

BULLETIN
University of Kentucky



Graduate School
1931-1932

JULY, 1931

Address Ezra L
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GRADUATE COUNCIL

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B. A., Ph. D., LL. D.....	President of the University
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M. A., Ph. D.....	English
EZRA L GILLIS, A. B.....	Registrar
EDWIN STANTON GOOD, M. S.....	Animal Husbandry
THOMAS MARSHALL HAHN, M. S.....	Physics
CARSIE HAMMONDS,	
B. S. in Agri., M. A.....	Education
J. CATRON JONES, A. B., A. M., Ph. D.....	Political Science
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M. A., Ph. D.....	English
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GRANT C. KNIGHT, A. M.....	English
OTTO TOWNSEND KOPPIUS, B. S., Ph. D.....	Physics
A. M. LANDS, M. A.....	Anatomy
CLAIBORNE G. LATIMER, B. S., Ph. D.....	Mathematics
MOSES EDWARD LIGON, A. M.....	Education
ARTHUR CRANE McFARLAN,	
A. B., Ph. D.....	Geology

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 BERTHUS BOSTON MCINTEER, B. S., M. S.....Botany
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 B. S., LL. B., Ph. D.....Psychology
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 JAMES THOMAS COTTON NOE,
 A. M., Litt. D.....Education
 LESTER S. O'BANNON, B. M. E.....Mechanical Engineering
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 WALTER ALLEN PRICE,
 B. S. in Agri., M. S.....Agricultural Entomology
 FRANK HALL RANDALL, A. B., LL. B.....Law
 ELIJAH LAYTHAM REES, C. E., A. M.....Mathematics
 LEWIS CASS ROBINSON, M. S.....Geology
 CLAY CAMPBELL ROSS, A. B., Ph. D.....Education
 MORRIS SCHERAGO, B. S., D. V. M.....Bacteriology
 MARSHALL NEY STATES, B. S., Ph. D.....Physics
 WILLIAM SEPTIMUS TAYLOR,
 B. S., Ph. D.....Education
 DANIEL VOIERS TERRELL, C. E.....Civil Engineering
 EDWARD TUTHILL, A. B., Ph. D.....History
 FRANKLIN ELLIOTT TUTTLE,
 M. A., Ph. D.....Chemistry
 AMRY VANDENBOSCH, Ph. D.....Political Science
 RALPH HOLDER WEAVER, B. S., Ph. D.....Bacteriology
 WILLIAM SNYDER WEBB, M. S.....Physics
 MARTIN M. WHITE, M. A., Ph. D.....Psychology
 EDWARD WIEST, A. M., Ph. D.....Commerce
 RALPH H. WOODS, M. A.....Education

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THE GRADUATE SCHOOL

WILLIAM D. FUNKHOUSER, A. M., Ph. D., Sc. D., Dean

INTRODUCTORY STATEMENT

Graduate work is offered in all colleges in the University. Approximately three hundred courses are listed in the catalogue, under the various departments, which are accepted for graduate credit.

The following advanced degrees are conferred by the University: Master of Arts, Master of Science, Master of Science in Agriculture, Master of Science in Home Economics, Civil Engineer, Mechanical Engineer, Electrical Engineer, Metallurgical Engineer, Mining Engineer.

The degree of Doctor of Philosophy is offered with major work in the following departments: Chemistry, Education, Economics, History, Mathematics, Physics, Psychology, and Political Science. Minor work may be carried in any department offering graduate courses.

ADMISSION TO GRADUATE STANDING

Graduates of institutions accredited by the University may be admitted to the Graduate School upon the presentation of a certificate of graduation and an official transcript of undergraduate courses taken. The status of the institution is to be ascertained from the Registrar of the University. Graduates from non-accredited institutions are encouraged to secure a bachelor's degree from an accredited institution. In particular cases they may be admitted to the Graduate School on the basis of doing additional work before being admitted to full graduate status.

It should be clearly understood that admission to the Graduate School does not necessarily admit a student to full graduate status. A student only attains full graduate status when he has fulfilled all the preliminary requirements of the degree which he seeks and of the department under whose direction he is pursuing graduate work.

Department prerequisites are determined jointly by the Dean of the Graduate School and the respective departments. In brief, it may be stated that such prerequisites usually consist of the equivalent of an undergraduate major. In some fields, the equivalent of an undergraduate minor is sufficient.

Members of the faculty of the University of Kentucky having a rank higher than that of instructor may not be considered as candidates for advanced degrees at this institution.

REGISTRATION

The first step in the procedure for admission to the Graduate School is the filing of a formal application with the Registrar on a

form prepared for that purpose. Applicants from institutions other than this University are also required to file an official transcript showing (a) all undergraduate work covered, (b) graduate work taken, if any, and (c) degrees received.

If the record submitted to the Registrar entitled him to admission he should confer with the Dean of the Graduate School and his major professor concerning preliminary requirements that he may have to satisfy and as to the graduate courses that he should take.

Preliminary requirements may be added from time to time as found necessary and all such requirements, together with graduate courses, must be recorded in the Registrar's Office and must be satisfied by the student before he is eligible for the degree for which he is registered.

All courses listed in this bulletin, and all courses which may appear later in the regular University catalogue, which have numbers above 100, may be counted as credit towards a graduate degree. A grade of D in a course will not be given graduate credit.

FEES

Registration and laboratory fees are the same as for undergraduate students in the college in which the major work is done.

Before the advanced degree is conferred, a fee of fifteen dollars must be paid at the Business Office of the University. This covers the graduation fee, diploma fee, fee for binding thesis and all other incidental fees.

REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS AND MASTER OF SCIENCE

Students having completed the equivalent of an A. B. or B. S. degree from an accredited liberal arts college or a standard teachers' college, may become candidates for the degree of master of arts or master of science.

Two plans are provided for satisfying the requirements for a master's degree, as follows:

1. Twenty-four credits in graduate courses exclusive of the thesis, one academic year (36 weeks) in residence, and an acceptable thesis.
2. At the option of a department (not of the student) the master's degree may be granted for the completion of forty-five credits in graduate courses with an average standing of B or better, three semesters (54 weeks) in residence, and no requirements of a thesis.

CREDITS

The credits (semester hours) may not include credits received in a thesis course. All of the work may be done in one field but it should preferably be done in a major subject and one or two minors. At least half of the work must be taken in major courses.

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RESIDENCE

The residence requirements may be fulfilled by any combination of regular semester or summer school sessions which total the required number of weeks. This does not mean that the work prescribed for each individual student can always be completed in the minimum length of time. Inadequate preparation or assistance in departments very frequently makes a longer period necessary. Part-time work during a regular semester is evaluated on the basis of the amount of work carried.

The transfer of acceptable graduate credits from other institutions or of other work done *in absentia*, such as writing a thesis under the direction of the major professor, cannot reduce the standard residence requirements.

THESIS

If a thesis is submitted, two typewritten copies of the completed thesis must be presented not later than three weeks before the time set for the oral examination. One copy is presented to the Dean of the Graduate School to be bound and placed in the University Library and the other to the major professor to be retained by the department concerned.

EXAMINATIONS of regular class work are taken by all resident graduate students. A final *oral examination* is given the candidate not later than fifteen days before the close of the semester. The Dean appoints an examining committee of at least three members for the purpose, selecting its members from the major and minor professors under whom work was done. The Dean is *ex officio* a member of all such examining committees. The candidate is asked to defend his thesis and is examined on any subject matter related to his field.

MASTER OF SCIENCE IN AGRICULTURE OR IN HOME
ECONOMICS

Students holding a bachelor's degree from a standard agricultural college may obtain the degree of Master of Science in Agriculture or Master of Science in Home Economics by satisfying the same requirements as those designated for the M. A. and M. S. degrees. The work is prescribed by the major professor with the approval of the Dean.

REQUIREMENTS FOR THE DEGREES IN ENGINEERING. C. E.,
CIVIL ENGINEER; E. E., ELECTRICAL ENGINEER; M. E.,
MECHANICAL ENGINEER; MET. E., METALLURGICAL ENGI-
NEER; E. M., MINING ENGINEER.

Any of these advanced engineering degrees may be obtained in residence by satisfying the same requirements as those outlined for the M. A. and M. S. degrees, provided the student holds a bachelor's degree from an engineering college of recognized standing. The course of study should be arranged in consultation with the head of the

department in which the student expects to do his major work and must have the approval of the Dean of the College of Engineering and the Dean of the Graduate School.

These degrees may also be obtained by graduates of the College of Engineering of the University of Kentucky for work done *in absentia* three or more years after receiving the degree of bachelor of science in engineering, providing this time has been spent in practical engineering work and an acceptable thesis is presented. At least one year's notice must be given the Dean of the Graduate School that graduate work is being done, and such work must have his approval and that of the major professor under whose supervision the thesis is prepared.

The fees for the degree obtained *in absentia* are \$15.00 registration fee, and \$15.00 ten days before the degree is granted.

REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

The degree of Doctor of Philosophy is conferred upon a candidate who, after completing not less than three years of graduate work devoted to the study of a special field of knowledge, passes the required examination in the subjects, presents a satisfactory dissertation, and is deemed worthy of recognition as a scholar of high attainments in his chosen province.

The Doctor's degree is intended to represent not a specified amount of work covering a specified time, but the attainment, through long study, of independent and comprehensive scholarship in a special field. Such scholarship should be shown by a thorough acquaintance with present knowledge in his special field of learning and a marked capacity for research.

REQUIREMENTS FOR APPLICANT

ADMISSION

Admission to the Graduate School and acceptance of advanced credits from other institutions must first be approved by the Registrar.

In order to be accepted as an *applicant* for the degree of Doctor of Philosophy the student must present evidence that he has completed an undergraduate course and has received his baccalaureate degree from a college of recognized standing.

The Graduate Committee reserves the right to decide in each case of applicancy for a degree whether the prerequisite training has been satisfactory and, if any of the years of advanced work have been passed in another institution, whether they may be properly regarded as having been spent under suitable guidance and favorable conditions. Private study is not considered as equivalent to university work. In any case the student must pass the qualifying examinations at the University of Kentucky and spend the last year of the residence requirements at this institution.

CLASSIFICATION

A student must first be admitted to the Graduate School who will consist of special committees to do his work. Not every student is required to give an examination before formal application.

Not every student is required to give an examination before formal application.

COURSES OF

Every student must first be admitted to the Graduate School who will consist of special committees to do his work. Not every student is required to give an examination before formal application.

The major field of study should be chosen by the applicant. Although not every student is required to give an examination before formal application.

The applicant should be a scholar of high attainments in his chosen province. The degree is intended to represent not a specified amount of work covering a specified time, but the attainment, through long study, of independent and comprehensive scholarship in a special field. Such scholarship should be shown by a thorough acquaintance with present knowledge in his special field of learning and a marked capacity for research.

Any student who is accepted for admission to the Graduate School must first be approved by the Registrar. In order to be accepted as an applicant for the degree of Doctor of Philosophy the student must present evidence that he has completed an undergraduate course and has received his baccalaureate degree from a college of recognized standing.

RESIDENCE

A minimum of one year of residence is required for the degree of Doctor of Philosophy. The Graduate Committee reserves the right to decide in each case of applicancy for a degree whether the prerequisite training has been satisfactory and, if any of the years of advanced work have been passed in another institution, whether they may be properly regarded as having been spent under suitable guidance and favorable conditions. Private study is not considered as equivalent to university work. In any case the student must pass the qualifying examinations at the University of Kentucky and spend the last year of the residence requirements at this institution.

While a student may secure a degree by private study, it should be wholly in study, in amount, and can be secured only at the University of Kentucky.

CLASSIFICATION

A student wishing to become an *applicant* for the Doctor's degree must first regularly register in the Graduate School of the University of Kentucky and must then classify with the Dean of the Graduate School who will appoint a special committee for that student. This special committee, the chairman of which shall be his major professor, will consist of members of the departments in which the applicant elects to do his major and minor work and this committee will supervise his work throughout his period of study.

Not every *applicant* for the Doctor's degree is a *candidate*. A student is not a *candidate* for the degree until he has passed the qualifying examinations, satisfied the language requirements, and made formal application to be so enrolled.

COURSES OF STUDY

Every applicant for the degree must select one major and at least one and not more than two minor subjects.

The major subject should be one in which he intends to concentrate his efforts; the minor subjects should be closely allied to the major field or be subjects which will be of value in the major work and should be approved by the major department.

The applicant's principal work must be in the major subject. Although no absolute regulations are laid down in respect to the time to be devoted to the major and minor subjects, it may be stated in general that the major subject should represent two-thirds of the student's entire time.

Any regular graduate course may be assigned as part of the applicant's work by his special committee. Only courses numbered above 100 in the University catalogue are considered as of graduate status. The number and extent of such courses is determined by the special committee.

REQUIREMENTS FOR CANDIDATES

RESIDENCE

A minimum of three collegiate years of resident graduate work, of which at least the last year must be spent at the University of Kentucky, is required for the doctorate. The full time of each of these years must be spent in study. Part-time students and those holding assistantships or engaging in other outside activities will of course be required to take a proportionately longer time.

While it is expected that a well prepared student of good ability may secure the degree upon the completion of three years of study, it should be understood that this time requirement is a minimum and is wholly secondary to the matter of scholarship. Neither time spent in study, however long, nor the accumulation of facts, however great in amount, nor the completion of advanced courses however numerous, can be substituted for independent thinking and original research.

Work done in other institutions of learning may be accepted toward the doctorate at the University of Kentucky but no work is credited which has not been done in a college or university of recognized standing or in a research laboratory.

LANGUAGE REQUIREMENTS

The applicant must give evidence of having a good reading knowledge and of being able to translate at sight at least two modern foreign languages. This proficiency is determined by examinations conducted by the respective language departments. Ordinarily French and German are expected to be offered, but other languages may be substituted on recommendation of the special committee if it is considered that such languages are of greater importance in the special field of work. The language requirements must be satisfied before the applicant can be admitted to the qualifying examination.

QUALIFYING EXAMINATION

Applicants for the degree of Doctor of Philosophy are required to pass a Qualifying Examination. This examination shall be taken during the second semester of the second year of residence. The examination shall be both oral and written and shall cover both major and minor subjects. It shall be prepared and given to the applicant by a committee of five to be appointed by the Dean of the Graduate School. The language requirements must have been met before the qualifying examination is taken. No applicant may proceed to his final examination until one year of work has been completed after he has passed the qualifying examination. If the applicant fails to pass the qualifying examination, no re-examination shall be allowed except upon the recommendation of the special committee and the approval of the Graduate Committee. If the applicant passes the qualifying examination he is then considered as a *candidate* for the degree and may make formal application for this rating.

DISSERTATION

Each candidate must present a dissertation covering his thesis work. This dissertation must give evidence of the candidate's ability to carry on independent investigation and must be satisfactory in style and composition. It must represent a definite contribution to the knowledge of his subject, must be the result of independent work, must include original research and must in some way add to or otherwise modify what was previously known on the subject. Two bound typewritten copies of the thesis and an abstract of not less than 1,200 nor more than 3,000 words must be formally presented to the Dean of the Graduate School at least four weeks before the final examination.

PRINTING OF DISSERTATION

One hundred printed copies of the dissertation must be presented to the University within one year from the time when the degree is conferred. Not later than one week before the conferring of the degree

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the candidate must deposit with the Business Agent of the University the sum of \$50.00, this amount to be returned if the printed copies are received within the time specified. The University does not obligate itself to publish the thesis but if in the judgment of the Graduate Committee the thesis or an abstract of same should be published, the University reserves the privilege of so doing.—

Or—

The candidate may have the dissertation printed at his own expense, in which case he must present one hundred copies to the University before the degree is granted. If the candidate has the dissertation printed at his own expense, he will be expected to use good substantial paper and sightly typography. A page four by six inches with outside margin of at least one inch is recommended. The dissertation must have a cover and title page and the latter, in addition to the title and the name of the author, must bear the following inscription:

"A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the University of Kentucky."

If the dissertation is published in a technical journal or other recognized educational publication, the reprints will be accepted if presented with special printed covers and proper title page.

APPLICATION

All candidates who desire to be admitted to the final examination must file an application, approved by the Dean of the Graduate School, with the Registrar of the University at least three weeks before the examination is held.

FINAL EXAMINATION

After the acceptance of the dissertation by the special committee and the Dean of the Graduate School, the candidate shall be given a final oral examination by a committee of five members which shall include the Head of the Major Department or his delegate presiding, one additional professor selected by the major department, one professor selected by each of the minor departments and additional members (to make the total of five) selected by the Dean of the Graduate School. The President of the University and the Dean of the Graduate School are *ex officio* members of all examining committees.

The final examination shall not be held until at least one year after the student has been accepted as a *candidate* for the degree.

The completion of three years of residence work confers no right upon the student to be so examined.

RECOMMENDATION

After the final examination has been passed, the name of the candidate will be presented to the University Senate for recommendation to the Board of Trustees for the degree of Doctor of Philosophy in course.

FELLOWSHIPS AND SCHOLARSHIPS

For the encouragement of research and scholarship the following fellowships and scholarships have been established:

Ten University scholarships with a stipend of \$200.00 each.

Five University fellowships with a stipend of \$400.00 each.

One Registrar's fellowship with a stipend of \$500.00.

Scholars and fellows will be expected to devote their whole time to graduate work, and no teaching or other departmental work may be required of them. Students employed as assistants in departments should as a rule take two years to satisfy a year's requirement.

Fellowships and scholarships are open to those who already hold, or will receive at the close of the academic year, a bachelor's degree from any college or university of good standing, provided the student has shown some special aptitude for the line of work he desires to pursue.

The primary object of these appointments is to stimulate research and not to give pecuniary aid. No departmental duties of any kind will be required of fellows and scholars. Candidates for the awards must be graduates of standard colleges or universities and must show evidence of high scholarship and fitness for graduate study. No student should apply for the award who does not cherish a real and earnest desire to do research work. The appointments are made for one year only but may be renewed if it can be satisfactorily shown that the prosecution of research undertaken should continue.

Forms for making application may be secured from the Dean of the Graduate School, University of Kentucky, Lexington, Kentucky. All applications should be on file not later than the 15th of April.

GRADUATE STUDENTS NOT CANDIDATES FOR A DEGREE

Graduate students who are not candidates for an advanced degree are not required to designate major or minor subjects, but may elect their work with a view to the special purpose for which they are in attendance at the University.

Any course of study announced for advanced undergraduates and graduates is open for election by such students upon the same conditions that are imposed upon those who are candidates for degrees.

Should a graduate student who has not arranged for his work with a view to obtaining a degree, subsequently desire to become a candidate for a degree, the amount of credit he is to receive for work already

done will be determined at the time he applies for admission to candidacy for the degree.

No work is given graduate credit unless the student was enrolled in the Graduate School at the time during which the work was taken.

THE GRADUATE CLUB

All graduate students are members of the Graduate Club, in which they are expected to take an active part. The club serves the purpose of developing an *esprit de corps* among graduate students and provides ways and means for securing prominent men for addresses on various subjects of interest.

GRADUATE COURSES OF STUDY

The courses offered for graduate work are listed under the following groups:

- I. LANGUAGES AND LITERATURES
 - Ancient Languages
 - English
 - German
 - Romance Languages
- II. SOCIAL SCIENCES
 - Archaeology (See Biological Sciences)
 - Commerce
 - Commercial Education (See Education)
 - Economics
 - Educational Psychology (See Education)
 - Farm Economics (See Agriculture)
 - History
 - History of Education (See Education)
 - Markets and Rural Finance (See Agriculture)
 - Law (See Law)
 - Philosophy
 - Philosophy of Education (See Education)
 - Political Science
 - Psychology
 - Sociology
- III. BIOLOGICAL SCIENCES
 - Agronomy (See Agriculture)
 - Anatomy and Physiology
 - Animal Industry (See Agriculture)
 - Animal Pathology (See Agriculture)
 - Anthropology and Archaeology
 - Bacteriology
 - Botany
 - Entomology (See Agriculture)
 - Horticulture (See Agriculture)
 - Hygiene
 - Zoology
- IV. PHYSICAL SCIENCES
 - Chemistry
 - Engineering (See Engineering)
 - Geology
 - Mathematics and Astronomy
 - Physics

V. AGRICULTURE

VI. EDUCATION

VII. ENGINEERING

VIII. FINANCE

IX. LAW

V. AGRICULTURE

- Agricultural Education (See Education)
- Agronomy
- Animal Industry
- Animal Pathology
- Entomology
- Farm Economics
- Home Economics
- Home Economics Education (See Education)
- Horticulture
- Markets and Rural Finance

VI. EDUCATION

- Administration
- Agricultural Education
- Commercial Education
- Educational Psychology
- Elementary Education
- History of Education
- Home Economics Education
- Philosophy of Education
- Secondary Education

VII. ENGINEERING

- Civil Engineering
- Electrical Engineering
- Mechanical Engineering
- Metallurgical Engineering
- Mining Engineering

VIII. FINE ARTS

- Art
- Music

IX. LAW

I. LANGUAGES AND LITERATURES

ANCIENT LANGUAGES AND LITERATURES

LATIN

109—LATIN LITERATURE (Selections). The authors read will probably be: Juvenal (Selected Satires); Martial (Selected Epigrams). These writers will be read for their literary value, and for the light they throw on the political and social life in Rome at the close of the first century.

Prerequisite: Latin 7 or 8. 3 credits; 1st semester (Jones)

110—LATIN LITERATURE (Selections). The authors read will probably be: Suetonius (Claudius and Nero); Seneca (Selections). The private life of the Caesars is discussed in detail. The principles of the Stoic Philosophy are explained.

Prerequisite: Latin 7 or 8. 3 credits; 2nd semester (Jones)

114a—LATIN COMPOSITION. The course will begin with easy passages in connected discourse and will proceed to more difficult selections.

Prerequisite: Latin 5. 1 credit; 1st semester (Jones)

114b—LATIN COMPOSITION. A continuation of 114a.

Prerequisite: Latin 5. 1 credit; 2nd semester (Jones)

120—GREEK CIVILIZATION (given entirely in English). A brief review of Ancient Greek history; the private and public life of the people; archaeology.

Prerequisite: Junior Standing. 3 credits; 1st semester (Jones)

121—ROMAN CIVILIZATION (given entirely in English). A brief review of Roman history; private and public life of the Romans; Roman archaeology.

Prerequisite: Junior Standing. 3 credits; 2nd semester (Jones)

122a—GREEK LITERATURE IN ENGLISH TRANSLATION. Several of the great authors will be studied, beginning with Homer.

Prerequisite: Junior Standing. 3 credits; 1st semester (Jones)

122b—A continuation of 122a. Prose writers will be studied; historians, orators, philosophers.

Prerequisite: Junior Standing. 3 credits; 2nd semester (Jones)

151a—COURSE IN INDIVIDUAL WORK. The work assigned will depend upon the needs of the student.

Prerequisite: Junior Standing. 3 credits; 1st semester (Jones)

151b—COURSE IN INDIVIDUAL WORK. A continuation of 151a.

Prerequisite: Junior Standing. 3 credits; 2nd semester (Jones)

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201a—LATIN PASTORAL POETRY. This course is based mainly on Virgil's Eclogues and Georgics. The development of the author's talent will be noted and his models traced. In addition one or two dramas will be read, or selections from Lucretius.

Prerequisite: Graduate Standing. 3 credits; 1st semester (Jones)

201b—LATIN ELEGIAC POETRY. Selections from Catullus, Tibullus, Propertius, and Ovid will be read. The change in the subject matter of the Elegy will be noted. Scanning. Mythological references studied.

Prerequisite: Graduate Standing. 3 credits; 2nd semester (Jones)

GREEK

149—ANABASIS. One book of the Anabasis will be read, and easy selections from other writers. Exercises in construction and composition.

Prerequisite: Greek 51. 3 credits; 2nd semester (Jones)

152—ANABASIS. Selections from the remaining books of the Anabasis and from other writers of equal difficulty will be read.

Prerequisite: Greek 149. 3 credits; 1st semester (Jones)

153—HOMER. The Iliad, Books 1-6. The Homeric Question. Life in the Homeric Age, Mycenaean Antiquities. Recent discoveries will receive due attention. Scanning.

Prerequisite: Greek 149. 3 credits; 2nd semester (Jones)

154—PLATO. The Apology and Crito, selections from Phaedo. The relation of Plato to Socrates, Socrates as a moral teacher, his methods of investigation, will be discussed.

Prerequisite: Greek 152. 3 credits; 1st semester (Jones)

155—HERODOTUS. Books 6-7. This course will include a rapid survey of Greek History from the Ionic Revolt to the end of the Persian Wars.

Prerequisite: Greek 152. 3 credits; 2nd semester (Jones)

ENGLISH

The department of English requires, as a prerequisite for the master's degree, attainment in English equivalent to that required of an undergraduate English major at the University of Kentucky. For the M. A. degree, a minimum of fifteen hours of English must be offered, including seminar throughout the year. A maximum of nine hours in other subjects is permitted, provided these courses have the approval of the Graduate Committee of the Department of English. Students in Library Science may offer ten credits in that subject but the remaining credits must all be in English. All candidates for the master's degree in English will be required to attain a reading knowledge of one foreign language before receiving the degree.

104—MILTON. A study of Milton's poetry and most important prose work. The relation of Milton to his contemporaries. Graduate students will be assigned special topics for investigation.

3 credits; 1st semester (Dantzler)

105—BROWNING. An intensive study of the art and teaching of Browning. Graduate students will be assigned special topics for investigation.

3 credits; 2nd semester (Dantzler)

106—THE ROMANTIC MOVEMENT IN ENGLISH POETRY. A rapid survey of the characteristics of the classical period, and a more careful study of growing signs of Romanticism in the early part of the 18th century. The French Revolution and its influence on the chief poets of the Romantic Movement. Special emphasis on Wordsworth, Byron, Shelley, Keats and other prominent poets of the first quarter of the 19th century.

3 credits; 1st semester (Brady)

107—VICTORIAN POETRY. Extensive study of the ideas of the chief poets of the Victorian era, with special emphasis on the works of Tennyson, Browning, Arnold, Swinburne and Rossetti.

3 credits; 2nd semester (Brady)

110a—SHAKESPEARE—COMEDY. Shakespeare's comedies will be studied in detail.

3 credits; 1st semester (Farquhar)

110b—SHAKESPEARE—TRAGEDY. A continuation of 110a.

3 credits; 2nd semester (Farquhar)

111a—THE NOVEL BEFORE SCOTT. The development of fiction from the romance to Jane Austen.

3 credits; 1st semester (Galloway)

111b—THE ENGLISH NOVEL OF THE NINETEENTH CENTURY. A continuation of 111a, although the latter is not required for admission. It aims to acquaint the student with the development of the novel in English from Walter Scott to and including Stephen Crane.

3 credits; 2nd semester (Knight)

116—THE CONTEMPORARY DRAMA. Development and tendencies in Continental, British, and American Dramatic Literature, 1850 to 1918. Selected readings.

3 credits (Farquhar)

117—LITERARY COMPOSITION. Meant to stimulate original writing in any form the student prefers. The class becomes a laboratory for readings, criticisms and discussions. Those taking it should be interested, at least in a speculative way, in becoming writers.

2 credits; 2nd semester (Knight)

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123a—AMERICAN LITERATURE BEFORE 1860. A survey course which purposes to introduce the student to influences in American life and thought as well as to its letters.

3 credits; 1st semester (Knight)

123b—AMERICAN LITERATURE AFTER 1860. A continuation of the above, which is not a prerequisite.

3 credits; 2nd semester (Knight)

127a—LITERATURE OF THE BIBLE. A literary study of the Bible by Books. It develops an appreciation of literature generally because of the demand that literature identify itself with the highest thought and feeling.

2 credits; 1st semester (Farquhar)

127b—LITERATURE OF THE BIBLE. This is a continuation of 127a.

2 credits; 2nd semester (Farquhar)

130a—COMPARATIVE LITERATURE. Extensive reading of literary masterpieces through the ages from Homer to the present day. A study of the great traditions of civilization as reflected in the literary monuments. Lectures, assigned readings, and class discussion. Intended for advanced undergraduates or graduate students. The reading is assigned entirely in translations, but a reading knowledge of at least one foreign language is highly desirable.

3 credits; 1st semester (Brady)

130b—COMPARATIVE LITERATURE. A continuation of English 130a.

3 credits; 2nd semester (Brady)

134—DEVELOPMENT OF THE ESSAY FROM BACON TO THE PRESENT DAY. Class discussion of assigned readings from representative essayists. Study of various types, such as the familiar, critical, historical, and philosophical essay, with some practice by the student in writing original essays.

3 credits; 1st semester (Brady)

135—PRE-VICTORIAN PROSE. A careful study of some of the prose monuments of English Literature with special emphasis on the groups of writers surrounding the period of the French Revolution, with consideration of the philosophical and political writing of the age.

3 credits; 2nd semester (Brady)

136—VICTORIAN PROSE. A careful study of Carlyle, Ruskin, Newman, Spencer, Arnold, Huxley, and related writers of the period in the field of prose. Assigned parallel readings, class discussion, and lecture.

3 credits; 1st semester (Brady)

141—RESTORATION—18TH CENTURY DRAMA. A course in the types of drama arising or developing between 1660 and 1774. Special attention given to foreign influences on the English drama and the relations between the drama and the 18th century life.

3 credits; 1st semester (Kelley)

142—ENGLISH LITERATURE OF THE RENAISSANCE. A survey of the literature of the Elizabethan and Jacobean periods, exclusive of the drama. Attention will be given to the foreign sources of the English Renaissance. The sonnet will be studied from its origins to its development in Spenser. The pastoral from Theocritus to Spenser, Utopian literature from Plato to More, the romance from Aucassin and Nicolette.

3 credits; 2nd semester (Kelley)

145—ELIZABETHAN DRAMA. A study of Elizabethan drama and dramatists, excluding Shakespeare, that contribute to the development of English drama. Special study of the influence of foreign drama upon Elizabethan drama.

3 credits; 2nd semester (Kelley)

152a—ENGLISH LITERATURE FROM THE RESTORATION TO SHERIDAN. The principles of English classicism. Dryden and lesser Restoration figures; Defoe, Swift, Pope, Addison, Steele.

3 credits; 1st semester (Galloway)

152b—ENGLISH LITERATURE FROM THE RESTORATION TO SHERIDAN. Continuation of the survey from the death of Pope to 1798. Johnson and his circle; Burke, Goldsmith, Gray, Walpole, Cooper. The Pre-Romantic movement.

Prerequisite: English 152a or the consent of the instructor. 3 credits; 2nd semester (Galloway)

153—RESTORATION—EIGHTEENTH CENTURY DRAMA. A study of the dramatic types that arose or developed between the closing of the theatres in 1642 and the death of Sheridan.

3 credits (Kelley)

201a—LITERARY CRITICISM. This course is mainly an application of the philosophic and historical elements of literary criticism to some period of literature or to the works of some author in a period. It is criticism that essays the unity of all literature, its everlasting growth and the importance of inductive observation of literary phenomena.

Prerequisites: English 108a-b. 3 credits; 1st semester (Farquhar)

201b—LITERARY CRITICISM. A continuation of 201a. Special problems assigned to students.

3 credits; 2nd semester (Farquhar)

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202a—STUDIES IN CONTEMPORARY DRAMA. This course is an application of the philosophy and history of drama to the modern drama as a whole and to the work of some particular dramatists. It includes a particular study of the work of Ibsen as prerequisite to any other study.

Prerequisite: English 116. 3 credits; 1st semester (Farquhar)

202b—STUDIES IN CONTEMPORARY DRAMA. A continuation of 202a. Special problems assigned to students.

3 credits; 2nd semester (Farquhar)

204a—BEOWULF. A literary and linguistic study of Beowulf. Lecture and recitation. One year of Old English and a reading knowledge of German are desirable.

2 credits; 1st semester (Dantzler)

204b—BEOWULF. A continuation of 204a.

2 credits; 2nd semester (Dantzler)

205—CHAUCER. Chaucer's contribution to English literature. The greater part of his poetry will be read. Lecture and recitation. Each member of the class will prepare two papers.

3 credits; 1st semester (Dantzler)

207—SPENSER. A study of Spenser and his poetry. Lecture and recitation. A problem will be assigned to each member of the class for study.

3 credits; 2nd semester (Dantzler)

208—CARLYLE. A comprehensive study of Carlyle, his position as a man of letters, and a critic of literature. His literary essays, political philosophy, various writings on history, including *The French Revolution*. His social ethics and moral philosophy: *Sartor Resartus*, *Chartism, Past and Present*.

3 credits (Brady)

LIBRARY SCIENCE

126—PLACE, FUNCTION, ADMINISTRATION, AND OPPORTUNITY OF THE HIGH SCHOOL LIBRARY. A study of the place, function, administration and opportunity of the library in the modern school. The librarian's relations to faculty, students, and outside agencies; the fundamentals of library planning and equipment; personnel problems and their management; business management, including accounts, records and statistics; methods of stimulating reading habits and handling an effective service are major topics discussed. Lectures, problems, assigned readings.

2 credits

128—CHILDREN'S LITERATURE. A brief introduction to the field of children's literature and a comparative study of different classes and types of books with regard to the independent reading of

children of different age groups and reading interests, with special emphasis on myth, folk tale and legend, followed by the reading and discussion of all types of books suitable for the junior and senior high school. Special study of story telling; of illustration and physical make-up of books; of editions; of children's magazines and book-reviewing periodicals; and of aids in the selection of books for young people.

2 credits

133—REFERENCE AND BIBLIOGRAPHY. A study of essential reference works, particularly those most valuable in school libraries, including dictionaries, encyclopedias, atlases, yearbooks, periodical indexes, and reference books on special subjects, with some consideration of subject and trade bibliographies, government documents, and vertical file material; and of the standards by which such material is selected. Lectures, problems and assigned readings.

2 credits

150—BOOK SELECTION. The study of principles and standards in the choice of books and periodicals. Practical problems in book selection and acquisition; a study of American publishers, of book reviewing periodicals and aids to book selection; the writing of book notes; the reading and discussion of typical books in the fields of biography, travel, essays, poetry, fiction, history, sociology, art, and science.

2 credits

154—SEMINAR. A survey of the field of library science through a study of the history and personnel of the modern library movement and of the various agencies that have developed—library associations, schools, commissions, periodicals, etc.; of library economy with special emphasis on the importance of routine processes in the library as related to good library service; of adult education in its special application to the guidance of the reading of teachers; of publicity methods within and outside the library. General discussion of problems, special reports on assigned topics.

Prerequisites: English 126, 129,
133, 150

2 credits

GERMAN

101a—NINETEENTH CENTURY LITERATURE. Studies in the German drama of the 19th century with special emphasis on selected authors.

Prerequisite: German 3b. 3 credits; 1st semester (Melcher)

101b—NINETEENTH CENTURY LITERATURE. Continuation of Course 101a.

Prerequisite: German 3b. 3 credits; 2nd semester (Melcher)

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102a—GERHARDT HAUPTMANN'S WORKS. Reading, discussions and reports.

Prerequisites: German 4a-b. 3 credits; 1st semester (Bigge)

102b—GERHARDT HAUPTMANN'S WORKS. Continuation of Course 102a.

Prerequisite: German 4a-b. 3 credits; 2nd semester (Bigge)

105a—INDEPENDENT WORK COURSE. This course is designed for students of particular excellence in the department.

3 credits; 1st semester (Melcher, Bigge)

105b—INDEPENDENT WORK COURSE. Continuation of Course 105a.

3 credits; 2nd semester (Melcher, Bigge)

ROMANCE LANGUAGES AND LITERATURES

FRENCH

109a—FRENCH LITERATURE OF THE XIX CENTURY. The works of the writers of XIX century are studied, i. e., Victor Hugo, Thiophile Guatier, DeMusset, and Daudet.

3 credits; 1st semester (Zembrod)

109b—FRENCH LITERATURE OF THE XIX CENTURY. A continuation of 109a.

3 credits; 2nd semester (Zembrod)

110a—FRENCH LITERATURE OF THE XVII CENTURY. The classics of Corneille, Racine, and Moliere are studied. Students are to familiarize themselves with the history of French society and civilization. Reports written in French are to be handed in at regular intervals. Advanced lessons in syntax and composition once a week.

3 credits; 1st semester (Zembrod)

110b—FRENCH LITERATURE OF THE XVIII CENTURY. A continuation of 110a.

3 credits; 2nd semester (Zembrod, Horsfield)

113a—ROMANCE LANGUAGES. This course is for graduate students who are majoring in one of the romance languages. No definite work is put down. Work is assigned to suit the needs of the students. A good reading knowledge of German is desirable.

3 credits (Zembrod)

113b—ROMANCE LANGUAGES. A continuation of 113a.

3 credits (Zembrod)

SPANISH

104a—SPANISH LITERATURE. Spanish novel and drama of the XVI and XVII centuries; syntax and composition. This course enables the student to become familiar with some of the works of the

greatest novelists and dramatists of the golden age of Spain's literary history.

3 credits; 1st semester (Server)

104b—SPANISH LITERATURE. A continuation of 104a.

3 credits; 2nd semester (Server)

112a—SPANISH LITERATURE. Spanish novel and drama of the XIX century; syntax and composition.

3 credits; 1st semester (Server)

112b—SPANISH LITERATURE. A continuation of 112a.

3 credits; 2nd semester (Server)

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II. SOCIAL SCIENCES

ARCHAEOLOGY (See Biological Sciences)

COMMERCE (See Economics and Commerce)

COMMERCIAL EDUCATION (See Education)

ECONOMICS AND COMMERCE

102—LABOR PROBLEMS. A study of the labor market in its industrial phases, including such directly related topics as immigration, unemployment, and labor organizations.

Prerequisite: Course 1a. 3 credits; 1st semester (Carter)

103—TRANSPORTATION. Growth of the railway net; pools and traffic associations; principles and practice of rate-making as exemplified by the decisions of the Interstate Commerce Commission and the courts; state and federal regulation, with comparison of policies in foreign countries.

Prerequisite: Course 1a 3 credits; 2nd semester (Sullivan)

104—PUBLIC FINANCE. A study of public receipts; public expenditures; the principles of taxation with special reference to their application to the tax systems, federal and state.

Prerequisite: Course 1a. 3 credits; 1st semester (Martin)

105—MONEY AND BANKING. Nature and functions of money; the importance of credit; relation of money and credit to prices; bank deposits and loans; complete study of our national banking system and comparison with those of foreign countries.

Prerequisite: Course 1a. 3 credits; 1st semester (Wiest and Sullivan)

106a—ADVANCED ACCOUNTING. Corporation accounting, cost accounting, municipal accounting, and auditing.

Prerequisites: Courses 7a and 7b. 3 credits; 1st semester (Haun)

106b—ADVANCED ACCOUNTING. Continuation of 106a.

3 credits; 2nd semester (Haun)

107—STATISTICAL METHOD. Training in the process of treating multiple phenomena with mathematical exactitude. The methods are illustrated with material from the fields of psychology, education, economics and sociology. Recitation, one hour, laboratory, four hours.

Not open to freshmen and sophomores. 3 credits; 1st semester (Palmer)

108—INSURANCE. Fundamental aspects of insurance; principles and their main application; nature of the contract; policies and premiums; life, casualty, health, fire, marine and other hazards.

Prerequisites: Course 1a, 3 credits; 2nd semester (Averett)
Mathematics 14.

109a—BUSINESS LAW. A survey of the principles of contracts, sales, bills and notes, and that portion of the law of torts applicable to business practices.

3 credits; 1st semester (Durbin)

109b—BUSINESS LAW. Continuation of 109a.

3 credits; 2nd semester (Durbin)

110—BUSINESS CYCLES. The nature and characteristics of the economic factors which underlie the cyclical fluctuations in business conditions; the methods of business and investment forecasting and their practical application.

Prerequisites: Courses 1a and 107. 3 credits; 2nd semester (Palmer)

112a—INDIVIDUAL WORK IN ECONOMICS. In this course a selected group of advanced students who have at least a standing of 2 are given special problems for intensive investigation. The students are expected to do more work than the usual amount required per credit hour. Each student makes reports of his studies to the class which is conducted on a seminar basis.

Prerequisite: Course 1a. 2 credits; 1st semester (Martin, Palmer and others)

112b—INDIVIDUAL WORK IN ECONOMICS. Continuation of 112a.

2 credits; 2nd semester (Martin, Palmer and others)

113—AUDITING. The theory of auditing, the valuation of assets, analysis of accounting procedure, and the presentation of statements. Special problems applicable to particular businesses will also be presented.

Prerequisites: Courses 7a, 7b. 3 credits; 2nd semester (Haun)

115—CONTEMPORARY ECONOMIC THOUGHT. A survey of current literature of theoretical economics. Special emphasis is placed on analysis of fundamental institutions.

Prerequisite: Course 1a. 3 credits; 1st semester (Martin)

117—CORPORATION FINANCE. Stocks and bonds, sound fiscal principles concerning the issue of securities, the management of the corporate income, the disbursement of dividends, the creation of sinking funds, and reorganization procedure.

Prerequisites: 1a, 7a, 7b and 9. 3 credits; 2nd semester (Wiest and Lawrence)

118—COST ACCOUNTING. The place of cost accounting in the general field of accounting, special records and cost statistics, application to particular businesses.

Prerequisites: Courses 7a, 7b. 3 credits; 1st semester (Haun)

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119—RETAIL MERCHANDISING. Selecting a business location, internal layout, departmentalization, merchandising control, store policies toward the public, training and management of personnel, and related subjects.

Prerequisites: Courses 1a, 10. 2 credits; 2nd semester (McIntyre)

120—ORGANIZATION OF ECONOMIC GROUPS. A survey of economic groups and their economic and social relationships; the business organization aspects of farmers' organizations, chambers of commerce, trade and industrial associations.

Prerequisite: Course 1a. 3 credits; 1st semester (Sullivan)

124—STATE AND LOCAL TAXATION. The classified property tax, separation of sources of revenue and the place of income, inheritance, and excise taxes in a state and local system; taxation of such businesses as banks, public utilities, and mining and such forms of property as rural and urban real estate, personalty and forests.

Prerequisite: Course 1a. 3 credits; 2nd semester (Martin)

125—ADVANCED ECONOMIC HISTORY OF EUROPE. An advanced study of population, immigration, labor, agriculture, industry, and finance and the effects of the various lines of development upon national life.

Not open to freshmen and sophomores nor to students who have had course 2 except when doing graduate work. 3 credits; 1st semester (Jennings)

126—ECONOMICS OF PUBLIC UTILITIES. No credit for this course can be given if the student has credit for Political Science 158. Growth and development of public utilities; valuation; rate-making; financing; the holding company; regulation; current problems; accounting.

Prerequisite: Course 1a. 3 credits; 1st semester (Carter)

127—INTERNATIONAL ECONOMIC POLICIES. Medieval notions concerning trade; modern fallacies respecting foreign trade; free trade; protectionism; preferential tariffs; colonial tariff policies; dumping; commercial treaties; international patent control; encouragement of foreign shipping; international investments and the movement of capital; international debts; reparations; current international economic problems.

Prerequisite: Course 1a 3 credits; 2nd semester (Sullivan)

128—FOREIGN EXCHANGE. The theory and practice of foreign exchange; inter-bank relations; the exchange market; supply and demand for foreign exchange; types of foreign bills; the rate of exchange, international gold movements; dollar exchange; settlements without use of foreign exchange, investment and speculation in exchange.

Prerequisite: Course 1a. 2 credits; 1st semester (Palmer)

129—CREDITS AND COLLECTIONS. The theory of credits; forms of credits; classes of credit and credit machinery; duties and qualifications of a credit man; elements determining the credit risk; sources of credit information; analysis of the financial statement; collections; legal remedies of the creditor and credit safeguards.

Prerequisites: Courses 1a, 10. 2 credits; 1st semester (Averett)

130—LABOR LEGISLATION. The status of labor law, mediation, conciliation, arbitration, the minimum wage, the eight-hour day, unemployment relief, safety and health legislation, and social insurance.

Prerequisite: Course 1a 3 credits; 2nd semester (Carter)

131—INVESTMENTS. The general field of investments. Emphasis is placed upon problems which face the investor rather than the seller of securities. Analysis of corporation statements for investment purposes; the security market; market influences on security prices; effect of interest changes on security prices; analysis of specific types of investments; and the development of investment programs.

Prerequisites: Courses 1a and 9. 2 credits; 2nd semester (Palmer)

132a—C. P. A. PROBLEMS. This course is designed primarily for those intending to write on C. P. A. examinations. It is entirely a problem course with class discussion centering about the advanced points of accounting theory illustrated in the problems. Among the points covered are: 1. Application of Funds Statement. 2. Balance Sheet Criticism. 3. Bank Accounts. 4. Branch Accounts. 5. Burglary and Fire Loss. 6. Club Accounts. 7. Comparative Statements. 8. Consolidated Statements. 9. Construction Accounts. 10. Contractors' Accounts. 11. Estate Accounts. 12. Executors' Accounts. 13. Fraud. 14. Goodwill. 15. Institutional Accounts. 16. Municipal Accounts. 17. Professional Accounts. 18. Railroad Accounts. 19. Real Estate Accounts. 20. Realization and Liquidation. 21. Reserves. 22. Sinking Funds. 23. Statement of Affairs and the Deficiency Account. 24. Trustee Accounts. 25. Valuation of Assets. 26. Working Capital, *et cetera*.

Prerequisites: Courses 106a, 106b. 3 credits; 1st semester (Haun)

132b—C. P. A. PROBLEMS. Continuation of 132a.

3 credits; 2nd semester (Haun)

133—INCOME TAX PROCEDURE. The preparation of income tax returns for individuals and corporations of all classes and a practical application of principles of accounting. The returns prepared cover such points as: 1. Rates of tax. 2. Exemptions and credits. 3. What included and what excluded from gross income. 4. Deductions allowed. 5. Deductions not allowed. 6. Partnership returns. 7. Returns of estates and trusts. 8. Administrative provisions. 9. Definitions and general provisions.

Prerequisites: Courses 106a, 106b. 3 credits; 1st semester (Haun)

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134—ADVANCED ECONOMIC HISTORY OF THE UNITED STATES. An advanced study of English colonial policy, population growth, immigration, territorial expansion, agriculture, manufactures, tariff, labor, industrial combinations, commerce, transportation facilities, money and banking, and conservation.

Not open to freshmen and sophomores nor to students who have had course 3 except when doing graduate work. 3 credits; 2nd semester (Jennings)

135—ADVANCED MARKETING. The literature and problems in the retail distribution of consumers' goods; wholesale distribution of consumers' goods; industrial goods; sales organization; sales promotion and advertising and price policies.

Prerequisite: Course 11. 3 credits; 1st semester (McIntyre)

136—SALES MANAGEMENT. The case method will be used supplemented with outside reading and written reports.

Prerequisites: Course 11 or the consent of the instructor. 3 credits; 2nd semester (McIntyre)

137—PROBLEMS IN MANAGEMENT. Emphasis is placed upon factory management, but an attempt is made to coordinate managerial aspects of business in its entirety. Fundamental principles underlying efficient management; correct office procedure; economics gained through proper plant location and plant layout; the routing and storing of products; and standardized operating practices. Approximately half of the semester is devoted to the consideration and criticism of business reports dealing with various managerial problems and prepared by members of the class.

Open only to seniors of the College of Commerce who are required to take either this course or 138, and to graduate students who have had the necessary prerequisite training. 3 credits; 2nd semester (Carter)

138—INVESTIGATION OF BUSINESS PROBLEMS. The method of surveying, analyzing and actual investigation of problems of business management. It is intended for mature students who have had a thorough training in commerce and who are capable of doing research work under the guidance of the instructor. The work will involve the statistical analysis of data secured through interviews, question-

naires and otherwise, and the use of the results in determining a satisfactory solution.

Open only to seniors in the College of Commerce who are required to take either this course or 137 and to graduate students who have had the necessary prerequisite training. 3 credits; 2nd semester (Palmer)

139—ADVANCED TIME SERIES AND INDEX NUMBERS. The selection and fitting of trend curves, the measurement of typical and varying seasonal factors, the special methods of correlation necessary for time series, the advanced study of index-number theory, and the technique of statistical forecasting. The principal aim of the course is to prepare students for the professional use of statistical methods in the business world.

Prerequisite: An elementary course in statistics. 3 credits; 1st semester (Palmer)

140—ADVERTISING CAMPAIGNS. The procedure necessary for developing an advertising campaign; a study of successful advertising campaigns as used by leading business houses throughout the country; and the planning and execution of an advertising campaign in conjunction with some local business house. The advertising campaign worked out by the student will be checked and tested for its effectiveness.

Prerequisites: Course 11, Psychology 5, or the consent of the instructor. 3 credits; 2nd semester (McIntyre)

141—MANAGERIAL STATISTICS. An advanced practical course in the use of charts and graphs by the business manager; logarithmic, double logarithmic and other rulings, pin maps, organization charts, work schedule graphs, computation graphs and nomographs, plotting the error area of trends, construction of three-dimensioned surfaces, etc. Data will be drawn from the fields of accounting, advertising, personnel work, credit granting, purchasing, scheduling and the like.

Prerequisites: an elementary course in statistics and analytic geometry. 3 credits; 1st semester (Palmer)

202a—SEMINAR. An extended original investigation of some specific topic with a view giving training in methods of research and studying intensively a particular subject in the field of economics

3 credits; 1st semester (Martin and others)

202b—SEMINAR. Continuation of 202a.

3 credits; 2nd semester (Martin and others)

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203—HISTORY OF ECONOMIC THOUGHT. A survey of the history of economic thought from the ancient period to about the Classical School.

Prerequisite: Course 1a. 3 credits; 1st semester (Wiest)

204—ECONOMIC HISTORY OF THE UNITED STATES PRIOR TO 1860. An examination of original sources and class reports; intensive investigation of all the subjects in detail prior to 1860.

Not open to students who had 2 credits; 1st semester courses 134, and 121-22. (Jennings)

205—ECONOMIC HISTORY OF THE UNITED STATES SINCE 1860. A continuation of course 204, but may be taken independently.

Not open to students who had 2 credits; 2nd semester courses 134, and 121-22. (Jennings)

206—MUNICIPAL FINANCE. The budget problems of municipalities are analyzed; the debt policies critically examined; and the auditing and reporting plans compared and evaluated. Problems of taxation are dealt with incidentally. Each individual conducts one or more independent investigations.

3 credits; 1st semester (Martin)

207—LITERATURE OF PUBLIC FINANCE. Several of the great masterpieces of government finance are read critically. Each student makes a careful study of one system or of the development of one idea. A reading knowledge of French or German is desirable, but not necessary.

3 credits; 1st semester (Martin)

208—ADVANCED ECONOMIC THEORY. A critical, comparative analysis of "orthodox" economic theory in the light of recent criticism is attempted. The course is built around a comprehensive system of economic theory.

3 credits; 2nd semester (Martin)

209—COMPARATIVE BANKING AND MONETARY SYSTEMS. A comparative study of banking systems and monetary policies in the principal countries of the world; emphasis is placed upon present-day organization and its underlying theory; the commercial bank with its monetary functions is the main theme of the course, but brief surveys of investment banking systems are also attempted.

3 credits; 2nd semester (Wiest)

210—RESEARCH STATISTICS. For those who wish to become connected with government, state and industrial research bureaus; particularly devoted to the study of the practical applications of probable error formulae, in estimating the most profitable size of

samples. Applications will be made in the fields of frequency series, correlation problems, and time series.

Prerequisites: an elementary course in statistics and a course in differential calculus. 3 credits; 2nd semester (Palmer)

EDUCATION PSYCHOLOGY (See Education)
FARM ECONOMICS (See Agriculture)

HISTORY

To become a candidate for the Master's degree in History, the applicant must present twenty-six semester hours of college history—being the equivalent of the A. B. degree with History as a major in the University of Kentucky.

105—COLONIAL AMERICA. A study of the beginnings of the English colonies, the colonial background, political, social and economic development, extension of their frontiers, inter-colonial wars, and external relations with the Dutch, French and Spanish. Emphasis on imperial policies and imperial control and the controversies arising therefrom.

Prerequisite: One year of American or English history in College. 3 credits; 2nd semester (Knapp)

106—LATIN AMERICA. A rapid survey of the colonial period of Latin America, the struggle for independence, and the development of National problems—political, social, economic. Lectures, text, and readings.

3 credits; 1st semester (Knapp)

114—THE RENAISSANCE. A study of the Italian Renaissance from 1300 to 1500. The states and cities of Italy and their scholars; general movements, political and other; rise of the modern spirit along the several lines of art and science, education, philosophy, commerce and exploration. Text, lectures, reports.

3 credits; 1st semester (Tuthill)

115—THE RENAISSANCE IN THE NORTH. This course will properly follow Course 114 in tracing the awakening of the new spirit in France, England, and Germany, and in sketching the background of the Reformation period.

Prerequisites: History 4a-b 3 credits (Tuthill)

119a—THE FRENCH REVOLUTION AND NAPOLEON. A study of the period 1789-1815 in Europe, treating of the appearance and manifestation of the spirit of revolt. Conditions in France and adjoining nations, the evolution of France from 1778 to 1795 and subsequent changes under Napoleon. Open to juniors, seniors and graduate students, with supplementary reading for the latter.

3 credits; 1st semester (Tuthill)

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119b—THE NINETEENTH CENTURY. Starting with the fall of Napoleon, this course treats the successive political changes in 1823, 1830, 1848 and 1871, together with the outstanding commercial, cultural and scientific features of European life after 1815; the expansion of Europe in Africa and Asia, and the reactions upon the great states of the world.

3 credits; 2nd semester (Tuthill)

120—THE TWENTIETH CENTURY. A study of recent and contemporary movements, chiefly in Europe. The rise and conflict of the chief colonial empires; European interference and control in Asia and Africa; forces and elements leading up to the great war; general features of the past twenty-five years, including socialism, public education, invention and discoveries. Reports on current literature and assigned reading on a liberal scale.

3 credits; 2nd semester (Tuthill)

126—THE OLD SOUTH. The exploration and settlement of the southern colonies, the development of their political and social institutions and economic interests, the American Revolution in the South, the ratification of the Constitution, and the growth of cotton production. It includes an historical study of the institutions, political philosophy, economic theory, social structure, and politics of the South prior to the Civil War. Lectures, collateral reading, and an essay.

3 credits; 1st semester (Knapp)

130a—HISTORY OF THE WEST. A study of the westward expansion in the United States and its influence upon the political, social and economic development of the United States. Lectures, collateral reading and reports.

2 credits (Knapp)

130b—HISTORY OF THE WEST. A continuation of course 130a.

2 credits (Knapp)

131—THE BRITISH EMPIRE. Early colonial beginnings, commercial and colonial rivalries of the 17th and 18th centuries; the first British empire and the result of the American colonies. The new colonial contacts of England, the second empire, and rise of the dominions.

3 credits (Hall)

147—RECENT HISTORY OF THE UNITED STATES. An intensive study of the principal movements and episodes in the history of the people of the United States from the Spanish American War to the present.

Prerequisite: One year of American history.

3 credits; 2nd semester (Knapp)

160—THE CIVIL WAR PERIOD IN KENTUCKY. A close study of neutrality, war and readjustment with emphasis on political, economic, and social developments in Kentucky from 1860 to 1870.

166a—DIVISION AND REUNION, 1850-1877. An intensive study of sectionalism in the United States from 1850 to 1860. The political, military, economic, industrial and educational aspects of the period of the Civil War, and Reconstruction. Emphasis on the problems of the Border States.

3 credits (Knapp)

170—THE ERA OF LOUIS XIV. A study of the general conditions of Western Europe from 1648 to 1715, and particularly of the institutions and power of France under the leadership of Louis XIV, as reflected in the life and culture of Europe and her colonies.
Prerequisite: One year of European history.

3 credits (Tuthill)

180—EUROPEAN HISTORIOGRAPHY. A study of the principal collections of material bearing on European history together with guides to books and periodicals in various fields. Periods will be chosen according to the needs of students. Lectures, discussions, problems.

1 credit; 1st semester (Tuthill)

181—AMERICAN HISTORIOGRAPHY. A study of the principal historians of United States and their works; periodical and monographic literature; public documents and collections of source materials; guides to and methods of historical investigation. Lectures, discussions, problems.

1 credit; 1st semester (Knapp)

182a—HISTORICAL CRITICISM. A study of the process of collecting, assembling, criticising and presenting material relating to thesis and seminar courses. A standard treatise will be used.

1 credit; 1st semester (Tuthill)

182b—HISTORICAL CRITICISM. A continuation of 182a.

1 credit; 2nd semester (Tuthill)

184—THE GEOGRAPHIC BASIS OF AMERICAN HISTORY. A study of the relationship of geography to history and the influence of physiography upon the settlement and growth of various regions of the Americas.

Prerequisites: Ten semester hours of American history. 1 credit

202, 203, 205, 206, 210, 220, 265, 266—GRADUATE SEMINARS. The graduate seminar is open only to candidates for advanced degrees. It requires extensive study, the results of which are to be written out and presented orally before the group for discussion and criticism. A survey of the sources of information, and cooperative attacks on typical problems constitute the normal procedure. One or more of the following will be offered each semester:

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202—THE AMERICAN REVOLUTION.
2 credits

203—THE FEDERAL CONVENTION OF 1787.
2 credits

205a—THE PUBLIC SERVICES OF HENRY CLAY. A graduate course to be conducted upon a seminar method, in which a study will be made of the participation of Henry Clay in the principal movements in the history of the United States.

2 credits; 1st semester

205b—THE PUBLIC SERVICES OF HENRY CLAY. A continuation of 205a.

2 credits; 2nd semester

206—AMERICAN CONFEDERATION.
2 credits (Knapp)

210—DEVELOPMENT OF THE POPULIST MOVEMENT. A close study of the origin and development of the Populist movement through the last quarter of the 19th century.

2 credits

220—ORIGINS OF THE GREAT WAR.
2 credits

265—THE AMERICAN CIVIL WAR.
2 credits

266—THE RECONSTRUCTION OF THE UNION.
2 credits

HISTORY OF EDUCATION (See Education)

MARKETS AND RURAL FINANCE (See Agriculture)

LAW (See Law)

PHILOSOPHY

101a—HISTORY OF PHILOSOPHY. A critical survey of Greek Philosophy and the Philosophy of the Middle Ages.

3 credits; 1st semester (Kuiper)

101b—HISTORY OF PHILOSOPHY. A critical survey of Modern Philosophy from the Renaissance to contemporary times.

3 credits; 2nd semester (Kuiper)

109a—INDEPENDENT WORK IN PHILOSOPHY.

3 credits; 1st semester (Kuiper)

109b—INDEPENDENT WORK IN PHILOSOPHY.

3 credits; 2nd semester (Kuiper)

111a—CONTEMPORARY PHILOSOPHY. A study of contemporary realism, idealism, pragmatism, etc., with special reference to the

writings of Bertrand Russell, S. Alexander, F. H. Bradley, B. Bosanquet, Wm. James, John Dewey, and Henri Bergson.

Prerequisites: Philosophy 3 credits; 1st semester (Kuiper)
101a, b.

(Not given 1931-32)

111b—CONTEMPORARY PHILOSOPHY. Continuation of 111a.

Prerequisites: Philosophy 3 credits; 2nd semester (Kuiper)
101a, b.

(Not given 1931-32)

115—INTERMEDIATE LOGIC. A second course in logic, including an introduction to symbolic logic and its relation to traditional logic.

Prerequisite: Philosophy 31. 3 credits; 1st semester (Kuiper)

118—PLATO AND ARISTOTLE. A study in English of the chief dialogues of Plato, and of Aristotle's *Ethics*, *Politics*, and *Metaphysics*.
3 credits; 2nd semester (Kuiper)

201a—SEMINAR IN PHILOSOPHY. One two-hour meeting a week for discussion of current developments in Philosophy as found in recent books as well as in periodicals.

1 credit; 1st semester (Kuiper)

201b—SEMINAR IN PHILOSOPHY. Continuation of 201a.

1 credit; 2nd semester (Kuiper)

Note:—Other courses such as Epistemology, Aesthetics, Philosophy of Religion, and special periods in the History of Philosophy will be given from time to time.

PHILOSOPHY OF EDUCATION (See Education)

POLITICAL SCIENCE

The Political Science Department offers courses leading to M. A. and Ph. D. degrees.

The student who holds a baccalaureate degree from a standard college is eligible to enter the department as a candidate for an advanced degree. An A. B. or B. S. degree is the only definite prerequisite for entering graduate study in the field of political science. However, students who are deficient in their social science background must make up such deficiencies before they will be recommended for a degree by the department. The applicant may remove such deficiencies by private study or by taking undergraduate courses. Each individual case is handled on its own merits.

101—LATIN AMERICAN RELATIONS.

3 credits (Vandenbosch)

150—INTERNATIONAL LAW.

3 credits (McVey or Vandenbosch)

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155a—CO

155b—CO

156—CO

157—CIT

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161—IN

163a—P

163b—P

164—AM

ORGANIZAT

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[GIVEN 1931

- 154—COUNTY GOVERNMENT.
3 credits (Manning)
- 155a—COMPARATIVE GOVERNMENT.
3 credits (Jones)
- 155b—COMPARATIVE GOVERNMENT. Continuation of 155a.
3 credits (Jones)
- 156—COLONIAL GOVERNMENT.
3 credits (Vandenbosch)
- 157—CITY ADMINISTRATION.
3 credits (Manning)
- 158—PUBLIC UTILITIES.
3 credits (Manning)
- 161—INTERNATIONAL ORGANIZATION.
3 credits (Jones, Vandenbosch or Walp)
- 163a—POLITICAL GEOGRAPHY.
3 credits (Walp)
- 163b—POLITICAL GEOGRAPHY. Continuation of 163a.
3 credits (Walp)
- 164—AMERICAN FOREIGN SERVICE AND INTERNATIONAL ORGANIZATION.
3 credits (Vandenbosch or Walp)
- 165—WORLD POLITICS.
3 credits (Blanding)
- 171—POLITICAL THEORY.
3 credits (Vandenbosch or Cole)
- 174—PUBLIC OPINION AND EXTRA-LEGAL GOVERNMENT.
3 credits (Jones or Cole)
- 180a—INDEPENDENT WORK. (Honors Course.)
3 credits (Jones, Vandenbosch, Manning or Cole)
- 180b—INDEPENDENT WORK. Continuation of 180a.
3 credits (Jones, Vandenbosch, Manning or Cole)
- 201a—SEMINAR.
2 credits (Jones)
- 201b—SEMINAR.
2 credits (Jones)
- 202a—SCOPE AND METHOD IN POLITICAL SCIENCE.
3 credits (Vandenbosch or Cole)

[GIVEN 1931-32 AND ALTERNATE YEARS]

- 202b—SCOPE AND METHOD IN POLITICAL SCIENCE.
3 credits (Vandenbosch)
[GIVEN 1931-32 AND ALTERNATE YEARS]
- 203a—PUBLIC ADMINISTRATION.
2 credits (Manning)
[GIVEN 1931-32 AND ALTERNATE YEARS]
- 203b—PUBLIC ADMINISTRATION. Continuation of 203a.
3 credits (Manning)
[GIVEN 1931-32 AND ALTERNATE YEARS]
- 204—INTERNATIONAL ORGANIZATION.
3 credits (Walp)
[GIVEN 1931-32 AND ALTERNATE YEARS]
- 205—FREEDOM OF THE SEAS.
2 credits (Vandenbosch)
- 207—IMPERIALISM AND NATIONALISM.
2 credits (Blanding)
[GIVEN 1930-31 AND ALTERNATE YEARS]
- 211—INTERNATIONAL ADMINISTRATIVE BODIES.
3 credits
[GIVEN 1930-31]
- 212a—MUNICIPAL FRANCHISES.
3 credits (Manning)
[GIVEN 1930-31 AND ALTERNATE YEARS]
- 212b—MUNICIPAL FRANCHISES. Continuation of 212a.
3 credits (Manning)
[GIVEN 1930-31 AND ALTERNATE YEARS]
- 213a—FEDERAL CENTRALIZATION.
3 credits
[GIVEN 1930-31 AND ALTERNATE YEARS]
- 213b—FEDERAL CENTRALIZATION. Continuation of 213a.
3 credits
[GIVEN 1930-31 AND ALTERNATE YEARS]
- 255a—COMPARATIVE GOVERNMENT.
3 credits (Jones)
[GIVEN 1931-32 AND ALTERNATE YEARS]
- 255b—COMPARATIVE GOVERNMENT. Continuation of 255a.
3 credits (Jones)
[GIVEN 1930-31 AND ALTERNATE YEARS]

PSYCHOLOGY

The department has accumulated for a number of years a mass of test records of the intelligence, special abilities and achievements of

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students in all the colleges of the University. It also has estimates of personal traits and the histories of many students. Taken together, these afford a rare opportunity for graduate work in student personnel problems. The director and executive secretary of the University Personnel Bureau are also affiliated with the department.

Another field in which special facilities are provided is that of the psychological clinic. The department has maintained such a clinic for years. It has established close contacts with the public schools, the welfare agencies, the Eastern State Hospital for the Insane, the reformatory institutions, and the State Institution for the Feeble-minded, all of which are located at or near Lexington.

The department undertakes special research in business and industrial personnel problems and in the development and training of normal children. It is well equipped for experimental and statistical studies in these fields. Connected with the department is a Kentucky Station of the Psychological Corporation, a national organization for conducting authoritative work in applied psychology.

The experimental laboratory is especially equipped for the objective determination of emotions, their relation to perceptual acts, sets, drives, conditioning, etc. Research may be attacked also on lower animals with facilities provided in the animal house.

Apparatus, test equipment, and library facilities are available for advanced work in the following list of courses for which a year's work in general psychology is a prerequisite:

104—SOCIAL PSYCHOLOGY. Description and explanation of social phenomena in terms of the original and acquired reaction systems of the individual. So-called types are characterized in respect to the social problems they afford. Topics given special consideration: crowds, mob behavior, propaganda, and nationalism.

3 credits; 1st semester (Dimmick)

114—ABNORMAL PSYCHOLOGY. Atypical conduct of thinking are studied from both the theoretical and practical points of view. The major psychoses and neuroses are given special consideration. Some opportunity for clinical observation is provided.

3 credits; 2nd semester (Dimmick)

111—MENTAL MEASUREMENTS. An analysis and interpretation of individual and group tests of general mental ability. History and significance of the testing movement; construction and evaluation of group tests.

3 credits; 1st semester (Dimmick)

109a—DIAGNOSIS OF DEVELOPMENT. Provides for acquisition of technique in the administration of well-known individual tests and scales which furnish criteria of the levels of intellectual and emotional development. Emphasis is placed upon the Stanford Revision and the Herring Revision of the Binet-Simon Scale.

Prerequisite: Psychology 111. 2 credits; either semester

(Dimmick)

109b—DIAGNOSIS OF DEVELOPMENT. A continuation of 109a in respect to aims. Training is given in the administration of standardized performance tests and scales and in the interpretation of the data yielded by these.

Prerequisite: Psychology 111. 2 credits; either semester

(Dimmick)

110—EXPERIMENTAL PSYCHOLOGY. Experimental techniques and their application to present psychological problems. The student is encouraged to select his own problems. Examples of such problems are: effect of changed surroundings on learning; peripheral retinal sensitivity; binocular fusion. One hour lecture; four hours laboratory.

3 credits; 2nd semester (White)

113—PSYCHOLOGY OF LEARNING. An experimental study of the learning process together with an analysis of the types of learning. One hour lecture; four hours laboratory.

3 credits; 1st semester (White)

117—PSYCHOLOGY OF LANGUAGE. An experimental course dealing with both spoken and written language. The development and physical basis of language, together with its function in thought processes. The main emphasis will be placed upon the experimental phases of the subject. Two hours lecture and two hours laboratory.

3 credits; 2nd semester (White)

115—MEASUREMENTS OF HUMAN RELATIONSHIPS. An advanced course which considers the treatment and interpretation of human measurements. The course deals with the computation and interpretation of simple, partial and multiple correlations, regression equations, and reliability of measures.

Prerequisite: Consent of instructor. 3 credits; 2nd semester (Asher)

112—PERSONNEL ADMINISTRATION. The functions of personnel work in business and industry. The selection and placement of employees, their training, supervision and motivation; the scientific study of work and fatigue.

3 credits; 2nd semester (Miner)

121—STUDENT PERSONNEL. The methods of dealing with student personnel problems in college and high school, including the problems of selection, classification, sectioning of classes, grading, personal adjustment, motivation, guidance and vocational placement. The functions of a personnel officer. Given in alternate years with 112.

Prerequisite: Consent of instructor. 3 credits; 2nd semester (Miner)

[NOT GIVEN 1931-32]

118—SYSTEMATIC PSYCHOLOGY. An historical and critical study of fundamental concepts and current schools of psychology with a view to their evaluation. Intended mainly for graduate students.

Prerequisite: Consent of instructor. 3 credits; 1st semester (Miner)

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120a—INDEPENDENT WORK IN PSYCHOLOGY. Designed for advanced students and graduates who undertake minor research problems to be conducted in regular consultation with the instructor. A minimum of six hours per week is required.

Prerequisite: Consent of instructor. 2 credits; 1st semester (Miner and the others)

120b—INDEPENDENT WORK IN PSYCHOLOGY. A continuation in 120a.

Prerequisite: Consent of instructor. 2 credits; either semester (Miner and the others)

201a—SEMINAR IN PSYCHOLOGY. One two-hour discussion each week of research under way by graduate students and members of the staff.

Prerequisite: Consent of the head of the department. 1 credit; 1st semester (Miner and the staff)

201b, c, etc.—SEMINAR IN PSYCHOLOGY. A continuation of 201a. These numbers are provided for registration in succeeding semesters.

Prerequisite: Consent of the head of the department. 1 credit; either semester (Miner and the staff)

203a—PROBLEMS IN PSYCHOLOGY. Brief studies by a graduate student may be registered under this number and continued in later semesters. A minimum of six hours per week. Conducted in consultation with instructor.

Prerequisite: Consent of the instructor. 2 credits; 1st semester (Miner and the others)

203b—PROBLEMS IN PSYCHOLOGY. Continuation of 203a.

Prerequisite: Consent of the instructor. 2 credits; 2nd semester (Miner and the others)

210a—RESEARCH IN PSYCHOLOGY. Research or thesis work may be registered under this number. A minimum of nine hours per week is required on research conducted in consultation with the instructor.

Prerequisite: Consent of the instructor. 3 credits; 1st semester (Miner and the others)

210b, c, etc.—RESEARCH IN PSYCHOLOGY. Continuation of research. This number is provided for registration in succeeding semesters.

Prerequisite: Consent of the instructor. 3 credits; either semester (Miner and the others)

Note: Other courses such as the Psychological Clinic, Human Measurements, Genetic Psychology, Animal Psychology, Psychological Interpretation, etc., will be given from time to time.

SOCIOLOGY

101—SOCIAL DEPENDENCE. A study of poverty and social dependence, and of measure of relief afforded through philanthropic agencies, or organized charity, together with general or special measures for the prevention, elimination, or reduction of poverty, and for social betterment.

3 credits; 1st semester (Best)

102—SOCIAL PATHOLOGY. A study of mortality rates, of diseases and accidents, and of mental and physical defectiveness, from a sociological point of view, together with a consideration of general social measures for prevention and treatment.

[NOT GIVEN 1931-32]

3 credits; 2nd semester (Best)

103—CRIMINOLOGY. A study of general conditions as to crime and delinquency, of measures of punishment and reform of the prisoner, of criminal procedure and its possible reform, and of measures for the prevention of crime.

3 credits; 1st semester (Best)

105—SOCIAL SYSTEMS. A study of social systems that have existed or have been proposed from early times, together with an examination of the theories of representative sociologists.

3 credits; 1st semester (Best)

[NOT GIVEN 1931-32]

106—AMERICAN IMMIGRATION. A study of immigrant peoples and races in the United States, and of their general effects upon American life, together with an examination of a general national policy upon the subject.

3 credits; 2nd semester (Best)

107—COMMUNITY WELFARE WORK. A limited social service course involving a study, with practical observations, of actual social conditions among local communities, of the work of agencies and organizations dealing with them, and of general measures for their improvement.

3 credits; 1st semester (Best)

109—THE FAMILY. A study of the family, both in its historical aspects and in connection with the problems before it under modern conditions.

3 credits; 1st semester (Best)

112—COMMUNITY ORGANIZATION. A study of the theory and of practical results of organization among individuals and among different agencies in the community for the advancement of its life.

3 credits; 2nd semester

201a—SOCIOLOGY SEMINAR. Consideration mainly of theses, methods of research; and current sociological literature.

1 credit; 1st semester (Best)

201b—SOCIOLOGY SEMINAR. Continuation of 201a.

1 credit; 2nd semester (Best)

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III. BIOLOGICAL SCIENCES

AGRONOMY (See Agriculture)

ANATOMY AND PHYSIOLOGY

105a—HUMAN OSTEOLOGY. The study begins with the development of the skeleton. This is followed by the process of ossification and the histology of bones. Each bone of the body is studied in detail, drawings being made from the bone. The bones surveyed during this division of the course are: Those of the face and cranium; vertebrae; ribs; sternum; hyoid. The work may be amplified to most any extent and some comparative anatomy included. *Recitation, one hour a week; laboratory, four hours a week.*

3 credits; 1st semester (Allen, Sherwood)

105b—HUMAN OSTEOLOGY. Continuation of A+P 105a. The bones of the upper and lower extremities (arm and leg) including the pectoral and pelvic girdles are thoroughly studied, detailed drawings of each bone being made from furnished specimens. *Recitation, one hour a week; laboratory, four hours a week.*

3 credits; 2nd semester (Allen, Sherwood)

106a—ENDOCRINOLOGY. This is the study of the glands of internal secretion or endocrine glands. Each gland is introduced with the consideration of its anatomical location and structure, gross and microscopic. This is followed by a comprehensive study of its functions, including the normal activity, hyperactivity and hypoactivity. The foregoing are demonstrated to the class. Recent scientific articles bearing upon the subject are reviewed and discussed. The glands taken up in this course are the thyroid, parathyroids, thymus and supraenals. *Lectures, demonstrations and recitations.*

Prerequisites: A+P 1a and 1 or

2a and 2b; Zoology 7b; 3 credits; 1st semester (Allen)

*Chemistry 1a and 1b; and
the consent of the instructor.*

106b—ENDOCRINOLOGY. Continuation of 106a. The endocrine glands which are studied are the pituitary, pancreas, organs of reproduction and pineal. *Lectures, demonstrations and recitations.*

Prerequisites: A+P 1a and 1b or

2a and 2b; Zoology 7b; 3 credits; 2nd semester (Allen)

*Chemistry 1a and 1b; and
the consent of the instructor.*

107a—ADVANCED ANATOMY. An introduction to the anatomy of the nervous system. The aim of this course is to provide an introductory laboratory course on the form, structure and functional

arrangements of the nervous system for students of biology, physiology, psychology and those who are planning the study of the medical sciences. The work of this course includes a careful study of the nervous systems of lower vertebrates, namely, fishes, amphibia and reptiles. *Recitations and lectures, one hour a week; laboratory, four hours a week.*

Prerequisites: A+P 1a and 1b 3 credits; 1st semester (Sherwood) or the equivalent.

107b—ADVANCED ANATOMY. Continuation of 107a. Special consideration is given to the structure of the mammalian brain in which the conductive systems are most completely organized. *Recitations and lectures, one hour a week; laboratory, four hours a week.*

Prerequisite: A+P 107a. 3 credits; 2nd semester (Sherwood)

108a—ADVANCED PHYSIOLOGY. The course is designed for students who anticipate further advanced study in physiology or in the medical sciences. In the course, graphic records which show the character of contraction of muscle (skeletal and smooth) are made. This is followed by observing the different factors that vary the character of the contraction. Experiments are performed to show that muscle is a thermogenic and an electrogenic organ. The nervous system which includes the structures and functions of the spinal cord, the medulla oblongata, the cerebellum, the cerebrum and the autonomic system are taken up in great detail. The course will close with an intensive study of the special sense-organs. Practically half of the semester will be devoted to the nervous system. *Lectures, recitation, three hours a week; laboratory, four hours a week.*

Prerequisites: A+P 1a and 1b or the equivalent; Chemistry 1a and 1b; Physics 1a and 1b; also, the consent of the instructors. 5 credits; 1st semester (Allen, Sherwood)

108b—ADVANCED PHYSIOLOGY. This is a continuation of 108a. The course is opened with the study of the circulatory system. Much time is given to the consideration of the mechanics of the heart, its nervous regulation and the functional peculiarities of its tissues. The mechanics of the circulation (hemodynamics) which includes the nervous regulation of the blood vessels are also surveyed. Other subject material to be covered consists of the respiratory system; the gastro-intestinal tract with its secretory organs; the processes of digestion, absorption, excretion, heat production; voice and the production of speech. *Lectures and recitation, three hours a week; laboratory, four hours a week.*

Prerequisite: A+P 108a. 5 credits; 2nd semester (Allen, Sherwood)

116a—SEMINAR IN ANATOMY AND PHYSIOLOGY. All students who are majoring in the Department are required to take this

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course. At each meeting of the Seminar, an assigned scientific article of physiological or anatomical subject-matter will be reviewed thoroughly by a member of the seminar and then discussed in general. In addition to the foregoing, each member of the seminar will be required to follow closely the current publications bearing upon the subjects of the class and present brief reports of such articles which are of interest. *One two-hour discussion period a week.*

Prerequisites: A+P 1a and 1b 1 credit; 1st semester

or the equivalent. (Allen, Sherwood)

116b—SEMINAR IN ANATOMY AND PHYSIOLOGY. Continuation of 116a. *One two-hour discussion period a week.*

Prerequisites: A+P 1a and 1b 1 credit; 2nd semester

or the equivalent. (Allen, Sherwood)

201a—RESEARCH IN PHYSIOLOGY. The pursuit of an assigned problem in which the student will have the opportunity to demonstrate originality. *Conferences and laboratory, ten hours a week.*

Prerequisites: A+P 1a and 1b

or the equivalent; Chemistry 5 credits; 1st semester

127a and 127b (131a and (Allen, Sherwood)

131b desirable); Physics, one year.

201b—RESEARCH IN PHYSIOLOGY. Continuation of 201a. *Conferences and laboratory, ten hours a week.*

Prerequisites: A+P 1a and 1b

or the equivalent; Chemistry 5 credits; 2nd semester

127a and 127b (131a and (Allen, Sherwood)

131b desirable); Physics, one year.

ANIMAL INDUSTRY (See Agriculture)

ANIMAL PATHOLOGY (See Agriculture)

ANTHROPOLOGY AND ARCHAEOLOGY

101—PRINCIPLES OF ANTHROPOLOGY. Fundamental principles of anthropology; relationships of physical anthropology, anthropometry, ethnology, ethnography and archaeology; anthropology of the New World; North American prehistory; ancient human occupation in the Mississippi Valley; outline of man's prehistoric past in Kentucky; anthropological studies of Kentucky materials.

2 credits; 1st semester (Funkhouser)

102—KENTUCKY ARCHAEOLOGY. Review of archaeological research in the United States; prehistoric cultures of the Mississippi Valley; development of ancient crafts; methods of classification of artifacts; significance of neolithic tools, weapons and problematical forms; a study of the artifacts and cultures represented in Kentucky.

Prerequisite: A & A 101a. 2 credits; 2nd semester (Webb)

BACTERIOLOGY

102—GENERAL BACTERIOLOGY. Morphology, classification, physiology, observation and cultivation of bacteria and related microorganisms; their relation to certain fermentations and to the preservation of food; their influence on the plant food in the soil. Microorganisms in milk, water, air, and soil. Relation of microorganisms to disease; sources and modes of infection; use of germicidal agents; theories of immunity.

Prerequisite: Chemistry 1b.

4 credits; 2nd semester
(Scherago, Weaver and assistants)

103—PATHOGENIC BACTERIOLOGY. Cultivation, morphology, means of identification, powers of resistance, pathogenesis, distribution, channels of infection and means of dissemination of pathogenic microorganisms, especially those related to specific infectious diseases of man and animals. Study of preparation, standardization, and uses of vaccines, toxins, antitoxins, and other biological products related to the diagnosis, prevention and treatment of specific infectious diseases. Application of the various phenomena of immunity in the diagnosis of infectious diseases; agglutination, precipitation, and complement fixation reactions. Anaphylaxis.

*Prerequisites: Bacteriology 52
or 102, or 2b and
Chemistry 1b.*

4 credits; 1st semester
(Scherago and assistants)

104—APPLIED BACTERIOLOGY. A course in bacteriological analysis to supplement courses 52 or 102.

*Prerequisites: Bacteriology 2b
and Chemistry 1b or Bac-
teriology 52 or 102.*

2 credits; 2nd semester
(Weaver and assistants)

106—BACTERIOLOGY OF FOODS. Microbiology of milk and milk products, eggs, tomato products, meat and meat products; food preservation; bacterial food poisoning.

*Prerequisites: Bacteriology 2b
and Chemistry 1b, or Bac-
teriology 52 or 102.*

4 credits; 1st semester
(Weaver)

107—BACTERIOLOGY OF WATER AND SEWAGE. The microflora of water; importance of the colon-typhoid group of bacteria on water; methods of water analysis and interpretation of results; special media used in isolating and identifying the colon-typhoid group of bacteria; methods of water purification; microflora of sewage; methods of sewage analysis; methods of sewage disposal; bacteriological study of swimming pools; methods of analysis; effect of treatment on bacteriological content; regulations concerning swimming pools. Water

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purification plants, sewage disposal plants and swimming pools will be visited and studied.

Prerequisites: Bacteriology 2b 4 credits; 2nd semester
and Chemistry 1b, or Bacteriology 52 or 102. (Weaver)

110a—LABORATORY DIAGNOSIS. Laboratory methods in the diagnosis of disease. Designed for students specializing in Public Health Bacteriology.

Prerequisite: Bacteriology 103. 3 credits; 2nd semester
 (Scherago)

110b—LABORATORY DIAGNOSIS. A continuation of 110a.
 3 credits; 2nd semester
 (Scherago)

111—GENERAL PATHOLOGY. A general course in Pathology, consisting of lectures, demonstrations, recitations and laboratory work. The laboratory work comprises examination of gross specimens and microscopic examination of morbid tissue. Emphasis will be placed on pathological technique and on the study of pathological histology.

Prerequisites: Physiology 1, 4 credits; 2nd semester
Zoology 1 and Histology (Scherago)
 101b.

115—INDIVIDUAL WORK. Students will be assigned special problems in laboratory work and reference reading.

Prerequisite: Any Bacteriology 3 credits (Scherago, Weaver)
course above 102.

125—IMMUNOLOGY AND SEROLOGY. The theories and mechanism of immunity. The production of antitoxin, agglutinins, bacteriolysins, opsonins, precipitins, hemolysins, and cytotoxins; their practical applications; the preparation of their homologous antigens. The study of ferments and antiferments; the study of anaphylaxis.

Prerequisite: Bacteriology 103. 5 credits; 2nd semester
 (Scherago)

150a—SEMINAR.
 1 credit; 1st semester (Scherago, Weaver)

150b—SEMINAR.
 1 credit; 2nd semester (Scherago, Weaver)

201a—RESEARCH IN BACTERIOLOGY.
 5 credits; 1st semester (Scherago, Weaver)

201b—RESEARCH IN BACTERIOLOGY. A continuation of course
 201a.
 5 credits; 2nd semester (Scherago, Weaver)

BOTANY

106a—SPECIAL PROBLEM. The qualified student will be assigned some problems for solution.

3 credits (McFarland, McInteer)

106b—SPECIAL PROBLEM. A continuation of 106a.

3 credits (McFarland, McInteer)

111—CLASSIFICATION OF PARASITIC FUNGI. Entire time will be taken up in studying the fungi that cause diseases of plants, both cultivated and wild.

1 credit (McFarland)

125a—MORPHOLOGY OF FUNGI. A detailed study of the different types of fungi from the standpoint of morphology, cytology and physiology.

4 credits (McFarland)

125b—MORPHOLOGY OF FUNGI. A continuation of 125a.

4 credits (McFarland)

126a—MYCOLOGY. A course which employs the entire time of the student in identification of unknowns.

4 credits (McFarland)

126b—MYCOLOGY. A continuation of 126a.

4 credits (McFarland)

150a—ADVANCED SYSTEMATIC BOTANY. A continuation of course 105, but more work and more difficult plants are studied.

5 credits (McFarland, McInteer)

150b—ADVANCED SYSTEMATIC BOTANY. A continuation of 150a.

5 credits (McFarland, McInteer)

206a—RESEARCH IN MORPHOLOGY.

5 credits (McFarland, McInteer)

206b—RESEARCH IN MORPHOLOGY. A continuation of 206a.

5 credits (McFarland, McInteer)

207a—RESEARCH IN MYCOLOGY.

5 credits (McFarland)

207b—RESEARCH IN MYCOLOGY. A continuation of 207a.

5 credits (McFarland)

210a—RESEARCH IN PLANT PHYSIOLOGY.

5 credits (McFarland)

210b—RESEARCH IN PLANT PHYSIOLOGY. A continuation of 210a.

5 credits (McFarland)

213a—RESEARCH IN SYSTEMATIC BOTANY.

5 credits (McFarland, McInteer)

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213b—RESEARCH IN SYSTEMATIC BOTANY. A continuation of 213a. 5 credits (McFarland, McInteer)

ENTOMOLOGY (See Agriculture)
HORTICULTURE (See Agriculture)

HYGIENE AND PUBLIC HEALTH

The Department of Hygiene and Public Health does not at this time give advanced work leading to a degree in public health. The courses listed below are available as minors for students who wish to become candidates for graduate degrees in related departments.

105—ADVANCED HYGIENE. A more detailed study of the material covered in Hygiene 1, with preparation of papers and reports. Prerequisite: *Hygiene 1*. 2 credits; 1st semester
(Chambers, Heinz)

110—HEALTH EDUCATION AND HEALTH SUPERVISION OF SCHOOLS. A course designed primarily for Education students dealing with the essentials of Health Supervision and Health Inspection of schools. Prerequisites: *Hygiene 1, 105*. 3 credits; 2nd semester
(Chambers, Heinz)

112—PUBLIC HEALTH ADMINISTRATION. Lectures, discussions, and reports dealing with Federal, State, and Municipal Health Administration and Organization. Prerequisite: *Hygiene 1*. 3 credits; 2nd semester (Heinz)

113—VITAL STATISTICS. A study of the part Vital Statistics plays in the problems of Modern Public Health, with emphasis on population, collection of Vital Statistics and their interpretation. Prerequisite: *Hygiene 1*. 3 credits; 1st semester (Heinz)

114—INDUSTRIAL HYGIENE. A course dealing with the general problem of industrial sanitation, occupational diseases, accidents and welfare of the industrial worker, industrial medical service, etc. Prerequisite: *Hygiene 1*. 3 credits; 2nd semester (Heinz)

115—EPIDEMIOLOGY. Lectures, discussion, and reports on the occurrence of epidemics of disease, the scope, theories, and practices of modern epidemiology. Prerequisite: *Hygiene 1*. 3 credits; 1st semester (Heinz)

116—SOCIOLOGIC AND ECONOMIC ASPECTS OF DISEASE. Prerequisite: *Hygiene 1*. 3 credits; 2nd semester (Heinz)

[NOT GIVEN 1931-32]

ZOOLOGY

101a—HISTOLOGY. Histology of the tissues. Lectures and laboratory work on the preparation of material for microscopic study. The latter part of the course is designed to acquaint the student with

microscopic manipulation and at the same time familiarize him with the tissues of the animal body.

Prerequisites: Zoology 1a-b. 3 credits; 1st semester (Brauer)

101b—HISTOLOGY. Histology of the organs. A continuation of course 101a. Lectures and laboratory work on the microscopic anatomy of the animal body.

Prerequisite: Zoology 101a. 3 credits; 2nd semester (Brauer)

102—ORNITHOLOGY. A study of the life histories, anatomy and physiology and taxonomy of birds with particular reference to the habits, songs, eggs, nests, migrations and economic importance of our native birds.

3 credits (Funkhouser, Allen)

105—MEDICAL ENTOMOLOGY. Insects (and briefly other animals) affecting the health and comfort of man. Identification, life histories and etiology of many important species. Methods of study and methods of control. For pre-medical students.

3 credits; 1st semester (Allen)

106—EMBRYOLOGY. A general course in ontogeny. Lectures on maturation, fertilization, cleavage, organogenesis, and anomalies of development. The laboratory work consists of a study of the germ cells, maturation, cleavage and development of the chick and of the pig.

4 credits; 2nd semester (Brauer)

107a—COMPARATIVE ANATOMY. Invertebrates. (1) Systematic consideration of all important phyla, classes, orders, and a few families. (2) Dissection of a few types not previously studied. (3) Identification and drawings of external aspects of many genera. (4) Life histories. (5) Comparative organology and physiology of higher phyla.

4 credits; 1st semester (Allen)

107b—COMPARATIVE ANATOMY. Vertebrates. (1) Systematic consideration of classes, orders, and some families of Vertebrata. (2) Detailed dissection of types not previously studied. (3) Comparative organology and (briefly) physiology of the several classes. (4) Preparation of charts and diagrams of nervous systems, urinogenital systems, and vascular systems. (5) Identification and demonstration of the bones of at least the Mammalian skeleton.

4 credits; 2nd semester (Allen)

108a—PRINCIPLES OF ZOOLOGY. An advanced lecture course open only to juniors, seniors and graduate students on the fundamental principles of biology. The first semester is devoted primarily to the study of organic evolution.

2 credits; 1st semester (Funkhouser)

108b—PRINCIPLES OF ZOOLOGY. A continuation of 108a. The second semester is devoted to the study of heredity, eugenics and animal instincts.

2 credits; 2nd semester (Funkhouser)

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110a—INDIVIDUAL WORK. Special problems for individual students who are capable of pursuing independent investigations.

3 credits (Funkhouser, Allen, Brauer)

110b—INDIVIDUAL WORK. A continuation of 110a.

3 credits (Funkhouser, Allen, Brauer)

112—ICHTHYOLOGY. (1) Taxonomy of the fishes. Use of keys and literature. Drawing types of families. (2) Life histories and biology of many type species, illustrated by photographs. (3) Fish structure and physiology. (4) Fish culture and economic ichthyology; care of fishes, aquaria, etc. (5) Special studies, such as blind fishes, deep sea fishes, etc.

3 credits; 1st semester (Allen)

114—ZOOLOGICAL SEMINAR. (1) Occasional presentation of the results of research by members. (2) Reports on papers of technical or semi-technical nature in the current literature. (3) Occasion book reviews. (4) Discussion of biological principles and phenomena. (5) Biological news notes.

1 credit (Funkhouser, Allen, Brauer)

201a—HERPETOLOGY. Systematic and taxonomic studies of the Reptilia. For graduate students only.

3 credits; 1st semester (Funkhouser)

201b—HERPETOLOGY. A continuation of 201a.

3 credits; 2nd semester (Funkhouser)

202a—SYSTEMATIC ENTOMOLOGY. Research work on special groups of insects requiring advanced study in the literature of the subject and designed for students who desire to specialize in entomology. For graduate students only.

4 credits; 1st semester (Funkhouser)

202b—SYSTEMATIC ENTOMOLOGY. A continuation of 202a. In the second semester special attention is paid to entomotaxy and the bibliography of the group studied.

4 credits; 2nd semester (Funkhouser)

IV. PHYSICAL SCIENCES

CHEMISTRY

101—PHYSICAL CHEMISTRY. For students in Agriculture and the biological sciences.

*Prerequisites: Chemistry 7 and 8,
Physics 1b, Mathematics 3 or 4.*

5 credits; either semester
(Bedford)

102—ELECTRO CHEMISTRY. Elementary, electro-analysis, electroplating and preparation of some inorganic and organic substances by electrolysis.

*Prerequisites: Chemistry 101
or 131b, 109, 127b.*

5 credits; either semester
(Bedford)

104—SYNTHETIC INORGANIC CHEMISTRY. An intermediate course planned to aid the student in gaining a more adequate knowledge of practical inorganic chemistry. Elective.

5 credits; 2nd semester (Maxson)

106—ADVANCED ORGANIC CHEMISTRY. A laboratory course which includes the preparation of compounds of theoretical, biological and industrial importance together with references to the original literature, conferences and reports.

Prerequisite: Chemistry 127b. 5 credits (Barkenbus)

107—SELECTED PROBLEMS IN QUANTITATIVE ANALYSIS.
Prerequisite: Chemistry 114. 5 credits; 2nd semester (Tuttle)

108—COLLOID CHEMISTRY. A course involving the preparation of colloids and study of the physical and chemical properties of matter in the colloidal state.

5 credits; either semester (Maxson)

109—QUANTITATIVE ANALYSIS. A lecture and laboratory course devoted to the analysis of ores, alloys, etc.

Prerequisite: Chemistry 8. 5 credits; either semester (Tuttle)

110—PHYSICAL CHEMISTRY. Intermediate course.

Prerequisites: Chemistry 131b and Calculus. 3 credits; either semester
(Bedford)

111—PHYSICAL CHEMISTRY. Intermediate course.

Prerequisite or concurrent: Chemistry 110. 2 credits; either semester
(Bedford)

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112—ADVANCED AGRICULTURAL ANALYSIS. A laboratory course having for its object the complete analysis of fertilizers, feeds, soils and agricultural products.

Prerequisite: Chemistry 8. 4 credits; 2nd semester (Tuttle)

114—ADVANCED QUANTITATIVE ANALYSIS. The analysis of iron and steel, slags and rocks.

5 credits; either semester (Tuttle)

118—WATER ANALYSIS. In this course waters are examined to determine their fitness for domestic and other purposes.

2 credits; 1st semester (Tuttle)

119a—INDUSTRIAL CHEMISTRY. A survey course on modern industrial chemistry using text as a basis for discussion.

2 credits; 1st semester (Maxson)

119b—INDUSTRIAL CHEMISTRY. A continuation of 119a.

2 credits; 2nd semester (Maxson)

122a—JOURNAL CLUB. Conferences and reports on chemical literature and training in the use of literature for research purposes.

1 credit; 1st semester (Maxson)

122b—JOURNAL CLUB. A continuation of 122a.

1 credit; 2nd semester (Maxson)

127a—ORGANIC CHEMISTRY. Recitations and lectures in the aliphatic series together with laboratory work on the preparation and study of such compounds as will emphasize basic principles and important synthetic methods.

Prerequisite: Chemistry 1b. 5 credits; 1st semester (Barkenbus)

127b—ORGANIC CHEMISTRY. A continuation of Chemistry 127a. Cyclic series.

Prerequisite: Chemistry 113a. 5 credits; 2nd semester

(Barkenbus)

129—FOOD CHEMISTRY AND ANALYSIS. The composition, adulteration and preservation of food. Laboratory practice on the analysis of milk, sugar, baking powder, vinegar, alcoholic beverages, fats, etc.

Prerequisites: Chemistry 7 5 credits; 1st semester

or 127a and 8. (Tuttle)

130a—PHYSIOLOGICAL CHEMISTRY. The chemistry and metabolism of carbohydrates, proteins and fats. A study of the tissues, the secretions and excretions. The nature and action of enzymes. Nutrition, food values and requirements. The effects of a diet of selected food principles on the quantity of metabolic products.

Prerequisite: Chemistry 5 credits; 1st semester

7 or 127a. (Barkenbus)

130b—PHYSIOLOGICAL CHEMISTRY. A continuation of 130a.

5 credits; 2nd semester (Barkenbus)

131a—INTRODUCTORY COURSE IN PHYSICAL CHEMISTRY. Based upon the fundamental laws of chemistry. Determination of atomic and molecular weights; gaseous, liquid and solid states of matter, solution, ideal and ionized; Thermo-chemistry.

4 credits; 1st semester (Bedford)

131b—INTRODUCTORY COURSE IN PHYSICAL CHEMISTRY. A continuation of 131a. Homogeneous and Hetrogeneous Equilibria; Chemical Kinetics; Structure of Matter; Periodic Law; Radio-chemistry; Colloids; Electro-chemistry.

Prerequisite: Chemistry 131a. 4 credits; 2nd semester (Bedford)

150—ADVANCED INORGANIC CHEMISTRY. A survey course covering the less common side of inorganic chemistry including laboratory work in synthesis.

Prerequisite: Chemistry 131b. 4 credits; 2nd semester (Maxson)

201—SYNTHETIC INORGANIC CHEMISTRY. Practice and research in inorganic synthesis, with use of original literature.

5 credits; either semester (Maxson)

202—QUANTITATIVE ANALYSIS. A critical study of known procedures and research in analytical chemistry.

5 credits; either semester (Tuttle)

204a—ORGANIC CHEMISTRY. A laboratory course with conferences on special problems in organic chemistry.

Prerequisite: Chemistry 106. 5 credits; either semester (Barkenbus)

204b—ORGANIC CHEMISTRY.

Prerequisite: Chemistry 204a. 5 credits; either semester (Barkenbus)

205a—ADVANCED PHYSICAL CHEMISTRY. Lectures on selected topics.

Prerequisites: Chemistry 131b and Calculus. 2 credits; either semester (Bedford)

205b—ADVANCED PHYSICAL CHEMISTRY. (Continuation of 205a. Lectures on selected topics.

2 credits; either semester (Bedford)

206a—ADVANCED PHYSICAL CHEMISTRY. Laboratory course on selected topics in Advanced Physical or Electro-chemistry.

Prerequisite or concurrent: Chemistry 205a. 3 or more credits; either semester (Bedford)

206b—ADVANCED PHYSICAL CHEMISTRY. Continuation of 206a.

Prerequisite or concurrent: Chemistry 205b. 3 or more credits; either semester (Bedford)

ENGINEERING (See Engineering)

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GEOLOGY

101a—PALEONTOLOGY.—Treatment of life which existed on the globe during former geological periods. Structure, classification, relationships, descent, conditions of existence, and distribution in time and space of the ancient inhabitants of the earth. Two hours of lecture and four of laboratory.

Prerequisite: Geology 22a-b. 3 credits; 1st semester (McFarlan)

101b—PALEONTOLOGY. Identification, classification and description, horizon determination of collections of fossils. Two hours of lecture and four of laboratory.

Prerequisite: Geology 22a-b, 101a. 3 credits; 2nd semester (McFarlan)

104—ADVANCED FIELD GEOLOGY. A course dealing with the preparation of an areal map of a restricted locality. Stress is placed upon the field technique, the taking of notes in the field and the preparation of written reports. May be repeated more than once. Six hours a week in the field.

Prerequisites: Geology 9b, 15a-b. 2 credits; 1st and 2nd semesters (McFarlan)

105—INDEPENDENT WORK IN GEOLOGY. Registration only after consultation with instructor in charge of field desired. May be elected more than once to cover work in different fields.

3 credits; 1st and 2nd semesters

106a—ECONOMIC GEOLOGY. Non-metallic mineral deposits (excepting Petroleum, Natural Gas and Asphalt). A study of the origin, mode of occurrence, treatment and uses of the deposits of economic importance, including coal.

Prerequisites: Geology 15a-b, 16a-b, 107a-b. 3 credits; 2nd semester (Robinson)

106b—ECONOMIC GEOLOGY. Metallic Mineral Deposits. A study of the origin and mode of occurrence of metalliferous deposits. The economics of various metal industries and methods of treatment of ores will be briefly considered.

Prerequisites: Geology 15a-b, 16a-b, 107a-b. 3 credits; 2nd semester (Robinson)

107a—PETROLOGY. Optical mineralogy. A review of the principles of optics as applied to the petrographic microscope, the use of the microscope and other apparatus and descriptions of rock-forming minerals with their associations and alteration products. One recitation and lecture and four laboratory periods a week.

Prerequisites: Geology 109a-b, Physics 1a-b. 3 credits; 1st semester (Robinson)

107b—PETROLOGY. The origin, metamorphism and decay of igneous rocks. Practice in the use of the various mineralogical and

chemical classifications in use at the present time and practice in writing descriptions from thin sections and hand specimens. One recitation and lecture and four laboratory periods a week.

Prerequisite: Geology 107a. 3 credits; 2nd semester (Robinson)

108—STRUCTURAL GEOLOGY. A study of rock structures, rock deformation and diastrophism with a consideration of the theories and principles involved.

Prerequisites: Geology 15b, 3 credits; 1st semester (Robinson)

109b, and Physics 1a-b.

[NOT OFFERED 1931-32]

109a—MINERALOGY. A laboratory course covering crystallography, and physical mineralogy. The course includes a study of the systems and classes of crystals with emphasis on their use in mineral identification and the physical properties of about 100 minerals stressing those characteristics that are important in recognizing minerals. Four hours laboratory a week.

Prerequisites: Chemistry 1a-b 2 credits; 2nd semester (Robinson)

109b—MINERALOGY. A laboratory course covering chemical, descriptive and determinative mineralogy (including blowpipe analysis). The course includes a study of the origin, occurrence, association and alteration and identification of about 150 minerals. Four hours laboratory.

Prerequisite: Geology 109a. 2 credits; 1st semester (Robinson)

110—STRATIGRAPHIC PALEONTOLOGY. This study aims to bring together those facts and principles which will aid in interpreting the history of the earth from the records left in the rocks. Methods of correlation, biogenetic relationships, and biogenic characteristics of plants and animals, and principles of classification and correlation of geological formations are emphasized. A thorough study is made of the more important index fossils.

Prerequisites: Geology 101a-b. 3 credits; 1st semester

111—SEDIMENTATION. Sources of sediments; methods of transportation from places of origin to those of deposition; methods, agents, and environments of deposition; chemical and mechanical changes from time of production to ultimate consolidation; climate and other environmental conditions prevailing at places of origin, over regions through which transportation takes place, and in the places of deposition; structures developed in connection with deposition and consolidation; horizontal and vertical variations of sediments. Two hours recitation and two laboratory.

Prerequisites: Geology 15a-b, 3 credits; 1st semester (Meacham)
109a-b, 107a.

116—OIL GEOLOGY. A discussion of the origin, accumulation and production of petroleum. The course includes a consideration of

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the stratigraphy and structure of the producing provinces of the United States and a study of geologic methods used to locate oil in the different fields.

Prerequisites: Geology 15a-b. 2 credits; 2nd semester (Robinson)

117—SEMINAR. A course required of advanced students in the department for the consideration of research work, independent work and review of current technical literature. May be repeated more than once.

*1 credit; each semester
(McFarlan, Robinson, Meacham)*

118a—FIELD WORK IN REGIONAL GEOLOGY. Two weeks in the field in Virginia, North Carolina and Tennessee. A study of type localities and mines, with special emphasis on mode of occurrence, origin, etc., of economically valuable mineral deposits. Course offered as part of the first summer session, coming early in June between Commencement and summer session. Required of major students in their junior year.

*Prerequisites: Geology 15a-b. 2 credits (McFarlan, Meacham)
16a-b.*

[NOT OFFERED 1930-31]

118b—FIELD WORK IN REGIONAL GEOLOGY. Two weeks in the field in Kentucky, Tennessee, Georgia and North Carolina. A study of type localities, and mines, with special emphasis on mode of occurrence, origin, etc., of economically valuable mineral deposits. Course offered as part of the first summer session, coming early in June between Commencement and summer session. Required of major students in their junior year.

*Prerequisites: Geology 15a-b, 2 credits (McFarlan, Meacham)
16a-b.*

[NOT OFFERED 1931-32]

202—RESEARCH IN GEOLOGY. Registration only after consultation and permission of the instructor in charge of field chosen. May be repeated more than once to cover work in different fields.

5 credits; Each semester

MATHEMATICS AND ASTRONOMY

MATHEMATICS

Graduate students will be able to obtain sufficient work to qualify for the doctor's degree. Graduate students must have had at least 12 credits beyond calculus before counting work toward an advanced degree. The White Mathematics Club and Pi Mu Epsilon meet regularly for the study of some book of general interest or for the presentation of special topics.

102—VECTOR ANALYSIS. An elementary course in the algebra and calculus of vectors with numerous applications in geometry and physics.

Prerequisite: Course 7b. 3 credits; 2nd semester (Rees)
[GIVEN 1930-1; OFFERED 1931-2]

103—THEORY OF EQUATIONS. This course is based on Dickson's First Course in the Theory of Equations, which is used as a text.

Prerequisite: Course 7a. 3 credits; 2nd semester (Brown)
[OFFERED 1931-2]

104—ADVANCED ANALYTICS. An account of some of the most important modern methods as presented in the treatises of C. Smith and Salmon.

Prerequisite: Course 7a. 3 credits; 1st semester (LeStourgeon)
[GIVEN 1930-1]

105a—DIFFERENTIAL EQUATIONS. A first course in differential equations based on A. Cohen's text.

Prerequisite: Course 7b. 3 credits; 1st semester (Davis)
[GIVEN 1930-1; OFFERED 1931-2]

105b—DIFFERENTIAL EQUATIONS. An extension of Math. 105a to more advanced topics with special study of certain ordinary and partial differential equations which have proved useful in Physics and Mechanics.

Prerequisite: Course 105a. 3 credits; 2nd semester (Davis)
[OFFERED 1931-2]

106a—ADVANCED CALCULUS. Topics included: Continuity of functions; derivatives and differentials; Taylor's series; power series; partial differentiation; total derivatives; implicit functions; Jacobians; applications to geometry—elements of arc, area, and surface, maxima and minima, curvature and torsion.

Prerequisite: Course 7b. 3 credits; 1st semester (Downing)
[OFFERED 1931-2]

106b—ADVANCED CALCULUS. Continuation of Math. 106a. Topics included: Definite integrals—existence, properties, differentiation of a definite integral, integration under the integral sign, improper integrals; Gamma and Beta functions; Dirichlet integrals; line, surface, and space integrals; elliptic integrals.

Prerequisite: Course 106a. 3 credits; 2nd semester (Downing)
[OFFERED 1931-2]

107—PROJECTIVE GEOMETRY. A brief course based on a text like Dowling's.

Prerequisite: Course 7a. 3 credits; 2nd semester (Boyd)
[OFFERED 1931-2]

109—THEORY OF FUNCTIONS OF A COMPLEX VARIABLE. Introduction to the algebra and calculus of complex numbers and their

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geometric representation. Conformal transformation. Theory presented mainly from the Cauchy-Riemann viewpoint, with reference to the Weierstrass development. Introduction to Riemann surfaces.
Prerequisites: Course 105a, 106a. 3 credits; 2nd semester
 (LeStourgeon)

[GIVEN 1930-1]

110a—INDEPENDENT WORK IN MATHEMATICS. Limited to upper division and graduate students of high standing.

Prerequisite: Course 7b. 3 credits; both semesters

[GIVEN 1930-1; OFFERED 1931-2]

111—HIGHER ALGEBRA. This course covers the material in Chapters 2-11 inclusive and Chapter XX in Bocher's "Introduction to Higher Algebra".

Prerequisite: Course 7a. 3 credits; 1st semester (Latimer)

[OFFERED 1931-2]

116—ANALYTIC MECHANICS. Topics included: Composition and resolution of forces; statics of a particle; moments; couples; center of gravity; friction; simple harmonic motion; moments; constrained motion; work and energy; inertia; impulse.

Prerequisite: Course 7b. 3 credits; 1st semester (Downing)

[GIVEN 1930-1]

117—ALGEBRAIC INVARIANTS. This course covers the material in Dickson's "Algebraic Invariants".

Prerequisite: Course 7b. 3 credits; 2nd semester (Latimer)

[OFFERED 1931-2]

119—MODERN GEOMETRY. A course covering the ground substantially as presented in Allschiller Court's text.

Prerequisite: Course 7a. 3 credits; 2nd semester (Boyd)

[GIVEN 1930-1]

120—MATHEMATICAL STATISTICS. Topics considered: averages, coefficients of dispersion and skewness, graphical representation, Bernoulli's Theorem, curve-fitting, theory of sampling, correlation, and regression lines.

Prerequisite: Course 7a. 3 credits; 2nd semester (South)

[GIVEN 1930-1]

201a—GEOMETRIC TRANSFORMATIONS. This course covers a large part of Winger's Projective Geometry.

3 credits; 1st semester (Boyd)

[GIVEN 1930-1]

202a—ALGEBRAIC CURVES. The classical theory as presented by Salmon, Wieleitner or Ganguli.

3 credits; 1st semester (Boyd)

[OFFERED 1931-2]

202b—ALGEBRAIC CURVES. Continuation of 202a.

3 credits; 2nd semester (Boyd)

[OFFERED 1931-2]

204—CALCULUS OF VARIATIONS. Examples illustrating the various types of problems. The differential equation of a curve which minimizes a definite integral. Other properties of a minimizing arc as deduced by Legendre, Weierstrass and Jacobi. Isoperimetric problems.

Prerequisites: Courses 105a, 106a. 3 credits; 1st semester
 [OFFERED 1931-2] (LeSturgeon)

205—DIFFERENTIAL GEOMETRY. An introductory study of the metric properties of twisted curves and surfaces. Altho vector analysis is not required, the student will find vector methods of great assistance in this study.

[GIVEN 1930-1; OFFERED 1931-2] 3 credits; 2nd semester (Rees)

207a—THEORY OF NUMBERS. This course covers the material in Chapters 1-5 inclusive of Dickson's "Introduction to the Theory of Numbers".

[GIVEN 1930-1] 3 credits; 1st semester (Latimer)

207b—THEORY OF NUMBERS. This course covers the material in Chapters 6-10 inclusive of Dickson's "Introduction to the Theory of Numbers".

[GIVEN 1930-1] 3 credits; 2nd semester (Latimer)

208—THEORY OF FUNCTIONS OF A REAL VARIABLE. Theory of the Real number system. Elements of point set theory; measure of sets. Study of continuities and discontinuities, and the Riemann and Lebesgue theories of integration.

Prerequisites: Courses 105a, 106a. 3 credits; 2nd semester
 [OFFERED 1931-2] (LeSturgeon)

ASTRONOMY

251a—CELESTIAL MECHANICS. Topics included: Rectilinear motion; central forces of various types; potential and attraction of bodies; problem of two bodies; Ivory's theorem; Kepler's equation.
 [GIVEN 1930-1] 3 credits; 2nd semester (Downing)

Note: Other courses such as Fourier's Series, Potential Function, Infinite Series, Substitution Groups, Solid Analytics, Practical Astronomy, will be given from time to time.

PHYSICS

The Department of Physics is well equipped with instruments of precision and has adequate library facilities necessary to the proper conduct of the following list of advanced and graduate courses:

101—THEORY OF HEAT. A lecture and experimental course covering the fundamental principles of heat. Opportunity is offered to use the gas thermometer, resistance thermometer, and various types of radiation pyrometers, determination of vapor pressure and densities, coefficients of viscosity, freezing and boiling points, latent and specific

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heats, heats of combustion, thermal conductivities, calibration of thermocouples, etc.

Prerequisites: Physics 3a, 5, and Mathematics 7b. 5 credits (Koppius)

102a—ELECTRICITY AND MAGNETISM. A course in the mathematical theory of electricity and magnetism. The laboratory work is designed to emphasize the principles covered and to give the student experience in the careful use of electrical measuring instruments. The course includes the modern methods of measuring current, high and low resistances, electromotive forces and power, the calibration of instruments employed, together with measurements of capacity, inductance, and the magnetization of iron.

Prerequisites: Physics 3b, 6, and Mathematics 7b. 5 credits (States)

102b—ELECTRICITY AND MAGNETISM. A continuation of Physics 102a with particular emphasis on alternating current phenomena, transformers, transients, the vacuum tube and associated phenomena.

Prerequisite: Physics 102a. 5 credits (States)

103—THEORY OF LIGHT. A course covering the general theory of reflection, refraction, diffraction and polarization.

Prerequisites: Physics 3b, 6, and Mathematics 7b. 5 credits (Webb)

104—THEORETICAL MECHANICS. This course serves as an introduction to mathematical physics. Although the work is usually based upon some standard text, it is supplemented by lectures and extensions of the text in topics which are of primary interest to physicists. The student is expected to solve a representative list of problems.

Prerequisites: Physics 3b, 5, and Mathematics 7b. 5 credits (Koppius)

111—ELECTRICITY AND MAGNETISM. This course comprises the lectures and recitations of course 102a.

Prerequisites: Physics 3b, 6, and Mathematics 7b. 3 credits (States)

113—RADIO COMMUNICATION. A discussion of the theory of transmission and reception of wireless waves. The theory of the detector and amplification properties of the vacuum tube.

Prerequisites: Physics 3b and 6. 3 credits (States)

115—THEORY OF MEASUREMENTS. A course designed for major students in Physics and graduates covering the fundamental theories of the science of physical measurements.

Prerequisites: Physics 3b and 6, and Mathematics 7b.

116a—PHYSICAL MANIPULATIONS. A course for those who wish to acquire a technique in various physical manipulations, as for example, glass blowing, and the preparation and use of materials used in physical experiments.

Prerequisites: College Physics or college chemistry. 1 credit (Webb, States and Schneider)

116b—PHYSICAL MANIPULATIONS. A continuation of 116a.
1 credit (Webb, States and Schneider)

119—PRINCIPLES OF X-RAYS. A basic course in X-rays for the advanced undergraduate and graduate, dealing with the production and properties of X-rays, the design and operation of X-ray tubes, rectifiers and accessory equipment; the mathematical development of the formulae of absorption, scattering, polarization, etc.; the methods of crystal analysis and wave length measurement of Bragg, DeBye and others; the Compton effect and related quantum phenomena; a review of articles in the various scientific periodicals.

Prerequisites: Physics 3b and 6, and Mathematics 7b. 3 credits (Hahn)

120—X-RAY TECHNIQUE. An introductory course in X-ray technology dealing with the design and operation of X-ray equipment, the use of intensifying screens, dark room procedure, etc. Some practice will be given in the radiography of the extremities and teeth with special attention to voltage, current, time and distant factors.

Prerequisites: Physics 1a-b. 2 credits (Hahn)

201—PHYSICAL OPTICS. This course covers in mathematical formulation the theories of interference and diffraction, the theory of optical instruments, the propagation of light in crystalline media and a comparison of the various theories of light.

Prerequisites: Physics 103, one additional 100 course, and Mathematics 105a. 3 credits (Webb)

202—MEASUREMENTS IN OPTICS. A course in the measurements of wave lengths, Fresnell Mirrors and Biprisms, determination of optical constants by Michelson's Interferometer, reflection and transmission grating, spectroscopes and concave grating spectrographs. This course is designed to supplement 201.

Prerequisite: Physics 103. 2 credits (Webb)

204—DYNAMICS OF A PARTICLE, INCLUDING WAVE MOTION. A mathematical presentation of the dynamics of a particle in a conservative medium, and the calculations of the velocity of propagation of various wave forms and their synthesis and analysis by Fourier's theorem. A study of the velocity of propagation as a function of wave length, including a consideration of varying degrees of freedom and boundary conditions.

Prerequisites: Physics 104, one additional 100 course, and Mathematics 105a. 3 credits (States)

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205—KINETIC THEORY OF MATTER. A course of lectures covering the classical kinetic theory of gases, including the theorems of Clausius, Joule, Maxwell and Boltzman. Coefficients of viscosity and slip, Brownian movements and specific heat relations are treated from the kinetic theory standpoint and equations of change of state are developed.

Prerequisites: Physics 101, one additional 3 credits (Webb)
100 course, and *Mathematics 105a.*

212—CONDUCTION OF ELECTRICITY THROUGH GASES. A course of lectures covering in chronological order the outstanding discoveries connected with the conduction of electricity through gases at low pressures. The subjects of diffusion, ionic mobility, e/m. measurements, positive ray analysis, isotropes, etc., are treated.

Prerequisites: Physics 102a and 104. 3 credits

213—ELECTRO-MAGNETIC THEORY OF LIGHT. A course of lectures covering the classical magnetic theory as applied to the optical phenomena of reflection, refraction and polarization. Both isotropic and non-isotropic media as well as conducting and non-conducting media are treated.

Prerequisites: Physics 103, one additional 3 credits (States)
100 course, and *Mathematics 105a.*

214—TRANSIENT ELECTRIC AND VACUUM TUBE PHENOMENA. A theoretical and experimental study of transient currents in circuit containing variable amounts of inductances, capacitance and resistance. Investigations of various types of coupled circuits including vacuum tube circuits. Theoretical and experimental study of various types of vacuum tubes, including 2, 3 and 4 element tubes, and the measurements of their characteristics and application to problems of radio transmission and reception.

Prerequisites: Physics 3b and 6, 113 or 102a, 3 credits (States)
and one additional 100 course, and
Mathematics 105.

215—QUANTUM THEORY. A course of lectures covering the historical development of the quantum hypothesis. Review of the fundamentals of thermodynamics. Application of the quantum theory to black body radiation, to specific heats, to Bohr-Sommerfeld theory of the spectra of the lighter elements.

Prerequisites: Physics 104, one additional 3 credits (States)
100 course, and *Mathematics 105.*

217a—THEORETICAL PHYSICS. A course for graduate students, the basis of the work being theoretical discussion of modern physical theories.

Prerequisites: One 200 course and 3 credits
Mathematics 105a.

217b—THEORETICAL PHYSICS. A continuation of 217a.
3 credits.

218—THERMODYNAMICS. First and second laws of Thermodynamics, entropy, derivation of thermodynamic equations and their application to physical phenomena.

Prerequisites: Physics 101, 205 and Mathematics 105a. 3 credits (Webb)

220a—SEMINAR. A weekly meeting of the staff and advanced students of the department for presentation and discussion of recent development in physics as reported in the current literature and of work in progress in the department. Credit is given only to those who satisfactorily present papers. 1 credit

220b—SEMINAR. A continuation of 220a. 1 credit

223a—GENERAL PHYSICS. Course covers Mechanics, Heat and Wave Motion. This course limited to graduate students in the College of Education.

Prerequisites: One year of Elementary Physics and Mathematics 2 and 3. 7 credits; 1st semester (Koppius)

223b—GENERAL PHYSICS. A continuation of 223a. Covers Electricity, Sound, and Light. 7 credits; 2nd semester (States)

224—X-RAYS AND THEIR APPLICATIONS TO PHYSICAL PROBLEMS. A course for students in Physics and Chemistry, giving the present theory of X-ray production, and the application of X-rays to microphysical problems.

Prerequisite: Physics 201. 3 credits (Hahn)

225—THESIS. This course is intended for graduate students who are prepared to undertake special problems. Except in the case of a purely mathematical problem the entire time is to be devoted to work in the laboratory. (Webb, States, Koppius, Hahn)

226a—RESEARCH IN PHYSICS.
3 credits (Webb, States, Koppius, Hahn)

226b—RESEARCH IN PHYSICS.
3 credits (Webb, States, Koppius, Hahn)

227a—RESEARCH IN PHYSICS.
5 credits (Webb, States, Koppius, Hahn)

227b—RESEARCH IN PHYSICS.
5 credits (Webb, States, Koppius, Hahn)

250a—RELATIVITY. A theory of space and time measurements as applied to physical phenomena.

Prerequisites: Physics 103 and either 102a or 104. 3 credits (Webb)

250b—RELATIVITY. A continuation of Physics 250a.
3 credits (Webb)

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V. AGRICULTURE

AGRICULTURAL EDUCATION (See Education)

AGRONOMY

101—METHODS AND RESULTS OF FIELD EXPERIMENTATION. The essentials of reliable field experimentation, the planning and laying out of model experiments, and a study of the results obtained by experiment station workers and other investigators. Special attention is given to the interpretation of field results. Designed for students who expect to teach or engage in experimental work.

Prerequisite: Agronomy 1. 2 credits; 1st semester (Roberts)

105—ADVANCED CROPS. The important crops are studied in more detail than is possible in the standard course in crops. Structure, classification and history of crop plants are given special attention. Soil and climatic adaptation, economics of production, and numerous other fundamental problems of crop production are studied. To as large an extent as possible the best crop literature is reviewed. Some attention is given to the more practical phases of production, chiefly to give students an opportunity to become familiar with advances that have been made in the art of crop production in recent years.

3 credits; 2nd semester (Kinney)

106—FIELD CROP IMPROVEMENT. In this course principles of genetics applicable to plant breeding, technique of breeding and development of plant breeding in the past are studied. Classification and inheritance of the various crops and the problems of improvement connected with each are given attention.

2 credits; 2nd semester (Kinney, Fergus)

107a—SEMINAR. 1 credit (The Agronomy Staff)

107b—SEMINAR. 1 credit (The Agronomy Staff)

110—ADVANCED SOILS. Biological studies in soils. Reference, classroom and laboratory work dealing with the biological processes in soils in relation to soil productivity. The studies include carbon dioxide production, ammonification, nitrification, nitrogen fixation, sulfification, solvent action of biological activity products, and partial soil sterilization.

Prerequisite: Agronomy 1 and 3 credits; 1st semester
permission of the instructor. (Karraker)

111—ADVANCED SOILS. Physico-chemical studies in soils. Reference, classroom and laboratory work on the physico-chemical conditions and changes in soils, emphasizing the theoretical and technical phases. Soil formation, air and water soil relationships, soil

colloids, soil solution, and soil reaction are important parts of the work.

Prerequisite: Agronomy 1 and permission of the instructor. 3 credits; 2nd semester (Karraker)

112—SPECIAL WORK IN SOILS.

Prerequisite: Agronomy 1 and permission of the instructors. 3 credits; either semester (Roberts, Karraker)

202—SPECIAL PROBLEMS IN CROP PRODUCTION.

2 credits; either semester (Kinney)

203a—LITERATURE OF PLANT PATHOLOGY.

3 credits; 1st semester (Valleau)

203b—LITERATURE OF PLANT PATHOLOGY.

3 credits; 2nd semester (Valleau)

ANIMAL INDUSTRY

102—FARM BUTCHERING AND CURING MEATS. The slaughtering and blocking out of beeves, veals, hogs and lambs. Animals are judged on foot and on the hook. Wholesale and retail cuts are studied. A general study is made of the whole field of meat industry. Meat curing and cures are studied with special emphasis on pork.

Prerequisite: A. I. 21. 4 credits, 1st semester (Wilford)

104—ANIMAL BREEDING. A survey of the methods by which the breeders have built up the different types of domestic animals.

Prerequisites: A. I. 17 and A. I. 119. 4 credits, 2nd semester (Anderson)

105—BEEF PRODUCTION. A study of the development of the beef cattle industry in this and other countries. The feeding, breeding and management of beef cattle are given the most attention. Laboratory work consists in judging beef cattle and practical problems relating to the industry.

Prerequisite: A. I. 20. 3 credits, 2nd semester (Good)

106—PORK PRODUCTION. A study of breeds and types. General management and feeding of all classes of swine supplemented with laboratory in judging and management.

Prerequisite: A. I. 20. 3 credits; 1st semester (Wilford)

107—SHEEP PRODUCTION. Breeds and market classes; judging, breeding, feeding, management and marketing of sheep; production and marketing of wool.

Prerequisites: A. I. 17; 21. 3 credits, 2nd semester (Horlacher)

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110—ADVANCED STOCK JUDGING. Primarily for judging team candidates. Admission by permission of instructor.
Prerequisites: A. I. 17; 21. 3 credits; 1st semester
(Horlacher)

111a-b.—SPECIAL PROBLEMS IN ANIMAL HUSBANDRY.
3 credits (Staff)

132a-b.—SPECIAL PROBLEMS IN DAIRYING.
3 credits (Staff)

133a-b.—SPECIAL PROBLEMS IN POULTRY.
3 credits (Staff)

112—ADVANCED POULTRY PRODUCTION. Advanced problems involved in incubation, breeding, poultry diseases, feeding and flock management. Laboratory consists of operation of mammoth incubators and brooders.
Prerequisite: A. I. 22. 4 credits; 2nd semester (Martin)

119—GENETICS. A study of the fundamental laws of heredity.
3 credits; 1st semester (Anderson)
Section for men and section for women.
Repeated 2nd semester.

120—SYSTEMS OF LIVE STOCK PRODUCTION. A survey of the systems of live stock production in the various countries of the world; designed to give the student a broad view of the live stock industry.

Prerequisites: A. I. 17; 21; 22; 23. 3 credits; 1st semester
(Horlacher)

121—ADVANCED GENETICS—Study of the laws of heredity as they have been applied in plant and animal improvement and may be made applicable for human betterment.

Prerequisite: A. I. 119. 3 credits; 1st semester (Anderson)

124—ADVANCED STUDY OF THE DAIRY BREEDS. A classification of prominent strains and families within the leading dairy breeds. Interpretation of herd book data, advanced classification, selective and super registration, present day breed problems, selection by type, proved sires and a constructive dairy breeding program. Lecture two hours a week; laboratory four hours a week.

Prerequisite: A. I. 23. 4 credits; 2nd semester (Ely)

125—DAIRY CATTLE FEEDING AND MANAGEMENT. The application of the principles of nutrition to dairy cattle feeding problems, up-to-date methods contributing to maximum efficiency in the production of quality dairy products on the farm.

Prerequisite: A. I. 20. 3 credits; 2nd semester (Ely)

127—ADVANCED POULTRY BREEDING. Fundamental genetic principles involved in poultry breeding. Emphasis laid on the trans-

mission of egg production, broodiness, egg shell color and feather color. A breeding program is mapped out, analyzed, and studied in detail.

Prerequisite: Genetics. 3 credits; 2nd semester (Martin)

129—DAIRY BACTERIOLOGY. The application of bacteriological principles to the production and processing of milk and other dairy products, involving methods of microorganisms into dairy products, effects of their growth and methods for their control. Lecture 2 hours; laboratory 4 hours a week.

Prerequisites: Bacteriology 52 4 credits; 1st semester
(Morrison)
or 102.

130—BUTTER AND ICE CREAM. A study of the various processes and problems involved in the manufacture and storage of butter and ice cream. Lecture 1 hour, laboratory 4 hours a week.

Prerequisite: A. I. 23. 3 credits; 1st semester (Barkman)

131—MARKET MILK AND CHEESE. A study of the problems connected with the production and handling of milk and manufacture of certain types of cheese. Lecture 1 hour, laboratory 4 hours a week.

Prerequisite: A. I. 23. 3 credits; 2nd semester (Morrison)

201—ECONOMIC FACTORS INVOLVED IN MEAT PRODUCTION. Problems involving the economical production of beef, pork and mutton.

3 credits; each semester
(Good, Horlacher, Wilford, Harris)

202—MEATS. Research in any field touching on the industry.

Prerequisite: A. I. 102. 3 credits; both semesters
(Wilford)

203—RESEARCH IN GENETICS. Special problems involving original investigation on the part of the student. Throughout the year.

Prerequisite: Approval of head 3 credits; each semester
of department. (Anderson)

204a-b—RESEARCH IN DAIRYING. Special problems involving original investigation on the part of the student. Throughout the year.

Prerequisite: Approval of head 3 credits; each semester
of department. (Ely or Barkman or Morrison)

205—INVESTIGATIONS IN BREEDING LIGHT HORSES.
3 credits (Anderson)

206a-b—RESEARCH IN POULTRY. Special problems involving original investigation on the part of the student. Throughout the year.

Prerequisite: Approval of head 3 credits; each semester
of department. (Martin or Insko)

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209a-b—

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207—INVESTIGATIONS IN WOOL. Special research problems.
Prerequisite: A. I. 107. 3 credits; either semester
(Horlacher)

208—RESEARCH IN ANIMAL BREEDING. Special problems involving original investigation on the part of the student. Throughout the year.
Prerequisite: Approval of head of department. 3 credits; each semester
(Anderson)

209a-b—ANIMAL HUSBANDRY SEMINAR. Throughout the year.
1 credit; each semester (Good and Staff)

ANIMAL PATHOLOGY

116—DISEASES OF DOMESTIC ANIMALS. The course deals with the various infectious and parasitic diseases of animals, their distribution, general nature, methods of dissemination, sanitation, prevention and eradication. The work is presented from the standpoint of hygiene and preventive medicine, special emphasis being placed on the transmissible diseases. Lectures, recitations and reference reading.

4 credits; 2nd semester (Dimock)

126—ANATOMY AND PHYSIOLOGY OF DOMESTIC ANIMALS. A study of anatomy and physiology of domestic animals to show the correlation of structure and function of the various organs of the body. The work is outlined so as to give the student an understanding of anatomy and physiology as related to work offered in other courses as livestock judging, butchering, animal nutrition, animal breeding and animal diseases.

4 credits; 1st semester (Hull)

ENTOMOLOGY

102—ADVANCED AGRICULTURAL ENTOMOLOGY. Life history, control and means of identification of the common and important insects of Kentucky; the making and care of school collections, cages and aquariums. Field trips and practical demonstrations of insect control. Especially planned for those intending to take up vocational agricultural teaching and county agent work.

Prerequisite: Entomology 10. 3 credits; 2nd semester (Price)

103—ECONOMIC ENTOMOLOGY. FRUIT AND GARDEN INSECTS. Beneficial and injurious insects of fruit and garden crops with special attention to the life histories, habits and control of injurious species found in Kentucky. A discussion of practical and specific control measures for each insect considered as garden and fruit pests.

Prerequisite: Entomology 10. 3 credits; 1st semester (Price)

104—ECONOMIC ENTOMOLOGY. FARM CROP INSECTS AND ANIMAL PARASITES. Beneficial and injurious insects of common farm crops including those of stored grains and forage. Also internal and external parasites of domestic animals. Detailed discussions of the more important Kentucky species with special reference to life histories and control measures. General theories of agronomic practice in the control of insects; fumigation methods and treatment for animal parasites.

Prerequisite: Entomology 10. 3 credits; 2nd semester (Price)

106a—SYSTEMATIC AND TECHNICAL AGRICULTURAL ENTOMOLOGY. Insect physiology, anatomy, ecology and taxonomy; entomological literature and technique; studies of special groups of insects.

Prerequisites: Entomology 10 3 credits; 1st semester (Price)
and any one of the following: 102, 103, 104.

106b—SYSTEMATIC AND TECHNICAL AGRICULTURAL ENTOMOLOGY. A continuation of 106a.

3 credits; 2nd semester (Price)

201a—ENTOMOLOGICAL PROBLEMS. Discussion and assignment of current insect subjects. Investigations of chosen insect problems including original research work.

Prerequisites: Entomology 10, 3 credits; 1st semester (Price)
103, 104, 106a and 106b.

201b—ENTOMOLOGICAL PROBLEMS. A continuation of 201a.

3 credits; 2nd semester (Price)

FARM ECONOMICS

103a—AGRICULTURAL ECONOMICS SEMINAR. Preparation and presentation of papers on current problems in the field of agricultural economics. Round table discussions, centering on the subject matter treated in the various student reports, are held at each meeting.

2 credits; 1st semester

(Farm Economics Staff)

103b—AGRICULTURAL ECONOMICS SEMINAR. A continuation of 103a.

2 credits; 2nd semester

(Farm Economics Staff)

107a—SPECIAL PROBLEMS IN FARM MANAGEMENT. Students enrolling in this course are assigned some special problem, as for example, the cost of producing some class of farm products such as dairy products, crop or live stock, the problem of profitable farm organization in a specified community; farm taxes, etc. Students are required to review the literature of the problem and report on it regularly to the instructor. In most cases they are also required to

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examine, classify and tabulate special statistical data previously collected by the College of Agriculture and to relate these data to the problem. Each student presents a final report showing results and conclusions arrived at.

1st semester (Nicholls)

107b—SPECIAL PROBLEMS IN FARM MANAGEMENT. A continuation of 107a.

2nd semester (Nicholls)

108—LAND PROBLEMS. The course deals particularly with problems of farm ownership and tenancy. Phases of the problem considered are the following: The classification of agricultural land; economic characteristic and peculiarities of land; principles involved in the determination of rent; the relation of rent to other distributive shares in production; factors determining the value and appraisal of farm land; problems of farm tenancy; land-tenant contracts and characteristics of such contracts which have been mutually satisfactory to landlords and tenants.

Prerequisite: *Farm Economics 4.*

2 credits; 1st semester

[NOT GIVEN 1931-32]

(Nicholls)

109—ADVANCED FARM MANAGEMENT. A course giving advanced consideration to the fundamental principles underlying the choice of a farm, the selection of crop and livestock enterprises, the management of labor and equipment and the organization of these elements into an efficient and profitable farm business. Trips are made to nearby farms that illustrate these principles and study is devoted to the records of other successfully operated farms of the state.

Prerequisite: *Farm Economics 113.*

2 credits; 1st semester

(Nicholls)

113—FARM MANAGEMENT. The course consists in a study of the principles underlying the choice of proper types of farming; the comparative merits of intensive and extensive farming; the relation of livestock to farm management; the best size of farm; the relation of capital to farm profits; farm rental systems; the management of men and horse labor and machinery for greatest profits; the layout of fields and farm buildings; farm accounts, including the annual inventory; the choice of a region for farming and important considerations in buying a farm; the other vital questions of farm organization and management.

Prerequisite: *Farm Economics 4.*

3 credits; 1st semester

(Nicholls)

120—RURAL COMMUNITY PROBLEMS. This course deals with the fundamental principles underlying the social organization of country life, and the application of those principles in the development of ways and means of community improvement. Among other matters

will be considered the following: rural vital statistics; the shifting of the rural population; community hygiene and sanitation; good roads; the rural church; the rural school and organization for community betterment. An essential feature of the course will be a study of the student's own community, with a view of recommending action for the betterment of the general social, intellectual, moral and economic conditions.

3 credits; 2nd semester
(Oyler)

202a—RESEARCH IN FARM ECONOMICS. Open to graduate students. The student enrolling in this course is assigned an advanced problem in the field of farm economics. Stress is placed on the plan, technique and scientific method used by the student in developing his research problem. The student is required to submit a report embodying his methods, generalizations and conclusions.

(Nicholls)

202—RESEARCH IN FARM ECONOMICS. A continuation of 202a.

(Nicholls)

HOME ECONOMICS

104—PROBLEMS IN TEXTILES. Study of physical and chemical properties of major and minor fibers. Social and economic aspects of textile and clothing trades. Laboratory work includes microscopy of fibers, physical tests and quantitative determination of fabric content. Term papers based upon individual problems.

Prerequisites: Home Economics 26; 4 credits; 2nd semester
Economics 1a. (Wade)

105a-b—SEMINAR IN NUTRITION. Investigations of recent research on nutrition.

Prerequisite: Senior or graduate standing. 1 credit; throughout year
(Erikson)

106a-b—SEMINAR IN TEXTILES AND CLOTHING. Investigation of special textile and clothing problems.

Prerequisite: Senior or graduate standing. 1 credit; throughout year
(Wade)

107a-b—EXPERIMENTAL COOKERY. Study of the application of chemical methods to the problem of cookery. Observation on effect of pH and determinations of losses in vegetable cookery; experimental work on batter and dough mixtures; shortening power of fats; properties of emulsions; comparison of slow and quick acting baking powders; jellying properties of fruit juices.

Prerequisites: Home Economics 4; 5 credits; each semester
109. (Erikson, Grundmeier)

109—NUTRITION. Investigations in nutrition and in metabolic processes of the body. It includes sugar tolerance tests; protein and

mineral balance
vitamins and
Prerequisite

112—PUBLIC
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methods of
Development
work included

115—CHILD
care and training
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116—ART
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118—TEXTILES
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121a-b—ADVANCED
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144—ADULT
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economic principles
Prerequisite

mineral balance experiments on human subjects; biological tests for vitamins and proteins of various foods.

Prerequisite: Home Economics 4. 4 credits; 2nd semester

(Erikson)

112—PUBLIC SCHOOL NUTRITION. A study of the nutrition class movement with emphasis on causes and effects of malnutrition, methods of judging nutrition and height and weight standards. Development of health program in public schools. The laboratory work includes a health class with public school children.

3 credits; both semesters (Grundmeier)

115—CHILD CARE AND TRAINING. Survey of the field of child care and training from pre-natal life through the pre-school period. It includes consideration of problems of pre-natal life and infancy; standards for normal growth; breast and artificial feeding; habit formation; general care and hygiene.

Prerequisites: Home Economics 3; 3 credits; both semesters

Physiology 3;

(Deephouse)

Psychology 7.

116—ADVANCED COSTUME DESIGN. History of Costume. A survey of costume from ancient to modern times, showing political, religious and industrial influence in design, and furnishing opportunity to create new designs applicable to modern needs. Study of Egyptian, Greek, Roman, French 18th and 19th Century Costumes.

Prerequisites: Home Economics 29; 3 credits; 2nd semester

Art 2b.

(Wade)

117—INTERIOR DECORATION. Study of essentials of architecture in their relation to interiors. Correct composition and decoration of interiors. Drawings, elevations embodying color theory, and principles of decorative design are made. Problems and their practical solutions emphasized.

Prerequisites: Home Economics 45; 3 credits; 1st semester

26; Art 2b.

(Wade)

118—TAILORING. A study of the economics of clothing, budgets. Suit and coat are made.

Prerequisite: Home Economics 47. 3 credits; 2nd semester

(Wade)

121a-b—SPECIAL PROBLEMS. Special problems in undergraduate research.

2 credits; throughout year (Staff)

144—ADVANCED HOME MANAGEMENT. Family Relationships. Open to seniors and advanced students. A lecture course affording opportunity for special study in family relationships. The social and economic problems of the home are stressed.

Prerequisites: Home Economics 42; 3 credits; 2nd semester

Sociology 1a;

(Deephouse)

Economics 1a.

178—INSTITUTIONAL ORGANIZATION AND ADMINISTRATION. Principles of organization are studied, types of institutional service, modern industrial tendencies, advertisement, personnel, organization and financial control.

Prerequisite: Home Economics 180. 3 credits; 2nd semester (Hoover)

179—INSTITUTIONAL MANAGEMENT. Application of scientific principles of institutional management consisting of practical work in the institution six hours a day, six days a week, daily half hour conferences and hour lecture a week. Remuneration: \$35 a semester plus noon meals and laundering of laboratory uniforms.

Prerequisite: Home Economics 178. 6 credits; 2nd semester (Hoover)

180—INSTITUTIONAL EQUIPMENT. Selection, arrangement, cost and care of institutional equipment is made. Problems of lighting, heating, ventilation, refrigeration are considered.

Prerequisite: Home Economics 79. 3 credits; 1st semester (Hoover)

HOME ECONOMICS EDUCATION (See Education)

HORTICULTURE

103—POMOLOGY. Apple Production. A course dealing with the theory and practice of commercial apple growing. Adaptation, soil relations, fruitfulness, and orchard management problems are studied in detail.

Prerequisite: Horticulture 1. 3 credits; 2nd semester (Waltman)

104—POMOLOGY. Stone Fruits. A detailed study of commercial peach, plum, and cherry growing.

Prerequisite: Horticulture 1. 3 credits; 2nd semester (Waltman)

105—POMOLOGY. Small Fruits. A detailed study of the care and management of commercial plantings of strawberries, raspberries, and other bush fruits. Lecture one hour, laboratory two hours a week, first half; lecture two hours a week last half.

Prerequisite: Horticulture 1. 2 credits; 2nd semester (Waltman)

110—VEGETABLE GARDENING. A study of the fundamental principles of vegetable growing, and the farmer's home garden.

3 credits; 2nd semester (Emmert)

111—MARKET GARDENING. A detailed study of commercial vegetable growing, with special emphasis on crops suited to Kentucky conditions.

Prerequisites: Horticulture 8, 110. 3 credits; 2nd semester (Emmert)

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115a—SPECIAL PROBLEMS. This course is designed to permit advanced students to make an intensive study of some phase of horticulture in which they are particularly interested. May be taken only with approval of the instructor.

3 credits; 1st semester (Olney and Staff)

115b—SPECIAL PROBLEMS. A continuation of 115a.

3 credits; 2nd semester (Olney and Staff)

MARKETS AND RURAL FINANCE

108—MARKETING. Principles and methods of marketing farm products; methods of marketing at country points and in central markets; classes and functions of middlemen; marketing specific commodities; market price; marketing costs; and cooperative marketing. Lectures 3 hours.

Prerequisite: Economics 1a. 3 credits; 1st semester (Price)

109—COOPERATIVE MARKETING. Principles, methods and problems involved in the cooperative marketing of farm products; legal, organization, and management problems which cooperatives encounter for different classes of farm products. Lectures 3 hours.

Prerequisite: M. & R. F. 108. 3 credits; 2nd semester (Price)

110—ADVANCED MARKETING. Marketing live stock, dairy products, eggs, and poultry; analysis of local and terminal market organization; factors affecting efficiency of business set-up and financial organization of marketing agencies. Lectures 3 hours.

Prerequisite: M. & R. F. 108. 3 credits; 1st semester (Price)

111—AGRICULTURAL PRICES. A study of the factors influencing prices of farm products, price movements and trends, and price relationships. Methods of price comparison, long time price movements and cyclical tendencies are reviewed. Lectures 3 hours.

Prerequisite: Farm Economics 4. 3 credits; 1st semester (Card)

112—FARM FINANCE. Principles of financing the production and marketing of farm products; credit needs of agriculture, including short time, intermediate and farm mortgage credit requirements; organization and operation of the federal farm loan system, and other agencies which furnish credit for agriculture. Lectures 3 hours.

Prerequisite: Farm Economics 4. 3 credits; 2nd semester
[Not given 1931-32] (Bradley)

113—AGRICULTURAL STATISTICS. Sources, methods of presentation and analysis of agricultural statistics with special reference to agricultural census and crop and live stock estimates; collection, tabulation and graphic presentation of data; measures of dispersion, index numbers, trends and correlation. Lectures 2 hours; laboratory 2 hours.

Prerequisite: Economics 1a. 3 credits; 1st semester (Card)

131—ADVANCED AGRICULTURAL PRICES. A review of price theory and statistical method with special reference to research in agricultural prices; analysis of various price studies with reference to the theory upon which they are based, research methods used and reliability of conclusions drawn. Lectures 2 hours.

Prerequisites: *M. & R. F.* 111-113 2 credits; 1st semester
or *Commerce* 107. (Card)

201a-b—RESEARCH IN MARKETING AND COOPERATION. Open to graduate students who have the necessary training and ability to carry on work on individual problems. The course consists of individual work on some selected marketing problem.

3 credits; each semester (Price)

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VI. EDUCATION

GENERAL STATEMENT OF REGULATIONS GOVERNING GRADUATE WORK IN THE COLLEGE OF EDUCATION

1. Of the graduate work offered by any candidate for the master's degree in education 15 semester hours (including the thesis course) must be in the courses at the 200 level or above.

2. The total number of credits (graduate and undergraduate combined) in education offered by any candidate for the master's degree must be at least 36 semester hours including the thesis course.

3. Two plans are provided for the work which leads to the master's degree:

A. The first plan consists of 30 semester hours of graduate work including the writing of a thesis.

B. The second plan requires the completion of 45 semester hours of graduate work with an average standing of B or better and no requirement of a thesis. Both plans involve the successful passing of an oral examination over the field of education and also the minor field, if any.*

4. The first semester of the thesis course shall be required of all candidates for the master's degree in education.

5. Educational Literature shall be a required course of all persons graduating on the 45 semester hour basis.

6. The residence requirement for those not writing a thesis shall be three semesters.

EDUCATIONAL ADMINISTRATION

101—SCHOOL ORGANIZATION. A course designed to familiarize the prospective teacher with those activities of school organization and administration in which she may be expected to participate. Topics emphasized are administrative control, selection of teachers, tenure, loads, salaries, retirement, supervision, classification and promotion, attendance, community relationships, and professional ethics.

Prerequisite: Education 16. 3 credits; both semesters
(Chamberlain)

103—THE ELEMENTARY SCHOOL. A course designed primarily for supervisors and principals. Topics emphasized include scheduling, office duties, supervisory duties, pupil activities, the curriculum, philosophy of the elementary school, state standardization, research in elementary school subjects, and modern procedures in administering the elementary school.

Prerequisite: 12 credits Education. 3 credits; 2nd semester
(Hill)

*No student may elect this plan except with the approval of his major professor.

125—SUPERVISION OF INSTRUCTION. Topics considered are the development of supervision, purpose of supervision, organization for supervision, planning supervision, use of classroom visitation and demonstration lessons, use of teachers' meetings and individual conferences, use of the course of study, use of tests and measurements, equipment and supplies, the teacher, and the pupil.

Prerequisite: Education 101 3 credits; 2nd semester
or equivalent. (Holloway)

190a—TECHNIQUE AND PROFESSIONAL WORK OF THE REGISTRAR. A comprehensive study of admissions, including the literature, history and present day tendencies; the rules of the University; recommendations of the American Association of Collegiate Registrars; accrediting agencies; special problems in the administration of the office. Limited to six students. Lecture 1 hour, laboratory 2 hours a week.

Prerequisite or concurrent: Education 90a. 2 credits; 1st semester
(Gillis)

190b—TECHNIQUE AND PROFESSIONAL WORK OF THE REGISTRAR. A comprehensive study of permanent records and transcripts, including the history, literature and present day tendencies; rules of the University; recommendations of the American Association of Collegiate Registrars. Special problems in the administration of the office. Limited to six students. Lecture 1 hour, laboratory 2 hours a week.

Prerequisite or concurrent: Education 90b. 2 credits; 2nd semester
(Gillis)

202—CITY SCHOOL ADMINISTRATION. Topics considered are the city school district, the city school board, city school administrators, city school organization, finance, teaching staff, curriculum, pupil accounting, allied activities, supervision, school publicity and public relations, and buildings and equipment.

Prerequisite: Ed. 101. 3 credits; summer session (McVey)

204a—THE ADMINISTRATION OF HIGHER EDUCATION. This course deals with the following topics: problems relating to the organization and administration of universities, colleges, and teacher training institutions; financial problems of higher institutions; professional duties of registrars, deans, and business managers.

Prerequisite: Graduate standing. 2 credits; summer session
(McVey)

204b—THE ADMINISTRATION OF HIGHER EDUCATION. A continuation of Education 204a.

Prerequisite: Graduate standing. 2 credits; summer session
(McVey)

206—PROBLEMS OF COLLEGE TEACHING. This course covers among others the following topics: methods commonly used in college

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teaching; bases for measuring instruction; marking systems; qualifications for college teaching; and efforts being made to improve college instruction.

Prerequisite: Graduate standing. 2 credits; 2nd semester
(Taylor)

207—SCHOOL BUILDINGS AND EQUIPMENT. The major topics considered are the measurement and evaluation of existing school building facilities, planning new school buildings, financing the building program, and building operation and maintenance.

Prerequisites: Education 101 3 credits; summer session
or equivalent. (Chamberlain)

210—SPECIAL PROBLEMS IN SCHOOL ADMINISTRATION.

Prerequisite: Graduate standing. 3 credits
[NOT GIVEN 1930-31]

213—STATE AND COUNTY SCHOOL ADMINISTRATION. The state as a unit of school administration, the school district, the nation as a unit of school administration, the scope of the school system, financing the schools, and supervision by the state are the topics emphasized.

Prerequisite: Ed. 101. 3 credits; 1st semester (Holloway)

231—FINANCING PUBLIC EDUCATION. Topics covered are budgetary procedure, school costs, school indebtedness, state finance, fiscal reports, and accounting procedures. These topics are treated primarily from the viewpoint of the superintendent of schools.

Prerequisite: Ed. 101. 3 credits; 1st semester (Hill)

232—HIGH SCHOOL ADMINISTRATION. A course designed primarily for high school principals and prospective administrators. Topics emphasized are secondary school organization, the principal, the staff, the pupil, program of studies, schedules, community relationships, records and reports, articulation, library, plant, finance, and the aims of secondary education.

Prerequisite: Ed. 226 or 250. 3 credits; 1st semester (Ligon)

290a, b, and c—PROBLEMS IN THE REGISTRAR'S FIELD OF ADMINISTRATION. Independent work. The purpose of the course is to give experience and training in the analysis and interpretation of data; organization of source material; so as to make the office an effective laboratory for the study of problems in administration and education. A committee will conduct the final oral examination to determine the administrative value of the study.

Prerequisite: Ed. 190a and b 2 credits; either semester
or equivalent. (Gillis)

301a-b—RESEARCH PROBLEMS IN EDUCATIONAL ADMINISTRATION.

Prerequisites: Ed. 202 and 213. 3 credits; both semesters
(Holloway)

- 302—SPECIAL PROBLEMS IN EDUCATIONAL FINANCE.
Prerequisite: Ed. 231. 3 credits; both semesters (Hill)
- 304.—SPECIAL PROBLEMS IN SCHOOL SUPERVISION.
Prerequisite: Ed. 125. 3 credits; both semesters (Holloway)
- 307—SPECIAL PROBLEMS IN HIGH SCHOOL ADMINISTRATION.
Prerequisite: Ed. 232. 3 credits; both semesters (Ligon)
- 308—SPECIAL PROBLEMS IN ELEMENTARY SCHOOL ADMINISTRATION.
Prerequisite: Ed. 202. 3 credits; both semesters (Chamberlain)
- 309—SPECIAL PROBLEMS IN RURAL SCHOOL ADMINISTRATION.
Prerequisite: Ed. 213. 3 credits; both semesters (Holloway)
- 321a, b—SPECIAL PROBLEMS IN HIGHER EDUCATION.
Prerequisite: Either Ed. 204 3 credits; both semesters or 205. (Taylor)

AGRICULTURAL EDUCATION

- 179—DETERMINING CONTENT IN VOCATIONAL AGRICULTURE. Interpreting data as a basis for course building. Working out the content of a four-year course in vocational agriculture.
3 credits; 2nd semester (Hammonds)
- 181—TEACHING VOCATIONAL AGRICULTURE. Designed to prepare men for the teaching of agriculture. About one-half of the course is practice.
7 credits; both semesters (Hammonds, Woods and Armstrong)
- 185—APPRENTICE TEACHING. The student assists in regular department of vocational agriculture, under supervision.
Prerequisite: Ag. Ed. 181. 2 credits; both semesters (Hammonds and Woods)
- 188—FARM-PRACTICE SUPERVISION. Practice and directed study in supervising farm-practice of pupils in vocational agriculture.
1 credit; both semesters (Hammonds, Woods and Armstrong)
- 280—METHOD IN TEACHING VOCATIONAL AGRICULTURE. The principles of method are applied to the teaching of agriculture. For men with experience in teaching vocational agriculture.
Prerequisite: Graduate standing. 3 credits; summer session (Hammonds)
- 287—ADVANCED PROBLEMS IN AGRICULTURAL EDUCATION. The specific problems considered vary according to the needs of the group.
Prerequisite: Graduate standing. 3 credits; both semesters (Hammonds and Woods)

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147—F
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289—RESEARCH IN AGRICULTURAL EDUCATION. The student works on some problem of importance to agricultural education.
Prerequisite: Graduate standing. 3 credits; both semesters
(Hammonds and Woods)

COMMERCIAL EDUCATION

158—METHOD OF TEACHING COMMERCIAL SUBJECTS. A study of classroom methods in accounting, shorthand, typewriting, business English, business law, and other commercial subjects usually offered in the high school.
Prerequisites: A knowledge of 3 credits; 2nd semester and first summer term (Lawrence)
the subjects.

159—THE COMMERCIAL CURRICULUM. Commercial subjects offered in the high school are examined to determine their content and the place each should occupy in the curriculum. Some time is given to the course of study.
Prerequisites: Senior standing or experience in teaching or supervising commercial subjects. 3 credits; 2nd semester and 2nd summer term (Lawrence)

EDUCATIONAL PSYCHOLOGY

118—EDUCATIONAL TESTS AND MEASUREMENTS FOR ELEMENTARY TEACHERS. The problem of measurement in the elementary school; formal and informal tests, marking systems, etc.
Prerequisites: One semester 2 credits; 1st semester (Ross)
of psychology.

119—FOUNDATIONS OF ELEMENTARY EDUCATION. The psychology of the child in the primary and intermediate grades.
Prerequisites: One semester 3 credits; 2nd semester (Ross)
of psychology.

122a—EDUCATIONAL TESTS AND MEASUREMENTS FOR HIGH SCHOOL TEACHERS. The problems of measurement in the junior and senior high school, with special emphasis on standardized tests.
Prerequisites: Education 16. 2 credits; 1st semester (Ross)

122b—EDUCATIONAL TESTS AND MEASUREMENTS FOR HIGH SCHOOL TEACHERS. The construction and use of new-type tests, use and limitations of traditional examinations, marking systems, etc.
Prerequisites: Education 16. 2 credits; 2nd semester (Ross)

147—FOUNDATIONS OF SECONDARY EDUCATION. The psychology of the student in junior and senior high school.
Prerequisites: One semester 3 credits; 2nd semester (Ross)
of psychology.

152—PROBLEMS IN EDUCATIONAL PSYCHOLOGY. A critical survey of the conflicting schools of psychology, theories of learning, etc.

Prerequisites: Education 16. 3 credits; 2nd semester (Ross)

216—SEMINAR IN EDUCATIONAL TESTS AND MEASUREMENTS. A critical study of certain problems in measurement. Individual work.

Prerequisites: Education 122a-b. 3 credits; 1st semester (Ross)

223—EDUCATIONAL STATISTICS. A non-mathematical study of the applications of statistical and graphical methods to educational data.

(Ross) 3 credits; 1st semester

ELEMENTARY EDUCATION

133.—DIRECTED TEACHING IN THE ELEMENTARY SCHOOL. Supervised teaching in kindergarten or Grades I to VI. One hour per day of actual teaching and one hour per day reserved for conference and class work.

Prerequisites: Senior standing. 5 credits; both semesters (Duncan and Training Teacher)

172—TEACHING READING IN THE ELEMENTARY SCHOOL. A practical application of principles derived from psychology and research. Discussion of aims, primary reading, activities leading to reading, reading in the intermediate grades, oral and silent reading, phonics, diagnostic and remedial work, means of testing and suitable material for each grade.

Prerequisite: Junior standing. 3 credits; 1st semester (Duncan)

173—TEACHING LITERATURE TO CHILDREN. A study of the literature for children from Kindergarten to Grade VI. Readings and book reports from various types; Mother Goose, folklore, modern fantastic tales, poetry, realistic stories, biography, myths and legends. Children's interests at different ages and stages of development; story telling and dramatization.

Prerequisite: Junior standing. 3 credits; 2nd semester (Duncan)

174—PRE-SCHOOL THEORY AND MANAGEMENT. A study of the nature, development, care and training educationally of the pre-school child. Emphasis will be placed on the formation of proper emotional and social habits and standards for right environment set up. Students will schedule regular periods for observation and assistance in the Kindergarten (by appointment).

Prerequisite: Junior Standing. 4 credits; 1st semester (Martin)

176—PRE-SCHOOL ORGANIZATION AND TEACHING. A study of the pre-school movement in Europe and America. A study of the organization, equipment, curriculum and methods of pre-school teaching. Students taking this course will schedule regular periods (by appointment) for observation and assistance in the Kindergarten.

Prerequisite: Junior standing. 4 credits; 2nd semester (Martin)

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HISTORY OF EDUCATION

117a—HISTORY OF EDUCATION. This course is a survey of the history of secondary education from the Greek period to the present time. 3 credits; 1st semester (Noe)

117b—HISTORY OF EDUCATION. A survey of the history of elementary education beginning with Athenian education and closing with present elementary education in America. 3 credits; 2nd semester (Noe)

121—HISTORY OF EDUCATION IN THE UNITED STATES. A course in the history of the development of the public school system in the United States. It is designed to give a background for the appreciation of the aims and purposes of modern education. [NOT OFFERED 1931-32] 3 credits

219—GREAT EDUCATORS AND THEIR WORK. A study of the lives and writings of the world's educators to enable the student to appreciate more fully the ideals, attitudes and contributions to society of the men and women in education who have served best. Prerequisite: Graduate standing. 3 credits; 1st semester (Noe)

220—COMPARATIVE EDUCATION. A course giving comparisons of systems of education. Prerequisite: Graduate standing. 3 credits; 2nd semester (Noe)

HOME ECONOMICS EDUCATION

160—TECHNIQUE OF TEACHING HOME ECONOMICS. A study of methods of teaching as applied to home economics. Prerequisites: Home Economics 26, 3 credits; both semesters
6a and b, 29, 3, 51, (Parker or Spickard)
Education 16.

162—DIRECTED TEACHING IN HOME ECONOMICS. Practical application of methods in teaching various phases of home economics. Prerequisite: Education 160. 6 credits; both semesters
(Parker or Spickard)

163—CURRENT PROBLEMS IN HOME ECONOMICS EDUCATION. A study of some recent developments in the field of home economics education. Prerequisites: Education 160 3 credits; summer session
and 162, experience (Parker or Spickard)
in teaching.

164—METHODS OF TEACHING CHILD CARE. A critical evaluation of subject matter in child care and methods of presenting it to high school pupils. Prerequisites: Home Economics 115 3 credits; summer session
or equivalent. (Parker or Spickard)

165—PROBLEMS IN VOCATIONAL EDUCATION. This course deals with the problems involved in teaching vocational homemaking in day, part-time and evening schools. 3 credits; 2nd semester (Parker or Spickard)

166—SEMINAR IN HOME ECONOMICS EDUCATION. Provision is made for students to make individual investigations and report on special problems in home economics education.

Prerequisite: Graduate standing. 3 credits; 2nd semester
(Parker or Spickard)

168—HOME ECONOMICS CURRICULUM CONSTRUCTION. A study of the underlying principles of curriculum building for junior and senior high school home economics.

Prerequisites: Education 160, 162. 3 credits; 1st semester
(Parker or Spickard)

178—METHOD OF TEACHING HOME MANAGEMENT AND FAMILY RELATIONS IN JUNIOR AND SENIOR HIGH SCHOOL. This course deals with the selecting of subject matter and methods suitable for junior and senior high school pupils.

Prerequisites: Home Economics 42, experience in teaching. 2 credits; summer session
(Parker or Spickard)

261—HOME ECONOMICS SUPERVISION. A course planned primarily to help prepare teacher trainers and supervisors of home economics education.

Prerequisites: Education 160, 162, experience in teaching and approval of instructor. 3 credits; 1st semester
(Parker or Spickard)

PHILOSOPHY OF EDUCATION

114—EDUCATIONAL SOCIOLOGY. A study in the application of sociological findings to the field of education.

Prerequisite: Nine hours in education. 3 credits; 1st and 2nd semesters

200—ADVANCED COURSE IN PHILOSOPHY OF EDUCATION. This is an advanced course dealing with the philosophy underlying the larger educational problems of today.

Prerequisites: Graduate standing and at least 12 hours in education. 3 credits; 2nd semester
(Adams)

205—REVIEW OF CURRENT EDUCATIONAL LITERATURE. An extensive study of current educational literature as found in educational periodicals.

Prerequisites: Graduate standing and 9 hours education. 3 credits; 1st semester
(Adams)

222a—THESIS COURSE. This course is intended to acquaint the student with the various techniques of research and to aid him in methods of attack on his own particular research problems.

Prerequisites: Graduate standing and 12 hours education. 3 credits; 1st semester
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222b—THESIS COURSE. Continuation of 222a.

Prerequisite: Graduate standing 3 credits; 2nd semester
and 12 hours education. (Taylor)

227a—PRINCIPLES OF CURRICULUM CONSTRUCTION.* A survey of modern curriculum making as carried on in progressive city school systems, laboratory schools and state school systems. Also an intensive study of the principles underlying curriculum revision.

Prerequisites: Graduate standing and 3 credits; 1st semester
teaching experience. (Adams)

227b—TECHNIQUES IN CURRICULUM CONSTRUCTION. This course has to do with the techniques being used to determine content of courses of study.

Prerequisites: Graduate standing, 3 credits; 2nd semester
teaching experience, (Adams)
9 hours education.

230—PROBLEMS OF EDUCATIONAL SOCIOLOGY. An advanced course in the application of sociology to the educational field.

Prerequisites: Graduate standing 3 credits; 2nd semester
and 9 hours education, (Adams)
including Education 114.

234—PROBLEMS OF CURRICULUM MAKING. This course deals with problems of curriculum making on the various educational levels. The problems have to do with content of material, grade placement of materials and objectives to be reached through the materials.

Prerequisites: Graduate standing 3 credits; 1st semester
and teaching (Adams)
experience.

SECONDARY EDUCATION

105—THE TECHNIQUE OF TEACHING. Deals with laboratory methods of instruction. Units: fundamental processes, control, operation, administration.

Prerequisites: Ed. 101. 3 credits; both semesters (Ligon)

149—EXTRA CURRICULAR ACTIVITIES. Underlying principles, faculty activities, home room activities, student council, clubs, athletics, publications, dramatics, honor societies, commencements.

Prerequisite: Junior standing. 3 credits

153—DIRECTED TEACHING IN ENGLISH. For seniors. Topics: course of study, minimum essentials, materials, methods, testing. Part I, languages and composition; Part II, literature. Observation and practice five hours, conference two hours.

Prerequisites: Ed. 101, 122 5 credits; both semesters
18 hours of English. (Anderson)

*Not offered either semester 1931-32.

177b—DIRECTED TEACHING IN MUSIC. A continuation of Education 177a.

Prerequisites: *Ed.* 101, 122. 3 credits; 2nd semester
(Potter)

226—THE JUNIOR HIGH SCHOOL. Units: The junior high school idea; peculiar functions of; program of studies; methods of teaching; the staff; administration.

Prerequisite: *Ed.* 101. 3 credits; 1st semester
(Ligon)

250—THE SENIOR HIGH SCHOOL. History of early secondary schools, relation to elementary and higher education, foreign secondary schools, growth to 1890, report of committee of ten, reorganization 1911, staff, curriculum, allied activities.

Prerequisite: *Ed.* 109. 3 credits; 2nd semester
(Ligon)

307—SPECIAL PROBLEMS IN SECONDARY EDUCATION. This course is designed for students who want to work on special problems.

Prerequisite: *Master's degree* 3 credits; both semesters
or equivalent. (Ligon)

VII. ENGINEERING

CIVIL ENGINEERING

Prerequisites for graduate work: Students desiring to take any of the following courses should have a thorough working knowledge of chemistry, physics and mathematics. These courses are offered to graduates and to such practicing engineers as may be qualified to pursue them. For major work, a candidate must hold a baccalaureate degree in civil engineering.

201a—CONSTRUCTION. Advanced work in plain and reinforced concrete, theory, design and experimental work. Lectures, reading and design twenty hours a week.

10 credits; 1st semester (Terrell)

201b—CONSTRUCTION. Continuation of 201a. Lectures, reading and designing twenty hours a week.

10 credits; 2nd semester (Terrell)

231a—HIGHWAY ENGINEERING. Advanced course designed for graduate civil engineers who wish to enter the field of highway engineering. Road laws, organization of highway departments, traffic, cost contracts, and specifications, laboratory investigations on all kinds of surfacing materials. Structures, their design and maintenance. Twenty-four hours a week.

12 credits; 1st semester (Terrell)

231b—HIGHWAY ENGINEERING. Continuation of 231a. Twenty-four hours a week.

12 credits; 2nd semester (Terrell)

241a—RAILROAD ENGINEERING. Advanced course in location, construction, maintenance, economical selection of lines, grade reductions, cost of operation, valuation, structures and their maintenance. Fifteen hours a week.

7 credits; 1st semester (Newman)

241b—RAILROAD ENGINEERING. Continuation of 241a. Fifteen hours a week.

7 credits; 2nd semester (Newman)

251a—SANITARY ENGINEERING. Advanced course in sewer design, construction and maintenance. Design, maintenance, and operation of sewage disposal plants. Water supply and water works design, construction and maintenance. (Courses in water analysis, sewerage analysis and bacteriology should be taken in connection with this course.) Twenty hours a week.

10 credits; 1st semester (Terrell)

251b—SANITARY ENGINEERING. Continuation of 251a. Twenty hours a week.

10 credits; 2nd semester (Terrell)

271a—STRUCTURAL ENGINEERING. Advanced course in theory of structures, mill buildings, railroad and highway bridges. The use of influence diagrams and detail drawings. Eighteen hours a week.

9 credits; 1st semester (Carrel)

271b—STRUCTURAL ENGINEERING. Continuation of 271a. Eighteen hours a week.

9 credits; 2nd semester (Carrel)

ELECTRICAL ENGINEERING

201a—ADVANCED ALTERNATING CURRENTS. An intensive study of the fundamental theory of alternating current phenomena and machines. Designs of machines and layouts for central stations and distribution systems are made. Lectures and recitations five hours, laboratory ten hours, and drawing ten hours a week.

Prerequisite: B. S. in Electrical 12 credits; 1st semester

Engineering or its equivalent. (Freeman)

201b—ADVANCED ALTERNATING CURRENTS. A continuation of course 201a. Lectures and recitations five hours; laboratory ten hours, and drawing ten hours a week.

Prerequisite: E. E. 201a. 12 credits; 2nd semester

(Freeman)

202—TELEPHONE ENGINEERING. A study of the theory and operation of modern telephone exchanges. Layouts and designs are made to meet different assumed conditions. Lectures and recitations five hours; laboratory ten hours, and drawing ten hours a week.

Prerequisite: B. S. in Electrical 12 credits; 1st semester

Engineering or its equivalent. (Freeman)

203—ILLUMINATION. A study of the principles underlying both exterior and interior illumination. The characteristics of the various commercial illuminants are compared and layouts for lighting systems are made. Lectures and recitations five hours; laboratory ten hours and drawing ten hours a week.

Prerequisite: B. S. in Electrical 12 credits; 2nd semester

Engineering or its equivalent. (Freeman)

MECHANICAL ENGINEERING

201a—AUTOMOTIVE ENGINEERING. An advanced course in the essentials of motor vehicle design, construction and operation. Recitation five hours a week; design ten hours a week, and laboratory fifteen hours a week.

Prerequisite: B. S. in Mech. Eng. 12 credits; 1st semester

or its equivalent. (C. H. Anderson)

201b—AUTOMOTIVE ENGINEERING. A continuation of M. E. 201a. Recitation five hours a week; design ten hours a week; laboratory fifteen hours a week.

Prerequisite: M. E. 201a. 12 credits; 2nd semester
(C. H. Anderson)

202a—POWER PLANTS. Advanced work in the design, selection and operation of power plant equipment. Usually involves a research problem as the major topic for study.

Prerequisite: B. S. in Mech. Eng. 12 credits; 1st semester
or its equivalent. (O'Bannon)

202b—POWER PLANTS. Continuation of M. E. 202a.

Prerequisite: M. E. 202a. 12 credits; 2nd semester
(O'Bannon)

203a—HEATING AND VENTILATION. Advanced work in the design, selection and operation of heating and ventilating equipment, usually with special emphasis on a particular research problem.

Prerequisite: B. S. in Mech. Eng. 12 credits; 1st semester
or its equivalent. (O'Bannon)

203b—HEATING AND VENTILATION. Continuation of M. E. 203a.

Prerequisite: M. E. 203a. 12 credits; 2nd semester
(O'Bannon)

METALLURGICAL ENGINEERING

101—ELEMENTS OF OIL SHALE ENGINEERING. Comprises an elementary study of the destructive distillation of oil shales for the production of oil, gas and by-products, together with the history of the oil shale industry and the economic factors upon which the future development of the industry depends.

Prerequisites: Phy. 3b, Chem. 10. 2 credits; 1st semester
(Crouse)

105—ADVANCED METALLURGY OF IRON AND STEEL. A consideration of the metallurgy of iron and steel from the standpoint of the calculations involved in figuring charges, slags, heat efficiency and similar factors of a metallurgist's work.

Prerequisite: Met. 114 2½ credits; 1st half,
2nd semester (Crouse)

113—PYROMETRY. A laboratory course in the heat treatment of steel including a study of the various methods used in the measuring of high temperatures. Laboratory four hours a week.

Prerequisites: Phys. 3b, 6; 1 credit; 1st half,
Met. 22. 2nd semester (Crouse)

114—METALLURGICAL CALCULATIONS. Comprises a study of the calculations involved in the practical application of the prin-

principles of general metallurgy and the metallurgy of non-ferrous metals such as copper, lead, zinc and aluminum.

Prerequisites: *Met.* 4, 19; 3 credits; 1st semester
Phys. 3b, 6; (Crouse)
Chem. 10.

205—HEAT TREATMENT OF METALS AND ALLOYS. The various factors involved in the heat treatment of metals and alloys are considered with special emphasis to the particular metal or alloy on which the student wishes to specialize. Reference reading and laboratory work are emphasized. Lectures and recitations two hours a week; laboratory eight hours a week.

Prerequisite: *B. S. in Met. Eng.* 6 credits; 1st semester
or its equivalent. (Crouse)

206—OIL SHALE TECHNOLOGY. Involving a detailed study of the principles and methods used in the production of oil from shales. Reference reading and laboratory work emphasized. It is desirable that the student have some knowledge of physical and organic chemistry. Lectures and recitations three hours a week; laboratory twelve hours a week.

Prerequisites: *Chem.* 10; *Phys.* 3b. 9 credits; 2nd semester
(Crouse)

207—TECHNOLOGY OF ALLOYS. A study of the principles and practice used in the production of alloys of various kinds with special stress on any particular group of alloys that the student may choose. Reference reading and laboratory work are emphasized. Lectures and recitations two hours a week; laboratory eight hours a week.

Prerequisite: *B. S. in Met. Eng.* 6 credits; 1st semester
or its equivalent. (Crouse)

208—ADVANCED METALLOGRAPHY. A detailed study of the structure of metals and alloys together with their preparation for examination under the microscope for such examination. Reference reading and laboratory work are emphasized. Lectures and recitations two hours a week; laboratory eight hours a week.

Prerequisite: *B. S. in Met. Eng.* 6 credits; 2nd semester
or its equivalent. (Crouse)

209—ADVANCED ORE DRESSING. A study of the technique of ore dressing plant design and an opportunity for original research in concentration problems. Lectures and recitations two hours a week, laboratory eight hours a week.

Prerequisite: *B. S. in Met. Eng.* 6 credits; 1st semester
or its equivalent. (Crouse)

210—TECHNOLOGY OF LOW TEMPERATURE CARBONIZATION. A detailed study of the principles and practices employed in the low temperature carbonization of carbonaceous materials such as bituminous and channel coals. Reference reading and laboratory

work emphasized. Lectures and recitations two hours a week, laboratory eight hours a week.

Prerequisite: B. S. in Met. Eng. 6 credits; 2nd semester
or its equivalent. (Crouse)

MINING ENGINEERING

203—MINE ORGANIZATION. A detailed study of the structure and function of a mining enterprise from both the financial and engineering standpoints.

Prerequisite: B. S. in Min. Eng. 3 credits; 1st semester
or its equivalent. (Emrath)

206—EXPLOSIVE ENGINEERING. A study of the principles involved in the use of explosives in large-scale mining and quarrying practice.

Prerequisite: B. S. in Min. Eng. 2 credits; 2nd semester
or its equivalent. (Emrath)

207—ADVANCED PROSPECTING. A detailed study of the principles involved in geophysical investigation of the mineral of the earth's crust.

Prerequisite: B. S. in Min. Eng. 2 credits; 1st semester
or its equivalent. (Emrath)

208—COAL DUST INVESTIGATION. Research work. The design of a laboratory scale gallery for the investigation of the explosive qualities of native bituminous coals.

Prerequisite: B. S. in Min. Eng. 4 credits; 2nd semester
or its equivalent. (Emrath)

209—ADVANCED MINE ENGINEERING. A detailed study of the procedure and methods used, in collecting and recording data and engineering information, involved in the systematic development and exploitation of a mining property. Lectures and recitations three hours a week, drawing and mapping eight hours a week.

Prerequisite: B. S. in Min. Eng. 7 credits; 1st semester
or its equivalent. (Emrath)

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VIII. FINE ARTS

ART

112—ADVANCED COMPOSITION. A study of pictorial organization for advanced students. Six studio hours a week.

Prerequisites: 12 credits in *Drawing* 2 credits; 1st semester
and *Painting*, 4 credits in *Design*, (Fisk)
and approval of Department
Head.

112b—ADVANCED COMPOSITION. Continuation of 112a. One major problem will be carried out in this course. Six studio hours a week.

2 credits; 2nd semester (Fisk)

115a—INDEPENDENT WORK. Individual work in Painting, Illustration or Applied Design. Open only to advanced students upon approval of Department Head.

3 credits; 1st semester
(Rannells, Fisk)

115b—INDEPENDENT WORK. Continuation of 115a.

3 credits; 2nd semester
(Rannells, Fisk)

116a—ETCHING. This is a course in the process of etching open only to advanced students whose work merits reproduction. Eight studio hours and weekly problems.

Prerequisites: 12 credits in *Drawing* 4 credits; 1st semester
and *Painting*, 4 credits in *Design*, (Fisk)
and approval of Department
Head.

116b—ETCHING. Continuation of 116a. Eight studio hours and weekly problems.

4 credits; 2nd semester (Fisk)

140—SURVEY OF ART. This course is recommended to those students and graduates of the upper division who have not scheduled the regular undergraduate History of Art courses. Graphic and plastic arts are studied analytically for bases of judgment and appreciation. Lectures, conferences and reports. Three hours a week.

3 credits; both semesters
(Rannells, Lowry)

IX. LAW

The following courses in the College of Law are accepted as graduate work when taken by students majoring in Political Science, Economics, Sociology, Commerce or other fields in which such courses are recommended by the major professors:

105—AGENCY. Keedy's Cases. Nature of the relation, competency of parties, appointment, delegation of authority, liabilities of principal and of agent, ratification, undisclosed principal, termination.
3 credits; 2nd semester (Moreland)

106a-106b—PLEADING I and II. Sunderland's Cases. The Anglo-American legal system, common law forms of actions, common law pleading, modifications thereof by the codes and equity pleading.
3 credits; 1st and 2nd semesters (Randall)

164—CONFLICT OF LAWS. Lorenzen's Cases. Domicile, jurisdiction of courts, procedure, contracts, property, movable and immovable, family law, divorce, inheritance, foreign administration, foreign judgments.
3 credits; 2nd semester (Black)

161a-161b—CONSTITUTIONAL LAW I and II. Evans' Cases. Division of powers, the dual system of government, scope of federal powers, taxation, money, banking, postal, military and treaty powers, regulation of commerce, the impairment of contracts, jurisdiction of federal courts, the police power, due process of law, equal protection of the law.
4 credits; 1st and 2nd semesters. (Black)

101a-101b—CONTRACTS I and II. Williston's Cases. Formation, parties, consideration, formalities, contracts for the benefit of third persons, assignments, joint obligations, conditions and implied conditions, impossibility.
6 credits; 1st and 2nd semesters (Murray)

107a-107b—CRIMINAL LAW I and II. Sayre's Cases. Nature of the crime problem, the theory of punishment, procedure, characteristics of particular crimes.
2 credits; 1st and 2nd semesters (Moreland)

121a-121b—EQUITY I and II. Cook's Cases, Volumes I and II. Methods of enforcing and legal effects of equitable decrees, relation of common law and equity, powers of courts of equity, inadequacy of remedy at law, interests protected, balancing the equities. Specific performance, affirmative and negative contracts, mutuality consideration, conditions, marketable title, laches and the Statute of Limitations, partial performance with compensation, the Statute of Frauds,

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equitable conversion, equitable servitudes, misrepresentations, mistake, hardship, plaintiff's conduct as a defense.

6 credits; 1st and 2nd semesters (Moreland)

124a-124b—EVIDENCE I and II. Hinton's Cases. Court and jury, presumptions and burden of proof, admission and exclusion of evidence, competency, privileges, examination of witnesses, hearsay rule and its exceptions, dying declarations, admissions, and confessions; statements against interest, regular and official entries, reputation, statements of pedigree, spontaneous statements, the opinion rule, circumstantial evidence, best evidence rule, parole evidence rule.

4 credits; 1st and 2nd semesters (Randall)

123—NEGOTIABLE INSTRUMENTS. Bills and Notes. Smith and Moore's Cases. Formal requisites of negotiability, acceptance, delivery, endorsement, rights and duties of holder, liability of maker, acceptor, drawer and endorser.

3 credits; 1st semester (Roberts)

125a-125b—PRACTICE COURT I and II. Selected Cases. Presentation and argument of cases by members of the class before the trial court, proceedings in review before appellate court.

2 credits; 1st and 2nd semesters (Randall)

160a-160b—PRIVATE CORPORATIONS I and II. Richard's Cases (2nd edition). Characteristics, formation, powers and liabilities, rights of stockholders' directors, legislative control, dissolution, creditors.

4 credits; 1st and 2nd semesters (Evans)

104a—PROPERTY I (Personal Property). Warren's Cases. The nature of possession, separation of the custody or use from the possession, bailments, finders, bona fide purchase, judicial sale, Statute of Limitations, accession, tortious confusion, gifts, sale and bailments, liens and pledges, conversion.

3 credits; 1st semester (Roberts)

104b—PROPERTY II. Introduction to Real Property. Warren's Cases. Estates, common law method of creating and conveying estates, Statute of Uses, rights incident to the ownership of land, fixtures, easements, waste, emblements, licenses and covenants running with the land.

3 credits; 2nd semester (Roberts)

122—PROPERTY III. Titles and Conveyancing. Warren's Cases. Adverse possession, prescription, accretion, execution and delivery of deeds, boundaries, exception and reservation, easements by implication, covenants of title, estoppel, priorities.

3 credits; 1st semester (Murray)

162—PROPERTY IV. Future Interests. Kale's Cases on Future Interests. Rights of entry, possibilities of reverter, reversions, remain-

ders, executory limitations, limitations to classes, powers, rule against perpetuities and illegal restraints and conditions.

3 credits; 2nd semester (Roberts)

166—SALES. Williston's Cases. Subject matter of sale, executory and executed sales, bills of lading, fraud, liens and their enforcement, stoppage in transitu, inspection, warranty and remedies for breach of warranty, Statute of Frauds.

3 credits; 2nd semester (Murray)

102a-102b—TORTS I and II. Ames and Smith's Cases (Pound's Edition). Assault and battery, false imprisonment, negligence and contributory negligence, unintended non-negligent interference, deceit, malicious prosecution, defamation, interference with privacy, interference with advantageous relations.

6 credits; 1st and 2nd semesters (Black)

120a-120b—TRIAL PROCEDURE I and II. Sunderland's Cases. The jurisdiction of courts, process and appearance, proceedings based on the record, incidents of jury trial, instructions, argument of counsel, verdicts, judgments, new trials, appellate practice, review.

2 credits; 1st and 2nd semesters (Randall)

165—TRUSTS. Scott's Cases. The nature of a trust as compared with other relations, the creation and elements of a trust including charitable trusts, resulting and constructive trusts, remedies of the cestui que trust, the transfer by the cestui to trust, who are bound, liabilities of the trustee, investment of funds, termination of trusts.

4 credits; 1st semester (Evans)

163—WILLS AND THE ADMINISTRATION OF ESTATES. Warren's Cases. Testamentary capacity, the making, revocation, republication and revival of wills, lapsed and void devises and legacies, jurisdiction of court to grant letters testamentary and of administration, the interests, contracts and transfers of the personal representative, inventory, inheritance tax, payment of debts, legacies and distributive shares.

3 credits; 2nd semester (Evans)

167—ADMINISTRATIVE LAW. Freund's Cases in Administrative Law, 2nd edition. Administrative power and action, administrative discretion, notice of hearing, summary action, relief against administrative action, mandamus, certiorari, and other extraordinary legal remedies, equitable relief, jurisdictional limitations, and administrative finality.

3 credits; 1st semester (Black)

168—ADMINISTRATION OF THE CRIMINAL LAW. Keedy's Cases on the Administration of Criminal Law. Police officers, arrest, investigation of crime, the magistrate, indictment and information, jurisdiction of the trial court, venue, interstate rendition, arraignment, the

ment, the
verdict, n

146—
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petitionin
preferenc

154—
consequer
pecuniary
value, in
eminent c

148—
divorce, p
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145—
contract,
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140—
national
sentatives

143—
equitable
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marshall

149—
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power, zo
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152—
oil and g
drilling c
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141—
formaliti
duties, in

G. S

ment, the petit jury, the prosecuting attorney, counsel for defense, the verdict, methods of review.

2 credits; 1st semester (Moreland)

146—BANKRUPTCY. Holdbrook and Aigler's Cases. Relation of state and federal governments in matters of bankruptcy, the bankrupt, petitioning creditor, acts of bankruptcy, the trustee, provable claims, preferences and discharge.

2 credits; summer session (Moreland)

154—DAMAGES. Beale's Cases. Nature of damages, avoidable consequences, counsel fees, certainty, compensation, damages for non-pecuniary injuries, pain, inconvenience, mental suffering, aggravation value, interest, special rules in certain actions, damages for death, eminent domain.

2 credits; summer session (Evans)

148—DOMESTIC RELATIONS. McCurdy's Cases. Marriage and divorce, property interests of husband and wife, mutual obligations of the spouses, parent and child.

2 credits; summer session (Moreland)

145—INSURANCE. Woodruff's Cases. Insurable interests, the contract, concealment, representations and warranties, implied conditions, waiver and estoppel, construction.

2 credits; 2nd semester (Murray)

140—INTERNATIONAL LAW. Evans' Cases. Sources, international persons, jurisdiction and state sovereignty, diplomatic representatives, belligerency, prize law, blockade, neutrality.

2 credits; 2nd semester (McVey)

143—MORTGAGES. Campbell's Cases. Elements of the mortgage, equitable mortgages, redemption, foreclosure, statutory redemption after sale, accounting, discharge, priorities, assignment and marshalling.

2 credits; 2nd semester (Evans)

149—MUNICIPAL CORPORATIONS. Tooke's Cases. Incorporation and existence, municipal officers, revenue, indebtedness, police power, zoning, liability for injuries received upon contracts implied in law and on implied contracts.

2 credits; 1st semester (Black)

152—OIL AND GAS. Kulp's Cases. Nature of landlord's right in oil and gas, interference, measures of damages, the oil and gas lease, drilling operations, storage and use of oil and gas, pipe line and transportation companies, taxation.

2 credits; summer session (Moreland)

141—PARTNERSHIP. Crane and Magruder's Cases. Elements, formalities of organization, powers of partners, partnership obligations, duties, insolvency and bankruptcy, dissolution, accounting, estoppel.

3 credits; 1st semester (Roberts)

150—PUBLIC UTILITIES. Robinson's Cases. Nature of public service, public employment and profession, withdrawal, duty to public, refusing service, commencement of service, management, liability for default, termination of service, regulation of charges, discrimination.
3 credits; 2nd semester (Murray)

147—QUASI-CONTRACTS. Thurston's Cases. Nature of quasi-contracts, benefits conferred by mistake, benefits conferred where further performance is impossible or contract is illegal or unenforceable, benefits conferred without contract or under compulsion.
2 credits; summer session (Randall)

151—SURETYSHIP. Ames' Cases. Nature of suretyship, Statute of Frauds, surety's defenses, subrogation, indemnity, contribution and exoneration, creditor's right to surety's remedies.
3 credits; 1st semester (Murray)

153—TAXATION. Casebook to be selected. Jurisdiction, public purpose, classification, exemptions, taxation of governmental agencies, direct and indirect taxes.
3 credits; 1st semester (Black)

144—USE OF LAW BOOKS. Selected problems, Cooley's Brief Making and Use of Law Books. How to find the law, use of digests, reports, text-books, and encyclopedias.
2 credits; 1st semester (Roberts)

142—WORKMEN'S COMPENSATION. Selected Cases. The servant at common law, constitutionality of compensation acts, Kentucky and other compensation acts, abolishment of common law defenses, class legislation, police power, compulsory acts, "personal injury by accident", sunstroke, pre-existing diseases, traumatic injuries, occupational diseases, the locus of the accident, horseplay, an intensive study of the provisions of the Kentucky Act.
2 credits; 1st semester (Moreland)

169—LAW OF THE AIR. Selected cases and readings. The course will deal principally with aircraft law as follows: proprietary rights in air space at common law, federal and state statutes, tort liability, criminal responsibility, aircraft as common carriers, the rules of the road, international aspects of air law, legislation for future development of air law.
2 credits; 1st semester (Randall)

Luther M.
William J.
Clyde Bro.
Hettie Be.
Ellen Scot

Lloyd B.
James B.
Hal Edwa
Samuel S
Samuel E
Liston L
Effe Cox
George Pe
Orba For
David Ma

Oscar Fit

Samuel S

Fannie S

GRADUATE STUDENTS

FELLOWS

Luther Martin Ambrose	Berea
William Jesse Baird	Berea
Clyde Brooks Crawley	Lexington
Hettie Belle Hughes	Somerset
Ellen Scott	Paris

SCHOLARS

Lloyd B. Averett	Lexington
James B. Holtzclaw	Stanford
Hal Edward Houston	Murray
Samuel Shepard Jones	Georgetown
Samuel Estil Kendrick	Frenchburg
Liston Lloyd Rudolph	Lexington
Effie Cox Starns	Lexington
George Perry Summers	Glendale
Orba Forest Traylor	Providence
David Marion Young	Lexington

OFFICERS OF GRADUATE CLUB

PRESIDENT

Oscar Fitzgerald Galloway	Lexington
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VICE PRESIDENT

Samuel Shepard Jones	Georgetown
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SECRETARY

Fannie Sue Johnson	Nicholasville
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REGISTER OF GRADUATE STUDENTS 1930-1931

Name	Major	Address
Abner, James Robert	Political Science	Lancaster
Adams, Henry A.	Education	Owenton
Adams, Mary Christian	Animal Industry	Brighton
Adams, Ora L.	Education	Harrodsburg
Adkins, Robert T., Jr.	English	Mt. Olivet
Allen, H. Edwin	Chemistry	Somerset
Allender, Eleanor D.	Education	Lexington
Allison, E. E.	Education	Minerva
Allison, Martha Wade	Home Economics	Delton, Va.
Allison, Nathan B.	Mathematics	Columbia
Ambrose, Luther Martin	Education	Berea
Anderson, Gertrude F.	Ancient Languages	Edmonton
Archer, Robbie	English	Athens, W. Va.
Armstrong, Watson A.	Education	Flemingsburg
Arnold, Andrew J.	Political Science	Lexington
Arnold, Marguerite G.	Education	Louisville
Arterberry, Terry L.	Education	Tompkinsville
Averett, Lloyd B.	Commerce	Lexington
Averitt, Paul	Geology	Lexington
Bailey, Edgar W.	Education	Ashland
Bailey, James Yost	Animal Industry	Adairville
Bailey, Virgil C.	Education	Parkersburg, W. Va.
Baird, William Jesse	Education	Berea
Baker, Bessie Etta	English	Nicholasville
Baker, Lawrence M.	Psychology	Manchester
Baker, Minnie Clay	Political Science	Lexington
Baker, Robert H.	Chemistry	Central City
Baker, W. Maurice	Education	Lexington
Baker, William M.	Chemistry	Central City
Barnett, Van Allen	Physics	Murray
Baxter, William E.	Mathematics	Bloomfield
Beck, Josephine W.	Education	Owingsville
Bell, Sallie Paul	Education	Cynthiana
Bennett, Henry, Jr.	English	Clio, S. Carolina
Berger, Rose Adelaide	Education	Falmouth
Berlin, Dorothy E.	Home Economics	Jenkins
Bernard, Cicero H.	Physics	Lexington
Berry, Armon C.	Animal Industry	Simpsonsville
Berryman, Robert	Education	Winchester
Bishop, David Kirby	Education	Louisville
Blakey, Lula Beatty	English	Beattyville

Name	Major	Address
Bland, Anna Pope	Home Economics	Shelbyville
Bleidt, Mrs. Helen M.	History	Lexington
Blom, John William	Romance Languages	Covington
Boggess, Clara Lee	Chemistry	Greenville
Bogie, Bernie	Education	Lexington
Boling, James P.	Education	Danville
Bond, Jessie L.	History	Humboldt, Tenn.
Bowlds, Fleming J.	Education	Owensboro
Bowman, Mary Withers	Education	Lexington
Boyd, Hyland	Education	Farmington
Boyd, Thomas David	Commerce	Louisville
Boyd, Virginia D.	English	Lexington
Bradbury, Robert L.	Economics	Butler
Braden, Norman Adelbert	Zoology	Lexington
Bradley, Avanelle	English	Morehead
Breitenhirt, Boynton B.	Psychology	Charleston, W. Va.
Brown, Georgia T.	Ancient Lang.	Independence, Kan.
Brown, Harlan R.	Education	Ashland
Brown, Lafayette M.	History	Lawton
Brown, Linnie	Education	Murray
Brown, Lois Perry	Education	Lexington
Brown, Mrs. Lorena B.	Education	Beaver Dam
Brown, R. P.	Education	Beaver Dam
Brown, Raymond Lee	Zoology	Beaver Dam
Brown, Robert Lee	Education	Corbin
Brumback, Hattie M.	Ancient Languages	Erlanger
Bryant, Howard R.	Commerce	Lexington
Bryant, Thomson R.	Economics	Lexington
Buchanan, Margaret Dye	Education	Lexington
Bullock, Robert C.	Mathematics	Shelby, Miss.
Bullock, Ruth	English	Lexington
Bunch, Bamma	English	Owensboro
Bunch, Pattie D.	Education	Winchester
Burkhead, Carlos E.	Education	Bradfordville
Burnette, H. C.	Education	Nicholasville
Burrows, Justus G.	Chemistry	Stamping Ground
Burton, W. E.	Education	Corbin
Bywater, James H.	Animal Industry	Ashland
Calkins, Hugh S.	Education	Lexington
Cammack, James W., Jr.	Education	Owenton
Campbell, Elizabeth R.	Home Economics	Myers
Campbell, W. A.	Animal Industry	Lexington
Card, Hugh Cleveland	Engineering	Lewisport
Carden, Robert Winston	Bacteriology	Munfordville
Carman, Armiel	Education	Lexington
Carnes, Hal L.	Mathematics	Shelby, Miss.

Name	Major	Address
Carpenter, Katie D.	Education	Harrodsburg
Carroll, Josephine	English	Burgin
Carroll, Richard B.	Education	Maysville
Caruthers, Mrs. Amelia	Education	Knoxville, Tenn.
Caswell, Durward B.	Education	Upton
Caudill, Mrs. Edith R.	Education	Grant
Cawood, Nancy Minerva	English	Winchester
Cawood, Thelma Gay	Mathematics	Winchester
Chamberlain, Leo M.	Education	Lexington
Chambers, Wilbur W.	Mathematics	Lexington
Chatfield, Anna W.	Botany	Ashland
Chavis, Alex	Education	Jefferson City, Tenn.
Chen, Keh-Ching	Psychology	Luchowfu, China
Clark, Ralph W.	History	Center
Clay, Elizabeth Starling	Philosophy	Lexington
Clay, William M.	Zoology	Myers
Cleveland, Forrest F.	Chemistry	Lexington
Cleveland, Ruth E.	Education	Lexington
Clifton, Louis	Education	Lexington
Coates, Thomas Henry	Economics	Richmond
Cobb, Emerson G.	Chemistry	Barbourville
Cocanougher, Hubert A.	Education	Perryville
Cochran, Mrs. L. D.	Education	Covington
Cochran, Thomas C.	Mathematics	Marion
Coffman, Ben	History	Slaughters
Coleman, Elsie Elizabeth	Political Science	Stanford
Colley, Sunshine	Home Economics	Farmington
Collins, Jimmie Martha	Education	Lexington
Collis, Mrs. Robert A.	Home Economics	Lexington
Combs, Margaret E.	English	Louisville
Congleton, Duke Wells	Animal Industry	Taylorsville
Conner, Eloise K.	History	Lexington
Conroy, Katherine	Education	Mt. Sterling
Cook, Frances A.	English	Lexington
Cook, Lucile E.	Psychology	Lexington
Coop, Walter Farris	Education	Burnside
Cooper, John R.	Education	Calhoun
Cooper, Van Buren	History	Caroleen, N. C.
Cox, John K.	History	Burgin
Cox, Lloyd Bryant	Education	Spurlington
Cox, Thelma	Education	Wilmore
Cracraft, Lucy Jane	Ancient Languages	Sheybyville
Cravens, Robert Young	Marketing	Livia
Cravens, Mrs. Virginia	Education	Hopkinsville
Crawley, Clyde B.	Physics	Lexington
Crenshaw, Cecyl	Education	Herndon

Name
Crick, Her
Crowe, Rol
Crutcher,
Culbertson
Cummins,
Cummins,
Cunov, Ha
Curry, B.
Curry, L.
Daily, Mar
Darnaby, A
Daugherty,
Davenport,
Davidson,
Davis, Cha
Davis, Edw
Davis, Gra
Davis, Hor
Davis, Joh
Davis, Kat
Davis, Mar
Day, Mrs.
Deacon, Ja
Deakins, C
Deakins, M
DeHaven,
Denney, Sa
Devarey, F
Deweese, F
Dickey, MR
Dillon, Che
Dinkle, Pa
Dishman, C
Ditto, Leol
Dodd, Anna
Dotson, Jo
Dotson, Jo
Dowell, Na
Doyle, Mar
Drake, Loie
Dudley, Ma
Duncan, Sa
Dunne, Cat
Dykes, Nor
Easley, W
Eckler, Ra

Name	Major	Address
Crick, Herbert W.	Education	White Plains
Crowe, Robert Scott	History	Guerrant
Crutcher, Frank D.	Education	Versailles
Culbertson, Raymond E.	Agronomy	Lexington
Cummins, Claude E.	Education	Lexington
Cummins, Squire R.	Education	Crab Orchard
Cunov, Harvey F.	Bacteriology	Detroit, Mich.
Curry, B. L.	English	Bowling Green
Curry, L. C.	Education	Bowling Green
Daily, Mary Bruce	History	Lexington
Darnaby, Ansel Nicholas	Chemistry	Clintonville
Daugherty, Mrs. Ray	English	Paris
Davenport, K. Elizabeth	Education	Lexington
Davidson, Thomas Clyde	Education	Jackson
Davis, Charles Glenn	Education	London
Davis, Edward J.	Chemistry	Melber
Davis, Grace A.	Education	Lexington
Davis, Horace L.	Education	Mt. Vernon, Ark.
Davis, John Stark	Education	Crestwood
Davis, Katherine Lucile	Education	Lexington
Davis, Marion I.	Physiology	Lexington
Day, Mrs. Elizabeth	Education	Aberdeen, Ohio
Deacon, James Murrell	Education	Winchester
Deakins, Clarence E.	Education	Decatur, Ill.
Deakins, Mrs. Margaret	Home Economics	Decatur, Ill.
DeHaven, William D.	History	Sturgis
Denney, Sam J.	English	Betsey
Devarey, Evelyne	English	Winchester
Deweese, Elizabeth H.	Education	Lexington
Dickey, Mrs. Katherine B.	Education	Lexington
Dillon, Chester C.	Education	Georgetown
Dinkle, Pansy Pence	English	Frankfort
Dishman, Catherine	Education	Barbourville
Ditto, Leola	English	Louisville
Dodd, Anna Elizabeth	French	Lexington
Dotson, John A.	Education	Benham
Dotson, John Henry	Animal Industry	Mayslick
Dowell, Naomi Elizabeth	Home Economics	Russell Springs
Doyle, Mary Katherine	Home Economics	Paris
Drake, Lois B.	History	Danville
Dudley, Mary Susan	French	Georgetown
Duncan, Sara Elizabeth	Education	Lexington
Dunne, Catherine H.	French	Lexington
Dykes, Norma Katherine	French	Richmond
Easley, Willie Kate	Home Economics	Stamping Ground
Eckler, Ralph Clifton	Education	Dry Ridge

Name	Major	Address
Eddleman, James C.	Education	Crittenden
Elkin, Mrs. Maida W.	English	Indianapolis, Ind.
Elkins, John Edward	Education	Ashland
Elliott, Julian Nathan	Political Science	Lancaster
Elliott, Margaret McClure	Education	Lancaster
Ellis, Hugh B.	Commerce	Lexington
Ellis, Justus L.	Education	Almo
England, G. H.	Animal Industry	Milton
Engle, Daisy Deanne	History	London
Engle, Fred A.	Education	Richmond
Ennis, James M.	Political Science	Park
Evans, Douglas V.	Education	Edinburg, Va.
Evans, Katherine M.	Education	Beattyville
Evans, Rob	English	Lexington
Evans, Thelma B.	Education	Lexington
Ewan, Mrs. Julia R.	Education	Lexington
Farris, Elgan Brooks	Engineering	Lexington
Farwell, Genevieve	Bacteriology	Lexington
Feedback, Tillie H.	Economics	Carlisle
Ferguson, William C.	Engineering	Cartersville, Ga.
Fields, Essie Lloyd	English	Maysville
Filson, Malcolm H.	Chemistry	Lexington
Fincel, Neville	Education	Frankfort
Fischer, Mrs. Lydia R.	Mathematics	Lexington
Fisher, Jennie D.	Home Economics	Paris
Fitch, Norma C.	Commerce	Lexington
Fleming, Frances U.	History	Louisville
Fogle, Ruby Lee	English	Yosemite
Foreman, Catharine	English	Georgetown
Forsee, William T., Jr.	Chemistry	Owenton
Forsythe, Katharine	Psychology	Lexington
Foster, Nettie B.	Education	Lexington
Fowler, Sudie B.	Education	Cynthiana
Foy, Samuel V.	Education	Farmington
Fraas, Willie Ann	Education	Lexington
Franklin, Marcus N.	Commerce	Lexington
Franklin, Mary K.	History	Waddy
Fredrickson, Mary J.	Education	Paris
French, Irene	Education	Owensboro
Frisby, Monta V.	Education	Liberty Road
Fryer, Erceel Ray	Animal Industry	Falmouth
Funk, George Barclay	Education	Iowa, La.
Gabbard, J. L.	Chemistry	Lexington
Gable, Kathryn E.	Education	Burnside
Gaffin, Otho R.	Education	Mackville
Galbraith, Shirley F.	Education	Brooksville

Name
 Galliher, L
 Galloway,
 Gard, Paul
 Gardner, I
 Gardner, N
 Garnett, R
 Garnett, T
 Garrett, Pa
 Gary, Well
 Garwood, T
 Gaugh, Ma
 Gentry, Ve
 Gibson, H.
 Gibson, W.
 Gifford, Ch
 Gilb, Elme
 Gilbert, Ba
 Gill, Anna
 Gilreath, W
 Glass, Dan
 Glenn, J. P
 Goldben, Is
 Goldben, W
 Gordon, Ma
 Gordon, Ro
 Gorer, Lew
 Gottherman,
 Gottherman,
 Gould, Fran
 Gable, Mr
 Graham, Be
 Graham, W
 Graham, M
 Grant, Berr
 Gray, Harr
 Graybeal, J
 Green, Ben
 Green, Tod
 Grehan, He
 Griffin, Ger
 Griffin, Hal
 Groves, Eu
 Groves, Ho
 Guard, Nor
 Gumbert, C
 Gunn, Mar

Name	Major	Address
Galliher, Leemo	Botany	Lexington
Galloway, Oscar F.	Education	Lexington
Gard, Paul Dombey	Education	Lexington
Gardner, Lucy Blakemore	Education	Winchester
Gardner, Norris L.	Education	Macon
Garnett, Rena E.	English	Columbia
Garnett, Thomassine	English	Columbia
Garrett, Paul L.	Education	Versailles
Gary, Weller Ray	Education	Mackville
Garwood, Thomas Leigh	Engineering	West Frankfort, Ill.
Gaugh, Margaret Elizabeth	Home Economics	Wilmore
Gentry, Vernon Scott	Zoology	Wheatley
Gibson, H. T.	Physics	Wilmore
Gibson, W. J.	Education	Murray
Gifford, Chloe	Political Science	Lexington
Gibb, Elmer	Education	Lexington
Gilbert, Barbara Lucille	Education	Berea
Gill, Anna Dade	Economics	Richmond
Gilreath, William O.	Sociology	Pine Knot
Glass, Dan R.	Education	Wilmore
Glenn, J. Philip	Commerce	Kuttawa
Goldben, Isadore	Engineering	Lexington
Goldben, William C.	Education	Mt. Sterling
Gordon, Mary Agnes	Psychology	Washburn, N. D.
Gordon, Rose B.	Education	Frankfort
Gorer, Lewis Edward	Education	Ashland
Gotherman, Edward E.	Psychology	Lexington
Gotherman, Jessie F.	Education	Lexington
Gould, Frances E.	Education	Louisville
Grable, Mrs. Queenie M.	Education	Gordonsville
Graham, Beulah	Mathematics	Brandenburg
Graham, W. B.	History	Arlington
Graham, Mrs. W. B.	Journalism	Arlington
Grant, Bernice Duncan	Mathematics	Burlington
Gray, Harry Barkus	Education	Bristow
Graybeal, J. W.	Education	London
Green, Ben	Commerce	Winchester
Green, Todd Heron	Commerce	Lexington
Grehan, Henry E.	History	Lexington
Griffin, Gertrude L.	Education	Danville
Griffin, Hallie K.	Home Economics	Henderson
Groves, Eudora	Education	Lexington
Groves, Howard H.	Education	Lexington
Guard, Norman M.	Education	Lexington
Gumbert, George Martin	Farm Economics	Richmond
Gunn, Margaret Adams	Political Science	Middlesboro

Name	Major	Address
Habel, Elmer Albert	Physics	Ashebaro, N. C.
Haggan, Henry C.	Animal Industry	Morehead
Haggard, Eunice	Education	Winchester
Hailey, George H.	Engineering	Cincinnati, Ohio
Hale, W. J.	Education	Lexington
Hall, Blanche	English	Oakville
Hankins, Mrs. Ruth F.	English	Sardis
Hankins, William H.	Mathematics	Inez
Harbold, Lucile Lee	Political Science	Lexington
Hare, Mirian Alice	Home Economics	Paintsville
Hargrove, Brooks L.	Education	Sedalia
Harlowe, Julian C.	Education	Prestonsburg
Harmon, Elizabeth C.	Home Economics	Perryville
Harmon, Judson S.	English	Whitley City
Harmon, Marjorie	Education	Hillsboro
Harmon, Ruby	Education	Perryville
Harned, Janice	Mathematics	Shepherdsville
Harned, Tom Goodwin	Education	Boston
Harney, Clarence W.	Psychology	Georgetown
Harper, Janie Belle	Home Economics	Oakville
Harris, Esther L.	English	Taylorville
Harris, Marshall	Economics	Taylorville
Harris, William	Physics	Warsaw
Harris, William J.	Animal Industry	Lexington
Harrison, Antoinette	Education	Lexington
Harrison, Mrs. Roberta A.	Education	Lexington
Hartford, Ellis Ford	History	Fordsville
Hastie, Edna M.	History	Bowling Green
Hawkins, Claude Lee	Education	Wilmore
Hearin, Marshall E.	Education	Boxville
Heberling, May D.	Education	Georgetown
Heird, Albert M.	Animal Industry	Campbellsville
Heird, James B.	Education	Versailles
Henderson, O. W.	Education	California
Hendricks, Samuel F.	Mathematics	Berea
Henry, Mrs. Mayme K.	Education	Carlisle
Henry, William T.	Education	Georgetown
Hervey, Henry Jacob	Education	Wilmore
Hieatt, Kate Gray	English	Lexington
Hieatt, Martha Fox	English	Lexington
Higgins, Herbert T.	Education	Pulaski
Hill, Mabelle	Home Economics	Waco
Hilliard, David M.	Education	Memphis, Tenn.
Hillman, Ethel Lee	Education	Ashland
Hiteman, Sallie Adams	Education	Lexington
Holman, Albert	Bacteriology	Stanton

Name	Major	Address
Holmes, Mrs. Sarah B.	Sociology	Lexington
Holtzclaw, James B.	Political Science	Stanford
Hood, Elizabeth G.	Education	Flemingsburg
Hooks, Floyd L.	Animal Industry	Hopkinsville
Hooks, Nall Trafford	Education	Eddyville
Hopkins, Christine	English	Louisville
Horlacher, Mrs. Vaneta	Education	Lexington
Horn, Clarence A.	Education	Princeton
Hosack, Ivan Gentry	Anatomy & Phys.	Pittsburg, Pa.
Hounshell, Arthur C.	Political Science	Jackson
Houston, Hal Edward	Zoology	Murray
Howard, Frank Leland	Commerce	Hodgenville
Hubbard, Dillard B.	Education	Covington
Huber, Elmer Lee	Education	Maysville
Hughes, Beulah Stillwell	Education	Lexington
Hughes, Effie Delle	Chemistry	Somerset
Hughes, Hettie Belle	Chemistry	Somerset
Hughes, W. Brandt	Education	Wilmore
Hughson, Ruth	Education	Lexington
Hume, Clarence W.	Education	Stearns
Humphrey, James E.	Marketing	Lexington
Hurt, Lester E.	Education	Auburn
Hurt, S. M. R.	Education	Morehead
Hutson, Woodfin, Sr.	Education	Wickliffe
Imes, Flo	English	Almo
Ingram, Gladys	Education	Columbia
Inman, B. T.	Education	Hardinsburg
Irvine, Jessie F.	Psychology	Paris
Irvine, Kate Tipton	English	Paris
Jackson, John Thomas, Jr.	Engineering	Lexington
Jackson, Ward B.	Education	Ashland
Jarvis, John P., Jr.	Political Science	Georgetown
Jefferson, Louise P.	English	Crestwood
Jesse, Edwin G.	Animal Industry	Nicholasville
Johnson, Elizabeth W.	Education	Lynch
Johnson, Fannie Sue	Education	Nicholasville
Johnson, Walter L.	English	Louisville
Jones, Earle Dillion	Chemistry	Lexington
Jones, Mrs. Fairy	Sociology	Richmond
Jones, J. S.	Education	Parkers
Jones, Mrs. J. S.	Education	Parkers
Jones, L. Frederick	Chemistry	Cameron, Mo.
Jones, O. Jefferson	Education	Lexington
Jones, Ralph	Education	Hardin
Jones, Samuel Shepard	Political Science	Georgetown
Jones, Warren F.	Education	Winchester

Name	Major	Address
Judy, E. Kievil	Education	Sunrise
Juergensmeyer, Charles	Education	Denton
Juergensmeyer, Mrs. Charles	Romance Languages	Denton
Juett, Freddie L.	Education	Lexington
Kardatzke, Carl H.	Education	Winchester
Karrick, Loutina	Education	Salt Lick
Kavanaugh, George R.	Economics	Berea
Kavanaugh, Mrs. W. L.	Education	Lancaster
Keffer, John LeRoy	Chemistry	Ashland
Keith, Thelma	English	Bowling Green
Keller, Wayne H.	Chemistry	Henderson
Kelley, Nannie Belle	Ancient Languages	Lexington
Kelly, James Redmond	Engineering	Erlanger
Kemper, Durbin C.	Education	Lexington
Kendall, Lulu Garr	Education	Lexington
Kendrick, Samuel E.	Mathematics	Frenchburg
Kenyon, Jay B.	Zoology	Wilmore
Kerr, Mary Frances	Education	Winchester
Keys, Alice	Education	Murray
Kilby, Mrs. Margaret	Psychology	Wilmore
Kilby, V. R.	History	Wilmore
King, Effie	Physiology	Education
King, Howard L.	Commerce	Buena Vista, Miss.
Kinney, Frances Ware	English	Lexington
Kinstler, Ella M.	Education	Louisa
Kintner, Ollis C.	Education	Wilmore
Kirk, Edwin Ling	Physics	Lexington
Kirkland, Glayds C.	Botany	Lexington
Kraatz, Charles Parry	Physiology	Jackson, Ohio
Krewson, Charles F.	Chemistry	Lexington
Lair, Jesse Lee	Education	Pineville
Lampert, Marcia	Education	Lexington
Lancaster, J. W.	Education	Georgetown
Landrum, Frances	Education	London
Langley, McKendall R.	French	Glassboro, N. J.
Latham, Rolla F.	Education	Dunmar
Latham, Mrs. Rolla F.	Education	Dunmar
Lawrence, A. J.	Commerce	Lexington
Layman, Morton B.	Education	Corbin
Layson, Rowland C.	Physics	Millersburg
Leake, James C.	Education	Huntington, W. Va.
Ledford, Eloise M.	Commerce	Lancaster
Lemons, Alleen	Mathematics	Cynthiana
Lester, William S., Sr.	Political Science	Winchester
Letton, George C.	Education	Carlisle
Lewis, Bennett	Education	Winchester

Name

Lewis, Jane

Linville, Do

Lisanby, Co

Little, Robe

Logan, Jam

Long, Mrs.

Loudenslag

Lovely, Lu

Lutes, Esth

Lynch, How

Lyon, Fran

Lyon, Mam

McCarthy,

McCaw, Lu

McCluer, S

McClure, V

McCollum,

McConnell,

McConnell,

McCourt, K

McCray, C

McCray, M

McElroy, O

McFarland,

McGinnis, I

McGuire, G

McInteer, N

McIntosh, S

McKee, Mr

McKinney,

Mahan, Ma

Mahoney, I

Maney, Cha

Mann, Fran

Mansfield,

Marrs, Virg

Marshall, I

Martin, Do

Martin, Er

Martin, Gl

Martin, Ma

Mason, R.

Mathis, Me

Matthews,

Mattox, Me

Maxey, Joh

Name	Major	Address
Lewis, Jane	Education	Lexington
Linville, Dorothy C.	Education	Versailles
Lisanby, Cornelius R.	Education	Georgetown
Little, Robert E.	Education	Berea
Logan, James A.	Economics	Winchester
Long, Mrs. James B.	Education	Lexington
Loudenslager, R. L.	History	Wilmore
Lovely, Lucile	Animal Industry	Lexington
Lutes, Esther F.	Education	Primrose
Lynch, Howard W.	History	Franklin
Lyon, Frances	Mathematics	Campbellsville
Lyon, Mamie Teresa	Home Economics	Beattyville
McCarthy, J. Lowell	Education	Grindstone, N. Y.
McCaw, Lucy Edelin	Education	Versailles
McCluer, Samuel C.	Physics	Cumberland
McClure, Virginia	History	Lexington
McCollum, Mrs. Emma E.	Political Science	Paris
McConnell, Dorothy	Education	Lexington
McConnell, Joseph L.	Economics	Cedar Falls, Iowa
McCourt, Katharine E.	French	Winchester
McCray, Carl A.	Education	Berea
McCray, Mrs. C. A.	Education	Berea
McElroy, O. L.	Education	Morganfield
McFarland, Mary Sue	English	Lexington
McGinnis, Katherine G.	Education	Lexington
McGuire, Geneva O.	Romance Languages	Wilmore
McInteer, Maude Creekmore	Education	Lexington
McIntosh, Sue Evelyn	Ancient Languages	Middlesburg
McKee, Mrs. Pratt H.	Education	Mt. Sterling
McKinney, David H.	Commerce	Richmond
Mahan, Martha G.	History	Slaughters
Mahoney, D. Howard	Education	Lexington
Maney, Charles Albert	Education	Lexington
Mann, Frances F.	English	Louisville
Mansfield, William Clifton	Political Science	Lexington
Marrs, Virginia Harrison	Education	Lexington
Marshall, Richard W.	Political Science	Lexington
Martin, Dorothy V.	English	Lexington
Martin, Ernest D.	Education	Lexington
Martin, Gladys E.	Education	Lexington
Martin, Mary F.	History	Fulton
Mason, R. Burgess	Chemistry	Rockport
Mathis, Metta	Education	Hardin
Matthews, Henry R.	Economics	Bowing Green
Mattox, Melvin E.	Education	Richmond
Maxey, John M.	Mathematics	Wilmore

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Maynard, Fred	Education	Greenup
Mayse, Henry Hobson	Education	Lexington
Means, Browder Randolph	Chemistry	Hopkinsville
Megibben, Katherine	English	Cynthiana
Melton, Frank Griffith	Education	Kevil
Mercer, Mrs. Anne M.	Education	Lexington
Mercer, Forrest G.	Education	Anchorage
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Miller, Allen P.	Education	Sacramento
Miller, E. M.	Education	Beverly
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Miller, P. Frank	Education	Clintonville
Mills, Elbert R.	Education	Clinton
Mills, Lewis H.	Education	Barbourville
Minihan, Edith C.	Education	Lexington
Miracle, Ethel M.	English	Barbourville
Mitchell, John Stapp	Education	Lexington
Moberly, Jesse	Education	Richmond
Moffitt, Ellen Ruth	Economics	Paducah
Monson, Saida Beall	Education	Cynthiana
Montgomery, Mrs. Gladys	Home Economics	Winchester
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Moore, Elvis Lee	Education	Kevil
Moore, James Reardon	Engineering	Bardstown
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Moore, Mrs. Princa G.	English	Forest City, N. Car.
Moore, William J.	Commerce	Richmond
Moores, Mary Edith	English	Waco
Morgan, Ethel Anne	English	Lexington
Morton, Samuel H.	Political Science	Owensboro
Moss, Mary Bradley	Education	Lexington
Murphy, E. R.	Economics	Stamping Ground
Myers, Francis C.	Chemistry	Independence, Kans.
Nankivel, David W.	Zoology	Wilmore
Neal, John Thomas	Education	Georgetown
Neal, Martha Maye	English	Mt. Olivet
Neblett, Patrick H.	Education	Jackson
Newbolt, Nora B.	Home Economics	Lexington
Newbolt, W. E.	Economics	Georgetown
Newhoff, Theresa C.	Art	Versailles
Nichols, Guy G.	Education	Barbourville
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Ogden, Frank J.	Education	Winchester

Name	Major	Address
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Oots, Edna Stewart	Education	Lexington
Orth, Shirlee Marie	Ancient Languages	Winchester
Osborn, Leon L.	Education	Wilmore
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Parman, Oscar C.	Education	London
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Partington, John Edwin	Education	Greenfield, Indiana
Pates, Jeanette W.	History	Lexington
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Patrick, Olney M.	Education	Salyersville
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Payne, Eleanor Maria	English	Winchester
Payne, James A.	Education	Cynthiana
Payne, Martha	Education	Lexington
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Pence, Sallie E.	Mathematics	Lexington
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Perry, George E.	Education	Lexington
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Plummer, Charles M.	Education	Paris
Poage, Lelia W.	English	Brooksville
Poe, E. Teddy	Zoology	Carlisle
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Potter, M. E.	Education	Lexington
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Powell, Anna	Education	Lexington
Power, Hilda	Education	Flemingsburg
Praither, Mrs. Anne S.	English	Lexington

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Prewitt, John W.	Education	Williamstown
Price, Henry C.	Education	Onton
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Price, Robert E.	Education	Bremen
Pritchette, Grayden M.	History	Onton
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Purnell, Mary Agnes	English	Paris
Qualls, Daniel W.	Education	Olive Hill
Rankins, Dick	Education	Passadena, California
Rast, William Leitner	Physics	Lexington
Ratliff, Mrs. Margaret	Psychology	Winchester
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Rice, Lawrence Kelly	Education	Jackson
Rice, Mary Belle	Mathematics	Depoy
Richards, Mary Ellen	Commerce	Hickory Flat
Richardson, F. B.	Chemistry	Somerset
Richardson, Verna Irene	English	Richmond
Richmond, E. W.	Education	Owensboro
Richard, French W.	Chemistry	Winchester
Rickard, Mrs. French W.	Education	Winchester
Rickett, Frances Heflin	Education	Lexington
Rigdon, William I.	Education	Lexington
Riley, Edgar C.	Education	Lexington
Robbins, Ballard F.	Physics	Berea
Roberts, D. O.	Education	Somerset
Roberts, Helen P.	Education	Lexington
Roberts, Roland	Education	Wilmore
Roberts, Virgil Dick	Education	Somerset
Robinson, Elmer	Chemistry	Corbin
Robinson, Frances	History	Barbourville
Robinson, Leonard H.	Education	Ewing
Robinson, Mrs. Lolo L.	English	Lexington
Robinson, Lucy E.	Sociology	Owensboro
Roe, Lorenzo D.	Education	Beechy
Rogers, Mrs. Amelia Clay	Education	Lexington
Rogers, Katherine E.	Education	Jackson, Tennessee
Rone, Commodore A.	Psychology	Morgantown
Rose, Edith	English	Lexington
Rose, Robert R.	Sociology	Barbourville
Rosenberg, Lucille	Music	Lexington
Ross, Evelyn F.	Education	Richmond
Ross, Marvin H.	English	Hartford

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Ross, Norbert Lee	Botany	Bowling Green
Ross, Pemberton J., Jr.	Political Science	Anchorage
Ross, Ray	Education	Mayfield
Ross, Rebecca	Education	Anchorage
Roy, Wallace R.	Chemistry	Lexington
Royse, Edgar	Animal Industry	Roy
Rudolph, Liston Lloyd	Education	Lexington
Russell, William F.	Education	Danville
Schaefer, Fred W.	Education	Lexington
Schneider, Ora S.	Zoology	Nicholasville
Schooler, Cora H.	Romance Languages	Lancaster
Schooler, Ina Lucille	Ancient Languages	Lancaster
Schooler, Paul Bernard	Education	Lancaster
Scott, Elizabeth F.	Ancient Languages	Winchester
Scott, Ellen	Political Science	Paris
Scribner, Albert Frank	Education	Valparaiso, Indiana
Scrivner, Ruth	Education	Ashland
Settle, Margery L.	Mathematics	Calhoun
Shadoan, William P.	Education	Lexington
Sharon, Robert E.	Education	Butler
Shaver, Robert E.	Engineering	Greenville
Shelton, A. M.	Education	Georgetown
Shelton, William A.	Education	Versailles
Shelton, Mrs. William A.	English	Versailles
Sheppard, John L.	History	Jenkins
Sherwood, Thomas C.	Zoology	Lexington
Shirley, Curtis E.	Education	Eagle Station
Shouse, Mrs. Edith J.	English	Eubank
Shropshire, James D.	Commerce	Lexington
Shultz, Leslie G.	Mathematics	Horse Branch
Shutt, Charles N.	Education	Berea
Simpson, Cecelia Elizabeth	English	Burnside
Simpson, Nina Rey	English	Breeding
Skidmore, Hugh P.	Education	Campbellsburg
Skinner, Frances Elizabeth	Ancient Languages	Lexington
Skinner, Jane O.	Home Economics	Lexington
Skinner, T. W.	Education	Nicholasville
Sloan, Marion L.	English	Princeton, W. Virginia
Smart, John A.	Animal Industry	Murl
Smiley, Lyda May	Physiology	Lexington
Smith, Anne Whitney	Education	Lexington
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Smith, Dorothy Berlin	Education	Jenkins
Smith, Herbert F.	Education	Kuttawa
Smith, Jane R.	History	Hibbino, Minnesota

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Smith, Jeff Frank	Education	Hindman
Smith, John W.	Education	Hardinsbug
Smith, Laura Gibson	Ancient Languages	Lexington
Smith, Mary Belle	Education	Nicholasville
Smith, Robert L.	Education	Perkins
Smith, Roy Beckham	Education	Sonora
Smith, Roy G.	Education	Winchester
Smith, Vestina Elizabeth	English	Pineville
Smith, Virginia Parker	Education	Versailles
Smoot, Ellen Marston	History	Owenton
Soder, Mabel	Mathematics	Lexington
Solomon, Lester	Education	Benton
Soward, Mary Andrews	English	Maysville
Spencer, Ella Stone	Education	Winchester
Spicer, Robert W.	Engineering	Lexington
Spillman, Claude O.	Education	Stanford
Squires, May Gordon	Education	Lexington
Stacey, General	English	Ary
Stallings, John T.	History	Winchester
Stallings, Mrs. J. T.	Education	Winchester
Stallings, Martha Lee	Education	Elizabethtown
Stanley, Mrs. Helen A.	Education	Lexington
Starnes, Effie Cox	History	Lexington
Stephens, L. A.	Education	Georgetown
Stephens, Mary	Home Economics	Independence
Stephenson, Charles M.	Commerce	Vidalia, Georgia
Stevenson, Emma Ritchie	Home Economics	Lexington
Stewart, Jesse J.	Economics	Bowling Green
Stewart, Mary Alice	History	Huntington, W. Va.
Stone, Talton K.	History	Richmond
Story, Ruth C.	Sociology	St. Petersburg, Fla.
Streyffeler, Mrs. Mary	Home Economics	Lexington
Strickler, George E.	Education	Brownsville
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Sullivan, Lawrence C.	Education	Russell Springs
Summer, George Perry	Marketing	Glendale
Sweeney, J. Harvey	Education	Lexington
Tabb, William Ray	Education	Hawesville
Talbert, Nancy Elizabeth	English	Carlisle
Tanner, Hugh Alexander	Geology	Irrington
Tarter, Add	Education	Russell Springs
Taylor, Bradford Preston	Engineering	Danville
Taylor, Mrs. Elizabeth	Bacteriology	Richmond, Va.
Taylor, Eva	English	Somerset

Name
Taylor, John
Taylor, Lew
Taylor, Ma
Taylor, Tru
Tempel, Ge
Thomas, Ed
Thompson,
Thompson,
Thompson,
Thompson,
Thomson, J
Thorn, Sara
Threlkeld, C
Thurmond,
Tilson, How
Tolman, He
Tolman, Wi
Towery, Be
Townsend,
Traylor, Lo
Traylor, Or
Triplett, Ish
Trosper, Ra
Troxler, Am
Tsu, Kwoh-c
Turner, Floy
Tyree, Ralp
Underwood,
Van Meter,
Van Meter,
Vaughn, Mo
Viley, Clyde
Walker, Edv
Walker, Jam
Walker, Kat
Walker, Sam
Wallace, Sus
Wallis, Eliza
Ward, Edwin
Ward, Mrs.
Warner, Hat
Warren, Mr
Warren, Noe
Warren, W.
Wash, Marg

Name	Major	Address
Taylor, John Milburn	Education	Benham
Taylor, Lewis N.	Education	Lexington
Taylor, Mari Virginia	Education	Aberdeen, Mississippi
Taylor, Truman	Education	Lexington
Tempel, Geneva H.	Education	Shelbyville
Thomas, Edith Asa	English	Lexington
Thompson, Forest S.	Education	Myers
Thompson, Mrs. Forest S.	English	Myers
Thompson, Nancy E.	Education	Danville
Thompson, Mrs. W. F.	Education	Winchester
Thomson, J. L.	Zoology	Lexington
Thorn, Sarah T.	Chemistry	Lexington
Threlkeld, G. Ernest	Education	Madisonville
Thurmond, W. C.	Agronomy	Blackford
Tilson, Howard G.	Animal Industry	Adamsville, Ala.
Tolman, Helen Louise	English	Georgetown
Tolman, William Allen	Economics	Georgetown
Towery, Beverly	English	Providence
Townsend, Arlie L.	Education	Cadiz
Traylor, Louis B.	Education	Moreland
Traylor, Orba Forest	Commerce	Providence
Triplett, Ishmael	Political Science	Prestonsburg
Trosper, Raleigh V.	Farm Economics	Lexington
Troxler, Amy Rose	Education	Louisville
Tsu, Kwoh-chi	Education	Chinkiang, Ku, China
Turner, Floyd L.	Chemistry	Cadiz
Tyree, Ralph B.	Political Science	Rice Station
Underwood, John T., Jr.	Education	Parksville
Van Meter, Elizabeth	Bacteriology	Shelbyville
Van Meter, Thomas E.	Engineering	Narberth, Penn.
Vaughn, Morris B.	Education	Louisa
Viley, Clyde Earl	Education	Graham
Walker, Edward A.	Education	Cornishville
Walker, James Earl	Education	Benton
Walker, Katharine K.	Ancient Languages	Lexington
Walker, Samuel	Education	Richmond
Wallace, Susan D.	English	Lexington
Wallis, Elizabeth	Education	Lexington
Ward, Edwin R.	Education	Providence
Ward, Mrs. Edwin R.	English	Providence
Warner, Hattie C.	History	Nicholasville
Warren, Mrs. Harriet	Education	Lexington
Warren, Noah J.	Sociology	Millersburg
Warren, W. A.	Education	Sedalia
Wash, Margaret E.	Home Economics	Lawrenceburg

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Waters, Thomas B.	Philosophy	St. Paul
Watts, Clyde	Animal Industry	Carrollton
Webb, Mrs. Frank	Ancient Languages	Ravenna
Wei, Frances E. D.	Education	Nanking, China
Weir, Harry Clarke	Education	Bowling Green
Weir, Howard L.	Education	Berea
Welch, James R.	Education	Carrollton
Wells, Auburn J.	History	Murray
Wert, James V.	Education	Covington
Wesley, H. M.	Education	Alexandria
Wesley, William M.	Education	Burgin
West, Beulah	Ancient Languages	Paint Lick
West, C. Byrd	Education	Henderson
Whalin, Clarence M.	Education	Bowling Green
Whalin, E. B.	Education	Corinth
Whalin, Roy H.	Education	Hickman
Whalin, Mrs. Roy H.	Ancient Languages	Hickman
Wheeler, Samuel E.	Education	Beech Grove
White, B. J.	Animal Industry	Hardyville
White, Elizabeth H.	English	Florence, Mississippi
Whitlow, Billy	Political Science	Lexington
Whitnel, Martha K.	Education	Murray
Whitney, O. Lee	Animal Industry	Campbellsville
Wieman, Blanche A.	Education	Lexington
Wiley, B. I.	History	Wilmore
Wiley, Frances N.	Education	Halls, Tennessee
Wiley, R. F.	Education	Halls, Tennessee
Williams, Estill D.	Education	Ashland
Williams, John Blaine	Education	Ewing
Williams, John Davis	Education	Danville
Williams, Mrs. Maudy	Education	Richmond
Williams, Nicholas W.	English	Winchester
Williams, Mrs. Ruth L.	English	Danville
Williams, Thomas O.	Education	Lexington
Williams, William L., Jr.	Bacteriology	Henderson
Willis, Robert G.	Education	Rich Pond
Wilson, E. Katherine	English	Cynthiana
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Wilson, Homer	Education	Union
Wilson, Mrs. J. T.	Education	Lexington
Wilson, Katherine K.	Romance Languages	Lexington
Wilson, M. Lenore	Education	Lexington
Wilson, Margaret E.	Education	Lexington

Name	Major	Address
Wilson, Mary Elizabeth	Geology	Lexington
Wilson, W. T. Earl	Zoology	Munfordville
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Winfrey, William R.	Education	Whetstone
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Wood, Elizabeth C.	Education	Lexington
Wood, Mrs. Mary Isabelle	History	Pleasureville
Woodruff, Frances E.	Home Economics	Cadiz
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Word, Carroll Emerson	Physics	Augusta
Work, Albert S.	Education	Frenchburg
Work, Margaret J.	Education	Frenchburg
Worten, Emma Lou	Education	Smithland
Worth, Betsy Beckner	English	Lexington
Worth, Mrs. Phoebe B.	Education	Lexington
Wraith, Stephens E.	Education	Kirksey
Wyman, Anne	English	Mayfield
Wyman, Emma	Ancient Languages	Mayfield
Yarbrough, Kathleen	English	Sedalia
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