358. The Law of Risk-Bearing, Labor, and Business Associations.—The law and risk-bearing, in which a study is made (1) of the legal aspects of devices for shifting risks incidental to business, such as speculative contracts and insurance contracts; (2) of limitations upon the shifting of risks. The law and labor, which treats (1) of the legal relation between employer and employee at common law; of the illegal practices in the bargaining struggle between employer and employee; (3) of modern preferential legislation in favor of labor. The law and business associations, which deals (1) with the nature and characteristics of the various forms of business associations recognized by law, such as the relation of principal and agent, the partnership, and the corporation; (2) with the control of the various forms of business associations; (3) with the incidents of membership in the various forms of business associations; (4) with the formation, dissolution, and reorganization of various forms of business associations. Prerequisite: 27 majors. Mj. 11:00, ASSISTANT PROFESSOR CHRIST.

367A. Railway Organization and Operation.—A brief survey of the principal problems of steam railway organization and operation, considered in their administrative bearing. It includes not only methods of organization, but also methods of yard and station operation, train operation, and maintenance of facilities. Brief consideration is given to accounting and traffic department activities. Prerequisite: Economics 362 or equivalent. M. First Term, 1:30, ASSOCIATE PROFESSOR SORRELL.

367B. Highway Transportation.—A survey of highways and highway transportation in the United States. The first part of the course deals with the history of highway transportation, causes of its recent development, types of construction, organization of highway departments, maintenance and operation. Methods of highway transportation research are also discussed. The second part deals with private and common carriers operating over the highways; their organization, policies, and methods. Prerequisite: Economics 362 or equivalent. M. Second Term, 1:30, ASSOCIATE PROFESSOR SORRELL.

375. Risk and Its Administration.—A survey course for advanced students who have had no work in the field of risk. An examination is made of the many risks in our economic order, and of the methods, devices, and institutions which have evolved to aid the individual and society in dealing with risk. Special attention is given to methods of forecasting future events of economic significance, and to the risk-bearing activities of such institutions as insurance companies and speculative exchanges. The extent to which risk has been reduced or eliminated by the development of existing means of dealing with risk; the weaknesses, limitations, and possible improvements of these means of dealing with risks; and the possible development of new means of dealing with risk are considered. Prerequisite: 36 majors, or 27 majors with an average of B. Mj. 12:30, ASSISTANT PROFESSOR NERLOVE.
379A. Technology of Commodities I.—This course is a scientific study of commodity evaluation as applied to commodities generally in the world-market. Its function is primarily that of commodity evaluation in wholesale and foreign trade, although all important processes through which the commodity passes are considered. The methodology of evaluation is illustrated by the practical work of a commercial technologist. A considerable amount of individual technical research in a chosen group of commodities is expected of each student. Contact with methods employed in the commercial world is provided by occasional excursions. Elementary microscopical analyses are made when relevant to the student's problem. Prerequisite: 27 majors. Mj. 9:00, PROFESSOR SCHNEIDER.

379B. Technology of Commodities II.—The evaluation of commodities is continued with particular emphasis upon milk, eggs, and other dairy products; alcohol and alcoholic beverages; canned goods; tea; coffee; cocoa and chocolate; candies; spices; and tobaccos. Attention in this course is also given to textile and cordage raw materials; cotton, flax, hemp, and similar fibers; jute, manila, sisal; wool and animal hair; yarns; rugs; knit goods; laces; silks and artificial silks. The practical, experimental, and field work is continued. Prerequisite: 27 majors. Mj. 10:00, PROFESSOR SCHNEIDER.

386. Special Studies in Market Administration.—This course is devoted to an intensive analysis of certain problems of sales management which are particularly difficult of satisfactory solution. Students taking the course are expected to be fully conversant with the literature of sales management. The following list of subjects will suggest the nature of the material to be covered: measurement of market potentials, the supervision and control of salesmen, sales organization, standards of sales efficiency, obtaining dealer co-operation, controlling the direction of sales effort, the use of records in controlling sales activities, the planning of sales campaigns, the determination of sales price, discount policy, the assignment of salesmen, the technique of market research, the selection of distributive channels.

Investigation by the student of both library and field sources as each subject is taken up will be expected. Each student will also be expected to conduct an original investigation of an approved subject during the quarter and submit a report upon it. Considerable latitude will be allowed in the selection of subjects.

Classroom work will be informal in nature and devoted largely to discussion. Throughout the course stress will be placed upon the technique or method of approach to sales problems rather than their solution. A considerable amount of case and problem material will be introduced as a basis for classroom discussion. Prerequisite: Commerce and Administration 285 and 27 majors with an average of B, or 385. Mj. (or M. First Term), hours to be arranged, ASSISTANT PROFESSOR PALMER.

387. Foreign Trade.—This is a general survey course in foreign trade, in which the study of marketing problems is carried over into the foreign field. It will cover theories of foreign trade; the character and volume of the foreign trade of the United States, and present tendencies in that trade; direct contacts with the foreign markets, and also reaching foreign markets through commission houses, manufacturers' export agents, export merchants, traveling salesmen, and export departments; the organization of combinations of exporters under the Webb-Pomerene Act; foreign exchange and credits; ocean transportation, and the merchant-marine problem in relation to foreign trade; tariffs and national commercial policies; the study of certain selected individual markets; marine insurance; documentation in foreign trade. Each student will select a commodity for study and present a term paper upon the marketing of that commodity in foreign fields. Prerequisite: 36 majors, or 27 majors and Commerce and Administration 285 with an average of B. Mj. 11:00, ASSOCIATE PROFESSOR SORRELL.

388. Special Studies in Terminal Marketing.—Problems considered are: the economic relationship of terminal markets to their environment, the physical plan and layout of the market, market institutions in relation to product distribution and price-making, costs of marketing, legal control, intermarket relationships. The method of study will involve the investigation and reporting of a problem in the field of the course. Chicago offers exceptional opportunity for studying terminal market operations at close range. Individual students may plan their work so as to make the course count for more than one major. Prerequisite: 36 majors, or Commerce and Administration 285 with an average of B. Registration limited to 10. Mj. or DMj. 11:00, ASSOCIATE PROFESSOR DUDY.
389Y. Special Studies in the Marketing of Livestock and Packing-House Products.—A course for graduate students who have done advanced work in marketing or animal husbandry and wish to make a further study of some phase of the livestock and meat trade in a packing center. In addition to livestock and meats there is opportunity for the study of a wide range of by-products and companion products, particularly poultry, dairy products, and vegetable oils as handled by packing companies.

This course will be of interest to instructors in agricultural colleges who desire contact with central markets in completing studies started elsewhere. Prerequisite: 36 majors or permission of instructor. Mj. or DMj. hours to be arranged, Assistant Professor Rhoades.

395. The Teaching of Typewriting.—A critical study is made of (1) the background of the present situation with respect to the teaching of typewriting; (2) the objectives of typewriting; (3) the psychological laws governing the acquisition of skill; (4) the organization of the material; (5) the teaching technique; (6) standards, tests, and measurements. Prerequisite: A knowledge of the theory of touch typewriting. M. First Term, 9:00, Miss Brewington.

396. The Teaching of Stenography.—A course for those who wish to prepare themselves to teach stenography and for those already teaching who wish to render their teaching more effective. A critical study is made of (1) the background of the present situation with respect to the teaching of shorthand; (2) the objectives of shorthand; (3) the psychological laws governing the acquisition of skill; (4) the organization of material; (5) the teaching technique; (6) the standards, tests, and measurements. Prerequisite: A knowledge of the theory of shorthand. M. First Term, 8:00, Miss Brewington.

397. Materials and Tests for the Teaching of Shorthand.—Special studies looking toward the production, selection, and arrangement of materials for use in teaching shorthand by the direct method. Prerequisite: Commerce and Administration 396 or permission of the instructor. M. First Term, 4:30, Miss Brewington.

398. The Teaching of Accounting.—This is a “methods” course in the presentation of principles underlying the objectives and technique of accounting. The attention will be centered on the place of accounting in the college curriculum, although the course will be of value also to those teaching the subject in secondary schools. Accounting will be critically examined as a specialized type of the quantitative method of analysis—a type particularly adapted for use in the control of economic activity which can be measured in terms of financial value. The method of accounting will be compared to and contrasted with the method of statistics.

Class sessions will be conducted on the discussion basis. Some of the topics which will be discussed are: presentation of the theory and technique of the double entry system, with particular emphasis on income and expense accounts and the specialized journals; selection and assignment of illustrative exercises; uses and limitations of laboratories; contacts with practical accounting situations; current bases of valuation; administrative uses of accounting, with attention to methods of explaining these uses to beginning students. Members of the class will be given an opportunity to become familiar with the existing college texts in accounting, particularly those intended for first-year work. Prerequisite: one year in Accounting, or consent of the instructor. M. Second Term, 8:00, Assistant Professor Korem.

Particular attention is called to the statements of the departments concerned for descriptions of the following courses:

ECONOMICS

(pp. 24–27)

102. The Economic Order.


202. Economic Order, Senior College Section.

210. Introduction to Accounting.

211. Introduction to Statistics.
301. Neo-Classical Economics.
302. History of Economic Thought.
303. Modern Tendencies in Economics.
310. Statistical Analysis of Commodity Prices.
312. Correlation, Curve-Fitting, and Theory of Sampling.
322. The Industrial Revolution as a Form of Economic Development.
323. Economic History and Economic Theory.
330. Banking.
331. Money.
340. Trade-Unions.

PSYCHOLOGY
(p. 23)

101. Introductory Psychology.

EDUCATION
(pp. 83-110)

201A. Introduction to the Scientific Study of Education.
204A. Methods of Teaching in Junior and Senior High Schools.
204B. Methods of Teaching in Junior and Senior High Schools.
208. Class Organization, Management, and Testing in Junior and Senior High Schools.
210A. History of Modern Elementary Education.
210B. History of Modern Secondary Education.
316. History of American Education.
336. The Organization and Administration of the High School.
338. Junior High School Organization and Administration.
342. The Curriculum.
364A. The Use of Achievement Tests in Improving Instruction in the Elementary Schools.
364B. Laboratory Course in the Use of Tests for the Improvement of Instruction in the High School.
367B. General Technique of Instruction in the High School.
THE GRADUATE SCHOOL OF SOCIAL SERVICE ADMINISTRATION

THE FACULTY

Max Mason, Ph.D., LL.D., Sc.D., President of the University.
Frederic Campbell Woodward, A.M., LL.M., Vice-President and Dean of Faculties.
Edith Abbott, Ph.D., Litt.D., LL.D., Dean of the Graduate School of Social Service Administration; Professor of Social Economy.

William Willard Burke, A.B., Assistant Professor of Social Economy.
Elizabeth Susan Dixon, S.B., Supervisor of Field Work and Instructor in Case Work.
Ruth Emerson, S.M., Director, Social Service Department, Albert Merritt Billings Hospital and Lecturer on Medical Social Work.
Earl Dewey Myers, A.M., Assistant Professor of Social Economy.
Edwin R. Eisler, S.B., M.D., Lecturer on Social Psychiatry.
Jacob Kepecs, Lecturer on Child Welfare.
Harry Lawrence Lurie, A.M., Lecturer on Case Work.
A. Wayne McMillen, A.B., Lecturer on Social Administration.
Amelia Sears, Lecturer on Case Work.
Elinor Nims, Ph.D., Instructor in Social Economy.
Ethel Verry, A.M., Instructor in Social Economy.
Kathleen Allen, A.M., S.M., Assistant Director, Social Service Department, Albert Merritt Billings Hospital.
Coyle Ellis Moore, A.M., Assistant in Social Economy.
Arlene Johnson, A.M., Assistant in Social Economy.

Arthur Lawton Beeley, Ph.D., Professor of Sociology and Social Technology, University of Utah (Summer, Second Term, 1928).
Jesse Frederick Steiner, Ph.D., Professor of Social Technology, Tulane University (Summer, 1928).
Helen Russell Wright, Ph.D., Staff Member, Robert Brookings Graduate School of Economics and Government (Summer, 1928).

GENERAL STATEMENT

The great increase in the last decade of the nineteenth century in the number of permanent salaried positions in social work for properly qualified men and women has given to such service a professional character that was lacking in the old days of more or less casual volunteer work. With the multiplication of agencies to serve the "dis-advantaged" groups in the community, the destitute, the sick, the aged, dependent children, and the mentally and physically defective, and with the increase in the number

1 This list includes only those who will be in residence during the Summer Quarter, 1928.
of organizations designed to promote social and civic reforms there has developed an urgent demand for persons properly equipped to carry on this work.

There is also a rapidly growing realization of the importance of professionally equipped officials in the public charitable and correctional service. Many states have reorganized their administrative departments; new positions have been created in the public-welfare field; and executives of professional attainments are needed as heads of public-welfare departments, secretaries of children’s code commissions, directors of children’s bureaus both state and local, and organizers of state and county welfare work.

Before the organization of the professional schools of social service the preparation of social workers resembled the early methods of education in the older professions of law and medicine; the social worker was either trained through the system of apprenticeship alone, or he learned from his own mistakes.

DEVELOPMENT OF THE PROFESSIONAL SCHOOLS

Experiments in establishing professional training for social work now cover a period of more than twenty-five years. The earliest “training classes” and “training schools” were largely organized by the directors of private charitable agencies, and the lecturers were usually the staff members of these agencies.

Gradually the training courses of a few weeks have developed into schools offering courses for graduate students extending over a period of two to three years. A curriculum has been developed, a system of field work has been organized, textbooks have been written, and staffs of instructors giving full time to teaching have been recruited to supplant the old system of using as instructors persons engaged in social work who could give only a few hours each week to teaching. Along with the improvements in standards of professional education, standards of social work have advanced, and the demand has steadily increased for men and women who have had a scientifically organized professional course in place of untrained persons with good will who learned “what not to do” at the expense of the poor.

In 1919, when an Association of Schools for Professional Social Work was organized, nine universities and colleges and five independent institutions were admitted to membership as offering professional courses requiring the full time of students for one year or more than one year. In 1928, there are 25 professional schools in the association.

The Graduate School of Social Service Administration is the successor to the Chicago School of Civics and Philanthropy and to the Philanthropic Service Division of the School of Commerce and Administration of the University of Chicago. The Chicago School of Civics and Philanthropy, originally a series of courses under the Extension Department of the University of Chicago, was known from 1905 to 1908 as the Chicago Institute of Social Science. In May, 1908, it was incorporated as the Chicago School of Civics and Philanthropy. It was then maintained as an independent professional school until 1920. The Philanthropic Service Division of the School of Commerce and Administration for ten years conducted such work at the University of Chicago. The Graduate School of Social Service Administration was organized in 1920 to serve the common purposes and to combine the resources of these hitherto separate courses.

The School is a graduate professional school. Its work leads to the degrees of Master of Arts and Doctor of Philosophy. In the case of a limited number of mature undergraduates the Ph.B. degree may be granted. (See page 123 for undergraduate work.)
THE FIELD OF SOCIAL WORK

The broad scope of social work and the variety of its activities do not permit a detailed enumeration here of all its specific opportunities. The following are mentioned as representative types of positions in social work toward which professional preparation may lead: child-welfare work, such as positions with children's aid societies, juvenile protective agencies, juvenile courts and mothers' pension departments; charity organization and other family case-work; medical social service and psychiatric social work in hospitals and dispensaries; child guidance clinics, and institutes for juvenile research; executive and visitors' work for prisoners' aid societies, and probation work with adult delinquents; social service in connection with state institutions for the feeble-minded, the insane, and the delinquent; social settlement work; social work in public schools, such as vocational guidance and placement, attendance work, and work as visiting teachers; psychiatric, medical, and legal social work; immigration work as executives, special agents, or investigators for state immigration commissions and private immigration committees and protective leagues; statistical and investigational work in private associations, and in the government departments, such as the U.S. Bureau of Labor Statistics, the Women's Bureau, and the Children's Bureau; executive positions in state charitable work and with private societies, councils of social agencies, welfare federations, and civic leagues.

For all these, the School offers the necessary basic instruction.

THE GRADUATE CURRICULUM

Graduate students who have a satisfactory background of undergraduate work are occasionally able to complete the work required for a Master's degree in three quarters. Their schedules will be planned individually to correlate their general collegiate training with the professional work of the school.

Graduate students whose previous training has been along other lines, cannot secure a Master's degree in three quarters. Such students find it necessary to spend at least four, and often five quarters in residence. Attendance during the Summer Quarter is recommended for students graduating in June. Those who finish their undergraduate work by the middle of their fourth year may do even better by entering this School in the Spring Quarter.

The curriculum of the graduate students will differ from student to student, both according to previous training and according to the probable field of work in which the student will engage. All candidates for a higher degree, however, must meet certain minimum requirements. If elementary courses in psychology, economics, sociology, and political science have not been carried during the undergraduate course, the School may require certain courses in addition to the regular graduate curriculum. For those who have met the social science undergraduate requirements, a minimum of eight majors in addition to two majors of field work and a thesis are required for the A.M. degree. Field Work (S.S.A. 301, and S.S.A. 302, or S.S.A. 303) will not be accepted as among the required eight majors for this degree. These eight majors should, in general, include the following five majors among the courses offered: S.S.A. 305, Principles of Case Work; S.S.A. 313, Child Welfare Problems; S.S.A. 320, Immigration; S.S.A. 370, Social Statistics; S.S.A. 362, English Philanthropy in the Nineteenth Century, or S.S.A. 350, Public Welfare Administration. These requirements are, however, subject to such
changes as may arise in view of the previous work of the student. For a more detailed statement of the requirements for higher degrees, the student is urged to consult the annual Announcements of the School, which will be sent upon application.

UNDERGRADUATE STUDENTS

Undergraduate students of sufficient maturity may register in the School but they may be admitted only to courses for which they possess the proper prerequisites. Graduates of other schools of social work who have not yet received the bachelor's degree and wish to complete their undergraduate work may register in the School with the limitation upon the selection of courses specified above. In general, the courses for undergraduates depend upon their previous preparation and experience. The number of social workers without university degrees who come to the University to complete the work required for a degree is steadily increasing. In such cases the candidate for admission as an undergraduate should send to the Dean of the School transcripts of his high school and other educational work. The courses required will be determined after these credits have been evaluated, but in all cases will include the sequences described above. For undergraduate students, the emphasis is on the basic social science courses, rather than the professional courses. Undergraduates wishing to enter the School should in no circumstances present themselves for admission without previously corresponding with the Dean of the School in order to determine whether or not their credits are sufficient to entitle them to admission.

FIELD WORK

Field work is planned to give the student experience in the carrying through of technical processes. Field work falls into two main divisions: (1) social research; (2) case-work.

Case work.—Arrangements are first made for the student to give fifteen hours a week in the Stockyards district office of the United Charities of Chicago. Emphasis is laid upon work with this organization since it is believed that for educational purposes no other form of social work is so fundamental as the work done by the so-called "family welfare" associations. This is partly due to the fact that the methods of investigation and treatment have been so thoroughly worked out, and partly to the fact that this work provides so many points of contact with a great variety of co-operating agencies that students are within a very short time given a working knowledge of the social field. All of this work is carried on under the Supervisor of Field Work. Students who wish to prepare for work in social research are strongly advised to undertake this work with the United Charities during at least one quarter in residence as well as the field work in social research. Social research so frequently involves the use of the material in the files of the social agencies, especially the case-work agencies, and is so often concerned with the methods of social work that the thorough knowledge acquired through experience in the office of a case-work agency is essential.

Specialization is provided for after the preliminary work with the United Charities. When the required field work in the district office has been completed, students may elect a further period of field work with the United Charities or with some other agency. Field work is provided for those interested in children's work, under a member of the School Faculty, in the Illinois Children's Home and Aid Society, the Chicago Orphan Asylum, the Jewish Home Finding Society of Chicago, and the Joint Service Bureau for
Children's Institutions. Students interested in psychiatric social work are assigned to
the Institute for Juvenile Research. The Social Service Department of the Albert
Merritt Billings Hospital of the University Medical School is conducted as a teaching
department of the School, to which students interested in medical social work may be
assigned for field work.

INSPECTION VISITS

Visits to the various social institutions in and near Chicago are organized by the
Faculty to meet the needs of the courses given. The series planned usually includes
visits to Hull-House, the Juvenile Court and other special institutions for children, the
House of Correction, the County Jail, the State Prison, the Psychopathic Hospital,
the Oak Forest Infirmary, the Social Registration Bureau, the social branches of the
Municipal Court, some of the most important of the public recreation centers of
Chicago, and the state institutions including the new Penitentiary, the Colony for the
Feeble-minded, the State Training Schools for Girls and for Boys, and one or more of
the Hospitals for the Insane.

SUPPLEMENTARY LECTURES

It is customary to supplement the courses offered in the School by special lectures
given by representatives of various social agencies and institutions. In addition to
lectures by representatives of social agencies in Chicago, there will be several series
of lectures by visiting lecturers. It is not practicable to announce these lectures in
advance of the beginning of the quarter, but every effort is made to give students in
attendance during the summer terms opportunities to hear and to meet distinguished
social workers in the various fields covered by the courses of the School. Chicago
lecturers usually include Miss Jane Addams of Hull-House, Amelia Sears of the Chicago
United Charities, Wilfred S. Reynolds of the Chicago Council of Social Agencies,
Anne S. Davis of the Vocational Guidance Department of the Board of Education,
Edna L. Foley of the Visiting Nurse Association, Jane A. Neil, Principal of the Spalding
School for Crippled Children, Dr. Rachelle Yarros of the Social Hygiene Council,
Lou Eva Longan of the Chicago Orphan Asylum, Ferris F. Laune of the Wieboldt
Foundation, Mary Murphy of the Elizabeth McCormick Memorial Fund, Jacob Kepecs of the
Jewish Home Finding Society, Margaret R. Gariepy of the Legal Aid Department,
Joel D. Hunter of the United Charities, Jessie F. Binford of the Juvenile Protective
Association, and others.

COURSES OFFERED: SUMMER QUARTER, 1928

It is impracticable to offer descriptions of all courses available for students preparing
for service in the field of social work. They have access to the resources of the entire
University, including the courses in the Law School, in the School of Education, and
courses in Economics and Statistics, Political Science, Sociology, Philosophy, Psych-
ology, and Hygiene and Bacteriology in the Colleges and Graduate Schools of Arts,
Literature, and Science. In addition to the courses listed below, graduate courses in
the departments of the University above mentioned are also accepted toward a degree
in Social Service Administration.

The courses are divided into four groups as follows, the first figure in each number
indicating the group in which the course belongs:
101-99.—Courses primarily for undergraduates with not more than 18 majors of credit.

201-99.—Courses primarily for undergraduates with more than 18 majors of credit.

*301-99.—Informational and advanced technical courses that assume a previous general survey of the field or method or problem treated. Open to undergraduates with 27 majors of credit, including departmental prerequisites.

401-99.—Pre-research, problem, and research courses.

202. The Field of Social Work.—An introductory course presenting a general view of the entire field of social work as illustrated by its present scope and methods. Arranged not only for professional students, but also for Student Volunteers and for those preparing for medicine, the ministry, teaching, etc. Systematic consideration is given (a) to the major problems of social work, viz., poverty and destitution, physical and mental deficiency and disease, delinquency, etc., and (b) to the principal forms and processes of social work. Class work is supplemented by inspection visits, clinics, and special lectures. Mj. (or M. either Term), 8:00, ASSISTANT PROFESSOR MYERS.

301. Field Work I.—See page 123 for statement concerning field work. Formal course credit is not given for field work, unless carried on under the immediate supervision of a member of the School staff during the entire quarter and carried in conjunction with the appropriate courses in Case Work. Hours to be arranged, Miss Dixon, Miss Nims.

302. Field Work II.—Specialized work arranged in connection with the courses in child welfare. Prerequisite: S.S.A. 301 and 303. Hours to be arranged, ASSISTANT PROFESSOR BURKE.

303. Field Work III.—Specialized work in connection with the courses in medical social work, psychiatric social work, and other work to meet the needs of individual students. Hours to be arranged, Miss Dixon, Miss Emerson, and Miss Verry.

305. Principles of Case Work.—This course deals with the general principles of social treatment of families in need. Investigation, co-operation, sources and special forms of relief, and social diagnosis are the subjects dealt with in cases of families in which the distress comes out of sickness, mental disturbance, and non-residence. The problems in treatment of family distress arising out of widowhood, desertion, unmarried motherhood, and old age will be discussed. This course will be based on the study of case records, and classroom discussion will be supplemented by visits of observation to selected institutions. Mj. (or M. either Term), 2:30, Miss Dixon.

305A. Principles of Case Work.—The first half of the course described above will be repeated during the Second Term. M. Second Term, 3:30, Miss Dixon.

307. Principles of Case Work III. Problems of Case Diagnosis and Treatment.—Selected case records which involve complex or difficult situations, or instances of long treatment by social agencies, will be studied to determine the principles of diagnosis and treatment involved. The case problems will be analyzed in relation to group standards, social organization, and the behavior of the individual. These will be considered in the light of the recent contributions of psychology, psychiatry, and sociology. Prerequisite: S.S.A. 305 or consent of instructor. M. Tu., Th., 4:30-6:30, First Term, Mr. Luree, Second Term, Miss Sears.

313. Child Welfare Problems.—This course will include a discussion of the methods of care of dependent children in their own homes, in institutions, and in foster homes; protective work for children, present status of that movement, the relationship of juvenile delinquency to dependency and neglect, the work of child-guidance clinics and their relation to institutions, children’s aid societies, and juvenile courts; problems of illegitimacy and subnormality. Prerequisite: 27 majors, or adequate experience in social work. Mj. (or M. either Term), 8:00, Miss Verry.

* For the Master’s degree and for the degree of Doctor of Philosophy the majors offered shall be from courses numbered 300 or above.
314. Child Welfare Case Studies.—A course dealing with case work problems in the children’s field. Prerequisite: S.S.A. 313 or experience in children’s work. M. M., W., 4:30-6:30, First Term, Mr. Kepecs.

315. Social Work and the Schools.—Modern developments in the socializing of the elementary schools will be discussed with special reference to the “nursery school,” truancy and non-attendance, the work of “scholarship committees,” protection of children who leave school to go to work—enforcement of the child labor law, issuing of “work-certificates,” vocational guidance—continuation schools, community centers, and evening schools for adults, the interrelation of public education and social work. M. First Term, 3:30, repeated M. Second Term, Miss Walker.

316. The Work of the Visiting Teacher.—A discussion of the special problems met by the visiting teacher in various types of schools, including the adjustment of the individual child to the curriculum, the relation of the school to individual parents and children, the visiting teacher in relation to school administration, and similar problems. M. First Term, 8:00, repeated M. Second Term, Miss Walker.

317. The Treatment of Juvenile Delinquency.—A study of the causes and treatment of juvenile delinquency with special reference to the modern methods of dealing with the problem. The course will consider the various methods of: diagnosis; institutional treatment; personal supervision (probation and parole); juvenile research; preventive agencies; programs. Case records will be used and arrangements will be made for observation of local facilities for treatment. Prerequisite: S.S.A. 318 or Sociology 373. M. First Term, 9:00, Assistant Professor Myers; repeated M. Second Term, M., W., 4:30-6:30, Professor Beley.

318. Crime and Punishment.—A study of the nature and extent of crime, followed by a survey of existing methods of dealing with adult and juvenile offenders. The legal concepts and statistics of crime will be reviewed. The nature of crime and the criminal will be analyzed by means of case studies from the field of clinical criminology. The administration of criminal justice, including (a) police system; (b) treatment pending trial; (c) trial; (d) sentence, fine, probation, imprisonment, parole, etc. Class work will be supplemented by clinics and field trips. Prerequisite: 27 majors. M. Second Term, 9:00, Assistant Professor Myers.

320. Immigration.—A general course dealing with the social, industrial, and political aspects of immigration; changes in the sources and causes of immigration; and national racial differences; methods of preventing exploitation; difficulties of industrial adjustment; the immigrant as a factor in the labor problem; educational needs; naturalization legislation and politics; the work of state and federal immigration commissions and immigration agencies; and so-called “Americanization” programs will be discussed. Prerequisite: 27 majors. Mj. (or M. either Term), 11:00, Professor Steiner.

325. Community Organization.—A course dealing with the principles of community organization and with the experiments that have been made. A consideration of the social theories that underlie the modern community movement; a critical review of the role of custom, habit, crisis, and gregariousness in community development. Special attention is given to the place of the crowd spirit in community work and to effective means of achieving community solidarity. An evaluation of community forces with a view to discovering the principles involved in their organization. The second half of the course includes a general survey of typical experiments in community organization; development and co-ordination of community activities illustrated by case records; a comparative study of methods of administration with special attention to problems of central financing of social agencies; qualifications for leadership in community work. Prerequisite: 27 majors. Mj. (or M. either Term), 10:00, Professor Steiner.

328. Rural Social Work.—While the art of social case work can, like the practice of medical diagnosis, be developed best in a city, where a great variety of problems as well as large numbers of cases can be observed, there are differences between the conditions and resources presented by urban and rural communities to which the attention of the
student should be directed. In this course an attempt will be made to study the methods that have seemed most successful in rural communities and especially those experiments in co-operation between the social worker and the health worker or the school official or the law enforcing agency that have seemed most fruitful. Such developments as the Iowa co-operation between public and private agencies in poor relief, the central and local agencies in Minnesota, the county organization for child care under the New York State Charities Aid will be especially studied to discover what features are peculiar to successful rural social work. Prerequisite: 27 majors. Mj. (or M. either Term), 8:00, Dr. Nims.

336. Medical Social Work I.—Approximately one-half of the time of this course (usually two days a week) is given to lectures on medical subjects by members of the medical faculties. The other half of the course deals with the organization and function of the place of social work in a medical institution; relations of social agencies of community to hospital; discussion of cases and problems. Mj. (or M. First Term), 3:30, Miss Emerson.

336A.—During the Second Term the first half of the course described will be repeated for the benefit of students entering the Second Term; M. Second Term, hours to be arranged, Miss Emerson.

335. Medical Social Work II.—This course is designed to meet the needs of students with experience in Hospital Social Service. Only those with experience will be admitted. A problem suited to the need of each student either in the field of research or of special observation and reporting will be undertaken by each student. The class may meet either for individual conferences or as a group. M. First Term; repeated M. Second Term, hours to be arranged, Miss Emerson.

340. Social Control of the Mentally Handicapped.—The modern social devices employed in dealing with the feeble-minded, the psychotic, the psychoneurotic, the epileptic, and the psychopathic. The nature, extent, social significance, and history of the problems. Principles and administrative principles involved in the education, segregation, and sterilization of the mentally disordered. Principles of extra-institutional care (social case treatment). The mental hygiene movement; community organization; programs of prevention, etc. Class work will be supplemented by institutional visits and clinical demonstrations. Prerequisite: 27 majors. M. Second Term, 8:00, Professor Berkley.

341. Psychiatry for Social Workers.—An introduction to the field of nervous and mental diseases, designed for students preparing for general case work or medical or psychiatric social work. The biological and psychological foundations of human conduct will be surveyed and the principles of psychopathology summarized. The course will concern itself chiefly with a systematic consideration of the medico-psychological phases of the various organic and functional psychoses (insanities), the psychoneurosises, the epilepsies, etc., and their social implications. Class work will be supplemented by clinical observations at local hospitals. Prerequisite: 36 majors, including S.S.A. 305. M. Second Term, Tu., Th., 7:00-9:00 p.m., Dr. Euler.

342. Behavior Disorders of Children.—The psychiatric approach to the study of such behavior disorders of childhood as are encountered in the field of social work. The various methods of investigation, medical, social, psychometric, psychoanalytic, will be considered, and certain principles of examination and treatment developed. Case materials will be extensively used. Prerequisite: 36 majors, including S.S.A. 305. M. First Term, 1:30, Dr. Levy.

345. Problems in Child Guidance.—An advanced course. Prerequisite: 36 majors, including S.S.A. 305 and S.S.A. 342. M. First Term, 2:30, Dr. Levy.

355. Administration of Social Service Agencies.—Business methods as applied to the administration of private social service agencies: (1) formulation of policies including legal restrictions, constitutions and by-laws, supervision by external agencies, powers and functions of boards of trustees, responsiveness to public opinion, and staff participation; (2) social service management including co-ordination of staff departments, use of the volunteer, control and supervision by external agencies; (3)
finance including budgets and budget control, financing by the individual agency and by joint effort, managerial accounting, purchasing, and the technique of publicity work; (4) personnel management including selection, training, classification, salary schedules, promotion, advancement, transfer, discharge, staff representation, and staff organization. The actual administration of typical agencies will be studied as the problems mentioned are considered. Mj. (or M. either Term), 8:00, Mr. McMILLEN.

373. Social Investigation.—A study of methods used in investigation of social problems with special attention to the use of Statistics. Selected reports of official and private inquiries relating to poverty, cost of living, crime, immigration, and unemployment will be critically examined. Mj. (or M. either Term), 9:00, Dr. Wright.

473. Social Conditions in the Chicago Region.—A course for research students conducting an inquiry in the metropolitan area of Chicago. Prerequisite: S.S.A. 370 or S.S.A. 373 and consent of instructor. Mj. (or M. either Term), hours to be arranged, Dr. Wright.

490. Individual Research.—Special research. Instructors and advanced students meet at appointed intervals for discussion of individual research problems of advanced student. Mj. or DMj. (or M. or DM. either Term), hours to be arranged, Dr. Wright and INSTRUCTORS IN THE SCHOOL.

For descriptions of the following courses, the statements of the departments concerned should be consulted:

Education 361A. Mental Hygiene.—M. Second Term, 8:00, ASSOCIATE PROFESSOR BLATZ.

Education 360A. Psychopathic, Retarded, and Mentally Defective Children.—
M. Second Term, 9:00, ASSOCIATE PROFESSOR BLATZ.

Education 363A. Mental Tests.—M. First Term, 9:00, ASSOCIATE PROFESSOR McPhee; repeated M. Second Term, 9:00, ASSISTANT PROFESSOR MCCLUSKY.

Education 307A. Statistical Methods Applied to Educational Problems.—M. First Term, 11:00, 2:30, PROFESSOR CLARSON, ASSOCIATE PROFESSOR HOLZINGER; M. Second Term, 12:30, PROFESSOR CLARSON.

Education 307B. Statistical Methods Applied to Educational Problems.—M. First Term, 12:30, PROFESSOR CLARSON; repeated M. Second Term, 11:00, 2:30, PROFESSOR CLARSON, ASSOCIATE PROFESSOR HOLZINGER.

Education 407. Statistical Methods: Advanced Course.—Mj. 1:30, ASSOCIATE PROFESSOR HOLZINGER.

Education 353B. Mental and Physical Growth of Children.—M. First Term, 2:30, PROFESSOR BUSWELL.

Education 374. Health Education in the Schools.—Mj. (or M. either Term), 2:30, DR. SHAUGHNESSY.

Education 329. Educational and Vocational Guidance.—Mj. (or M. either Term), 3:30, MR. WOELLNER.

Psychology 321. Fundamentals of Statistics.—Mj. 9:00, PROFESSOR THURSTONE.

Psychology 423. Theory of Psychological Measurement.—Mj. 10:00, PROFESSOR THURSTONE.

Psychology 357. Abnormal Psychology.—DM. First Term, 3:30-5:30, PROFESSOR TAYLOR.

Sociology 220. Introduction to Social Psychology.—Mj. 9:00, PROFESSOR FARIS.

Sociology 290. Ethnology.—Mj. 10:00, PROFESSOR SPIER.

Sociology 320. Social Attitudes.—Mj. 10:00, PROFESSOR FARIS.

Sociology 373. Crime and Its Social Treatment.—Mj. 1:30, PROFESSOR BURGESS.

Sociology 399. The Psychology of Culture.—Mj. 10:00, PROFESSOR SAPER.

Economics 211. Introduction to Statistics.—Mj. 11:00, ASSISTANT PROFESSOR YNTEMA.
Economics 340. Trade Unions.—Mj. 8:00, Professor Millis.

Commerce and Administration 245. The Manager’s Administration of Personnel. Mj. 9:00, Professor Stone.

Political Science 349. The Administration of Criminal Justice.—Mj. 11:00, Professor Moley.

History 370. Problems in English Social and Economic History, 1850–1928.—Mj. (or M. either Term), 8:00, Assistant Professor Gillespie.

Philosophy 212. Movements of Thought in the Nineteenth Century.—Mj. (or M. either Term), 11:00, First Term, Professor Mead; Second Term, Professor Tufts.

Home Economics 236A. Child Care.—M. Second Term, 9:00, Assistant Professor Roberts and Mrs. Martin.

Home Economics 237. Psychological Study of Young Children.—Mj. (or M. either Term), 8:00, Associate Professor Koch.

Home Economics 337. Psychology of Children.—Mj. (or M. First Term), 10:00, Associate Professor Koch.

Home Economics 316A. Nutrition Work with Children.—M. First Term, 9:00, Assistant Professor Roberts; repeated M. Second Term, 1:30, Mrs. Martin.

Law 67. Administrative Law and Officers.—Mj. Daily, 1:30 (to August 16), Professor Freund.
INDEX

Administration, officers of .......................... 2
Admission, specimen application blank  ................ 1
Admission and residence ................................ 3
Anatomy .................................................. 50-51
Anthropology ............................................. 52-53
Art .......................................................... 51-52
Art Education ............................................. 100-1
Art, History of ........................................... 31
Art, Theory and Practice ................................ 32
Arts, Literature, and Science .......................... 13-67
Astronomy .................................................. 49
Athletics ................................................... 65-66
Bacteriology .............................................. 63
Baggage, transfer of ...................................... 9
Basket-ball .................................................. 66
Basket-ball .................................................. 8
Botany ...................................................... 58-59
Botany (teaching of) ..................................... 107
Business ..................................................... 112-19
Calender ..................................................... 3
Chemistry ................................................... 51-54
Chemistry (teaching of) .................................. 107
Child Study .................................................. 35
Child Study .................................................. 70-71
Church History ............................................ 71-72
Civics (teaching of) ...................................... 103
Climate ...................................................... 12
Clubs ......................................................... 10
Clothing and Textiles .................................... 36-37
Commerical and Administrative School of ............. 11-17
Comparative Literature ................................... 48
Comparative Philology .................................... 40
Comparative Religion ..................................... 39
Correspondence ............................................ 3
Departments of instruction ................................ 3-4
Dermatology ............................................... 54
Divinity School .......................................... 65-74
Doctors of Philosophy as guests of the university .... 11
Economics .................................................. 24-27
Education, Department of ................................ 83-110
Education, History of .................................... 103
Education, School of ..................................... 83-110
Educational Administration ................................ 90-91
Educational Psychology .................................. 92
English ...................................................... 45-47
English (teaching of) ..................................... 102
Examinations, Estimate of ................................ 9
Faculties, list of .......................................... 13
Fees, tuition, etc. ........................................... 6-7
Folk dancing ............................................... 66
Food and Nutrition ....................................... 34-35
Football ...................................................... 66
French ....................................................... 42-43
French House .............................................. 42
Funds, care of ............................................. 9
General Information ...................................... 3
General Medicine ......................................... 64
Geography .................................................. 56-58
Geography (teaching of) .................................. 102
Geology ...................................................... 54-55
Germains .................................................... 45
Golf ........................................................... 66
Greek ........................................................ 40
Gynecology ............................................... 82
Halls, University Residence ................................ 7
Hall Foundation Institute .................................. 12-28
Health, protection to ..................................... 12
Health care .................................................. 12
Health Service ............................................. 9
History ...................................................... 29-31
History (teaching of) ..................................... 103
History of Education ..................................... 92
Household Economics ..................................... 34-39
Home Economics Education ............................... 104-5
Home Management ...................................... 30
Household Economics ..................................... 34-39
Housing Accommodations ................................ 7-8
Hygiene ..................................................... 63
Hygiene (teaching of) ..................................... 107
Institute, General .......................................... 1
Institute of Technology ................................... 1
Institution Administration ................................ 2
Institution Economics ..................................... 12
Italian ....................................................... 43-44
Key to buildings .......................................... 4
Kindergarten-Primary Education .......................... 107-10
Laboratories .............................................. 10-11
Latin ........................................................ 41
Law School .................................................. 75-78
Lectures, University Public ................................ 12
Libraries ..................................................... 10
Library Science Education ................................ 98
Limited-credit courses ................................... 5
Location of University .................................... 4
Laryngology .................................................. 82
Major, definition of ....................................... 4
Mathematics ............................................... 48
Mathematics (teaching of) ................................ 105
Medical Schools ......................................... 70-82
Medicine .................................................... 64,82
Military Science .......................................... 67
Minor, definition of ....................................... 4
Missions ..................................................... 74
Museums ..................................................... 11
Natural Science (teaching of) ............................. 106
Neurology ................................................... 64
New Testament ............................................ 39-40
Numbering System ....................................... 22
Nursing ..................................................... 65
Nutrition .................................................... 34
Obstetrics ................................................... 82
Ophthalmology ............................................ 82
Oriental Languages ...................................... 39
Otology ..................................................... 82
Paleontology .............................................. 55-56
Pathology ................................................... 62
Pediatrics ................................................... 82
Pharmacology ............................................. 62
Philosophy .................................................. 22-33
Physics ...................................................... 50-51
Physics (teaching of) ..................................... 106
Physical Culture .......................................... 65-66
Physiology .................................................. 61
Physiology (teaching of) .................................. 106
Physiological Psychology ................................ 61-62
Placement, Board of Vocational Guidance and ....... 10
Political Science .......................................... 28
Practical Theology ........................................ 72-76
Preaching and Parish Ministry ......................... 72-76
Psychology ................................................ 23-24
Public Speaking .......................................... 46-74
Quarter, definition of .................................... 4
Railway rates .............................................. 9
Recreation .................................................. 12
Registration, routine of .................................. 5
Religious Education ...................................... 73
Rhythms .................................................... 66
Rosentgenology .......................................... 44
Rome Language .......................................... 42-45
Rooms ........................................................ 7-8
Rush Medical College .................................... 82
Sanitarium ................................................... 40
Secretarial work .......................................... 118
Sight-Conservation Education ......................... 99
Social Dancing ............................................ 66
Social Ethics .............................................. 70-71
Social Service Administration, School of .......... 120-27
Sociology .................................................. 52-53
Spanish ...................................................... 44-45
Special Methods, Departments of .................... 98-106
Student service in the Commonwealth ................ 10
Surgery ..................................................... 64-82
Swimming ................................................... 66
Table of Contents ........................................ 1
Textiles ..................................................... 12,66
Textiles and Clothing .................................... 96-90
Track ......................................................... 56
Zoology ...................................................... 59-60
Zoology (teaching of) .................................... 106