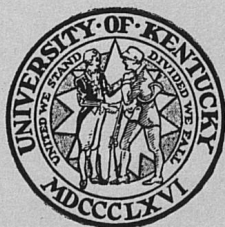


BULLETIN

University of Kentucky



Graduate School

1938-39

July, 1938

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GRADUATE FACULTY

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LOUIS ARTHUR PARDUE, A. B., M. S., Ph. D.....	Physics
ETHEL LEE PARKER, M. A.....	Education
NIEL PLUMMER, M. A.....	Journalism
MERWIN ELWOOD POTTER, B. S., M. A.....	Physical Education
HUGH BRUCE PRICE, Ph. D.....	Agriculture
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Docteur de l'Universite	Romance Languages
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DANIEL VOIERS TERRELL, C. E.	Engineering
EDWARD TUTHILL, A. B., Ph. D.....	History
WILLIAM DORNEY VALLEAU, Ph. D.....	Agriculture
AMRY VANDENBOSCH, Ph. D.....	Political Science
RALPH HOLDER WEAVER, M. S., Ph. D.....	Bacteriology
WILLIAM SNYDER WEBB, M. S., Sc. D.....	Physics
M. M. WHITE, M. A., Ph. D.....	Psychology
EDWARD WIEST, A. M., Ph. D.....	Economics
RALPH HICKS WOODS, M. A., Ph. D.....	Agriculture

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 catalog, 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 Arts in Education
- Master of Science in Education
- Master of Science in Agriculture
- Master of Science in Home Economics
- Master of Science in Public Health
- Master of Science in Civil Engineering
- Master of Science in Electrical Engineering
- Master of Science in Mechanical Engineering
- Master of Science in Metallurgical Engineering
- Master of Science in Mining Engineering
- Civil Engineer (C. E.)
- Electrical Engineer (E. E.)
- Mechanical Engineer (M. E.)
- Metallurgical Engineer (Met. E.)
- Mining Engineer (E. M.)
- Doctor of Philosophy

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

Graduate students should register in the Graduate School on special cards prepared for this 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 catalog, 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 or residence.

FEEES

Registration and laboratory fees are the same as for undergraduate students in the college in which the major work is done, that is, \$47.00 for residents of Kentucky; \$60.00 for non-residents. This does not include laboratory fees.

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.

APPLICATION FOR DEGREE

All candidates for degrees are required to make formal application for the degree at the office of the Registrar, on special cards provided for that purpose, at least one month before the date on which the degree is to be conferred.

REQUIREMENTS FOR ADVANCED DEGREES

A graduate student is expected to familiarize himself with the requirements for the degree for which he is a candidate and is held responsible for the fulfillment of these requirements. This applies to the last dates on which theses may be accepted, the dates for examinations, the proper form for theses and all other matters regarding requirements for degrees.

The University of Kentucky offers the degree of Doctor of Philosophy in the eight departments listed on page 5 of this bulletin, the regular academic degrees of Master of Arts and Master of Science in all departments and professional degrees in Education, Engineering, Agriculture and Home Economics. The requirements for these various degrees are as follows:

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

CREDITS

The candidate shall complete twenty-four semester hours of graduate work in course with a standing of 2 and no grade below C shall be counted.

COURSES

The major field shall comprise, as to courses, approximately two-thirds of the work and a minor (within the department or allied departments) of approximately one-third of the work. The two shall have graduate relationship.

RESIDENCE

The minimum residence requirement is one academic year of 36 weeks. This residence requirement 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 can always be completed in the minimum length of time. Inadequate preparation or assistance in departments very frequently make a longer period necessary. Part-time work during a regular semester is evaluated on the basis of the amount of work carried.

TRANSFER OF CREDITS

No transferred credits are accepted toward the Master of Arts or Master of Science degrees. All work for these degrees must be done at the University of Kentucky. However, a student is not asked to repeat a course which he has satisfactorily completed at another institution.

THESIS

A thesis is required of every candidate. 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.

The Graduate School issues a special bulletin giving definite instructions regarding the form in which the thesis must be presented, and stating the University regulations regarding the style of cover page, title page, biographical sketch, etc., which must be followed. Students are required to observe these instructions in submitting theses and dissertations.

LANGUAGE REQUIREMENT

A reading knowledge of at least one foreign language is required. This language should be pertinent to the program of the student. The language requirement must be satisfied by an examination given by the foreign language department offering instruction in the language concerned. The passing of this examination shall satisfy one of the two language requirements for the doctorate.

The language examinations are given by the foreign language departments on the first of October, the first of March (unless these dates fall on Sunday, in which case the examinations will be held the following Monday) and during the second week of the first term of the Summer Session. These examinations are given at no other times and students must take the examinations on the dates specified in order to qualify for their degrees for the following commencement.

EXAMINATIONS

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.

REQUIREMENTS FOR THE DEGREES OF MASTER OF ARTS IN EDUCATION AND MASTER OF SCIENCE IN EDUCATION

The professional degree of Master of Arts in Education is open to students who have received the degree of B. A. or B. A. in Education and the professional degree of Master of Science in Education is open to students who have received the degree of B. S. or B. S. in Education.

Two plans are provided for satisfying the requirements for either of these degrees 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 the department (not of the student) the master's degree in Education may be granted for the completion of thirty-six credits in graduate courses with an average standing of 2 or better, forty-eight weeks in residence and no requirement of a thesis.

There is no language requirement for either of the professional degrees in Education.

REQUIREMENTS FOR THE DEGREES OF MASTER OF SCIENCE IN AGRICULTURE AND MASTER OF SCIENCE IN HOME ECONOMICS

Students holding the degree B. S. in Agriculture, B. S. in Home Economics, or the equivalent, may become candidates for the degree M. S. in Agriculture, or M. S. in Home Economics respectively. Admission to candidacy shall be upon the approval of the Graduate Committee of the College of Agriculture. The approval of this Committee must be obtained during the first semester or term of the student's residence in the Graduate School.

Two plans are provided for satisfying the requirements for either degree, namely:

1. Twenty-four credits (exclusive of the thesis) in graduate courses, one academic year of 36 weeks in residence, and an acceptable thesis.

Or,

2. At the option of the Graduate Committee of the College of Agriculture and not at the student's option, the master's degree in Agriculture or in Home Economics may be granted without a thesis for the completion of 36 credits of graduate work with a standing of 2 or better, and 48 weeks in residence.

There is no language requirement for either of the professional degrees in Agriculture.

REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE IN PUBLIC HEALTH

Students holding a bachelor's degree from a fully accredited institution or the M. D. degree from a recognized Medical School may obtain the degree of Master of Science in Public Health by satisfying either of the following requirements:

1. The completion of 24 credits of graduate work for which only grades above D are counted, 36 weeks of residence and a thesis.

Or,

2. The completion of 36 credits of graduate work with a standing of 2 or better, 48 weeks of residence and no thesis requirement.

A final comprehensive examination is required of all candidates. There is no language requirement for this professional degree.

REQUIREMENTS FOR ADVANCED DEGREES IN ENGINEERING

Two classes of advanced degrees are offered in the College of Engineering, the Master's Degrees and the Professional Degrees.

THE MASTER'S DEGREES IN ENGINEERING. The Master's degrees in engineering may be obtained by satisfying the following requirements:

Twenty-four credits in graduate courses, one academic year (thirty-six weeks) in residence and an acceptable thesis.

The candidate must hold the corresponding Bachelor of Science degree in engineering from this institution or from another engineering school of recognized standing. The degrees offered are Master of Science in Civil Engineering, Master of Science in Electrical Engineering, Master of Science in Mechanical Engineering, Master of Science in Metallurgical Engineering, Master of Science in Mining Engineering.

THE PROFESSIONAL DEGREES IN ENGINEERING. The professional degree of Civil Engineer (C. E.), Electrical Engineer (E. E.), Mechanical Engineer (M. E.), Metallurgical Engineer (Met. E.), or Mining Engineer (E. M.) will be granted only to graduates of the University of Kentucky, College of Engineering, who present satisfactory evidence of professional work of creditable quality in the engineering fields of their choice, extending over a period of five years, and who submit satisfactory theses as further evidence of their professional attainments.

Applications for professional degrees must be made with the Dean of the Graduate School not less than one year before the degree may be granted, and have the approval of the Graduate Committee of the College of Engineering.

The Graduate Committee will pass on the qualifications of all applicants for the professional degrees. It may, at its discretion, require an oral examination.

A candidate holding the M. S. degree in engineering shall be considered to have fulfilled two years of the five-year requirement for the corresponding professional degree.

A candidate holding the B. S. degree in one field of engineering may apply for the professional degree in another field of engineering, if he has attained unusual prominence and success in that field.

The fees for residence students who are candidates for M. S. degrees in engineering are the same as for undergraduates (see page 6). The fees for the Professional degrees are \$15.00 registration fee and \$15.00 graduation fee.

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 a 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 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 a 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.

Candidates for the doctor's degree who major in the College of Education may not satisfy residence requirements entirely by attendance in Summer Sessions, but must attend at least two semesters during the regular college year. (See announcement under EDUCATION.)

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. The German department will examine applicants during each semester and also during the summer session. 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 Faculty. If the applicant passes the qualifying examination he is then considered as a *candidate* for the degree and may make formal application for his 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 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 slightly 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 1st 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 provide 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
- Journalism
- Library Science
- 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)
- Law (See Law)
- Markets and Rural Finance (See Agriculture)
- 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
- Psychology (See Social Sciences)
- Zoology

IV. PHYSICAL SCIENCES

Chemistry
Engineering (See Engineering)
Geology
Mathematics and Astronomy
Physics

V. AGRICULTURE

Agricultural Education (See Education)
Agricultural Entomology
Agronomy
Animal Industry
Animal Pathology
Farm Economics
Farm Engineering
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
Physical 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, A. D.

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.

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)

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—FREEMAN AND LOWE'S GREEK READER will be read and easy selections from other writers. Exercises in construction and composition.

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

152—ANABASIS. Selections from Books 2-4 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 sixteen hours of English must be offered, including seminar throughout the year. A maximum of eight hours in other subjects is permitted, provided these courses have the approval of the Graduate Committee of the Department of 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—THE SEVENTEENTH CENTURY. Cavalier and Puritan Poetry; Milton, Burton, Browne, Bunyan, Walton; Restoration Prose and Poetry.

3 credits; 1st semester (Gallaway)

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 eighteenth 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 nineteenth 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; 2nd 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 (Gallaway)

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)

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)

133—THE DEVELOPMENT OF AMERICAN REALISM. A course which will complete the study of colonial and romantic American Literature (English 123a and 123b) by tracing the development of realistic writing through our sectional humorists, the local color school, Mark Twain, the growth of naturalism in fiction, drama, and poetry to the present.

3 credits (Knight)

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—EIGHTEENTH 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 eighteenth century life.

3 credits; 1st semester (Ewing)

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 Moore, the romance from Aucassin and Nicolette.

3 credits; 1st semester (Dantzler)

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

3 credits; 2nd semester (Ewing)

147—THE AGE OF JOHNSON. Continuation of the survey from the death of Pope to 1798. Johnson and his circle: Burke, Goldsmith, Gray, Walpole, Cowper. The Pre-Romantic Movement.

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

152—AGE OF POPE. Addison and Steele, Swift, Pope, and Defoe.

3 credits; 1st semester (Gallaway)

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

3 credits; 1st semester (Ewing)

155a—CONTEMPORARY ENGLISH POETRY. An examination of the forces which developed to create modern poetry in England and America since 1900. The course to be historical of the movements and currents in their origins and ideas and to be literary and esthetic in an appreciation of form, matter, and style. Collateral reading.

3 credits; 1st semester (Farquhar)

155b—CONTEMPORARY ENGLISH POETRY. A continuation of 155a.

3 credits; 2nd semester (Farquhar)

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

3 credits; 2nd semester (Farquhar)

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.

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 as 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)

210a—SEMINAR. Studies in research. This course is required of all candidates for the master's degree in English.

3 credits; 1st semester (Staff)

210b—SEMINAR. Studies in research. A continuation of English 210a.

3 credits; 2nd semester (Staff)

GERMAN

The Department of German requires as a prerequisite for the Master's degree, attainment in German equivalent to that required of a German major. The number of hours of German required for the M. A. degree will vary depending upon the advanced courses the student may be asked to take and/or permitted to take in related departments.

101a—NINETEENTH CENTURY LITERATURE. Studies in German Literature of the nineteenth century with special emphasis on representative authors.

Prerequisite: German 3b. 3 credits; 1st semester (Hegeman)
[GIVEN 1935-36, OFFERED 1936-37]

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

Prerequisite: German 3b. 3 credits; 1st semester (Whitaker)
[GIVEN 1935-36, OFFERED 1936-37]

102a—TWENTIETH CENTURY LITERATURE. A study of the trend in German Literature of the twentieth century. Gerhart Hauptmann will be studied in greater detail than his contemporaries. Readings, reports and term paper.

Prerequisite: German 3b. 3 credits; 1st semester (Bigge)
[GIVEN 1935-36, OFFERED 1936-37]

102b—TWENTIETH CENTURY LITERATURE. Continuation of 102a.

Prerequisite: German 3b. 3 credits; 2nd semester (Bigge)
[GIVEN 1935-36, OFFERED 1936-37]

103a—LIFE AND WORKS OF GOETHE. This course follows the unfolding of Goethe's genius from his first lyrics through the second part of Faust. His principal literary works will be read and special attention devoted to autobiographical material, letters, and diaries.

3 credits; 1st semester (Hegeman)

103b—LIFE AND WORKS OF GOETHE. Continuation of Course 103a.

3 credits; 2nd semester (Hegeman)

105a-d—INDEPENDENT WORK IN GERMAN. This course is limited to those upper division and graduate students who have shown special proficiency in the department.

Prerequisite: German 3b. 3 credits; both semesters (Staff)
[GIVEN 1935-36, OFFERED 1936-37]

110a—GERMAN LITERATURE IN ENGLISH TRANSLATION. The aim of this course is to furnish students not having a reading knowledge of German with an understanding of the content and significance of German literature from the earliest records to the present.

Election of this course will not count toward satisfying the University's language requirement, and it may not be elected by any student enrolled in another "100" or "200" course in this department.

3 credits; 1st semester (Staff)

[OFFERED 1938-39]

110b—GERMAN LITERATURE IN ENGLISH TRANSLATION.
Continuation of Course 110a.

3 credits; 2nd semester (Staff)

[OFFERED 1938-39]

S160a—LITERARY LANDMARKS OF GERMANY. This course will run approximately six weeks and will be devoted mainly to directed travel and study in Germany and Austria. It is the purpose of this course to review the noteworthy contributions of German men of letters and to acquaint the student with the actual circumstances calling forth the creating of these literary works. Tour, assigned readings, quizzes, lectures and reports. (Scheduled concurrently with S160b.)

*Prerequisites: German 2b
or its equivalent and
permission of the Ger-
man Department.*

3 credits; summer (Bigge)

S160b—LITERARY LANDMARKS OF GERMANY. Continuation of S160a. (To be scheduled concurrently with S160a.)

*Prerequisites: German 2b
or its equivalent and
permission of the Ger-
man Department.*

3 credits; summer (Bigge)

201a—MIDDLE HIGH GERMAN. This is essentially a literary course with only the necessary minimum of Middle High German grammar. Selections will be read from both the epic and lyric poetry of the period, and reports will be given on assigned topics.

3 credits; 1st semester (Hegeman)

[GIVEN 2ND SEMESTER 1937-38; OFFERED 1938-39]

201b—MIDDLE HIGH GERMAN. Continuation of Course 201a.

3 credits; 2nd semester (Hegeman)

[OFFERED 1938-39]

203a—GERMAN LITERATURE FROM LUTHER TO LESSING. This course traces the principal trends in German life and thought from the Protestant Reformation through the Age of Enlightenment, as they are reflected in the work of the chief authors.

3 credits; 1st semester (Bigge)

[OFFERED 1938-39]

203b—GERMAN LITERATURE FROM LUTHER TO LESSING.
Continuation of Course 203a.

3 credits; 2nd semester (Bigge)

JOURNALISM

Note.—Prerequisites for the following courses for journalism majors include Journalism 1a, 1b, and either Journalism 11 or 12.

102—COMMUNITY JOURNALISM. A study of the problems in editorial and business branches of the community newspaper and the small city daily.

Prerequisite: Junior standing. 3 credits; 1st semester (Portmann)

103—NEWSPAPER ADMINISTRATION. A study of the business, circulation, and accounting divisions of the newspaper with special emphasis placed upon bookkeeping, cost accounting, and the problems of the community newspaper.

Prerequisite: Junior standing. 3 credits; 2nd semester (Portmann)

104a—COPYREADING, PROOFREADING, TYPOGRAPHY, EDITING. A study of that editorial branch of the newspaper in which all news is selected and prepared for publication. A comprehensive study is also made of modern typography and newspaper makeup.

Prerequisite: Junior standing. 3 credits; 1st semester (Portmann)

104b—COPYREADING, PROOFREADING, TYPOGRAPHY, EDITING. A continuation of 104a. 104a must be taken first with no credit until 104b has been completed.

Prerequisite: Junior standing. 3 credits; 2nd semester (Portmann)

105—LAW OF THE PRESS. A study of the special laws of libel, copyright and regulatory provisions, that pertain to the press.

Prerequisite: Junior standing. 3 credits; 1st semester (Portmann)

106—ETHICS AND PRINCIPLES OF JOURNALISM. A study of the practice and application of the ethics, principles, and standards of modern journalism.

Prerequisite: Senior standing. 3 credits; 1st semester (Portmann)

107—EDITORIAL WRITING. A study of editorial writings, the editorial page and its contents, aims, and results.

Prerequisite: Senior standing. 3 credits; both semesters (Plummer)

108—HISTORY OF AMERICAN JOURNALISM. A study of the rise and development of American journalism and newspapers and their significance and effect on modern journalism.

Prerequisite: Senior standing. 3 credits; 2nd semester (Portmann)

110—SUPERVISION OF HIGH SCHOOL PUBLICATIONS. A study of the problems that confront the adviser of the high school newspaper, magazine, or annual. Open to advisers or prospective advisers with consent of the instructor.

Prerequisite: Senior 3 credits; summer session (Portmann) standing.

111—VERBAL CRITICISM. A study of words and their synonyms with reference to developing accuracy in use of modern English in journalistic work.

Prerequisite: Junior 3 credits; both semesters (Tucker) standing.

112—CRITICAL WRITING FOR THE PRESS. The function of criticism in Journalism. Reviewing of motion pictures, plays, concerts and books for newspaper publication.

Prerequisite: Junior 3 credits; summer session (McLaughlin) standing.

115—ADVERTISING TYPOGRAPHY AND LAYOUT. A study of the principles of typographic families, illustrations, decorations, etc., as they pertain to modern advertising. Practical work with merchants is included in the latter part of the course. Lecture two hours; laboratory two hours.

Prerequisite: Senior 3 credits; 2nd semester (Portmann) standing; Psychology 5, or consent of instructor.

118—PUBLICITY FOR SCHOOLS AND SOCIAL SERVICE AGENCIES. Lectures and practice dealing with the aims and methods of writing news and special articles on the work of schools, colleges, libraries and social service organizations.

Prerequisite: Junior 3 credits; summer session (Plummer) standing.

120a—SEMINAR IN PUBLIC OPINION. A study of the relationship of the press in its several departments to public opinion; propaganda and its effect; newspaper campaigns and crusades; influence of politics on the press; financial control of the press and its effect; ethics, principles, and standards.

Prerequisite: Senior or Graduate standing. 2 credits; 1st semester (Plummer)

120b—SEMINAR IN PUBLIC OPINION. A continuation of 120a.
Prerequisite: Senior, or Graduate standing. 2 credits; 2nd semester (Plummer)

125—MAGAZINE ARTICLE WRITING. Lectures and personal conferences, and practice in submitting material for publication in magazines; study of the markets for this material.

Prerequisite: Junior 3 credits; summer session (Tucker) standing.

LIBRARY SCIENCE

A certificate is granted to graduate students completing 38 credits of professional courses in this department.

GENERAL COURSES

105—READING GUIDANCE. A study of adolescent reading interests and problems; of the nature and content of books available to young people of the secondary school level; of the tools for book selection; and of methods which may be used by teachers to stimulate and direct the reading of young people. Books to correlate with English, social sciences, science and vocational guidance will be stressed especially. *A non-technical course designed to meet the needs of teachers. Open only to upper division and graduate students.*

2 credits; both semesters

107—FUNCTION AND USE OF THE LIBRARY IN THE SCHOOL. A course open to teachers and students preparing to teach, to familiarize them with the functions and use of the school library in modern schemes of education. Designed to acquaint the teacher with the variety and extent of service of the school library, methods by which the library may be adapted to fit the teacher's needs, reference aids and teaching tools, costs and standards for school library service, and administrative problems which necessitate cooperation of school administrators, teachers and school librarians. Opportunity is afforded for the development of individual projects which correlate the library with teaching. *A non-technical course open only to upper division and graduate students.*

2 credits; both semesters

PROFESSIONAL COURSES

126—LIBRARY ADMINISTRATION. A study of the place, function and administration of the library in the modern school and community and of the relationship of the library and librarian to the teachers, pupils and parents. Major supplementary topics discussed: Library planning and equipment; standards; personnel problems; relation of library to outside agencies; business management of the library including budgeting, accounting, attendance; methods of stimulating the use of books, and of handling service. *Supplemented by L. S. 144.* Assigned readings, class discussions, lectures, special reports and projects.

3 credits; 1st semester

128—CHILDREN'S LITERATURE. A survey of the field of children's literature with comparative study of representative types of books for children from the standpoint of presentation, use and interest for different ages and groups (from pre-school through Junior High School). Special study 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 children's books.

2 credits; 2nd semester

129a, b—CATALOGING AND CLASSIFICATION. A study of the principles and forms of classification and cataloging as complimentary devices of arranging printed materials and of providing a key to their nature, location and contents; with special emphasis on their application to the effective administration of the school library and its major function—service to the reader. Practice work under supervision is required in classifying materials by the Dewey Decimal system and in making a shelf list and a dictionary card catalog by the use of the unit card.

3 credits; 1st semester (Semmons)

2 credits; 2nd semester (Semmons)

132—LIBRARY WORK WITH CHILDREN. The effective organization and administration of library work with children, especially in the elementary school. Emphasizes the equipment and vital services of the children's library; the assembly of special materials; reading guidance, including discussions of the librarian's part in a program of remedial reading; story telling and special methods of stimulating children's reading.

2 credits; 2nd semester

133a, b—REFERENCE AND BIBLIOGRAPHY. A study of the essential reference works, particularly those most valuable in school libraries, including dictionaries, encyclopedias, atlases, yearbooks, periodical indexes and reference books on special subjects; of the more important subject and trade bibliographies; of government documents and vertical file material, and of the standards and methods by which such material is selected, organized and efficiently used.

3 credits; 1st semester (Cass)

2 credits; 2nd semester (Cass)

138—METHODS OF TEACHING THE USE OF THE LIBRARY. This course emphasizes effective interpretation of the function, facilities and services of the library in the modern school and community. The first half semester is devoted to a study of administrative problems to be considered in formal instruction in the use of the library by the librarian or teacher, examination of the bibliographies of the field, and of content and teaching methods for various units as adapted to the school levels and particular groups taught. Class members prepare and present actual lessons correlated with the subject curricula of the school. Informal methods of encouraging use of the library, its tools and services, are emphasized the second half semester; especially oral and visual devices (assembly programs, radio, films) and printed aids (news releases, library handbooks, exhibits).

Prerequisite: 133a.

2 credits; 2nd semester

139—FIELD WORK. Comparable to practice teaching. Supervised practical work in all departments of the school libraries of the University Training School and nearby school systems, two periods a week of two consecutive hours; supplemented by Seminar discussions. The course is designed to give the librarian in training an appreciation of library work as a whole by affording him opportunity for wide observation, for comparison of libraries and their methods, and for actual practice.

Prerequisites: 129a, 133a, 150a.

2 credits; 2nd semester

(Wood and Staff)

144—LIBRARY RECORDS AND METHODS. A course presenting the fundamental knowledge and techniques necessary to the development of efficient procedures for the acquisition, preparation, care, circulation and use of books and minor materials in the library, with emphasis on the importance to effective library service of the application of the best business methods to these routines, and of careful interpretation of statistics and services to administrators, staff and readers. *Correlated with Library Science 126.* Assigned readings, class discussion, lectures and demonstrations, special problems and projects.

2 credits; 1st semester

150a, b—BOOK SELECTION. A study of principles and standards in the choice of books, periodicals, pamphlets and visual materials for library use. The course includes practical problems in the selection of books; a comparative study of the products of American publishers, editions, series, etc.; of critical examination of book reviewing periodicals and aids to book selection; the writing of book notes and reviews; the reading and evaluation of typical books of biography, travel, literature, science, useful and fine arts, and social science. The second semester is devoted to the study of the reading interests of young people of High School age and of the choice of books for them from the point of view of school and individual needs.

3 credits; 1st semester

2 credits; 2nd semester

154—SEMINAR. A survey of the field of library science through a brief study of the modern library movement and its history; of library agencies and media; of outstanding personalities in the field; of standards for professional training and certification; of current economic, social and educational problems of special interest to the librarian. General discussion with special reports on assigned topics.

Prerequisites: 133a, 126; 150a

2 credits; 2nd semester

desirable.

(Semmons)

ROMANCE LANGUAGES AND LITERATURES

FRENCH

109a—FRENCH LITERATURE OF THE NINETEENTH CENTURY. A survey of the literature of the period and the outstanding works of representative authors of the century.

3 credits; 1st semester (Ryland)

109b—FRENCH LITERATURE OF THE NINETEENTH CENTURY. Continuation of 109a.

3 credits; 2nd semester (Ryland)

110a—FRENCH LITERATURE OF THE SEVENTEENTH CENTURY. A survey of the literature. The classics of Corneille, Racine and Moliere. The state of French society and times.

3 credits; 1st semester (Ryland)

110b—FRENCH LITERATURE OF THE SEVENTEENTH CENTURY. Continuation of 110a.

3 credits; 2nd semester (Ryland)

113a—ADVANCED FRENCH GRAMMAR. A study of the grammar and syntax of the French language. Conducted entirely in French.

3 credits; 1st semester (Ryland)

113b—ADVANCED FRENCH GRAMMAR. Continuation of 113a.

3 credits; 2nd semester (Ryland)

114a, b, c, d, etc.—INDEPENDENT WORK IN ROMANCE LANGUAGES. Independent work designed to meet the individual needs of students after consultation with the staff.

3 credits; both semesters (Staff)

115a—FRENCH LITERATURE OF THE EIGHTEENTH CENTURY. A survey of the literature; the works of representative writers; written reports and assigned readings.

3 credits; 1st semester (Holmes)

115b—FRENCH LITERATURE OF THE EIGHTEENTH CENTURY. Continuation of 115a.

3 credits; 2nd semester (Holmes)

116—FRENCH LITERATURE OF THE TWENTIETH CENTURY. A study of representative authors; comparison of pre and post war writers.

3 credits; 1st semester (Horsfield)

201a—FRENCH LITERATURE OF THE RENAISSANCE. A study of the works of Villon, Lemaire de Belges, Marot, Rabelais, Calvin, Montaigne, Ronsard, Du Bellay, Baif, Belleau, D'Aubigne, and Regnier. Conducted entirely in French.

3 credits; 1st semester (Ryland)

201b—FRENCH LITERATURE OF THE RENAISSANCE. A continuation of 201a.

3 credits; 2nd semester (Ryland)

202a—OLD FRENCH. A study of the grammar and syntax of Old French. Readings from the Chanson de Roland.

Prerequisites: Courses 3 credits; 1st semester (Holmes)

113a and 113b and a reading knowledge of German.

202b—OLD FRENCH. Continuation of 202a.

3 credits; 2nd semester (Holmes)

203a—ADVANCED PHONETICS. A study of the phonetics of the Romance Languages with special attention to French. A course to prepare teachers of phonetics.

Prerequisites: R. L. 8a-b. 3 credits; 1st semester (Schick)

203b—ADVANCED PHONETICS. Continuation of 203a.

3 credits; 2nd semester (Schick)

SPANISH

104a—SPANISH LITERATURE. Spanish novel and drama of the sixteenth and seventeenth 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 nineteenth century; syntax and composition.

3 credits; 1st semester (Holmes)

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

3 credits; 2nd semester (Holmes)

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 setting, including such directly related topics as immigration, unemployment, and labor organizations.

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

103—TRANSPORTATION. Railways, waterways, highways, airways. Rates, service, management, regulation.

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

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.

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

106a—ADVANCED ACCOUNTING. Principles of valuation and income determination. Statement arrangement. Corporation accounting. Manufacturing accounts. Advanced partnership accounting.

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

106b—ADVANCED ACCOUNTING. Continuation of 106a. Accounting for installment sales, agencies and branches, ventures, and consignments. Accounting features of insolvent concerns and of consolidations and mergers. Estate accounting. Analysis of financial statements.

3 credits; 2nd semester (Haun and Beals)

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.

3 credits; 1st semester (Palmer)

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 (Haun and Pittman)

109b—BUSINESS LAW. Continuation of 109a.

3 credits; 2nd semester (Haun and Pittman)

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.

Prerequisites: Courses 1 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.

Prerequisite: Course 1.

2 credits; 1st semester

(Palmer and others)

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

2 credits; 2nd semester (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 and 7b. 3 credits; 2nd semester

(Haun and Beals)

115—VALUE AND DISTRIBUTION THEORY. The major emphasis is on current theory.

3 credits; 1st semester (Sullivan)

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: Commerce 1, 7a,

3 credits; 2nd semester

7b and 9.

(Lawrence and others)

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 and Beals)

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 1, 10. 2 credits; 1st semester (McIntyre)

124—STATE AND LOCAL TAXATION. Classified property taxes; separation of sources of revenue, taxation of banks, forests, public utilities, mines, and rural and urban real estate; income, inheritance and sales taxes.

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

127—INTERNATIONAL ECONOMIC POLICIES. Modern fallacies respecting foreign trade; free trade; protectionism; preferential tariffs; colonial tariff policies; dumping; commercial treaties; control of raw materials; encouragement of shipping; international investments and the movement of capital; international debts; reparations.

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

129—CREDITS AND STATEMENT ANALYSIS. The theory underlying credit-granting; credit administration; analysis and interpretation of financial statements.

Prerequisite: Course 7a. 2 credits; 1st semester (Haun and Beals)

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 1. 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 1 and 9. 2 credits; 2nd semester (Palmer)

132a—C. P. A. PROBLEMS. This course is designed to prepare students for C. P. A. examinations. Advanced accounting theory is

stressed through the study of a wide range of problems.

Prerequisites: Courses 106a and 106b. 3 credits; 1st semester

(Haun and Beals)

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

3 credits; 2nd semester (Haun and Beals)

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.

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

(Haun and Beals)

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 10. 3 credits; 2nd semester (Moore)

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

Prerequisite: 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. 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, questionnaires and otherwise, and the use of the results in determining a satisfactory solution.

Open only to seniors of 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. Prerequisite Course 107.

3 credits; 2nd 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.

Prerequisite: Course 11, Psychology 5, or the consent of the instructor.

3 credits; 1 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.

Prerequisite: An elementary course in statistics.

3 credits; 1st semester
(Palmer)

142—INDEX NUMBERS. The problems of sampling, selection of formula, and weighting in the construction of index numbers; a study of the construction and use of the common index numbers of prices and production.

Prerequisite: An elementary course in statistics.

2 credits; 2nd semester
(Palmer)

143—LIFE INSURANCE. Economics of life insurance; organization and control; special forms of life insurance; fundamental principles of rate-making.

Prerequisite: Course 1.

3 credits; 1st semester
(Carpenter)

144—PROPERTY AND CASUALTY INSURANCE. Public control; nature of contracts; analysis of reserve functions and rate-making processes.

Prerequisite: Course 1.

3 credits; 2nd semester
(Carpenter)

145—PROBLEMS IN OFFICE MANAGEMENT. The theories and principles underlying office management and control. The course is designed for superintendents of schools, high school principals, registrars, office workers, and others.

3 credits; summer session (Lawrence)

147—AMERICAN BUSINESS LEADERS. Biographical sketches of a selected list of men including their business achievements and their relationships to the economic and social life of their time.

2 credits; 1st semester (Jennings)

148—EUROPEAN BUSINESS LEADERS. Biographical sketches of a selected list of men including their business achievements and their relationships to the economic and social life of their time.

1 credit; 2nd semester (Jennings)

149—MARKET ANALYSIS. Training in the application of scientific method to research in fields of marketing. A major marketing investigation will be conducted by the class.

Prerequisites: Com. 10 and a course in statistics.

3 credits; 1st semester
(McIntyre)

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

1 to 3 credits; both semesters (Palmer and others)

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

Prerequisite: Course 1.

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 have taken Course 134 for graduate credit.

2 credits; 1st semester
(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 have taken Course 134 for graduate credit.

2 credits; 2nd semester
(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 examination of current literature on economic problems and policies.

Prerequisite: Course 1.

3 credits; 1st semester

(Sullivan)

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; 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 (Carpenter)

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

3 credits; 2nd semester

in statistics and consent of instructor.

(Palmer)

211—ADVANCED MONEY AND BANKING. A general survey of the subject is attempted with the emphasis upon its historical and theoretical aspects.

3 credits; 2nd semester (Wiest)

215—SURVEY OF ECONOMIC THEORY SINCE THE AUSTRIAN SCHOOL. This course is virtually a continuation of Course 203.

3 credits; 2nd semester (Sullivan)

EDUCATIONAL PSYCHOLOGY (See Education.)

FARM ECONOMICS (See Agriculture.)

HISTORY

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

Of the total course hours, sixteen will be required in History if a minor is presented; but a maximum number of hours in History is desirable.

THE DOCTORATE IN HISTORY

Applicants for the degree of Doctor of Philosophy who select History as the major field of study will adopt a program in line with the following requirements and suggestions:

(1) A PRELIMINARY EXAMINATION to test the candidate's previous work may be required at any time after reasonable notice.

(2) AN EXAMINATION FOR ADMITTANCE TO CANDIDACY.

This examination will be both written and oral and will cover the course work in both the major and minor fields. In addition, the History Department may require the applicant to present specific fundamental fields even if these have not been covered in course work. The duration of the written examination will be 8 hours in the case of a major and 2 to 3 hours in the minor. There will be also an oral examination of not less than 2 hours. Meeting successfully this examination admits the applicant to candidacy following approval by the Dean of the Graduate School.

(3) COMPREHENSIVE ORAL EXAMINATION.

Later in his work the candidate will be required to pass a comprehensive written and oral examination in not less than five specified fields of History which have been previously selected with the approval of the Department. The candidate will be expected to show that his knowledge in these fields is of a definite character. For the purposes of this examination the subject is organized into the following divisions and special fields:

DIVISION I

1. The Ancient Orient and Greece.
2. Roman History.
3. Political and Institutional History of the Middle Ages.
4. History of Continental Europe, 1300-1648.
5. English History to 1485.

DIVISION II

1. English History since 1485.
2. History of Continental Europe, 1648-1871.
3. History of Continental Europe since 1871.
4. History of North America and U. S. to 1789.
5. History of the United States, 1789-1876.
6. History of the United States since 1876.

DIVISION III

1. The Expansion of Europe.
2. The Far East.
3. The Near East.
4. Latin-America.
5. Canada.

In order that the candidate may have a reasonable distribution of the fields for intensive study which will be tested in this examination he must select:

At least 1 field from Division I,

At least 2 fields from Division II, and

May select 1 field from Division III to make a total of five.

In addition to the specific detailed examination on these selected fields the candidate should understand that he will be expected to have general familiarity with the broader fields of European and American history.

(4) FINAL EXAMINATION.

After the acceptance of the dissertation by the special committee appointed for this purpose and by the Dean of the Graduate School the candidate shall be given a final oral examination. In this examination the candidate shall be required to defend his thesis and also to present for examination the special field in which the thesis subject lies.

The following courses are offered by the Department:

100a—THE DIPLOMACY AND FOREIGN POLICY OF THE UNITED STATES TO 1860. A survey designed to acquaint the student with the principles of American foreign policy and their historical evolution in practice.

3 credits; 1st semester (Dupre)

100b—THE DIPLOMACY AND FOREIGN POLICY OF THE UNITED STATES SINCE 1860. A continuation of course 100a.

3 credits; 2nd semester (Dupre)

105—COLONIAL AMERICA. A study of the beginnings of the English colonies, the colonial background, political, social and economic development, extension of their frontiers, intercolonial 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)

106a—COLONIAL LATIN AMERICA. A survey of the founding and development of the Latin American Colonies and their struggle for independence.

2 credits; 1st semester (Knapp)

106b—LATIN AMERICAN REPUBLICS. This course will include a study of the political, economic, and social institutions, and problems of the Latin American Republics from the attainment of independence to the present.

2 credits; 2nd semester (Knapp)

114—THE RENAISSANCE IN THE SOUTH. A study of the Italian Renaissance from 1300 to 1500. The southern 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)

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)

131a—ENGLISH CONSTITUTIONAL HISTORY TO 1603.

3 credits; 1st semester (Hall)

131b—ENGLISH CONSTITUTIONAL HISTORY SINCE 1603.

3 credits; 2nd semester (Hall)

135a—THE BRITISH EMPIRE TO 1860. Review of the various elements affecting Great Britain and her Empire between 1783 and 1860: The Industrial Revolution; The French Revolution; Development of British Sea Power. The early growth and development of Canada, Australia, New Zealand, South Africa, and India. Lectures, class discussions, readings, reports. Three hours a week.

3 credits (Hall)

135b—THE BRITISH EMPIRE SINCE 1860. A continuation of 135a. Great Britain and the growth of the Dominions and the Commonwealth since 1860. Particular attention given to the history of the Canadian Dominion and the extension of the idea to other portions of the Commonwealth; their relations with the rest of the World. Three hours a week. 3 credits (Hall)

138—BRITISH SOCIAL HISTORY DURING THE TUDOR PERIOD, 1485-1603. A study of British life, manners, and customs in town and country. Particular emphasis will be placed upon the Age of Elizabeth, with political events subordinated to social changes. Lectures, discussions, and reports. Two hours a week. 2 credits (Hall)

140a, b, c, d—INDIVIDUAL WORK. Under special conditions selected students may investigate special problems, making weekly reports to the instructor. 2 credits (Staff)

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)

166a—DIVISION AND REUNION, 1850-1877. An intensive study of sectionalism in the United States from 1850 to 1877. 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)

171—THE EIGHTEENTH CENTURY. The 18th century in Europe. A study of the benevolent despots, their times and circumstances, their significance in Modern Europe.

Prerequisite: Course 4a or equivalent. 2 credits (Lunde)

175—THE SUCCESSION STATES. A study of the post-war politics and culture of Middle Europe and the Near East. 3 credits (Dupre)

176—THE THIRD FRENCH REPUBLIC. A study of the parties, politics, administration, diplomacy, economy, social movements, and

general culture of France from 1870 to the present. A reading knowledge of French will be helpful to graduate students. Lectures, readings, reports, and discussions. 3 credits (Dupre)

180—HISTORY OF THE NEW SOUTH. The evolution of southern life and society, agrarian politics, relationships with other sections, industrial growth, and new leadership.

Prerequisite: History 5b.

3 credits (Clark)

[GIVEN 1936-37]

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.

Prerequisite: Ten semester hours of American history.

1 credit (Knapp)

190a—THE FAR EAST TO 1900. The contacts of Europe and America with the Far East (China, Korea, Japan, eastern Siberia and the Philippines) to the close of the nineteenth century.

Prerequisite: Course 4a or equivalent.

3 credits (Clyde)

190b—THE FAR EAST SINCE 1900. A continuation of Course 190a.

Prerequisite: Course 4b.

3 credits (Clyde)

194—THE UNITED STATES IN THE PACIFIC AND THE FAR EAST SINCE 1898. This course studies policies which resulted in annexation of Hawaii and the Philippines, the announcement of the so-called open door policies and the integrity of China, with their historical development. It concludes with the Stimson doctrine of non-recognition.

3 credits (Clyde)

COURSES IN THE "200" GROUP

These courses are for graduate students only. They are content courses presented by the lecture and discussion method, and as such are distinct in character from the "300" group of courses which are concerned with problems and practice of research.

202—THE AMERICAN REVOLUTION.

3 credits (Knapp)

206—AMERICAN CONFEDERATION.

3 credits (Knapp)

226—THE OLD SOUTH

3 credits (Knapp)

247a, b, c, d—SEMINAR IN RECENT UNITED STATES HISTORY. Intensive studies in the political, social, and cultural history of the United States since 1914. Different topics will be stressed in rotation.

2 credits

280—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.

2 credits; 1st semester (Tuthill)

281—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 investigations. Lectures, discussions, problems.

2 credits; 2nd semester (Knapp)

282—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.

2 credits (Tuthill)

COURSES IN THE "300" GROUP

SEMINARS.—Basically research in character. These are not content courses. They provide laboratory training in historical research (collection and critical analysis of bibliography, note-taking and organization of materials, and the presentation of a properly documented thesis). It is desirable that the student take the Senior Seminar before enrolling in "300" courses. Three hours credit. Two class hours. One conference hour.

300a, b, c, d—SEMINAR IN AMERICAN DIPLOMACY.

3 credits (Clyde)

315a, b, c, d—HENRY CLAY AND HIS TIMES.

3 credits (Knapp)

320a, b, c, d—ORIGINS OF THE GREAT WAR.

3 credits (Tuthill)

331—SEMINAR IN MODERN BRITISH HISTORY.

3 credits (Hall)

340a, b, c, d—SEMINAR IN AMERICAN DIPLOMACY IN THE PACIFIC AREA.

3 credits (Clyde)

342—SEMINAR IN HISTORY OF KENTUCKY. The development of Kentucky as a western commonwealth. Emphasis on economic and political phases from the 18th century to the present, with writing of papers based upon research among documents and other source material.

Prerequisites: Courses 5a and 40, except by consent of instructor.
2 credits; 2nd semester (Clark)

365—THE AMERICAN CIVIL WAR.

3 credits (Knapp)

366—RECONSTRUCTION.

3 credits (Knapp)

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)

[OFFERED 1938-39]

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

3 credits; 2nd semester (Kuiper)

[OFFERED 1938-39]

110—THE MAKING OF THE MODERN MIND. A survey of the intellectual background of the present age.

3 credits (Kuiper)

[NOT OFFERED 1938-39]

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, Henri Bergson, and G. Santayana.

Prerequisites: Philosophy 101a, b.

3 credits (Kuiper)

[NOT OFFERED 1938-39]

111b—CONTEMPORARY PHILOSOPHY. Continuation of 111a.

Prerequisites: Philosophy 101a, b.

3 credits (Kuiper)

[NOT OFFERED 1938-39]

118—PLATO AND ARISTOTLE. A study in English of the chief dialogues of Plato, and of Aristotle's *Ethics*, *Politics*, and *Metaphysics*.

3 credits (Kuiper)

[GIVEN 1937-38]

120—GREAT RELIGIONS OF THE WORLD.

3 credits; 1st semester (Kuiper)

[GIVEN 1937-38]

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)

[OFFERED EVERY YEAR]

201b—SEMINAR IN PHILOSOPHY. Continuation of 201a.
1 credit; 2nd semester (Kuiper)

[OFFERED EVERY YEAR]

210a—TYPES OF LOGICAL THEORY. An intensive study of some of the outstanding contributions to logical theory, such as those of W. E. Johnson, Whitehead and Russell, or F. H. Bradley.

3 credits (Kuiper)

210b—TYPES OF LOGICAL THEORY. Continuation of 210a.
3 credits (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. Students entering with these deficiencies will find the work more difficult, and the period required for the completion of the degree longer than if there were no deficiencies in the social science background. The applicant may remove such deficiencies by private study or by taking undergraduate courses. Each individual case is handled on its own merits.

I. POLITICAL PARTIES AND PUBLIC OPINION

170—POLITICAL PARTIES. An analysis of public opinion and pressure groups; a survey of the history, organization methods and functions of political parties in the United States; first hand studies of the individual's participation in government.

3 credits; 1st semester (Shannon)

[GIVEN EVERY YEAR]

Related Courses in Other Departments

Psychology 104—Social Psychology.

Sociology 15—Social Control.

II. PUBLIC ADMINISTRATION

154—COUNTY GOVERNMENT AND ADMINISTRATION. A study of the background, the legal status, types and administrative activities of the American County. Special attention is given to the relationship of state and the county.

3 credits; 1st semester and summer (Manning)

[OFFERED 1938-39]

172—KENTUCKY GOVERNMENT AND CONSTITUTION. An intensive study of government and administration in Kentucky. The course is intended primarily for teachers of civics in the secondary schools and for teachers of government in colleges.

3 credits; summer (Manning)

[OFFERED 1938-39]

173—PUBLIC OPINION. The concept of public opinion; public opinion as an agency of political control; influence of the press, radio and other means of influencing public opinion; propaganda technique and control; competition of pressure groups for political influence.

3 credits; 2nd semester and summer (Shannon)

[OFFERED 1938-39]

174—PUBLIC WELFARE ADMINISTRATION. An intensive study of public welfare agencies of the state and local units, with emphasis on the problems of relief, rehabilitation, public and private control, and unified administration.

3 credits; 2nd semester (Manning)

[OFFERED 1938-39]

177—PRINCIPLES OF PUBLIC ADMINISTRATION. A functional study of governmental administration, with emphasis on the theory and practice of administration, the evolution of administrative organization, the staff and line functions of government, including personnel, financial administration, protection of life and property, judicial administration, public health, welfare, education, conservation of natural resources, and regulation of industry.

3 credits; 2nd semester and summer (Manning)

[OFFERED 1938-39]

177—PRINCIPLES OF PUBLIC ADMINISTRATION. The theory, general practices, and problems of public administration; the problems of administrative organization and reorganization; personnel administration and financial management.

3 credits (Manning)

Related Courses in Other Departments

- Economics 102—Labor Problems.
Economics 104—Public Finance.
Economics 124—State and Local Taxation.
Economics 130—Labor Legislation.
Law 153—Taxation.
Law 167—Administrative Law.
Psychology 112—Personnel Administration.
Sociology 107—Community Welfare Work.
Sociology 112—Community Organization.

III. THEORY

171a—EARLY POLITICAL THEORY. The political theories of Plato, Aristotle, Roman Political Thought, Thomas Aquinas, Dante, Machiavelli, Bodin, Grotius, More, Bacon, Harrington, Filmer, Hobbes, Locke, Spinoza, Montesquieu, Rousseau.

3 credits; 1st semester (Shannon)

[OFFERED 1938-39]

171b—MODERN POLITICAL THEORY. The theories of the American and French Revolutions, the English Utilitarians, Democratic Political Theory, Socialism, Fascism, Anarchism, Syndicalism, Guild Socialism, Communism.

3 credits; 2nd semester (Shannon)

[OFFERED 1938-39]

Related Courses in Other Departments

- Philosophy 101a and 101b—History of Philosophy.
Philosophy 110a—Making of the Modern Mind.

IV. COMPARATIVE GOVERNMENT

155a—COMPARATIVE GOVERNMENT—PARLIAMENTARY DEMOCRACIES. A study of the government of England, Ireland and the British self-governing dominions.

3 credits; 1st semester and summer (Trimble)

[OFFERED 1938-39]

155b—COMPARATIVE GOVERNMENT—CONTEMPORARY DICTATORSHIPS. A study of the government of Europe including France and Switzerland and the dictatorship of Italy, Germany and Russia.

3 credits; 2nd semester and summer (Trimble)

[OFFERED 1938-39]

V. PUBLIC LAW

159a—AMERICAN CONSTITUTIONAL DEVELOPMENT, 1787-1868. Chronological survey of the making of the constitution and its

interpretation through principal statutes and judicial decisions; some emphasis upon the economic and social interests which influenced this growth.

3 credits; 1st semester (Trimble)

[GIVEN EVERY YEAR]

159b—AMERICAN CONSTITUTIONAL DEVELOPMENT. From the adoption of the Civil War Amendments to the present time. Congressional policies embodied in social-economic legislation; doctrines developed by the Supreme Court. Analysis and criticism of chief cases on "due process", congressional powers and changes in the federal systems.

3 credits; 2nd semester (Trimble)

[GIVEN EVERY YEAR]

176—LEGISLATION. A functional study of legislative bodies and the process of legislation. Emphasis is placed on the organization of legislative assemblies, the operation of the committee system, the actual process of enactment, including the drafting of bills, and the external controls over legislation.

3 credits; 1st semester (Manning)

[OFFERED 1937-38]

Related Courses in Other Departments

History 131a-131b—English Constitutional History.

Law 149—Municipal Corporations.

Law 161a-161b—Constitutional Law I and II.

VI. INTERNATIONAL LAW AND DIPLOMACY

101—LATIN AMERICAN RELATIONS. The relations between the United States and the Latin American countries, the Monroe Doctrine, Pan-Americanism, Pan-Hispanism, Latin America and the League of Nations.

3 credits; 2nd semester (Blanding)

[OFFERED 1936-37]

150—INTERNATIONAL LAW. Sources and sanctions of international law, recognition, intervention, jurisdiction, nationality, protection of citizens abroad, diplomatic intercourse of states, the making, termination and interpretation of treaties, the treatment of aliens and international claims.

3 credits; 2nd semester (Vandenbosch)

[GIVEN EVERY YEAR]

160—AMERICAN FOREIGN RELATIONS. Chief principles and problems of American Foreign policies; the part of the House, the Senate, the Constitution and the President in the initiation, conduct and

control of foreign policies; the organization of the Department of State, the selection of personnel, the status and duties of foreign service officers.

3 credits; 2nd semester (Vandenbosch)

[GIVEN 1937-38]

165—WORLD POLITICS. A study of diplomatic history before and after the war with particular stress on the importance of alliances, imperialism, nationalism, militarism, and secret diplomacy. The latter part of the course deals with the development of international conferences, the League of Nations and the recent foreign policy of the important nations.

3 credits; 2nd semester (Blanding and Vandenbosch)

168—GOVERNMENTS AND POLITICS OF EASTERN ASIA. An introductory study of the political institutions of China, Japan, the Philippines, the Dutch East Indies and India. Constitutional principles, governmental organization, the party systems, current political issues and contemporary problems of international relations.

3 credits; 1st semester (Vandenbosch)

[OFFERED 1936-37]

Related Courses in Other Departments

Economics 127—International Economic Policies.

History 100a-100b—The diplomacy and foreign policy of the United States.

History 190a-190b—The Far East.

History 120—The Twentieth Century.

Law 164—Conflict of Laws.

Courses Open Only to Graduate Students

202—NATIONAL AND REGIONAL PLANNING. A survey of conditions leading to efforts at planning. A study of the theories and principles of planning; a detailed investigation of the regional life of selected areas.

3 credits; 1st semester (Shannon)

[OFFERED 1938-39]

204—INTERNATIONAL ORGANIZATION AND THE LEAGUE OF NATIONS. Social and economic factors leading to the establishment of international administrative organs, the Mandates System, the International Labor Organization, the League of Nations.

3 credits; 2nd semester (Vandenbosch)

[OFFERED EVERY YEAR]

205—FREEDOM OF THE SEAS. Belligerent and neutral rights at sea, violations of Maritime law during the World War, neutrality

and recent international legislation, current problems and possible solutions.

3 credits; 1st semester (Vandenbosch)

[OFFERED 1938-39]

206—SPECIAL PROBLEMS IN PUBLIC ADMINISTRATION. A research course in selected problems of public administration. The problems will be selected in accordance with the needs and desires of students registering for the course.

3 credits (Manning)

[OFFERED 1938-39]

210—SUPREME COURT AND POLITICS. Intensive study of the federal judiciary in the political and economic order. Factors in decision-making; personnel of the court; relations to other departments and processes of the national government and to the states; trends in the principle of judicial review.

3 credits; 2nd semester (Trimble)

[OFFERED EVERY YEAR]

211—THE CONSTITUTION AND CIVIL RIGHTS. The American conception of civil rights as expounded by the constitutional fathers and as interpreted by the courts. The social, economic and political aspects and implications of these rights. Special attention will be given to the decisions of the United States Supreme Court.

3 credits; 1st semester and summer (Trimble)

[OFFERED 1938-39]

213—FEDERAL CENTRALIZATION. A study of the shifting of power and control from the states to the federal government as a result of the economic and social development of the country and the resulting alteration of our constitutional system. Special attention will be given to the development of such provisions of the Constitution as the commerce clause, the taxing clause and of grants-in-aid and the more important measures of the New Deal.

3 credits; 1st semester (Trimble)

[GIVEN 1937-38]

PSYCHOLOGY

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

In order to provide training for guidance counselors in the schools and colleges of the State this department has arranged, in cooperation with the College of Education, a comprehensive plan for training in

this field including practice and research. In cooperation with the registrar it has also paid special attention to the preparation of registrars.

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 of the Feeble-Minded, all of which are located at or near Lexington.

In cooperation with the Junior League of Lexington the Department has also established a Child Guidance Service which affords additional opportunities for the study and observation of both normal and maladjusted children.

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.

An animal behavior laboratory is also provided and equipped for class and research work on lower animals. Standardized strains of white rats are available.

Apparatus, test equipment, and library facilities are suitable for advanced work in the list of courses which follows. For graduate majors in the Department, it is assumed that the student has had fundamental training in general psychology, and in biological or social sciences.

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 present. Topics given special consideration: Crowds, mob behavior, propaganda, and nationalism.

3 credits; 1st semester (Dimmick)

107—PSYCHOLOGICAL INTERPRETATION (Of the Unusual). Unusual human activities and experiences, including hypnotism, thought transference, spirit communications, psycho-therapy, and other sub-conscious phenomena are considered from the point of view of scientific evidence. An attempt is made to understand the conditions for creative work in literature, art and science.

3 credits; 1st semester (Miner)

[GIVEN 1936-37; NOT OFFERED 1937-38]

110—EXPERIMENTAL PSYCHOLOGY. Experimental techniques and their application to present psychological problems. The first part of the course acquaints the student with the standard apparatus in

psychological laboratories and with the classical experiments the undertaking of which is important in modern psychology. The second part is a consideration of present psychological problems. The student selects one of these problems for detailed experimentation. Examples of such problems are: change of blood pressure with covert and overt expression of emotion; influence of tension upon perception; sensory discrimination. One hour lecture and four hours laboratory a week.

3 credits; 1st semester (White)

111—MENTAL MEASUREMENTS. An analysis and interpretation of individual and group tests of intelligence, aptitude, skill, and achievement. The history and significance of the testing movement; the construction and evaluation of group tests.

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. Given in alternate years with 221.

3 credits; 2nd semester (Miner or Beaumont)

113—PSYCHOLOGY OF LEARNING. An experimental study of the learning process with an analysis of types of learning. The lectures are centered around the topics of the nervous mechanism in learning and the conditioned response. In the laboratory, the conditions which affect learning are studied. Examples of such conditions are: the effect of drugs; the relation of length, amount and complexity of the material, and of the mode of attack to learning. One hour lecture and four hours laboratory a week.

3 credits; 2nd semester (White)

114—ABNORMAL PSYCHOLOGY. An intensive course on disturbed conduct and thinking are studied from both the theoretical and the 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)

115—GENETIC PSYCHOLOGY. Influence of hereditary factors in the development of human behavior, with a critical survey of the problem and the evidence in connection with certain psychological traits such as musical and other special abilities, intelligence, insanity, and interests.

3 credits; 2nd semester (Newbury)

116—COMPARATIVE PSYCHOLOGY. Two hours of lectures, two hours of laboratory a week. A survey of the field of animal behavior with special reference to experimental technique. Opportunity for research experience in an animal laboratory. Topics include problems

of heredity and environment, activity, instinct, motivation, learning, sensory discrimination, and personality in sub-human species. Relationships to human problems indicated.

3 credits; 1st semester (Newbury)

120a-d—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.

2 credits; both semesters (Miner and others)

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 in schools and colleges.

3 credits; 1st semester (Miner, Beaumont, or Croft)

122—PERSONALITY MALADJUSTMENTS. The course is intended primarily for social workers, teachers, and others, who deal with the common maladjustments which they are able to detect and help. The causes of such disturbances in the home, school or social surroundings will be emphasized. The early symptoms of more grave mental disorders will be treated from the standpoint of mental hygiene. The students will be acquainted with the background of scientific studies which is necessary for the interpretation of problem children and maladjusted adults. Examples of representative cases will supply some training for practical application of the principles discussed.

3 credits; 1st semester (Dimmick)

123—PRACTICE IN TESTING. This course trains the student in the techniques of administering, scoring and interpreting the group and individual intelligence and achievement tests most frequently employed in educational and psychological guidance. Opportunity will also be provided for the diagnosis and evaluation of aptitudes and emotional characteristics as these are related to adjustment problems. The practical rather than the theoretical aspects of diagnostic procedures are emphasized.

*Prerequisite: Psychology 111
or its equivalent.*

*3 credits; 2nd semester
(Dimmick)*

Courses Open Only to Graduate Students

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

1 credit; 1st semester (Miner and Staff)

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

1 credit; either semester (Miner and the staff)

203a—PROBLEMS IN PSYCHOLOGY. Shorter research problems are registered under this number. A minimum of six hours per week is required in consultation with the instructor.

2 credits; 1st semester (Miner and others)

203b, c, etc.—PROBLEMS IN PSYCHOLOGY. Continuation of researches. These numbers are provided for registration in subsequent semesters.

2 credits; either semester (Miner and 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.

3 credits; 1st semester (Miner and others)

210b, c, etc.—RESEARCH IN PSYCHOLOGY. Continuation of research. These numbers are provided for registration in succeeding semesters.

3 credits; either semester (Miner and others)

211—MENTAL WORK AND FATIGUE. A laboratory course. Four hours devoted to experiments and one hour discussion each week. Prerequisites, an advanced course in experimental psychology and elementary statistics or their equivalent.

3 credits; 1st semester (White)

212—THE EMOTIONS. A laboratory course. Four hours devoted to experiments and one hour discussion each week. Prerequisites, an advanced course in experimental psychology and elementary statistics or their equivalent.

3 credits; 1st semester (White)

[GIVEN 1935-36; NOT GIVEN 1936-37]

213—THE OBSERVATION PROCESSES. A laboratory course. Four hours devoted to experiments and one hour discussion each week. Prerequisites, an advanced course in experimental psychology and elementary statistics or their equivalent.

3 credits; 2nd semester (White)

215—PSYCHOMETRICS. 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, regressions, equations, and reliability of measures.

3 credits; 1st semester (Asher)

217—PSYCHOLOGY OF LANGUAGE. An experimental course dealing with both written and spoken language. The development and physical basis of language, together with its function in thought

processes. The main emphasis will be placed on the experimental phases of the subject. Two hours lecture and two hours laboratory each week.

3 credits; 2nd semester (White)

[GIVEN 1937-38; NOT OFFERED 1938-39]

218—SYSTEMATIC PSYCHOLOGY. An historical and critical study of fundamental concepts and current schools of psychology with a view to their evaluation.

3 credits; 2nd semester (Miner)

219—CLINICAL PSYCHOLOGY. Two hours clinic and two hours lecture. A survey of clinical work on the diagnosis and adjustment of problem children and adults. The course gives a background for social work, mental hygiene, and clinical work.

3 credits; 2nd semester (Dimmick)

SOCIOLOGY

The courses in Sociology are designed primarily to give students an acquaintance with and fundamental conceptions of the larger social problems of the day. They are prepared with the purpose of making them an elemental part of one's general education. At the same time they are intended to provide a certain preliminary training for students looking to the field of social work, whether as a professional career, or with the expectation to do volunteer work or to participate in the direction of some social service agency.

Students seeking to prepare to a greater or less extent, or in some degree in a professional capacity, for social work, and who expect to meet the requirements for membership in national professional bodies of social workers, must take certain specialized or so-called technical courses in the department of sociology, as well as certain regular courses in this department and in allied departments, including those of psychology, political science, economics, etc. In addition, there are certain optional courses in these and other departments which are recommended for the affording of full and well-rounded backgrounds or social work training.

The specialized courses may be taken only on a graduate basis. They are not recommended for students in general who have no expectation of entering social work. They are open with permission to special students who wish to benefit from them without regard to University credit. To be eligible for them with University credit, students must have taken, as preliminary or concurrent courses, those in sociology and other departments designated as required. One of these courses, Supervised Field Work, requiring in all 300 hours of field or "laboratory" work, and under qualified direction, may be taken at the same time as the other courses are taken; or it may be taken thereafter. Full University credit, however, will not be given until it is completed. Facilities are available for it through social agencies in Lexington, Louisville, and Cincinnati.

101—SOCIAL DEPENDENCE. A study of poverty and social dependence, and of measures for its relief and reduction, with special attention to present private and public activities in this direction, including social insurance.

3 credits; 2nd semester (Best)

102—SOCIAL PATHOLOGY. A study of illness and accidents, mortality rates, mental and physical impairment or defectiveness, health insurance, and hospitals and similar institutions and agencies, all from a sociological point of view.

3 credits; 2nd semester (Caldwell)

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

3 credits; 1st semester (Best)

107—COMMUNITY WELFARE WORK. A course involving an inspection of the several public welfare agencies and institutions of the community, and of certain ones of the State, after a preliminary theoretical consideration.

Prerequisite: Sociology 101, 102, or 103. 3 credits; 1st semester (Palmer)

109—THE FAMILY. A study of the family, both in its historical aspects and in connection with modern life.

2 credits; 2nd semester (Caldwell)

110—CHILD WELFARE. A study of present social attitudes toward the child, and of methods and agencies for its care and protection.

3 credits; 1st semester (Caldwell)

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

3 credits; 2nd semester (Palmer)

114a-d—INDEPENDENT WORK. Study of some special topic by duly authorized students.

1 credit; either semester (Staff)

201a—SOCIOLOGY SEMINAR. Consideration mainly of methods of research and of current sociology literature.

2 credits; 1st semester (Staff)

201b—SOCIOLOGY SEMINAR. Continuation of 201a.

2 credits; 2nd semester (Staff)

205—SOCIAL SYSTEMS. A study of social systems propounded or attempted in human society from Plato's Republic down to the present.

2 credits; 1st semester (Caldwell)

213—INTRODUCTION TO SOCIAL CASE WORK. A more or less technical course in social case work. Open only to properly authorized students.

3 credits; 1st semester (Lawson)

217—ADVANCED SOCIAL CASE WORK. Continuation of 213.
3 credits; 2nd semester (Lawson)

220a—SUPERVISED FIELD WORK. A field or "laboratory" course in connection with an accredited social agency, and under the guidance of a qualified member of its staff. (150 hours.)

3 credits; 1st semester (Lawson)

220b—SUPERVISED FIELD WORK. Continuation of 220a. (150 hours.)

3 credits; 2nd semester (Lawson)

222—FIELD OF SOCIAL WORK. A study of the theoretical aspects of social work; its philosophy, objectives, and methods; its history and development; its present professional status; and its place in modern programs of human progress.

3 credits; 2nd semester (Lawson)

223—SOCIAL TREATMENT OF DELINQUENCY. An examination of possible and actual methods of dealing with the delinquent, including institutional care, juvenile court, probation, parole, etc. Open only to properly qualified students.

3 credits; 2nd semester (Palmer)

224—METHODS OF SOCIAL INVESTIGATION. A study of the several methods of investigation and research employed in the fields of sociology and social work. Two hours lecture; two hours laboratory. Open only to properly qualified students.

3 credits; 1st semester (Caldwell)

226—SOCIAL LEGISLATION. A study of the essential content of the law dealing with social welfare matters, together with the general principles involved in its enactment. Open only to properly qualified students.

3 credits; 2nd semester (Palmer)

III. BIOLOGICAL SCIENCES

AGRONOMY (See Agriculture.)

ANATOMY AND PHYSIOLOGY

105—ARCHITECTURE OF THE HUMAN SKELETON. The course is designed for the student who wishes advanced study in Anatomy and Physiology, for students of Anthropology, for students in Art, and for those who are preparing for the study of medicine. The study begins with the development of the skeleton and joints. This is followed by the process of ossification and the histology of bones. Each bone of the body is studied in great detail, organized demonstrations are given with architecture and function being stressed. Variations in the skeleton are also considered and whenever possible, the bone is compared with that of the lower vertebrates. The physiology of the bone, joint and muscular relations are studied in detail. Lecture and recitation, one hour a week; laboratory, six hours a week.

4 credits; 1st semester (Sherwood and Assistant)

106—INTRODUCTION TO ENDOCRINOLOGY. This is an introductory study of the glands of internal secretion or the endocrine glands in which the general development, anatomical location and structure, and fundamental functions of the organs are presented. The purpose of the course is to give a general knowledge in this particular field rather than a technical and detailed knowledge. The course will be found to be of value not only to the student of Anatomy and Physiology and related subjects but also to those students of education and sociological interests. Lectures and discussions, three hours a week.

Prerequisites: A. & P. 1a and 1b 3 credits; 1st semester
or the equivalent; Zoology (Allen)
7b; Chemistry 1a and 1b;
and with the consent of
the instructor.

107—ADVANCED ANATOMY. An introduction to the anatomy and physiology of the nervous system. The aim of the course is to provide an introductory laboratory course on form, structure, and functional arrangements of the nervous system for students of biology, physiology, psychology and those preparing for the study of medicine or the medical sciences. The work of the course includes a careful study of the nervous systems of vertebrates. The simpler types of nervous systems are compared with that of man. The development of the various reflexes are considered. The relation of the structure of the nervous system to psychological reactions are studied. Lectures and recitations, two hours a week; laboratory, four hours a week.

Prerequisites: A. & P. 1a and 1b 4 credits; 2nd semester
or the equivalent. (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 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, recitations, three hours a week; laboratory, four hours a week.

Prerequisite: A. & P. 1a and 1b

4 credits; 1st semester

or the equivalent; Chemistry

(Allen, Sherwood and

1a and 1b; Physics 1a and

Assistants)

1b; also, the consent of the

instructors.

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 gastrointestinal tract with its secretory organs; the process 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. 108.

4 credits; 2nd semester (Allen,

Sherwood and Assistants)

109—APPLICATION OF PHYSICAL PRINCIPLES TO THE HUMAN BODY. This course is especially designed for students interested in Anatomy and Physiology or the natural sciences. Students of the physical sciences as well as others will also find the course to be of practical and cultural value. The course is opened by thoroughly acquainting the student with the various physical phenomena that are to be considered. This will be followed by applying the same to the physiological processes of the body. Such will include stress and strain with respect to the bones of the skeleton, types of levers involved in joint action, permeability, calorimetry, mechanics of circulation and temperature regulation, mechanics of vision, mechanics of hearing,

mechanics of speech or voice. Lectures and recitations, two hours a week; laboratory, two hours a week.

Prerequisites: A. & P. 1a and 1b 3 credits; 1st semester
or the equivalent; Physics 1a (Allen, Assistant and
and 1b; Chemistry 1a and 1b. members of the staff of
Department of Physics)

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

116d—SEMINAR IN ANATOMY AND PHYSIOLOGY. Continuation of 116c. 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. Conference and laboratory, ten hours a week.

Prerequisites: A. & P. 1a and 1b 5 credits; 1st semester
or the equivalent; Chemistry (Allen, Sherwood)
127a and 127b (131a and
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 5 credits; 2nd semester
or the equivalent; Chemistry (Allen, Sherwood)
127a, and 127b (131a and
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. 101.*

2 credits; 1st semester

(Webb or Haag)

105—ETHNOLOGY. A study of the present races of mankind. The origins, migrations and present distribution of these races and their subdivisions. Physical and mental characteristics of the protomorphic, archimorphic and metamorphic groups with discussions of their cultures and religions.

2 credits; 2nd semester and summer session (Funkhouser)

106—ETHNOLOGY OF EUROPE. A study of the origins and migrations of the ethnological groups of Europe. The influence of Hamitic, Ligurian, Iberian and Pelasgian stocks on prehistoric civilizations; the effect of the migration of the Indo-Iranian Division; the contribution of the Semites to early European cultures; the contrasts between the Aryans and Nordics in racial characters with particular attention given to the Q-Kelts, P-Kelts, Slavs and Anglo-Saxons. Three lectures per week.

Prerequisite: Ethnology 105.

2 credits (Funkhouser)

110a, b, c, d—FIELD ARCHAEOLOGY. Field work in archaeology including the actual excavation of prehistoric sites, the surveying, photographing and measuring involved and the preparation of technical reports.

3 credits per course (Funkhouser, Webb and Haag)

BACTERIOLOGY

102—GENERAL BACTERIOLOGY. Observation and cultivation of bacteria and related microorganisms; study of their morphology, classification, physiology, relation to certain fermentations, to foods, to soil fertility, and to disease. Lectures and recitations, two hours a week; laboratory, four hours a week.

Prerequisite: Chemistry 1b.

4 credits (Scherago)

103—PATHOGENIC BACTERIOLOGY. A study of human and animal pathogenic microorganisms, especially their morphological, cultural, biochemical and pathogenic properties. Lectures and recitations, two hours a week; laboratory, four hours a week.

Prerequisites: Bacteriology 52,

4 credits; 1st semester

102, or 2b and Chemistry 1b.

(Scherago)

104—APPLIED BACTERIOLOGY. A course in bacteriological analysis to supplement Courses 52 or 102. Laboratory, four hours a week.

Prerequisites: Chemistry 1b preceded or accompanied by Bacteriology 52 or 102. (Weaver)

110a—LABORATORY DIAGNOSIS. Laboratory methods employed in diagnostic and public health laboratories. Designed primarily for students interested in Medical Technology. Examination of sputum, urine and blood. Laboratory, six hours a week.

Prerequisite: Must be preceded or accompanied by Bacteriology 103. 3 credits; 2nd semester (Scherago)

110b—LABORATORY DIAGNOSIS. A continuation of 110a. Laboratory diagnosis of intestinal parasitism; examination of stomach and intestinal contents; laboratory methods used in diagnosis of gonorrhea, typhoid fever, syphilis, etc. Laboratory, six hours a week.

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

111—GENERAL PATHOLOGY. The effect of disease on the organs and tissues of the human body. Fresh and museum specimens as well as histological sections will be examined. Degenerations, infiltrations, regenerations, inflammation, disturbances of the circulation, infectious granulomata, neoplasms, etc., will be studied. Lectures and recitations, two hours a week; laboratory, four hours a week.

Prerequisites: Physiology 1a and 1b; Zoology 7b and 101b; Bacteriology 103. 4 credits; 1st semester (Maxwell)

115—INDIVIDUAL WORK. Students will be assigned special problems in laboratory work and reference reading. Laboratory, six hours a week.

Prerequisite: Any advanced course in Bacteriology. 3 credits (Scherago, Weaver)

120a—HOSPITAL LABORATORY PRACTICE. Students will be required to carry out, under supervision, the laboratory work in one of the hospitals in Lexington. Laboratory, twelve hours a week.

Prerequisites: Bacteriology 110a, b; consent of Head of Department. 4 credits; 1st semester (Maxwell)

120b—HOSPITAL LABORATORY PRACTICE. Continuation of 120a. Laboratory, eighteen hours a week.

Prerequisites: Bacteriology 110a, b; consent of Head of Department. 6 credits; 2nd semester (Maxwell)

125—IMMUNOLOGY AND SEROLOGY. The theories and mechanism of infection and immunity; the preparation, standardization and uses of vaccines, toxins, antibodies and other biological products related to the diagnosis, prevention and treatment of specific infectious

diseases; agglutination, precipitation, complement fixation, etc.; receptor analysis; hypersensitiveness. Lectures and recitations, two hours a week; laboratory, six hours a week.

Prerequisite: Bacteriology 103.

5 credits; 2nd semester

(Scherago)

150a-d—SEMINAR. Review of current literature in bacteriology; presentation of papers on work in progress in the department or on assigned topics; reports on meetings of national bacteriological societies.

1 credit; both semesters (Scherago, Weaver)

201a-d—RESEARCH IN BACTERIOLOGY. Laboratory, ten hours a week

5 credits; both semesters (Scherago, Weaver)

203a—PUBLIC HEALTH BACTERIOLOGY. This course considers the public health aspects of bacteriology including the etiology, epidemiology; immunology, and laboratory diagnosis of infectious diseases; the bacteriology of air, water and sewage; food poisoning; the production, standardization and practical applications of biological products used in the diagnosis, treatment and prevention of infectious diseases; the standardization of disinfectants.

Prerequisites: Open only to physicians and health officers or those with equivalent training.

3 credits (Scherago)

203b—PUBLIC HEALTH BACTERIOLOGY. Continuation of Course 203a.

Prerequisite: Bacteriology 203a.

3 credits (Scherago)

NOTE.—This course is offered in the summer session only.

206—BACTERIOLOGY OF FOODS. Microbiology of milk and milk products, eggs, tomato products, meat and meat products; food preservation; bacterial food poisoning. Lectures and recitations, two hours a week; laboratory, four hours a week.

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

4 credits; 1st semester

207—BACTERIOLOGY OF WATER AND SEWAGE. The microflora of water; importance of the colon-typhoid group of bacteria in 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 purification plants, sewage disposal plants and swimming pools will be visited and studied. Lectures and recitations, two hours a week; laboratory, four hours a week.

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

4 credits; 2nd semester

(Weaver)

BOTANY

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

3 credits (McFarland, McInter)

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

3 credits (McFarland, McInter)

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

Prerequisites: Botany 125a, b.

1 credit (McFarland)

103—PLANT PHYSIOLOGY. A course dealing with the fundamental functions of the plant cell life, nature of protoplasmic membranes, osmotic phenomena, metabolism, growth and responses of various kinds. Lecture one hour; recitation, one hour; laboratory four hours.

Prerequisites: Botany 1a, 1b.

4 credits (McInter)

114—ECOLOGY. A course dealing with plants in relation to their habitats. Studies will be made along the lines of plant groups and quadrat formation. The influence of various soils and environment on plants and their growth. Lecture, two hours; laboratory, two hours.

Prerequisites: Botany 1a, 1b, 15.

3 credits (McInter)

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 15, but more work and more difficult plants are studied.

3 credits (McFarland, McInter)

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

3 credits (McFarland, McInter)

206a—RESEARCH IN MORPHOLOGY.

5 credits (McFarland, McInter)

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

5 credits (McFarland, McInter)

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 (McInteer)

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

5 credits (McInteer)

213a—RESEARCH IN SYSTEMATIC BOTANY.

5 credits (McFarland, McInteer)

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 offers graduate work leading to the degree of Master of Arts or Master of Science. The requirements for these degrees are the same as required in all other departments.

Most of the graduate work of this department, however, is offered in the Summer Session and is designed primarily for public health officers. This work leads to the professional degree of Master of Science in Public Health, the requirements for which are given in a preceding section of this bulletin.

The courses offered by the department which are accepted for graduate credit are as follows:

100a—PUBLIC HEALTH. A consideration of the cause, prevalence, transmission and control of preventable diseases.

3 credits; 1st semester, summer school

(Chambers and Heinz)

100b—PUBLIC HEALTH. A continuation of 100a. Environmental and organization approach to disease prevention.

3 credits; 2nd semester, summer school

(Chambers and Heinz)

104—MATERNAL AND CHILD HEALTH. Problems in maternal and child health from the standpoint of the public health nurse.

2 credits; 2nd semester, summer school (Griffin)

110—HEALTH EDUCATION AND HEALTH SUPERVISION OF SCHOOLS. A course dealing with principles of health education, and

the cooperative nature of school health work through study of problems in the solution of which contributions are made by parents, school and community.

3 credits; 2nd semester, summer school (Heinz)

111a, b—INDEPENDENT WORK IN HYGIENE AND PUBLIC HEALTH.

3 credits; 1st and 2nd semesters (Staff)

115—COMMUNICABLE DISEASES. A study of communicable diseases with reference to causal agents, transmission, and their methods of prevention and control.

3 credits; summer school (Hamilton)

118—VITAL STATISTICS. Statistics of population, deaths, births and morbidity; the collection and analysis of vital statistics.

3 credits; 1st semester, summer school (Heinz)

120a—MENTAL HYGIENE. An introduction to mental hygiene, including a consideration of the cause, treatment and prevention of mental disorders.

3 credits; 1st semester, summer school (Ratliff)

120b—MENTAL HYGIENE. A continuation of Hygiene 120a. Students are given the opportunity to apply to concrete cases the principles and concepts developed in 120a.

3 credits; 2nd semester, summer school (Ratliff)

122—SCHOOL AND COMMUNITY HEALTH. To develop an idea of the cooperative nature of school health work and the importance of connecting it up with adult work in the community.

2 credits; 1st semester, summer school (Rood)

124a—PUBLIC HEALTH NURSING. The principles and practices of public health nursing.

3 credits; 1st semester, summer school (Rood)

124b—PUBLIC HEALTH NURSING. Educational interpretations of public health services. A continuation of Hygiene 124a.

3 credits; 2nd semester, summer school (Rood)

125a—COUNTY HEALTH PRACTICE. Lectures and recitations on the purposes, development, practice and techniques of local health work.

2 credits; 2nd semester, summer school (Cawood)

125b-e—COUNTY HEALTH PRACTICE. Nursing practice in the training area under the supervision of trained personnel. Sixteen weeks taken either concurrently or following the formal courses of instruction.

*3 credits; both semesters, summer school by appointment
(Cawood, Rood)*

126—CARE AND TREATMENT OF CRIPPLED CHILDREN. Intended to give students opportunities to observe the various crippling conditions found in children and to understand underlying causes.
1 credit; 2nd semester, summer school (Rood)

130—DEFICIENCY DISEASES AND NUTRITION. Lectures and recitations. A consideration of the physiological action of the more common vitamins and hormones and the clinical and subclinical manifestations of their excess or deficiency. The public health aspects of prevalence and control are emphasized.
2 credits; summer school (Gambill)

200—EPIDEMIOLOGY. The cause, transmission and control of communicable diseases.
3 credits; summer school (Chambers)

203—PUBLIC HEALTH RECORDS. General principles of recording, filing and use of public health data.
2 credits; summer school (Cawood)

204—MATERNAL AND CHILD HEALTH. Lectures and conferences. The principles of prenatal, infant and child care.
2 credits; summer school (Griffin)

212a—PUBLIC HEALTH ADMINISTRATION. The organization and administration of public health.
3 credits; summer school (Mustard)

218a—VITAL STATISTICS. Statistics of population, births, deaths, marriage and morbidity.
3 credits; summer school (Fertig)

218b—VITAL STATISTICS. A continuation of 218a.
2 credits; summer school (Fertig)

220—MENTAL HYGIENE. Lectures and clinics considering the cause, classification, course, treatment and prevention of mental disorders.
2 credits; summer school (Rogers)

225a—COUNTY HEALTH PRACTICE. An internship in actual county health practice.
3 credits; summer school (Cawood)

225b—COUNTY HEALTH PRACTICE. A critical analysis of one service of the Fayette County Health Department.
2 credits; summer school (Cawood)

290—SEMINAR.
1 credit; summer school (Staff)

PSYCHOLOGY (See Social Sciences.)

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, migration 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 important species. Methods of study and methods of control. For pre-medical students.

3 credits; 1st semester (Allen)

106—EMBRYOLOGY. Vertebrate development. Lectures on maturation, fertilization, cleavage, axiation, 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)

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)

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)

114a—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) Occasional book reviews. (4) Discussion of biological principles and phenomena. (5) Correlation of zoological fields.

1 credit (Funkhouser, Allen, Brauer)

114b—ZOOLOGICAL SEMINAR. A continuation of 114a.

1 credit (Funkhouser, Allen, Brauer)

157a—INVERTEBRATE 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)

157b—VERTEBRATE 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) Complete demonstration of the Mammalian anatomy.

4 credits; 2nd semester (Allen)

160—ONTOGENY. Theories and philosophies of development with a consideration of experimental data bearing thereon. Lectures and literature reports.

2 credits; 1st semester (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

Requirements for the degree of Master of Science: Twenty-four credits in graduate courses exclusive of the thesis, one academic year (36 weeks) in residence, and an acceptable thesis.

The applicant must have a good reading knowledge of scientific German. Ability to read scientific French is often required of the candidate.

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

Prerequisites: Chemistry 7 and 8, 5 credits; either semester
Physics 1b, Mathematics 3 or 4. (Bedford)

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

Prerequisites: Chemistry 101 5 credits; either semester
or 131b, 109, 127b. (Bedford)

103—QUALITATIVE ORGANIC ANALYSIS. A systematic study of the separation and identification of organic compounds. Laboratory, ten hours a week.

Prerequisite: Chemistry 127b. 5 credits; either semester
(Baker and Barkenbus)

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 (Stewart)

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; 2nd 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
(Stewart)

110—PHYSICAL CHEMISTRY. Intermediate course.

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

111—PHYSICAL CHEMISTRY. Intermediate course.

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

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 (Stewart)

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

5 credits; either semester (Stewart)

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

2 credits; 1st semester (Stewart)

119a—INDUSTRIAL CHEMISTRY. A survey course on modern industrial chemistry using the chemical literature and a 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 (Stewart)
or 127a and 8.

130a—PHYSIOLOGICAL CHEMISTRY. The chemistry 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 7 or 127a. 5 credits; 1st semester (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 Heterogeneous Equilibria; Chemical Kinetics; Structure of Matter; Periodic Law; Radio-Chemistry; Colloids; Electro-Chemistry.

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

140—INDUSTRIAL STOICHIOMETRY. Chemical calculations of manufacturing processes, e. g., calculations related to the production of water and producer gas, lime, cement, nitric and sulphuric acids and other industrial products.

Prerequisite: Chemistry 119a. 3 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 (Stewart)

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 2 credits; either semester and Calculus. (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: 3 or more credits; either Chemistry 205a. semester (Bedford)

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

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

207a—SYSTEMATIC INORGANIC CHEMISTRY. Lectures and conferences, two hours a week.

Prerequisite: Chemistry 131b or 2 credits; either semester its equivalent. (Maxson)

207b—SYSTEMATIC INORGANIC CHEMISTRY. Continuation of Chemistry 207a. Lectures and conferences, two hours a week.

2 credits; either semester (Maxson)

208—THEORETICAL CHEMISTRY. A historical survey of atomic theories and their influence upon the development of chemistry. Two lectures and assigned reading a week.

2 credits; either semester (Stewart)

210a, b, c, d—SEMINAR. Reports and discussions of recent research and current literature. 2 hours.

1 credit; either semester (Staff)

ENGINEERING (See Engineering.)

GEOLOGY

101a—PALEONTOLOGY. A systematic study of the important phyla of fossil invertebrates, their classification, identification, and geological distribution.

Prerequisites: Geology 15a-b; 3 credits; 1st semester Zoology 1a-b. (McFarlan)

101b—PALEONTOLOGY. The stratigraphic use of fossils in the determination of the geologic age of strata. Collections are assigned, the fossils identified, and the age of the fauna determined.

Prerequisite: Geology 101a. 3 credits; 2nd semester (McFarlan)

104a, b, c, etc.—ADVANCED FIELD GEOLOGY. The preparation of a geologic map, structure, and stratigraphic sections of assigned areas.

Prerequisites: Geology 9b, 15a-b.

2 credits (McFarlan)

105a, b, c, etc.—INDEPENDENT WORK IN GEOLOGY. May be elected in any field. Registration only after consultation with instructor in charge.

3 credits

106a—ECONOMIC GEOLOGY. Non-metallic mineral deposits (excepting petroleum, natural gas and asphalt). A study of origin, mode of occurrence, distribution and uses.

Prerequisite: Geology 15a-b.

3 credits (Averitt)

106b—ECONOMIC GEOLOGY. Metallic mineral deposits.

3 credits (Averitt)

118a, b, c—FIELD WORK IN REGIONAL GEOLOGY. Two to three weeks in the field in selected areas. These are varied from year to year to permit extended work of this type. They have included the Southern Appalachians (1935), Niagara Falls and Sudbury, Ontario (1936), the Arbuckle and Ouachita Mountains, and eastern Oklahoma and Texas (1937), and the Black Hills, South Dakota (1938). The course is offered as a part of the first summer session, coming early in June before the opening of the term. Required of major students at the end of their junior year.

Prerequisite: Geology 15a-b.

2 credits (McFarlan and Young)

120a—GEOLOGY OF KENTUCKY. A study of the geological features of the state other than mineral resources. This includes the major events in its geological history, the development of regional characters, and an explanation of its scenic and natural wonders.

3 credits (McFarlan)

120b—GEOLOGY OF KENTUCKY. The mineral resources of the state, their recognition, distribution, origin and uses. The fossil record of ancient life.

3 credits (McFarlan)

121—ECONOMIC GEOLOGY OF KENTUCKY. A technical study of the mineral resources of the state, their distribution and availability, geological occurrence, origin, and geological factors determining probable extension of known deposits and the finding of others.

Prerequisites: Geology 101a, b;

3 credits

106a, b; 104a, b; 109a, b; 122.

(McFarlan and others)

122—PETROLEUM GEOLOGY. A study of the origin and accumulation of petroleum. The course includes a consideration of the stratigraphy and structure of producing regions of the United States and a study of geologic methods used in exploratory work and in the exten-

sion and development of known fields. An introduction to geophysical methods is given by Dr. Koppius.

Prerequisites: Geology 9a, b; 15a, b; 19a, b. 3 credits; 2nd semester (Robinson)

123a—MINERALOGY. Crystallography and physical mineralogy with emphasis on their use in mineral identification.

Prerequisite: Chemistry 1a-b. 3 credits; 1st semester (Robinson)

123b—MINERALOGY. Chemical, descriptive and determinative mineralogy. The origin, occurrence, associations and alteration products of minerals.

3 credits; 2nd semester (Robinson)

124a-b—REGIONAL GEOLOGY. A study of the geologic regions of the United States. The course will serve as tutorial work in preparation for the comprehensive examination.

3 credits per semester (All members of staff)

202a-b—RESEARCH IN GEOLOGY. Consult instructor before registering.

5 credits

207a—PETROLOGY. Optical mineralogy. The use of optical properties in the determination of minerals in thin sections. A study of the minerals, their associations, and alteration products.

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

207b—PETROLOGY. A study of igneous rocks, their classification, origin, metamorphism and decay.

Prerequisite: Geology 107a. 3 credits (Robinson)

208—STRUCTURAL GEOLOGY. A study of rock structures, rock deformation and diatrophism.

Prerequisites: Geology 15a-b; 109a-b; Physics 1a-b. (Robinson)

210—STRATIGRAPHIC PALEONTOLOGY. A study of the more important index fossils and fossil associations used in stratigraphic work.

Prerequisites: Geology 101a-b. 3 credits (McFarlan)

MATHEMATICS AND ASTRONOMY

Graduate students will be able to obtain sufficient work to qualify for the doctor's degree. Twelve credits beyond calculus are required before counting work toward an advanced degree.

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

Prerequisite: Course 20b.

3 credits; 1st semester (Rees)

[GIVEN 1937-38]

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 20a.

3 credits; 2nd semester

(Downing)

[GIVEN 1937-38]

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

Prerequisite: Course 20b.

3 credits; 1st semester

(LeStourgeon and Downing)

[GIVEN 1937-38; OFFERED 1938-39]

105b—DIFFERENTIAL EQUATIONS. Continuation of 105a. Partial differential equations. Applications.

3 credits; 2nd semester (John)

[OFFERED 1938-39]

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 20b.

3 credits; 1st semester (Cohen)

[GIVEN 1937-38]

106b—ADVANCED CALCULUS. Continuation of Mathematics 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 or

3 credits; 2nd semester

consent of instructor.

(Cohen)

[GIVEN 1937-38]

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

Prerequisite: Course 20a.

3 credits; 1st semester (Pence)

[OFFERED 1938-39]

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

Prerequisite: Course 20b.

3 credits; both semesters

(Senior Staff)

[GIVEN 1937-38; OFFERED 1938-39]

112—SERIES. Important theorems on limits, properties of infinite series, uniform convergence, multiplication of series.

Prerequisite: Course 20b. 3 credits; 1st semester (Cohen)

[OFFERED 1938-39]

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 20b. 3 credits; 2nd semester
(Downing)

[OFFERED 1938-39]

118—SOLID ANALYTIC GEOMETRY. Loci of equations of first and second degrees in three variables. Determinants and Matrices. Methods and principles of use in various fields of higher mathematics.

Prerequisite: Course 20b. 3 credits; 1st semester
(LeSturgeon)

[OFFERED 1938-39]

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

Prerequisite: Course 20a. 3 credits; 2nd semester (Boyd)

[GIVEN 1937-38]

120—MATHEMATICAL STATISTICS. Topics considered: Averages, coefficient of dispersion and skewness, graphical representation, Bernoulli's theorem, curve fitting, theory of sampling, correlation, and regression lines.

Prerequisite: Course 20a. 3 credits; 2nd semester (South)

[OFFERED 1938-39]

122—ACTUARIAL MATHEMATICS. Theory and construction of mortality tables, life annuities, premiums, terminal reserves, etc.

Prerequisites: Mathematics 14, 20a. 3 credits; 2nd semester
(South)

[GIVEN 1937-38]

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

3 credits; 1st semester (John)

[GIVEN 1937-38]

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

3 credits; 2nd semester (Boyd)

[OFFERED 1938-39]

203—THESIS. Required in addition to twenty-four credits for the Master's degree.

3 credits; both semesters (Senior Staff)

[GIVEN 1937-38; OFFERED 1938-39]

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

(Downing)

[GIVEN 1937-38]

205—DIFFERENTIAL GEOMETRY. Introductory study of metric properties of surfaces and twisted curves. Although vector analysis is not required, vector methods will be found of great assistance in the study.

3 credits; 2nd semester (John)

[GIVEN 1937-38]

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

3 credits; 1st semester (Latimer)

[GIVEN 1937-38]

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

Prerequisites: Courses 105a, 106a. 3 credits; 2nd semester

(Cohen)

[OFFERED 1938-39]

209—THEORY OF FUNCTIONS OF THE COMPLEX VARIABLE. Introduction to algebra and calculus of complex numbers and their geometric representation. Conformal transformation. Cauchy-Riemann viewpoint, Weierstrass development. Riemann surfaces.

Prerequisites: Courses 105a, 106a. 3 credits; 2nd semester

(LeSturgeon)

[GIVEN 1937-38]

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

Prerequisite: Course 20a. 3 credits; 1st semester (Latimer)

[OFFERED 1938-39]

220a-d—MATHEMATICS SEMINAR.

2 credits; 2nd semester (Latimer, John)

[OFFERED 1938-39]

218—ALGEBRAIC NUMBERS. Introductory course. Hecke's *Vorlesungen ueber der Algebraischen Zahlen* is used as a text.

3 credits; 2nd semester (Latimer)

[OFFERED 1938-39]

221—TENSOR ANALYSIS. A course on the modern extension of vector analysis with special emphasis on applications to differential geometry. Algebraic part of theory of tensors. Quadratic differential forms. Riemannian geometry. Pseudo-Euclidian geometry.

3 credits; 1st semester (John)

[OFFERED 1938-39]

NOTE.—Other courses such as Advanced Analytics, Fourier's Series, Potential Function, Groups, Theory of Numbers, Algebraic Invariants, Celestial Mechanics, Practical Astronomy, second courses in various subjects, 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 heats, heats of combustion, thermal conductivities. Calibration of thermocouples, etc.

Prerequisites: *Physics 2b* and
Mathematics 20b.

5 credits (Koppius)

102a—ELECTRICITY AND MAGNETISM. A course developing the fundamental theory of electricity and magnetism, emphasizing the physical concepts of electrical quantities and applying these to practical problems. The laboratory work is designed both to emphasize the principles covered and to give the student experience in the careful use of electrical measuring instruments. Lectures and recitations three hours, laboratory four hours a week.

Prerequisites: *Physics 2b* and
Mathematics 20b.

5 credits (Warburton)

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

Prerequisites: *Physics 2b* and
Mathematics 20b.

5 credits (Ramsey)

104—THEORETICAL MECHANICS. This course begins with a careful statement of the fundamental laws of mechanics and the conditions under which they hold. Defined quantities are introduced logically. The work is usually based on some standard text but will be supplemented by lectures. The student is expected to solve a representative list of problems.

Prerequisites: *Physics 2b* and
Mathematics 20b.

5 credits (Pardue)

108—THEORY OF LIGHT. This course comprises the lectures and recitations of Course 103.

3 credits (Ramsey)

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

*Prerequisites: Physics 2b and
Mathematics 20b.*

3 credits (Warburton)

113—FUNDAMENTALS OF RADIO. A course in radio primarily for high school teachers. The fundamental principles of vacuum tube characteristics, amplifiers, oscillators, transmitters and receivers; laboratory work in constructing and operating simple radio equipment of a type suitable for radio club projects.

*Prerequisite: Physics 1b or
equivalent.*

3 credits (Hahn)

114a—RADIO COMMUNICATION. Circuit constants at radio frequencies; resonant circuits; theory of vacuum tubes and measurement of vacuum tube constants; theory and design of vacuum tube amplifiers, audio and radio frequency; vacuum tube oscillators; piezo-electric phenomena; detection; modulation; antennas and wave propagation; theory of transmitter and receiver design. Lectures and recitations, two hours; laboratory, two hours a week.

*Prerequisites: Physics 2b;
Mathematics 20b.*

3 credits (Hahn)

114b—RADIO COMMUNICATION. A continuation of Course 114a. Lectures and recitations, two hours; laboratory, two hours a week.

Prerequisite: Course 114a.

3 credits (Hahn)

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)

116b—PHYSICAL MANIPULATIONS. A continuation of 116a.

1 credit (Webb)

117—THEORY OF HEAT. This course comprises the lectures and recitations of Course 101.

3 credits (Koppius)

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 mathematical development of the formulae of absorption, scattering, polarization, etc.; methods of wave length measurement; the Compton effect and related quantum phenomena; a review of articles in the various scientific periodicals.

*Prerequisites: Physics 2b and
Mathematics 20b.*

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 distance factors. Lectures and recitations two hours a week.

Prerequisite: *Physics 1a-b.*

2 credits (Hahn)

122—X-RAY ANALYSIS OF CRYSTALS. Elementary theory of x-ray diffraction and its application to the study of the structure of matter; the methods of Laue, Bragg, crystal rotation and powder spectroscopy, as used in the determination of symmetry, cell size and atomic arrangement.

Prerequisite: *Physics 119.*

3 credits (Hahn)

123—PRINCIPLES OF THERMODYNAMICS. A lecture and problem course covering the first and second laws of thermodynamics, derivation of thermodynamic relations and their application to processes in physics and allied sciences. Topics considered: The gas laws for both ideal and real gases, specific heat relations, continuity and change of state, vapor and osmotic pressures, equilibrium, solutions, electrical phenomena and radiation, etc.

Prerequisites: *Physics 2b and Mathematics 20b.*

3 credits
(Koppius)

125a, b, c, d—INDIVIDUAL WORK IN PHYSICS.

3 credits (Staff)

151—INTRODUCTION TO ATOMIC PHYSICS. A survey of recent physics for those interested in professions other than advanced physics and a useful introduction for those planning to pursue physics intensively. Contents: corpuscular nature of matter, electricity and radiant energy; molecular, atomic and nuclear structure; theoretical viewpoints upon above problems with special emphasis in their compatibility; relativity, astrophysics.

Prerequisites: *Physics 2b and Mathematics 20b.*

3 credits (Pardue)

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 in Physics, 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 spectrograph. 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: Two "100" courses in Physics, and Mathematics 105a. 3 credits (Koppius)

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: Two "100" courses in Physics, and Mathematics 105a. 3 credits (Koppius)

210a—ELECTRODYNAMICS. The mathematical theory of electricity and magnetism, including an analysis of the energy relations between charges and between currents. Numerous problems are solved by introducing boundary conditions in the general solutions of the differential equations. The expressions for retarded potentials and the Maxwell field equations are developed. Vector notation is used throughout.

Prerequisites: Physics 102a and Mathematics 105a. 3 credits (Warburton)

210b—ELECTRODYNAMICS. A treatment of the subject from the relativity point of view and on the electron theory. The topics treated will be the simultaneous and retarded fields of a point charge, the derivation and solution of the field equations, the dynamical equation of the electron, radiation from an electron and groups of electrons.

Prerequisites: Physics 102a and Mathematics 105a. 3 credits (Pardue)

NOTE.—210a and 210b are independent of each other.

212—CONDUCTION OF ELECTRICITY THROUGH GASES. A course of lectures covering 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, isotopes, photo-electricity, etc., are treated.

Prerequisites: Physics 102a and 104, and Mathematics 105a. 3 credits (Koppius)

213—ELECTRO-MAGNETIC THEORY OF LIGHT. A course of lectures covering the classical electro-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 "100" course in Physics, and Mathematics 105a.

3 credits (Webb)

215—QUANTUM THEORY. A brief review of the Bohr and Bohr-Sommerfeld theories. The general aspects of wave mechanics, matrix mechanics, uncertainty principle. Application of the above theories to numerous and important problems.

Prerequisites: Physics 217a and Mathematics 105a.

3 credits (Pardue)

216a—RECENT ADVANCES IN PHYSICS. Current developments in physics are carefully studied with special interest placed upon their background and their trend. Useful training is afforded in the organization of the literature upon special topics.

Prerequisite: One specialized "200" course in Physics.

1 credit (Staff)

216b—RECENT ADVANCES IN PHYSICS. A continuation of 216a.

1 credit (Staff)

217a—THEORETICAL PHYSICS. Lectures upon advanced classical and relativity dynamics, hydrodynamics of perfect fluids and of viscous fluids, properties of elastic media. A substantial portion of the treatment of many of the topics will be taken from Page's "Introduction to Theoretical Physics".

Prerequisites: Two "100" courses in Physics and Mathematics 105a.

3 credits (Pardue)

217b—THEORETICAL PHYSICS. A continuation of 217a. Statistical mechanics, classical and modern. Origin of spectra including the classical theory of molecular spectra. Transformation of the elements. There is a slight flexibility which may be used to fit the needs of the students.

3 credits (Pardue)

218—THERMODYNAMICS. A review of the two classical laws of thermodynamics and their dynamical and statistical mechanical support; Nernst's heat theorem; applications of classical thermodynamics to important problems; relativity thermodynamics.

Prerequisites: Physics 101 and Mathematics 105a.

3 credits

220a—SEMINAR. A weekly meeting of the staff and advanced students of the department for presentation and discussion of recent developments 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 (Staff)

220b-d—SEMINAR. A continuation of 220a.

1 credit (Staff)

224—X-RAYS AND THEIR APPLICATIONS TO PHYSICAL PROBLEMS. An advanced study of the theories of production, scattering and absorption of x-rays, the interpretation of x-ray spectra, and advanced experimental technique in x-ray measurements. Much of the material will be taken from "X-Rays in Theory and Experiment" by Compton and Allison.

Prerequisite: Physics 119.

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.

(Staff)

226a—RESEARCH IN PHYSICS.

3 credits (Staff)

226b—RESEARCH IN PHYSICS.

3 credits (Staff)

227a—RESEARCH IN PHYSICS.

5 credits (Staff)

227b—RESEARCH IN PHYSICS.

5 credits (Staff)

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

*Prerequisites: Physics 103 and either
Physics 102a or 104.*

3 credits

(Webb)

250b—RELATIVITY. A continuation of Physics 250a.

3 credits (Webb)

V. AGRICULTURE

AGRICULTURAL EDUCATION (See Education.)

AGRICULTURAL 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 or Townsend)

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 or Townsend)

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

Prerequisite: Entomology 10. 3 credits; 2nd semester

(Price or Townsend)

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

and any one of the following: 102, 103, 104.

(Price or Townsend)

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

3 credits; 2nd semester (Price or Townsend)

201a—ENTOMOLOGICAL PROBLEMS. Discussions 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)

AGRONOMY

105—ADVANCED CROPS. Important crops of the world are studied in some detail as regards distribution, soil and climatic adaptation and technique of production. Lectures and recitations, 3 hours.
Prerequisite: Agronomy 11. 3 credits; 2nd semester, summer
(Kinney, Fergus)

106—FIELD CROP IMPROVEMENT. A study of the principles involved and the technic used in breeding field crop plants. Lectures, 2 hours.
Prerequisites: Agronomy 11 2 credits; 2nd semester
or equivalent; A. I. 19. (Kinney)

109—RECENT DEVELOPMENTS IN SOIL MANAGEMENT. Consideration will be given to the water erosion, leaching, tillage, liming, fertilization, and cropping of soils in the light of recent knowledge.
Prerequisites: Undergraduates, 3 credits; summer
Agronomy 115; graduates, (Karraker)
Agronomy 4.

110—ADVANCED SOILS: BIOLOGICAL STUDIES IN SOILS. A study in some detail of the soil, organisms and biological soil processes. Lecture, 1 hour; laboratory, 4 hours.
Prerequisite: Agronomy 14. 3 credits; 2nd semester
(Karraker)

111—ADVANCED SOILS: PHYSICO-CHEMICAL STUDIES IN SOILS. A study in some detail of the physico-chemical conditions and changes in soils. Lecture, 1 hour; laboratory, 4 hours.
Prerequisite: Agronomy 4. 3 credits; 2nd semester
(Karraker)

112a-b—SPECIAL WORK IN SOILS. Students interested will be given the opportunity to do work not covered in the other courses in soils.
Prerequisite: Agronomy 4. 3 credits; 1st and 2nd semesters
(Roberts, Karraker)

113—AGRONOMY EXPERIMENTATION. A study of the essentials of reliable field experimentation, including sources of error; **a study of field results with emphasis on interpretation.** Lectures and discussions, 3 hours.
Prerequisite: Agronomy 4. 3 credits; 1st semester (Roberts)

114a-b—SPECIFIC CROPS. This course is for the student who wishes to study in detail the production of a particular crop. First

semester work limited to forage crops; second semester work to cereal crops and tobacco.

Prerequisite: Permission of 2 credits; 1st and 2nd semesters instructor.

(Kinney, Fergus)

115—SOIL MANAGEMENT. Deals with erosion, soil moisture, tillage operations, soil organic matter and nitrogen, including animal and green manures, lime and fertilizers. Lectures, 3 hours.

Prerequisite: Agronomy 4. 3 credits; 1st semester (Roberts)

116—TOBACCO. A course designed for students particularly interested in the more practical phases of tobacco production and grading. Laboratory periods are devoted entirely to practice in grading various types of tobacco leaf. Offered in alternate years. Lecture, 1 hour per week; laboratory, 2 hours. Open to juniors and seniors.

2 credits; 2nd semester (Kinney)

[OFFERED 1938-39; NOT OFFERED 1939-40]

202a-b—SPECIAL PROBLEMS IN CROP PRODUCTION. This course is for graduate students wishing to study form and growth of a crop plant in relation to production practices and problems.

2 credits; 1st and 2nd semesters (Kinney, Fergus)

203a-b—LITERATURE IN PLANT PATHOLOGY. A survey of the literature of plant pathology.

Prerequisites: Agronomy 23. 3 credits; 1st and 2nd semesters

(Valleau)

204a-b—INVESTIGATIONS IN SOILS.

Prerequisite: Permission of 3 credits; 1st and 2nd semesters instructor.

(Roberts, Karraker)

207a-b—SEMINAR.

1 credit; 1st and 2nd semesters (Agronomy Staff)

ANIMAL INDUSTRY

102—FARM BUTCHERING AND CURING MEATS. Slaughtering and blocking out of beeves, veals, hogs and lambs; judging on foot and on the hook; wholesale and retail cuts, meat curing and cures with special emphasis on pork. Lectures, 2 hours; laboratory, 4 hours.

Prerequisite: A. I. 31. 4 credits; each semester (Wilford)

104—ANIMAL BREEDING. Breeding plans, inbreeding, line-breeding, outcrossing; disease resistance; inheritance of lethal characters; genetics of sex; heredity in cattle, sheep, swine and laboratory animals. To be given alternate years. Lectures, 3 hours.

Prerequisite: A. I. 19. 3 credits; 1st semester

(Martin, Bywaters)

[OFFERED 1938-39]

105—BEEF PRODUCTION. Development of the beef cattle industry in this and other countries; feeding, breeding and management of beef cattle. Laboratory work consists of judging beef cattle and practical problems relating to the industry. Lectures, 2 hours; laboratory, 2 hours.

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

107—SHEEP PRODUCTION. Breeds and market classes; judging, breeding, feeding, management and marketing of sheep; production and marketing of wool. Lectures, 3 hours.

Prerequisite: A. I. 31. 3 credits; 2nd semester (Horlacher)

110—ADVANCED LIVESTOCK JUDGING. Primarily for judging team candidates. Open only to those who have made good standings in the prerequisite course. Lectures and laboratory.

Prerequisites: A. I. 13 and A. I. 31. 3 credits; 1st semester (Garrigus)

111a-b—SPECIAL PROBLEMS IN ANIMAL HUSBANDRY.

3 credits; each semester (Animal Husbandry Staff)

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. Lectures, 3 hours.

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

127—POULTRY BREEDING. Fundamental genetic principles involved in poultry breeding; disease resistance; inheritance of egg production and related characters; development of breeding programs. To be given alternate years. Lectures, 3 hours.

Prerequisite: A. I. 19. 3 credits; 1st semester (Martin)

[NOT OFFERED 1938-39]

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

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

[NOT OFFERED 1938-39]

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, 6 hours.

Prerequisite: A. I. 33. 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, 6 hours.

Prerequisite: A. I. 33. 3 credits; 2nd semester (Morrison)

[NOT OFFERED 1938-39]

132a-b—SPECIAL PROBLEMS IN DAIRYING.

3 credits; each semester (Dairy Staff)

133a-b—SPECIAL PROBLEMS IN POULTRY.

3 credits; each semester (Martin, Ringrose)

134—ADVANCED POULTRY PRODUCTION. Fundamental studies in control measures of poultry diseases, nutrition, marketing, flock management and replacement. Lectures, 3 hours.

Prerequisite: A. I. 32. 3 credits; 1st semester (Ringrose)

136—TECHNICAL CONTROL OF DAIRY PRODUCTS. Various chemical and bacteriological tests used in the control of production or processing of dairy products. Given in alternate years. Laboratory and recitation, 6 hours.

Prerequisites: A. I. 33, 129. 3 credits; 2nd semester (Morrison)

[NOT OFFERED 1938-39]

137—DAIRY CATTLE BREEDING. The application of genetics to present day problems of breed and herd improvement, an analysis of progress and mistakes of the past compared with present day approved methods of interpreting records, the progeny test of sires, type classification, selective registration as employed by leading breeders. The rise and fall in popularity of prominent families and strains within the leading dairy breeds. To be given in alternate years. Lecture, 3 hours.

Prerequisite: A. I. 19. 3 credits; 2nd semester (Ely)

[OFFERED 1938-39]

138—HORSE PRODUCTION. Development of the horse industry in this and other countries; judging, breeding, feeding, management and marketing. Lectures, 2 hours; laboratory, 2 hours.

3 credits; 1st semester (Horlacher)

202a-b—RESEARCH IN MEATS. Problems involving original investigation.

3 credits; each semester (Wilford)

203a-b—RESEARCH IN ANIMAL GENETICS. Problems involving original investigation.

3 credits; each semester (Martin)

204a-b—RESEARCH IN DAIRYING. Special problems involving original investigation on the part of the student in either dairy production or dairy manufacturing.

3 credits; each semester (Dairy Staff)

205a-b—RESEARCH IN HORSE HUSBANDRY. Problems involving original investigation.

3 credits; each semester (Horlacher)

206a-b—RESEARCH IN POULTRY SCIENCE. Problems involving original investigation.

3 credits; each semester (Martin, Ringrose)

207a-b—RESEARCH IN SHEEP HUSBANDRY. Problems involving original investigation.

3 credits; each semester (Horlacher)

209a-b—ANIMAL HUSBANDRY SEMINAR.

1 credit; each semester (Staff)

210a-b—RESEARCH IN BEEF CATTLE HUSBANDRY. Problems involving original investigation.

3 credits; each semester (Good, Garrigus)

211a-b—RESEARCH IN SWINE HUSBANDRY. Problems involving original investigation.

3 credits; each semester (Wilford)

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)

201a-b—INVESTIGATION IN ANIMAL DISEASES. Special problems involving original investigation on the part of the student.

Prerequisites: 126 and 116,
or equivalent.

4 credits; each semester
(Dimock and Staff)

FARM ECONOMICS

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 livestock, 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 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 characteristics 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 113. 2 credits; 1st semester
(Nicholls)

[OFFERED IN ALTERNATE YEARS;
NOT OFFERED IN 1938-39]

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; 1st semester (Oyler)

121—SPECIAL PROBLEMS IN RURAL LIFE. Rural community organization, rural migration, and rural institutions such as the family and the church are some of the problems that may be selected.

3 credits; 1st semester (Oyler)

122a-b-c—RURAL LIFE. Examination of composition of population; cultures; the family; and rural social institutions, particularly in view of recent changes in local and national rural life.

1 credit; summer

201a—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)

201b—RESEARCH IN FARM ECONOMICS. A continuation of 201a.

(Nicholls)

203a—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 reports, are held at each meeting.

1 credit; 1st semester (Farm Economics Staff)

203b—AGRICULTURAL ECONOMICS SEMINAR. A continuation of 203a.

1 credit; 2nd semester (Farm Economics Staff)

FARM ENGINEERING

101a-b—SPECIAL PROBLEMS IN FARM ENGINEERING. This course is a study of one or more problems in the field of agricultural engineering.

Prerequisite: Farm Engineering 10. 3 credits; each semester

(Kelley or Young)

102—DAIRY ENGINEERING. A study of the engineering principles involved in the construction, installation, operation and management of machinery and equipment used in the handling and manu-

facturing of dairy products. Lectures and recitations, 2 hours; laboratory, 2 hours.

Prerequisite: Farm Engineering 10. 3 credits; 1st semester
(Kelley)

HOME ECONOMICS

104—PROBLEMS IN TEXTILES. Advanced textiles. Individual term problems.

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

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

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

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

Prerequisite: Senior or graduate 1 credit; throughout year
standing. (Seeds-Latzke)

109—NUTRITION. Metabolic processes of the body in normal and disease conditions, correlating the metabolic changes due to disease with diet therapy. The laboratory includes sugar tolerance tests; protein and mineral balance experiments; biological tests for vitamins. It also includes practice in the planning, calculation and preparation of therapeutic diets.

Prerequisite: Home Economics 124. 4 credits; 2nd semester
(Erikson)

112—PUBLIC SCHOOL NUTRITION. 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. (With special permission from the head of the department, prerequisites may be waived for advanced students.)

Prerequisite: Home Economics 124. 3 credits; both semesters
(Grundmeier)

115—CHILD CARE AND DEVELOPMENT. Study of the care and training of the child from pre-natal life through the pre-school period; standards for normal development—physical, social, emotional and mental; includes observations of pre-school children and participation in nursery school activities. Meetings with parents are required.

Prerequisites: Physiology 3, 3 credits; both semesters
Psychology 7. (Mumford)

116—ADVANCED COSTUME DESIGN. A survey of costume

throughout the ages showing how the costume of a period mirrors the life of the period. Planning of modern costumes from historic source material.

Prerequisite: Home Economics 29. 3 credits; 1st semester
(Seeds)

117—INTERIOR DECORATION. A study of the house interior as an appropriate background for the family. Color, line, and texture are considered in the backgrounds, windows, furniture and accessories. Opportunity is given to plan interiors suited to today's needs.

Prerequisites: Home Economics 26; 3 credits; 2nd semester
Art 30b. (Seeds)

119a-b—EXPERIMENTAL COOKERY. Study of factors that affect the results obtained in cooking and food preparation processes. Experimental work is carried out under controlled conditions and special emphasis is placed on physical, chemical and mechanical conditions. Opportunity is given for group and individual problems depending on the interests of the students. Study of food judging and demonstration may be given.

Prerequisites: Chemistry 7; Home 3 credits; each semester
Economics 6a; or special (Grundmeier)
permission.

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

2 credits; throughout year (Staff)

124—DIETETICS. Daily food requirements of human beings at different age levels, emphasis being given to satisfying the divergent needs of families and other groups. Practice is given in normal dietaries for the different ages and different groups.

Prerequisites: Home Economics 3; 4 credits; both semesters
Home Economics 6b; (Grundmeier)
A. & P. 3.

125—CONSUMER PROBLEMS. A course dealing with the buying problems of the present day consumer. A study of consumer buying and its economic characteristics, an analysis and study of the common problems of the manufacturer, the merchant and the consumer in order to understand better the needs and responsibilities of each group.

Prerequisite: Economics 1. 3 credits; both semesters
(Deephouse)

126—FAMILY LIVING. The inter-locking relationships of community and family living. Emphasis is given to the influence of home conditions on the members of the family, and the result of such influence on attitudes and behaviors that affect community living.

Prerequisites: Home Economics 41; 3 credits; both semesters
Home Economics 115; Economics 1; (Mumford)
Sociology 1a or Farm Economics 120.

127—ADVANCED CHILD DEVELOPMENT. Detailed study of special features of child development during the pre-school years. Examples of what is found according to the literature are observed in the nursery school with special reference to body management, posture, expressive movements, language and speech, conduct in novel situations, emotional expression, conduct in relation to companions, and conduct in problem solving situations.

Prerequisite: Home Economics 115. 3 credits; both semesters

(Mumford)

128—ADVANCED CLOTHING PROBLEMS. Designed to suit the needs of the individual student. Some suggested problems are children's clothing; tailoring; remodeling; clothing economics; clothing for the family.

Prerequisite: Home Economics 47. 3 credits; both semesters

(Seeds, Latzke)

142—HOME MANAGEMENT. A study of the problems of family living—the technological phases of management of time, money and materials and the social and cultural training provided by good family living. Emphasis is placed on buying problems, household accounts, leisure and good family relationship. Students live for a stated period in the University Home Management House.

Prerequisite or parallel: Home Economics 124. 5 credits; both semesters

(Deephouse)

178—INSTITUTION ORGANIZATION AND ADMINISTRATION. Principles of institution organization, types of institution service, modern industrial tendencies, advertisement, personnel and financial control.

Prerequisites: Home Economics 81; 3 credits; 2nd semester

Home Economics 82.

(Helton)

179a-b—INSTITUTION MANAGEMENT. Application of scientific principles of institution management. Practice is given in office management and in the different units of service.

Prerequisite: Home Economics 82. 3 credits; both semesters

(Helton)

180—INSTITUTION EQUIPMENT. Selection, arrangement, cost and care of institution equipment. Problems of lighting, heating, ventilation, refrigeration for institution food preparation and service units.

Prerequisite: Home Economics 82. 3 credits; 1st semester

(Helton)

201—ADVANCED HOME MANAGEMENT. A lecture course affording opportunity for special study of social and economic problems affecting family life.

Prerequisite: Home Economics 142. 3 credits; 2nd semester

(Deephouse)

202a-b—GRADUATE SEMINAR.

2 credits; each semester (Staff)

HOME ECONOMICS EDUCATION (See Education.)

HORTICULTURE

103—POMOLOGY. Pome Fruits. A course dealing with the theory and practice of commercial apple growing. Adaptation, soil relations, fruitfulness and orchard management problems are studied in detail. Lectures, 2 hours; laboratory, 2 hours.

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

104—POMOLOGY. Stone Fruits. A detailed study of commercial peach, plum and cherry growing. Lectures, 2 hours; laboratory, 2 hours.

Prerequisite: Horticulture 1. 3 credits; 1st semester (Waltman)
[OFFERED 1938-39]

105—POMOLOGY. Small Fruits. A detailed study of the care and management of commercial plantings of strawberries, bush fruits and grapes. Lecture, 1 hour; laboratory, 2 hours a week, first half; lecture, 2 hours a week, last half.

Prerequisite: Horticulture 1. 2 credits; 1st semester (Waltman)
[NOT OFFERED 1938-39]

106—GREENHOUSE CONSTRUCTION AND MANAGEMENT. A study of the details of greenhouse construction and management. Lecture, 1 hour; laboratory, 2 hours.

2 credits; 1st semester (Emmert)

[NOT OFFERED 1938-39]

108—VEGETABLE FORCING. A study of the culture of vegetable crops under glass. Lecture, 2 hours; laboratory, 2 hours.

3 credits; 1st semester (Emmert)

[OFFERED 1938-39]

110—VEGETABLE GARDENING. A study of the fundamental principles of vegetable growing, and the farmer's home garden. Lecture, 2 hours; laboratory, 2 hours.

3 credits; 1st semester (Emmert)

111—MARKET GARDENING. A detailed study of commercial vegetable growing, with special emphasis on crops suited to Kentucky. Lectures, 2 hours; laboratory, 2 hours.

Prerequisites: Horticulture 108, 110. 3 credits; 1st semester (Emmert)

113—LANDSCAPE GARDENING. A study of lawns, trees and shrubs and their arrangement for home and school yard planting. Lecture, 2 hours; laboratory, 2 hours.

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

114—ADVANCED LANDSCAPE GARDENING. A continuation of 113. Special attention is given to design and the use of plant materials. Lectures, 2 hours; laboratory, 2 hours.

Prerequisites: Horticulture 113, 117. 3 credits; 2nd semester

(Elliott)

[OFFERED 1938-39]

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; either semester (Olney and Staff)

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

3 credits; either semester (Olney and Staff)

117—FLORICULTURE. A study of the fundamental principles of flower growing under glass and in the garden. Lecture, 2 hours; laboratory, 2 hours.

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

118—ADVANCED FLORICULTURE. A detailed study of the culture and arrangement of garden flowers for the home grounds. Lecture, 2 hours; laboratory, 2 hours.

Prerequisite: Horticulture 117. 3 credits; 2nd semester

(Elliott)

[NOT OFFERED 1938-39]

119—PLANT PROPAGATION. A detailed study of the principles and methods of propagating plants. Lectures, 2 hours; laboratory, 2 hours.

Prerequisites: Botany 1a and 1b. 3 credits; 2nd semester

(Elliott)

200a—SEMINAR.

1 credit; 1st semester (Olney and Staff)

200b—SEMINAR.

1 credit; 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 prices; marketing costs; and cooperative marketing. Lectures, 3 hours.

Prerequisite: Economics 1.

3 credits; 1st semester

(Price and Wrather)

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 (Clark)

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 1. 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 method used and reliability of conclusions drawn. Lectures, 2 hours.
Prerequisites: M. & R. F. 111-113 2 credits; 1st semester (Card)
or Commerce 107.

132—CURRENT PROBLEMS IN AGRICULTURAL ECONOMICS. This course emphasizes recent developments in agricultural marketing, production and credit. Especial consideration of federal production adjustment programs, organization of agricultural credit, marketing agreements and cooperation.
Prerequisite: Farm Economics 4. 3 credits; 2nd semester (Price)

133—AGRICULTURAL POLICY. General development of the principles underlying agricultural policy, including analysis of the place of agriculture in the general economy, goals or objectives of agricul-

tural policy; causes and development of the present agricultural problem; appraisal of current or proposed programs, and legislation for remedial action.

Prerequisite: Farm Economics 4. 3 credits; 2nd semester

(Price)

202a-b—SPECIAL PROBLEMS IN MARKETING AND RURAL FINANCE. Open to graduate students who have the necessary training and ability to do research on individual problems. The course consists of individual work on some selected problem related to agricultural marketing or agricultural finance.

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

(Price and Staff)

203a-b—SEMINAR. Analysis of current problems in field of marketing and rural finance.

1 credit; each semester (Price and Staff)

204—RESEARCH IN MARKETING. Types of research in marketing. Laying out the research project. Analysis of data.

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

VI. EDUCATION

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

Work leading to the Doctor's degree with a major in education must conform to the same rules and regulations as prescribed in the general requirements, pages 10 to 14 of this bulletin.

The regulations governing graduate work leading to the degree of Master of Arts in Education and to the degree of Master of Science in Education are as follows:

1. Of the graduate work offered by any candidate for the master's degree for majors in education, 15 semester hours must be in courses at the "200" level or above for persons completing the degree requirements on the 24-hour basis and 21 semester hours must be in courses at the "200" level or above for persons completing the degree requirements on the 36-hour basis.
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. The number of graduate credits in education must be at least 16 hours for students graduating on the 24-hour basis and at least 24 hours for students graduating on the 36-hour basis.
3. Two plans are provided for the work which leads to the master's degree:
 - A. The first plan consists of 24 semester hours of graduate work with an average standing of B or better, 36 weeks of residence, and the writing of a thesis.
 - B. The second plan requires the completion of 36 semester hours of graduate work with an average standing of B or better, 48 weeks of residence and no requirement of a thesis. Both plans involve the passing of an oral and a written examination over the field of education and an oral examination in the minor field, if any.
4. Review of Educational Literature shall be a required course of all persons graduating on the 36-semester hour basis.
5. If a student desires to qualify for the Master of Arts or the Master of Science degree rather than for the Master of Arts in Education or the Master of Science in Education, he must satisfy the language requirement.

Candidates for the Doctor's degree who major in the College of Education at the University of Kentucky, to satisfy the one-year minimum residence requirement, shall be in attendance at the University of Kentucky two full semesters during the regular year, at least one

semester of which shall be done during the last two years of work toward the doctorate degree. This requirement shall apply to all candidates whose committees had not been approved by September 1, 1935.

EDUCATIONAL ADMINISTRATION

101—SCHOOL ORGANIZATION. A course designed to familiarize the prospective teacher with those activities of school organization and administration in which he 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.

3 credits (Seay)

148—ADVISERS OF GIRLS AND DEANS OF WOMEN. This course is designed for teachers, advisers of girls, and deans of women with particular reference to the needs of Kentucky schools. Some of the problems studied are: the adjustment of students; the aims, organization, and content of the extra-curricular program; the technique of counseling; work with groups; student government; vocational and educational guidance; record forms and office organization.

3 credits (Holmes)

198—THE ADMINISTRATION OF PUPIL PERSONNEL. This course deals with the school census, enforcement of attendance, personnel records, marking, pupil progress, and classification. The course is designed primarily for prospective superintendents and attendance officers.

3 credits (Seay)

202—LOCAL SCHOOL ADMINISTRATION. A general course in public school administration for the prospective superintendent of a county or city school system. The course deals with the state as an educational agency, the local school district, the board of education, the superintendent, the internal organization for the administration of a school system, problems of the teaching personnel, problems of pupil personnel, business management, finance and accounting, the curriculum, school building planning and management and the supervision of instruction. This is one of the basic courses in school administration and should be taken at or near the beginning of the student's graduate program.

3 credits (Seay or Hill)

203—CONSTITUTIONAL AND LEGAL BASIS OF PUBLIC SCHOOL ADMINISTRATION. A study of court decisions in order to discover the legal principles involved in practical problems of school administration. Topics: The school and the state; school districts; school officers; relations of school districts and municipalities; authority of school districts and district officers; school board procedure and records; tort liability of school districts; personal liability of school

officers; contractual authority and liability of boards of education; school money; the school debt; acquisition and use of school property; employment and dismissal of teachers; school attendance; rules and regulations of school boards; discipline and punishment of pupils; textbooks and studies.

Prerequisite: Education 202 or 213 or 232. 3 credits (Ligon)

206—PROBLEMS OF COLLEGE TEACHING. This course covers among others the following topics: Methods commonly used in college teaching; bases for measuring instruction; marking systems; qualifications for college teaching; and efforts being made to improve college instruction.

3 credits (Taylor)

207—SCHOOL BUILDINGS AND EQUIPMENT. The major topics considered are the measurement and evaluation of existing building facilities, planning new school buildings, financing the building program, and building operation and maintenance. The student should have had considerable graduate work in education before enrolling in this course.

Prerequisite: Education 202 or its equivalent. 3 credits (Chamberlain)

210—SPECIAL PROBLEMS IN SCHOOL ADMINISTRATION. An independent work course for students doing their first year of graduate work in education.

Prerequisite: Education 101 or 202. 3 credits (Seay)

211—THE ADMINISTRATION OF VOCATIONAL EDUCATION. A course designed for superintendents and principals of high schools. The purpose of the course is to train for administering and supervising vocational education. Topics emphasized include aims and purposes of vocational education, relationship of vocational to other education, financing vocational education, and relationship of local to state administration.

3 credits (Hammonds)

212—THE ELEMENTARY SCHOOL. This course is designed to help the superintendent, elementary principal, and elementary supervisor in a better understanding of the modern elementary school. The activity program, objectives, research and study in the skills and content subjects of the elementary curriculum are discussed from the standpoint of supervision.

3 credits (Duncan)

213—STATE SCHOOL ADMINISTRATION. The administration of American education from the standpoint of the federal and state governments. The course deals with federal relations to education, the state as an educational agency, local units for the administration of education, the scope of the school system, state school support, state

control of the material environment and equipment, the training and certification of teachers, and teachers' contracts, tenure and retirement.

3 credits (Seay)

214—THE SECONDARY SCHOOL. This course is designed to acquaint the prospective principal or superintendent with the nature and function of the secondary school. This is one of the basic courses in the field of administration and should be taken at or near the beginning of the student's graduate program.

3 credits (Ligon)

225—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. The student should have had Education 202 or its equivalent before enrolling in this class.

3 credits (Seay or Hill)

229—THE ELEMENTARY PRINCIPAL. This course deals with problems related to the elementary principalship, such as the professional preparation, selection and status of the principal; relation to other administrative officers, supervisors, teachers, pupils and parents; problems of attendance, discipline, health and records; the application of sound principles to the improvement of teaching. Emphasis will be placed on the community relationship of elementary principals and teachers and ways in which they may cooperate and improve the life of the community. Attention will also be given to problems presented by members of the class as outgrowth of their experiences.

3 credits (Duncan)

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. The student should have had Education 202 or its equivalent before enrolling in this class.

3 credits (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.

3 credits (Ligon)

233—THE ADMINISTRATION OF THE TEACHING PERSONNEL. A specialized course in school administration, primarily for

prospective superintendents. The course will emphasize principles and practices in teacher preparation, teacher selection and placement, measurement of teaching efficiency, salaries, tenure, retirement, teaching loads, sick leave and related problems and personnel records.

3 credits (Hill or Chamberlain)

236—BUSINESS ADMINISTRATION OF PUBLIC EDUCATION. A specialized course for prospective superintendents covering the following aspects of school administration: The organization for business management; the scope of business administration; appraisal, depreciation and insurance of school property; maintenance of the school plant; plant operation; selection, training and pay of the custodial staff; purchase and management of supplies; textbook management; selection and purchase of equipment; inventories; and transportation.

3 credits (Seay)

238—TRENDS IN HIGHER EDUCATION. This course will survey modern tendencies in American higher education in the following areas: Scope and development, objectives, organization, administration, curricula, finance, and faculty and student personnel. It is designed to serve the needs of present and prospective college administrators and teachers and others interested in developments in higher education. For those desiring special instruction in the work of the registrar a program of laboratory work will be arranged.

3 credits (Chamberlain)

276—ADMINISTRATIVE PROBLEMS IN TODAY'S EDUCATION. This course has to do with present-day problems of persons in administrative positions in public education. It is designed to be of assistance particularly to superintendents of schools.

3 credits (Seay)

301a-b—RESEARCH PROBLEMS IN EDUCATIONAL ADMINISTRATION. An independent research course. The student will confer with the instructor whenever either or both of them deem it advisable.

Prerequisite: One year of graduate work. 3 credits (Seay)

307a-b—RESEARCH PROBLEMS IN SECONDARY EDUCATION. Same type of course as Education 301.

Prerequisite: One year of graduate work. 3 credits (Ligon)

308a-b—RESEARCH PROBLEMS IN ELEMENTARY EDUCATION. Same type of course as Education 301.

Prerequisite: One year of graduate work. 3 credits (Duncan)

321a-b—RESEARCH PROBLEMS IN HIGHER EDUCATION. Same type of course as Education 301.

Prerequisite: One year of graduate work. 3 credits
(Taylor and Chamberlain)

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 (Hammonds)

181—TEACHING VOCATIONAL AGRICULTURE. Designed to prepare men for the teaching of agriculture. About one-half of the course is practice.

7 credits (Hammonds, Hilton, Robbins, and Tabb)

182—EVENING SCHOOL AND PART-TIME COURSES IN AGRICULTURE. A general introduction to evening school and part-time work with some observation of work in both of these fields.

2 credits (Hammonds)

188—FARM PRACTICE SUPERVISION. Practice and directed study in supervising farm practice of pupils in vocational agriculture.

1 credit (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.

3 credits (Hammonds)

281—TEACHING PREVOCATIONAL AGRICULTURE. Each student works out the content of a course in prevocational agriculture, including selecting the teaching materials. Aims, purposes, and methods of teaching are considered.

3 credits (Woods)

287a—ADVANCED PROBLEMS IN AGRICULTURE EDUCATION. The specific problems considered vary according to the needs of the group.

3 credits (Hammonds and Woods)

287b—SELECTING TEACHING MATERIALS. Specific references and other teaching materials are selected to be used in the teaching of vocational agriculture.

3 credits (Armstrong)

287c—EVENING SCHOOLS. Designed to prepare men to teach adult farmers. Includes organizing the school, determining content, method of teaching, follow-up work.

3 credits (Hammonds and Woods)

287d—DIRECTING FARM PRACTICE. Considers farm practice as a method of teaching. Takes up standards, planning, supervision, records.

3 credits (Hammonds)

287e—TEACHING FARM SHOP. Includes determining content for shop, securing and equipping the shop, and methods of teaching farm shop.

3 credits (Woods)

287f—PART-TIME SCHOOLS. Determining content and teaching part-time courses in vocational agriculture.

3 credits (Hammonds and Woods)

289—RESEARCH IN AGRICULTURAL EDUCATION. The student works on some problem of importance to agricultural education.

3 credits (Hammonds and Woods)

BUSINESS EDUCATION

104—FOUNDATIONS OF BUSINESS EDUCATION IN THE HIGH SCHOOL. This course is designed to give to the student preparing to teach commerce in the high school an understanding of the origin, the status, and the objectives of business education in the secondary school.

3 credits (Lawrence)

158a—METHODS OF TEACHING SECRETARIAL SUBJECTS. Special techniques and devices for teaching shorthand, typewriting, and secretarial office practice are considered.

2 credits (Lawrence)

158b—METHODS AND MATERIALS IN TEACHING ACCOUNTING. This course provides materials and techniques in the teaching of accounting.

2 credits (Lawrence)

192—METHODS AND MATERIALS IN GENERAL BUSINESS. Objectives of the general business course are studied critically and a syllabus prepared for teaching this subject.

3 credits (Lawrence)

208a—PROBLEMS IN BUSINESS EDUCATION. Some of the more advanced problems in the field are studied. The type of problems considered is influenced by the interests and needs of the group. Some of these problems are: testing in business subjects; extra-curricular activities in commerce; job studies; placement and follow-up; types of equipment; and supervision.

3 credits (Lawrence)

208b—PROBLEMS IN BUSINESS EDUCATION. This course is a continuation of Education 208a with special emphasis on research studies already made and research techniques.

3 credits (Lawrence)

256—METHODS AND MATERIALS IN THE SOCIAL BUSINESS SUBJECTS. The various social business subjects will be examined to determine their contribution to the objectives of business education.

3 credits (Lawrence)

257—SEMINAR IN BUSINESS EDUCATION. A study of current literature in business education with special reference to trends in this field.

1 credit (Lawrence)

259—THE COMMERCE CURRICULUM. Business subjects offered in the high school are examined critically to determine their content and the place each should occupy in high school curricula. A course of study is developed for each subject.

3 credits (Lawrence)

DISTRIBUTIVE OCCUPATIONS

112—DETERMINING TEACHING CONTENT IN DISTRIBUTIVE OCCUPATIONS. This course is planned to meet the needs of persons engaged as instructors in the field of distributive occupations. It will cover the analysis and course construction in the field of distributive occupations.

3 credits (Baker)

116—PROBLEMS OF THE COORDINATOR IN DISTRIBUTIVE OCCUPATIONS. The purpose of this course is to discuss some of the problems facing the coordinator as he acts in the capacity of intermediary between the school and the business world. Problems in placing students in stores, problems in follow-up methods, problems in store contacts and problems in securing the cooperation of personnel management will be discussed.

3 credits (Baker)

128—TECHNIQUE OF TEACHING DISTRIBUTIVE OCCUPATIONS. This course is a study of the methods of teaching as applied to distributive occupations education. The purpose of the course is to train prospective teachers to teach in the field of distributive occupations.

3 credits (Baker)

EDUCATIONAL PSYCHOLOGY

118—EDUCATIONAL TESTS AND MEASUREMENTS FOR ELEMENTARY TEACHERS. The problems of measurement in the elementary school; formal and informal tests, marking systems, etc.

Prerequisite: One semester of

2 credits (Ross)

Psychology.

119—FOUNDATIONS OF ELEMENTARY EDUCATION. The psychology of the child in the primary and intermediate grades.

Prerequisite: One semester of

3 credits (Ross)

Psychology.

122—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. The construction and use of new type tests, use and limitations of traditional examinations, marking systems, etc.

Prerequisite: One semester of Psychology. 3 credits (Ross)

147—FOUNDATIONS OF SECONDARY EDUCATION. The psychology of the student in junior and senior high school.

Prerequisite: One semester of Psychology. 3 credits (Ross)

152—PROBLEMS IN EDUCATIONAL PSYCHOLOGY. A critical survey of the conflicting schools of psychology, theories of learning, etc.

Prerequisite: One year of Psychology. 3 credits (Ross)

216—SEMINAR IN TESTS AND MEASUREMENTS. A critical study of certain problems in measurement. Individual work.

Prerequisite: Education 122. 3 credits (Ross)

223—EDUCATIONAL STATISTICS. A non-mathematical study of the applications of statistical and graphical methods to educational data.

3 credits (Ross)

ELEMENTARY EDUCATION

110—ADVANCED INDUSTRIAL ARTS. This course will deal primarily with the industrial process involved in records and shelter suitable for classroom experimentation. As a result of work in this course the teacher should be able to guide children in the construction activities pertaining to the study of records and shelter. Some of the experiences he will receive will be in the fields of book binding, block printing, paper decorating, toy making, elementary woodwork, and interior decorating.

2 credits (Haines)

133—DIRECTED TEACHING IN THE ELEMENTARY SCHOOL. Supervised teaching in Kindergarten or Grades I to VI. The student must spend from 9:00 a. m. until 2:00 p. m. in the classroom for the semester. One hour per day additional (2:00 p. m. to 3:00 p. m.) is spent in conference and discussion with the critic teacher and supervisor. The student may take only two additional courses (3 credits each) this semester and these classes must be taken either the first, seventh, or eighth hours. A student who has had three credits in practice teaching may take this course with reduced hours and reduced credits. This course is designed to give the student experience with and practice in the program for the whole day in a modern elementary school.

10 credits (Duncan and Training Teachers)

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.

3 credits (Duncan)

173—TEACHING LITERATURE TO CHILDREN. A study of the literature for children from kindergarten to Grade VI. Reading and book reports from various types, 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.

3 credits (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).

4 credits (King)

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 University Kindergarten.

4 credits (King)

196—SCIENCE IN THE ELEMENTARY SCHOOL. This course is planned to give a background of elementary science usable with children in the first six grades. The course includes planning units of work, organizing and using materials and references, use of illustrative material, excursions, and making bibliographies for teachers and children.

3 credits (Estelle Adams)

212—THE ELEMENTARY SCHOOL. This course is designed to help the superintendent, elementary principal, and elementary supervisor in a better understanding of the modern elementary school. The activity program, objectives, research and study in the skills and content subjects of the elementary curriculum are discussed from the standpoint of supervision.

3 credits (Duncan)

224a-b-c—ORGANIZATION AND SUPERVISION OF STUDENT TEACHING. This course has been planned for students preparing to

do critic teaching in the fields of elementary and secondary education. Education 224a is a general course that will include the basic principles underlying the entire program. Education 224b will have to do with specific problems for critic teachers on the secondary level, while Education 224c will deal with problems on the elementary level.

3 credits each (Williams, Duncan)

229—THE ELEMENTARY PRINCIPAL. This course deals with problems related to the elementary principalship, such as the professional preparation, selection and status of the principal; relation to other administrative officers, supervisors, teachers, pupils and parents; problems of attendance, discipline, health and record; the application of sound principles to the improvement of teaching. Emphasis will be placed on the community relationship of elementary principals and teachers and ways in which they may cooperate and improve the life of the community. Attention will also be given to problems presented by members of the class as outgrowth of their experiences.

3 credits (Duncan)

308a-b—RESEARCH PROBLEMS IN ELEMENTARY EDUCATION. An independent research course. The student will confer with the instructor whenever either or both of them deem it advisable. *Prerequisite: One year of graduate work.*

3 credits (Duncan)

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 (Patrick)

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 (Patrick)

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.

3 credits (Patrick)

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.

3 credits (Patrick)

220—COMPARATIVE EDUCATION. A course giving comparisons of systems of education.

3 credits (Taylor)

235—HISTORY OF EDUCATION IN KENTUCKY. A course designed to give the student an historical background of education in Kentucky.

3 credits (Patrick)

237a-b—SPECIAL PROBLEMS IN HISTORY OF EDUCATION. An independent work course for students in history of education.

3 credits (Patrick)

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

6a and b, 29, 3, 51; *Education 147.* (Parker or Spickard)

162—DIRECTED TEACHING IN HOME ECONOMICS. Practical application of methods in teaching various phases of home economics.

Prerequisite: Education 160. 6 credits (Parker or Spickard)

164—METHODS OF TEACHING CHILD CARE. A critical evaluation of subject matter in child care and methods of presenting it to high school pupils.

Prerequisite: Home Economics 115

3 credits

or equivalent.

(Parker or Spickard)

165a-b—PROBLEMS IN VOCATIONAL EDUCATION. This course deals with the problems involved in teaching vocational homemaking in day, part-time, and evening schools.

3 credits (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;

3 credits

experience in teaching.

(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,

3 credits

experience in teaching and

(Parker or Spickard)

approval of instructor.

263—CURRENT PROBLEMS IN HOME ECONOMICS EDUCATION. A study of some recent developments in the field of home economics education.

Prerequisites: Education 160 and 162;

3 credits

experience in teaching.

(Parker or Spickard)

264—MODERN TENDENCIES IN HOME ECONOMICS EDUCATION. This is a basic course for graduate students in home economics education. It is designed to acquaint students with modern tendencies in education. Some problems considered are the contribution of home economics to the general education of boys and girls, evaluation, and integration.

3 credits (Parker)

266a-b-c—SEMINAR IN HOME ECONOMICS EDUCATION. Provision is made in each course for students to make individual investigations and report on special problems in home economics education.

3 credits (Parker or Spickard)

267—DIRECTED SUPERVISION IN HOME ECONOMICS EDUCATION. This course includes teaching home economics classes for observation, directing student teachers under the guidance of a supervising teacher, visiting schools with the itinerant teacher trainer in different sections of the state, and organizing teaching materials. This course may be taken parallel to or following Education 261.

Prerequisites: Two years' teaching experience and recommendation by the Department of Home Economics Education. 3 credits (Parker or Spickard)

268—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 (Parker or Spickard)

269—ACHIEVEMENT TESTING IN HOME ECONOMICS. This course is intended to acquaint teachers of home economics with techniques used in measuring attainment in home economics in the junior and senior high school and college.

Prerequisite: Teaching experience. 3 credits (Parker)

INDUSTRIAL EDUCATION

108—COORDINATION TECHNIQUES IN INDUSTRIAL EDUCATION. This is a course designed to meet the needs of persons functioning as coordinators in part-time or evening industrial education. It analyzes the social, educational, and economic responsibilities of the coordinator and ties up these findings with the local school program in a better system of student training and student accounting.

2 credits (May)

123—VOCATIONAL GUIDANCE. A course designed to give teachers, principals, superintendents and welfare workers a comprehensive view of the factors in vocational guidance, the agencies contributing to or influencing life choices and an analysis of the human and economic resources of a given civic unit.

3 credits (May)

143—MODERN INDUSTRIAL ANALYSIS. This course is designed to meet the needs of persons who wish to secure a working knowledge of modern industrial organization, trends in industrial educational policies, and the proper approach to and analysis of these problems as they affect the industrial vocational teacher.

2 credits (May)

170—PART TIME GENERAL CONTINUATION TEACHER TRAINING. This is an analysis of the problems of the continuation school as they affect teacher preparation for the part-time program.

3 credits (May)

171—VOCATIONAL EDUCATION. This course is planned primarily for the advanced student in industrial education. It covers the general philosophy of vocational education as it is tied up with the problems and principles of industrial education.

2 credits (May)

PHILOSOPHY OF EDUCATION

114—EDUCATIONAL SOCIOLOGY. A study in the application of sociological findings to the field of education.

3 credits (Patrick)

127a—PRINCIPLES OF CURRICULUM CONSTRUCTION (For Elementary Teachers). A study of the philosophy and technics of curriculum construction and some practical work in construction.

3 credits (Haines)

175a-f—MODERN EDUCATIONAL PROBLEMS. A brief survey of some of the problems in modern education.

3 credits each

186—VISUAL TEACHING. A course in methods and technique of visual instruction. Special emphasis is placed on charts, slides, graphs, maps, still pictures, motion pictures, and other visual aids, their effective use in teaching and the planning of outlines and lessons involving their use. Attention will also be given to the administration of visual aids in the school.

3 credits (Clifton or Starnes)

200—ADVANCED COURSE IN PHILOSOPHY OF EDUCATION. This is an advanced course dealing with the philosophy underlying the larger educational problems of today.

Prerequisite: 12 hours in education.

3 credits (Adams)

205—REVIEW OF CURRENT EDUCATIONAL LITERATURE. An extensive study of current educational literature as found in educational periodicals.

Prerequisite: 12 hours in Education.

3 credits (Adams)

222—METHODOLOGY OF EDUCATIONAL RESEARCH. 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.

Prerequisite: 12 hours in Education.

3 credits (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: Teaching experience

3 credits (Adams)

and 12 hours in Education.

227b—TECHNIQUES IN CURRICULUM CONSTRUCTION. This course has to do with the techniques being used to determine content of courses of study.

Prerequisites: Teaching experience;

3 credits (Adams)

12 hours Education.

228a-d—SEMINAR IN EDUCATION. This course has been planned for graduate students majoring in education, to be given under the direction of the faculty of the College of Education.

1 credit each

230—PROBLEMS OF EDUCATIONAL SOCIOLOGY. An advanced course in the application of sociology to the educational field.

Prerequisite: 12 hours Education,

3 credits (Adams)

including Education 114.

240—CHARACTER EDUCATION. This course will make an extensive survey of plans and methods of teaching character education in the best public school systems. It will take up such points as the relation between character and conduct, how character is correlated with intrinsic and extrinsic learning, the direct and indirect methods of presentation, and the contribution which other institutions than the school should make to character education.

3 credits

SECONDARY EDUCATION

105—FUNDAMENTALS OF SECONDARY EDUCATION. Deals with laboratory methods of instruction. Units: fundamental processes, control, operation, administration.

3 credits (Ligon)

107—SAFETY EDUCATION. This course is designed to give teachers the knowledge, techniques, and skills for the teaching of safety education in all its aspects. Particular emphasis will be placed on driver education and the problems related thereto.

3 credits (Mitchell)

111—REMEDIAL READING IN THE SECONDARY SCHOOL.

A study of diagnostic and remedial work with reading disability cases in the junior and senior high school. This course is designed to enable the teacher to diagnose reading difficulties and to remedy them. Observation, case studies, and practice in remedial work with children will be required of all students. The course includes a critical study of the investigations and literature in the field.

2 credits (Duncan)

123—VOCATIONAL GUIDANCE. A course designed to give teachers, principals, superintendents and welfare workers a comprehensive view of the factors in vocational guidance, the agencies contributing to or influencing life choices and an analysis of the human and economic resources of a given civic unit.

3 credits

142—DIRECTED TEACHING IN ART. This course has been planned for teachers who contemplate becoming supervisors of art in the public schools.

Prerequisites: Education (see Professional Major) and 18 hours in Art. 6 credits (Haines)

153—DIRECTED TEACHING IN ENGLISH. 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: Education (see Professional Major) and 18 hours in English. 6 credits (Anderson and Shipman)

154—DIRECTED TEACHING IN FOREIGN LANGUAGES. Topics: aims and objectives, course of study, methods, tests, equipment, analysis of textbooks. Observation and practice, five hours; conference, two hours.

Prerequisites: Education (see Professional Major) and 18 hours in subject to be taught. 6 credits (West and Topham)

155—DIRECTED TEACHING IN THE SCIENCES. Topics: aims and objectives, courses of study, methods, tests, equipment. General science, biology, physics, and chemistry. Observation and practice, five hours; conference, two hours.

Prerequisites: Education (see Professional Major) and 18 hours in subject to be taught. 6 credits (Kemper and Keffer)

156—DIRECTED TEACHING IN MATHEMATICS. Topics: course of study, materials, methods, testing. Observation and practice, five hours; conference, two hours.

Prerequisites: Education (see Professional Major) and 18 hours in Mathematics. 6 credits (Mitchell and Keffer)

157—DIRECTED TEACHING IN THE SOCIAL STUDIES. Topics: objectives, preparation of the teachers, courses of study, methods, supplementary materials, visual instruction, testing and professional helps. Observation and practice, five hours; conference, two hours.

Prerequisites: Education (see Professional Major) and 18 hours in subject to be taught. 6 credits (Peck and Shipman)

169a—DIRECTED TEACHING IN PHYSICAL EDUCATION. This course has been planned for students who desire to become directors of physical education and coaches of athletics in the public schools.

Prerequisites: Education (see Professional Major) and 18 hours in Physical Education. 3 credits

169b—DIRECTED TEACHING IN PHYSICAL EDUCATION. A continuation of Education 169a.

3 credits

177a—DIRECTED TEACHING IN MUSIC. This course has been planned for teachers who contemplate becoming supervisors of music in the public schools.

Prerequisites: Psychology 7, Education 44, 101, 147, and 18 hours in Music. 3 credits (Capurso and Mason)

177b—DIRECTED TEACHING IN MUSIC. A continuation of Education 177a.

3 credits

193—DIRECTED TEACHING IN COMMERCIAL SUBJECTS. This course will include practice in junior business training; in shorthand; in typewriting and in such other commercial subjects as are commonly taught on the secondary level.

Prerequisites: Education 35, 122, 104, 158a, b, and 18 hours in Commerce. 6 credits (Betz)

214—THE SECONDARY SCHOOL. This course is designed to acquaint the prospective principal or superintendent with the nature and function of the secondary school. This is one of the basic courses in the field of administration and should be taken at or near the beginning of the student's graduate program.

3 credits (Ligon)

224a-b-c—ORGANIZATION AND SUPERVISION OF STUDENT TEACHING. This course has been planned for students preparing to do critic teaching in the fields of elementary and secondary education. Education 224a is a general course that will include the basic principles underlying the entire program. Education 224b will have to do with specific problems for critic teachers on the secondary level while Education 224c will deal with problems on the elementary level.

3 credits (Williams and Duncan)

241—PROBLEMS IN TEACHING THE SOCIAL STUDIES. The purpose of this course is to acquaint the teacher with the most approved methods of teaching the social studies. Source materials dealing with the problems of teaching, such as research findings, yearbooks, and periodicals will be investigated and current practices in the best high schools of the country will be stressed.

3 credits (Peck)

242—PROBLEMS IN TEACHING ENGLISH. The purpose of this course is to acquaint the teacher with the most approved methods of teaching English. Source materials dealing with the problems of teaching, such as research findings, yearbooks, and periodicals will be investigated and current practices in the best high schools of the country will be stressed.

3 credits (Anderson)

243—PROBLEMS IN TEACHING MATHEMATICS. The purpose of this course is to acquaint the teacher with the most approved methods of teaching mathematics. Source materials dealing with the problems of teaching, such as research findings, yearbooks, and periodicals will be investigated and current practices in the best high schools of the country will be stressed.

3 credits (Keffer)

249—EXTRA CURRICULAR ACTIVITIES. Underlying principles, faculty activities, home room activities, student council, clubs, athletics, publications, dramatics, honor societies, commencements.

Prerequisite: 12 hours Education.

3 credits (Ligon)

307a-b—RESEARCH PROBLEMS IN SECONDARY EDUCATION. This course is designed for students who want to work on special problems.

Prerequisite: Master's degree or equivalent

3 credits (Ligon)

PHYSICAL EDUCATION

The Physical Education Department offers graduate work toward the degree of Master of Arts or the degree of Master of Arts or Master of Science in Education. Requirements for the degree of Master of Arts with a major in physical education are stated on pages seven and eight. Requirements for the degree of Master of Arts or Master of Science in Education with a major in physical education are stated on page eight.

120—PHYSICAL DIAGNOSIS AND MEDICAL GYMNASTICS. Theory and practice in physical and health examinations with special emphasis on the detection of physical abnormalities; physical efficiency tests and measurements. Therapeutic exercises and their application to the prevention or arrest, the cure or correction of disturb-

ances amenable to physio-therapeutic measures. Theory and practice of after-treatment in joint injuries, sprains and fractures.

3 credits; 1st semester and summer school (Potter)

124—HISTORY AND PHILOSOPHY OF PHYSICAL EDUCATION. History of Physical Education from the ancient Greeks and Romans, through the Middle Ages and the Modern Era. The philosophy of the German, Swedish and French systems is outlined. Lectures and recitations on present day athletics and physical training in the United States and foreign countries. Two hours recitation a week.

2 credits; 2nd semester and summer school (Hackensmith)

125—ADMINISTRATION AND ORGANIZATION OF MUNICIPAL AND COMMUNITY RECREATION. A general consideration of the principles and procedures involved in organization methods and administrative policies for supervised children's, youths' and adults' recreation. Visitation and field trips to local municipalities and communities to study and discuss conditions as they pertain to organized recreational projects.

*Prerequisite: Physical Education 29, 3 credits; 2nd semester
or sufficient experience in and summer school
organized recreational work. (Shively)*

128—PRINCIPLES AND METHODS OF PHYSICAL EDUCATION. Lectures, discussions and preparation of papers covering the objectives of physical education; the educational, health and recreational significances; the content of the school program; types of activities for grade school, high school, and college.

3 credits; 1st semester and summer school (Potter)

131—ADVANCED BASKETBALL. Lectures and recitations on theory and practice of team play in basketball. Special emphasis is placed on systems of offense and defense as used by the leading coaches throughout the country. Two hours per week.

2 credits; 2nd semester and summer school (Rupp)

142—ADVANCED FOOTBALL. Lectures and recitations on the theory of football. Special stress is placed on generalship, signal systems, scouting and conditioning of players. Football is studied from the coach's viewpoint. Two hours a week.

2 credits; 1st semester and summer school (Kirwan)

148—ORGANIZATION AND ADMINISTRATION OF ATHLETICS. Special emphasis on equipment, care of the gymnasium plant, executive and administrative duties of an athletic director, establishment and enforcement of eligibility rules, making of schedules, selecting a coach, sportsmanship and publicity are studied. Three hours recitation and lecture a week.

3 credits; 2nd semester and summer school (Shively)

150—ORGANIZATION AND SUPERVISION OF INTRAMURAL ATHLETICS. The course will make a critical analysis of the outstanding intramural programs fostered throughout the United States. The relationship of intramural athletics to the school curriculum, physical education and interscholastic program will be studied. Problems of policy and administration of programs on the elementary, secondary, and college levels will be considered.

2 credits

201—RESEARCH IN PHYSICAL EDUCATION. Theory and practice in research and statistical procedures as applied to the field of problems of research pertaining to athletics, recreation, intramural and other phases of Physical Education. Lectures and study on the technique and procedure of research. Special problems and the preparation of papers dealing with studies and surveys of Physical Education. Five hours recitation a week.

5 credits; 2nd semester and summer school (Potter)

190—TECHNIQUE IN OFFICIATING ATHLETIC CONTESTS. Methods, procedures and technique in officiating football, basketball, baseball, track and field events and minor sports activities. Recitations and lectures, three hours a week.

3 credits (Shively)

200—GRADUATE SEMINAR IN PHYSICAL EDUCATION. Graduate students majoring in physical education who are engaged in writing a thesis should register for this course. Recitations, two hours a week.

2 credits (Hackensmith)

202—PROBLEMS COURSE IN CONTEMPORARY MOVEMENTS IN PHYSICAL EDUCATION. A detailed study and analysis of various foreign systems and procedures in physical education and athletic activities, and present athletic and physical education trends in the United States. Recitations and lectures, three hours a week.

3 credits (Hackensmith)

203—CURRENT STUDIES IN THE ADMINISTRATION OF PHYSICAL EDUCATION. For administrative officers, directors of physical education, and leisure time activities. A study of representative programs of physical education and standards for evaluating programs. Lecture and recitation, two hours a week.

2 credits (Potter)

204—CURRENT STUDIES IN THE ADMINISTRATION OF ATHLETICS. For athletic directors, supervisors, and administrative procedures for colleges, public school systems and municipal athletic leagues. Lecture and recitation, two hours a week.

2 credits (Shively)

VIII. ENGINEERING

Prerequisites for graduate work: Students desiring to take any of the following courses should have the prerequisites indicated in each case. Courses numbered 200 and above are offered to graduates and to such practicing engineers as may be qualified to pursue them. A thorough working knowledge of chemistry, physics and mathematics is necessary. For credit toward an advanced degree, a candidate must hold a baccalaureate degree in the division of engineering in which he is registered.

ENGINEERING GENERAL

ENGINEERING ADMINISTRATION

100a—ENGINEERING VALUATIONS AND APPRAISALS. A study of the methods, procedures and principles involved in engineering analyses as applied to valuation and appraisal; specific problems and assignments to cover the various branches of engineering. Lectures and recitations three hours a week.

Prerequisite: Com. 1 or Pol. Sci. 15. 3 credits; 2nd semester (Emrath)

100b—ENGINEERING VALUATIONS AND APPRAISALS. A continuation of Engineering Administration 100a. Lectures and recitations, three hours a week.

3 credits; 1st semester (Emrath)

APPLIED MECHANICS

100—STRENGTH OF MATERIALS. A study of the physical properties of materials used in engineering machines and structures; the analysis of stress and strain due to bending, torsion, etc., in simple and continuous beams, columns, thin cylinders, springs, etc. Some attention is given to reinforced concrete. Lectures and recitations, four hours a week.

Prerequisite: Applied Mech. 1. 4 credits; both semesters, summer school (Hawkins, Farris)

101—ANALYTICAL MECHANICS. A continuation of Applied Mechanics 1, including the solution of engineering problems by means of differential equations. Lectures and recitations, four hours a week.

Prerequisites: Applied Mech. 1 and 100. 4 credits; both semesters (Hawkins, Farris)

102—STRENGTH OF MATERIALS. A continuation of Applied Mech. 100. Especial attention is given to curved bars, arches, thick cylinders and plates. Lectures and recitations, three hours a week.

Prerequisite: Applied Mech. 101. 3 credits; both semesters (Hawkins, Farris)

103—ADVANCED APPLIED MECHANICS. This includes the inertia of moving parts, harmonic analysis, cams, free and forced vibrations and critical speeds. Lectures and recitations, three hours a week.

Prerequisite: Applied Mech. 102. 3 credits; both semesters
(Hawkins, Farris)

ENGINEERING DRAWING

115—PHOTOGRAPHY. Fundamental principles of photography. Lectures on the optics and chemistry of photography together with practical demonstrations. Negative making, printing, etc. Lecture, one hour; recitation, one hour; laboratory, two hours a week.

3 credits; 2nd semester (Nollau)

CIVIL ENGINEERING

102—REINFORCED CONCRETE. A study of concrete mixtures. Theory and design of beams, slabs, columns, bridges and buildings.
Prerequisite: E. M. 13. 3 credits; 1st semester (Terrell)

104—REINFORCED CONCRETE DESIGN. Design of columns, beams, buildings, bridges, retaining walls, dams and arches. Special problems assigned to each student. Drawing room, two hours a week.
Prerequisite: E. M. 13. 0.7 credit; 1st semester (Terrell)

Concurrent: C. E. 102.

105—MASONRY STRUCTURES. Theory and design of retaining walls, dams, arches, plane and reinforced structures, rigid frames. Lectures and recitation, three hours; drawing room, two hours a week.
Prerequisite: Civ. Eng. 171a. 3.7 credits; 2nd semester
(Terrell)

106—FOUNDATIONS AND TUNNELING. A study of foundation material and its relation to the structure. Principles of tunneling as related to transportation and structures. Recitation, two hours a week.
Prerequisite: Appl. Mech. 100. 2 credits; 2nd semester
(Graham, Terrell)

107—SOIL MECHANICS. A study of soil and its utilization in foundations for structures and as subgrade for highways. Stabilization and improvement of bearing values. Recitation, two hours a week.
Prerequisite: Appl. Mech. 100. 2 credits; 2nd semester
(Shaver)

111—CONTRACTS AND SPECIFICATIONS. Legal forms and provisions of an engineering contract and details for specification writing.
1 credit; 2nd semester (Carrel and Farris)

113—GEODESY, PRECISE SURVEYING AND LEVELING. Method of making and adjusting observations in triangulation systems, and precise traverses. Observation and calculations for determining time, azimuth, latitude and longitude. Class work, two hours a week; field work, three hours a week.

Prerequisites: Math. 11, 12; 3 credits; 1st semester
C. E. 13. (Terrell)

120—HYDRAULICS. Principles of hydraulics and hydrodynamic pressure. Flow of water through orifices, nozzles, pipes and open channels, over weirs, against stationary and moving vanes. Loss from friction and other sources. Lectures and recitation, two hours a week.

Prerequisite: Phys. 2a.
Prerequisite or Concurrent: 2 credits; both semesters
Math. 20b. (Cheek)

122—WATER POWER ENGINEERING. Investigations, design and operation of water power projects.

Prerequisite: C. E. 120. 2 credits; 2nd semester (Carrel)

123—HYDRAULICS LABORATORY. Experimental investigation of flow of water in pipes, channels and over weirs; measure of friction and hydrostatic pressure; hydraulic machinery. Laboratory, three hours a week.

Prerequisite or Concurrent: 1.5 credits; 1st semester
C. E. 120. (Cheek)

170—ELEMENTS OF STRUCTURAL DESIGN. Drafting room practice, problems in the design of timber, steel and masonry structures. Lectures, one hour; drafting room, six hours a week.

Prerequisite: C. E. 171a. 3 credits; both semesters
(Carrell, Cheek)

171a—THEORY OF STRUCTURES. Laws of statics, wind, impact, live and dead load, reactions, shear moments and influence lines. Methods of design, including beams, girders, columns and various types of trusses. Lectures and recitations, three hours a week.

Prerequisite or Concurrent: 3 credits; both semesters
Applied Mech. 100. (Carrel)

171b—THEORY OF STRUCTURES. Continuation of Civ. Eng. 171a. Lectures and recitations two hours a week.

Prerequisite: Civ. Eng. 171a. 2 credits; 2nd semester (Carrel)

173a—STEEL STRUCTURES. Design and detail of steel buildings and highway bridges. Lecture, one hour; drawing room, six hours a week.

Prerequisite: C. E. 171a. 3 credits; 2nd semester (Carrel)

173b—STEEL STRUCTURES. Design and detail of steel railway bridges. Drawing room, four hours a week.

Prerequisite: C. E. 173a. 1.3 credits; 1st semester (Carrel)

181a—INDEPENDENT PROBLEMS. A complete solution with the necessary details, plans and specifications of a problem, selected by the student with the approval of the instructor, in one of the following fields:

(a) Reinforced concrete design, (b) Concrete research, (c) Structural steel, (d) Hydraulics, (e) Sanitary engineering, (f) Highway and railway engineering, (g) Geodetic surveying.

Conference, laboratory or drawing room, three hours a week.

Prerequisite: Student must show that 1 credit; 1st semester

he is qualified to undertake the (Terrell and others)
proposed problem.

181b—INDEPENDENT PROBLEMS. Continuation of 181a. Seven hours a week conference, laboratory or drawing room.

Prerequisite: C. E. 181a. 3 credits; 2nd semester

(Terrell and others)

202a—CONSTRUCTION. Advanced work in plain and reinforced concrete, theory, design and experimental work. Class work, three hours; laboratory, nine hours a week.

6 credits; 1st semester (Terrell)

202b—CONSTRUCTION. Continuation of 202a.

6 credits; 2nd semester (Terrell)

232a—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. Class work, three hours; laboratory, nine hours a week.

6 credits; 1st semester (Chambers)

232b—HIGHWAY ENGINEERING. Continuation of 232a.

6 credits; 2nd semester (Chambers)

242a—RAILROAD ENGINEERING. Advanced course in location, construction, maintenance, economical selection of lines, grade reduction, cost of operation, valuation, structures and their maintenance. Class work, three hours; laboratory, nine hours a week.

6 credits; 1st semester (Shaver)

242b—RAILROAD ENGINEERING. Continuation of 242a.

6 credits; 2nd semester (Shaver)

262a—GEODETIC SURVEYING. Advanced course in geodetic calculations, development and use of formulas used by the United States

Coast and Geodetic Survey. Modern methods of field practice. Class work, three hours; laboratory, nine hours a week.

6 credits; 1st semester (Terrell)

262b—GEODETIC SURVEYING. Continuation of 262a.

6 credits; 2nd semester (Terrell)

272a—STRUCTURAL ENGINEERING. Advanced course in theory of structures, mill buildings, railroad and highway bridges. The use of influence diagrams and detail drawings. Class work, three hours; laboratory, nine hours a week.

6 credits; 1st semester (Carrel)

272b—STRUCTURAL ENGINEERING. Continuation of 272a.

6 credits; 2nd semester (Carrel)

SANITARY ENGINEERING

151—WATER SUPPLY AND WATER WORKS. Sources of supply: rainfall, surface water, rivers, lakes and ground water. Theory of filtration, purification, equipment and distribution. Problems in design and construction.

Prerequisite: C. E. 120.

2 credits; 2nd semester (Cheek)

152—SEWERS AND SEWAGE DISPOSAL. Sanitary and storm sewer systems; theory of design; method of disposal.

Prerequisite: E. M. 101.

2 credits; 2nd semester

(Terrell and Cheek)

153—DESIGN OF WATER WORKS AND SEWERS. Design of water supply system, storm and sanitary sewers and disposal plants. Specifications and estimates of cost. Drawing room, four hours a week.

Prerequisites or concurrent:

1.3 credits; 2nd semester

S. E. 151, 152.

(Terrell)

156—WATER AND SEWER PLANT OPERATIONS. Standard methods of control for producing best results in the treatment of water and sewage. Practice with miniature plants. Laboratory, two hours a week.

Prerequisite or concurrent:

1 credit; 2nd semester

S. E. 151, 152.

(Cheek)

157—SANITARY ENGINEERING FOR HEALTH OFFICERS. General principles of sanitary engineering including municipal and rural sanitation, water supply, collection of waste, sewers and sewage disposal, insect control, milk sanitation, principals of heating, lighting and ventilation. Eight hours a week for eight weeks. Lectures, recitations, field trips.

2 credits; summer school (Cheek)

158—SANITARY ENGINEERING DESIGN. For students majoring in Sanitary Engineering. Complete design and layout of a water plant, distribution system, storm and sanitary sewer and sewage disposal plant. Drawing room, eight hours a week.

Prerequisite or Concurrent: 2.7 credits; 2nd semester

San. Eng. 151, 152.

(Cheek)

182—SANITATION. Presented from an engineering view point. Municipal and rural sanitation, treatment and protection of water supplies, disposal of refuse and sewage, control of insects, food supply, plumbing and ventilation. Recitation, three hours a week.

Prerequisite: *Bact.* 57.

3 credits; 1st semester

183—STREAM POLLUTION. Survey of sources of pollution including sewage and industrial waste, prevention, sanitary laws, relation to public health. Recitation, three hours a week.

Prerequisite: *Bact.* 57.

3 credits; 2nd semester

252a—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 and bacteriology should be taken in connection with this course.) Class work, three hours; laboratory, nine hours a week.

6 credits; 1st semester (Cheek)

252b—SANITARY ENGINEERING. Continuation of 252a.

6 credits; 2nd semester (Cheek)

ELECTRICAL ENGINEERING

101—ELEMENTS OF ELECTRICAL ENGINEERING MACHINERY (For Civil, Metallurgical and Mining Engineers). A study in classroom and laboratory of the more common types of d. c. and a. c. electrical equipment and controls which are to be found in general use. Recitation, two hours a week; laboratory, three hours a week.

Prerequisite: *Physics* 2b.

3 credits; 1st semester (Bureau)

102—ELECTRICAL ENGINEERING MACHINERY (For Metallurgical and Mining Engineers). A study in the classroom of electric power applied to mining machinery and metallurgical processes.

Prerequisite: *E. E.* 101.

2 credits; 2nd semester (Bureau)

105—D. C. CIRCUITS AND MACHINERY (For Mechanical Engineers and Industrial Chemists). A study in classroom and laboratory of the fundamental laws of electrical and magnetic circuits with special attention to direct current equipment such as generators, motors, batteries and control apparatus. Recitation, three hours a week; laboratory, three hours a week.

Prerequisite: *Physics* 2b.

4 credits; both semesters,
summer school (Barnett, Doll)

106—ALTERNATING CURRENTS (For Mechanical Engineers and Industrial Chemists). The fundamental theory of alternating current circuits and apparatus. Includes study of single phase and polyphase generators, motors and transformers, converters, etc. Recitation, three hours; laboratory, three hours a week.

Prerequisite: E. E. 105; 4 credits; both semesters,
Math. 20a. summer school (Barnett, Doll)

107—ELECTRICAL CONTROL. A study of the field of electrical engineering which is concerned with the control of electric motive equipment. It involves a study of the individual types of control equipment as well as the various circuits with which they are tied together into a unit of automatic functioning equipment. Recitation, two hours; laboratory, three hours a week.

Prerequisite: E. E. 105 3 credits; both semesters
or E. E. 101. (Bureau)

108—INDUSTRIAL ELECTRONICS. A study of the application of thermionic and light sensitive tubes to industry in non-communication uses such as controlling processes, safe-guarding life and property, etc. Included will be light sensitive tubes in illumination control, smoke density recorders, etc., and power rectifiers of various types. The laboratory work will consist of designing, building and studying control circuits. Recitation, two hours; laboratory, three hours a week.

Prerequisite: Physics 2b. 3 credits; both semesters (Doll)

109—ELECTRICAL POWER EQUIPMENT. A general study of the operation of the more common types of electrical power equipment. Attention is given to power resources, prime movers, generating equipment, switch gear, transformers, meters, reactors, relays, lightning arresters and distribution systems. Recitation, four hours a week.

Prerequisite: E. E. 106. 4 credits; 1st semester
summer school (Freeman)

110—ELECTRICAL LABORATORY (For Electrical Engineers). An experimental study of direct current machines. Two three-hour laboratory periods a week.

Prerequisite or 2 credits; 2nd semester (Doll)
Concurrent: Elec. Eng. 115.

111a—ADVANCED ELECTRICAL LABORATORY. Advanced study of electrical machinery and equipment with special reference to alternating current apparatus. Laboratory, six hours a week.

Prerequisite: E. E. 106. 2 credits; 1st semester (Bureau)

111b—ADVANCED ELECTRICAL LABORATORY. Continuation of E. E. 111a. Laboratory, three hours a week.

1 credit; 2nd semester (Bureau)

115—DIRECT CURRENT MACHINERY (For Electrical Engineers). The theoretical principles and operation of direct current machines, including generators, motors, lifting magnets, balances, etc. Recitations, three hours; supervised calculations and laboratory, three hours a week.

Prerequisite: Phys. 2b, 4 credits; both semesters
Elec. Eng. 21, Math. 20b. (Barnett, Doll)

116—ALTERNATING CURRENT CIRCUITS AND MACHINERY (For Electrical Engineers). A study of polyphase circuits and of the simpler forms of alternating current machines. Recitations, three hours; supervised calculations and laboratory, three hours a week.

Prerequisite: Elec. Eng. 115. 4 credits; 2nd semester,
 [NOT OFFERED UNTIL 1939-40] *summer school (Barnett, Doll)*

117—ALTERNATING CURRENT MACHINERY (For Electrical Engineers). The theory of alternating current machines and their applications in the generation, distribution and utilization of electrical power. Recitations, three hours; supervised calculations and laboratory, three hours a week.

Prerequisite: Elec. Eng. 116. 4 credits; 1st semester
 [NOT OFFERED UNTIL 1939-40] *(Barnett, Doll)*

123—ELECTRICAL EQUIPMENT PROBLEMS. A problem course in miscellaneous design and application of electrical equipment. Economic comparisons as well as engineering considerations are factors studied in making selections in equipment. Four hours a week.

Prerequisite: E. E. 106 or 116. 1.3 credits; both semesters,
summer school (Bureau)

124—ELECTRICAL DESIGN. A study of design problems culminating in the design calculation for a generator or motor and the design of a distribution transformer. Nine hours a week.

Prerequisite or concurrent: 3 credits; both semesters,
E. E. 106 or 116. summer school (Bureau)

131—COMMUNICATION ENGINEERING (Elective for Electrical Engineers). A general survey of the field of electrical communication from the first Bell telephone to the modern dial telephone and the wireless phone; from the first Morse telegraph to the most modern form of automatic recording telegraph and the commercial wireless of today. Recitations, three hours; supervised problem work and laboratory, three hours a week.

Prerequisite: Elec. Eng. 106 4 credits; 2nd semester (Doll)
or 116.

136—ILLUMINATION ENGINEERING. Includes a study of light sources and photometry; fundamental principles of illumination as applied to home, public building, factory and commercial lighting;

outdoor lighting, including streets and highways. Recitations, three hours; supervised problem work and laboratory, three hours a week.
Prerequisite: Phys. 2b. 4 credits; 2nd semester (Freeman)

137—ELECTRIC POWER TRANSMISSION AND DISTRIBUTION (Elective for Electrical Engineers). A study of the materials and equipment used and the problems involved in the design, building and operation of transmission lines and distribution systems. Recitations, three hours a week.

Prerequisite: Elec. Eng. 106 or 116. 3 credits; 1st semester (Freeman)
 [NOT OFFERED UNTIL 1939-40]

141—ANALYTICAL ELECTRICAL ENGINEERING. A study of the complex notation and its use in the vector analysis of electrical machinery and circuit conditions. Recitations, three hours a week.
Prerequisite: E. E. 106 3 credits; 1st semester (Bureau)
 or 116.

151a—SEMINAR (For Electrical Engineers). Round table discussion of modern trends and practices in electrical engineering. Basis of discussion is current literature on electrical subjects. Two hours a week.

Prerequisite: Senior classification. 0.5 credit; 1st semester (Bureau and others)

151b—SEMINAR (For Electrical Engineers). Continuation of Elec. Eng. 151a. Two hours a week.

0.5 credit; 2nd semester (Bureau and others)

152a—INDEPENDENT PROBLEMS. A problem, approved by the Head of the Department, forms the background for the student's original study and research. Only students whose previous record warrants it, will be allowed to take this work. Six hours a week.
Prerequisite: Senior classification.

2 credits; both semesters (Freeman and Others)

152b—INDEPENDENT PROBLEMS. Continuation of Elec. Eng. 152a. Nine hours a week.

Prerequisite: Senior classification. 3 credits; both semesters (Freeman and Others)

152c—INDEPENDENT PROBLEMS. Continuation of Elec. Eng. 152b. Twelve hours a week.

Prerequisite: Senior classification. 4 credits; both semesters (Freeman and Others)

205—ADVANCED INDUCTION MOTOR THEORY. A study of the theory underlying the characteristics of single phase and polyphase induction motors. Recitation, three hours; laboratory, three hours a week.

4 credits; 1st semester (Bureau)

206—ELECTRIC POWER TRANSMISSION. The theory underlying calculation and operation of long distance transmission circuits. Special attention to relay control. Recitation, three hours; laboratory, three hours a week.

4 credits; 1st semester (Barnett)

207—ELECTRIC POWER DISTRIBUTION. A study of theory underlying operation and control of various types of distribution network circuits. Recitation, three hours; laboratory, three hours a week.

4 credits; 2nd semester (Barnett)

208—ELECTRIC TRACTION. An advanced study of electric power application to railways, cranes, elevators, etc. Recitation, three hours; drawing room, three hours a week.

4 credits; 2nd semester (Bureau)

209—TELEPHONE ENGINEERING. An advanced study of the theory and operation of modern telephone exchanges. Layouts and designs are made to meet different assumed conditions. Recitation, three hours; laboratory and design, three hours a week.

3 credits; 1st semester (Freeman)

210—SYMMETRICAL COMPONENTS. A study of the symmetrical component method of analyzing unbalanced conditions on transmission lines and its use in solving relay applications. Recitation, three hours; laboratory and design, three hours a week.

4 credits; 2nd semester (Bureau)

MECHANICAL ENGINEERING

100a—MACHINE DESIGN (For Mechanical Engineers). Design of machine and structural elements. Lecture, one hour; drawing room, six hours a week.

Prerequisites: Eng. Draw. 18,

Applied Mech. 1.

Prerequisite or Concurrent:

Applied Mech. 100.

2.3 credits; both semesters,

summer school (Jett, Meyer)

100b—MACHINE DESIGN (For Mechanical Engineers). Continuation of Mech. Eng. 100a. Individual work on the design and construction of complete machines or structures. Lecture, one hour; drawing room, nine hours a week.

Prerequisite: Mech. Eng. 100a.

3.3 credits; both semesters,

summer school (Jett, Meyer)

101—MECHANICAL ENGINEERING DESIGN. Individual work in the selection of equipment and in the laying out and specifying of power plant, heating, ventilating, air conditioning, plumbing, electric, industrial and elevator equipment for buildings. Drawing room, nine hours a week.

Prerequisites: Mech. Eng. 104,

Applied Mech. 100.

3 credits; both semesters

(West, May)

103—ELEMENTS OF HEAT-POWER ENGINEERING. Brief general course in heat-power engineering, including elementary principles of thermodynamics and power plant equipment. Intended for civil engineers. Recitation, two hours a week.

Prerequisite: *Physics 2a.* 2 credits; 1st semester (May)

104—ENGINEERING THERMODYNAMICS. Covering the fundamental principles of thermodynamics, Carnot cycles, entropy and enthalpy. A study of the thermodynamic equations for gases and vapors, steam power plant cycles, reciprocating engines and turbines. Recitations four hours a week.

Prerequisites: *Phys. 2a, Math. 20a.* 4 credits, both semesters (Spicer)

105—STEAM POWER PLANT EQUIPMENT. Study of the characteristics and use of steam power plant equipment, including steam generators, fuel handling and burning equipment, ash handling, draft producers, dust collectors, smoke abatement, prime movers, generators, air preheaters, economizers, feed water heating and treatment apparatus, pumps, continuous blow down and combustion control apparatus. Recitations two hours a week.

Prerequisite: *Mech. Eng. 104.* 2 credits; both semesters (West)

106a—HEATING, VENTILATING AND AIR CONDITIONING. General course open to all engineers. Elementary heating and ventilating calculations and a study of the characteristics of various types of heating and ventilating equipment. Recitations three hours a week.

Prerequisite: *Mech. Eng. 104 or Mech. Eng. 103.* 3 credits; 2nd semester (May)

106b—HEATING, VENTILATING AND AIR CONDITIONING. A continuation of Mech. Eng. 106a. Special emphasis on the physics and thermodynamics of air conditioning and the design, selection, laying out and specifying of air conditioning equipment. Recitations two hours a week.

Prerequisite: *Mech. Eng. 106a.* 2 credits; 1st semester (May)

107—FLOW OF GASES. Derivation and use of formulas for the flow of steam and air through pipes and metering devices, using the thermodynamical method of analysis. Recitations two hours a week, one-half of semester.

Prerequisites: *Mech. Eng. 104 or Mech. Eng. 103, Civ. Eng. 20.* 1 credit; 1st semester (Spicer)

108—INTERNAL COMBUSTION ENGINES. A study of internal combustion engine cycles and the characteristics and performance of actual engines, valve gears and materials of construction. Recitations three hours a week.

3 credits; both semesters (Meyer)

109—REFRIGERATION. A study of the thermodynamics of refrigeration cycles, and the characteristics of refrigeration equipment. Recitation two hours a week.

Prerequisite: M. E. 104.

3 credits; both semesters (May)

110—HEATING AND VENTILATING DESIGN. Brief course for architectural engineers, covering the selection and layout of heating and ventilating equipment. Drawing room four hours a week.

Prerequisite or concurrent:

1.3 credits; 2nd semester (May)

M. E. 116.

111—ENGINEERING REPORTS. A study of the purpose, form and use of engineering reports, together with the construction of charts and tables for the presentation of data therein and the drafting of the salient conclusions therefrom. Also the study of financial reports, contract forms and specifications. Recitations two hours a week.

2 credits; both semesters (West)

112—MECHANICAL LABORATORY. Practice in the operation, use, calibration and care of mechanical and industrial test and research instruments and apparatus, followed by a study of the methods used for the determination of certain fundamental coefficients and constants; also a study of the records and results from operating and test instruments in actual commercial use. Lecture one hour; laboratory three hours a week.

Concurrent: Mech. Eng. 104.

2 credits; both semesters (West)

113—MECHANICAL LABORATORY. Performance tests on heating, ventilating and power plant equipment. Lecture one hour; laboratory two hours a week.

Prerequisite or concurrent:

2 credits; 1st semester

M. E. 105, 106a.

(West)

116—ELEMENTARY HEATING AND VENTILATING. A course involving elementary heating calculations and descriptions of various types of heating and ventilating equipment. Latter part of semester devoted to a discussion of the basic principles of air conditioning. Recitations three hours a week.

Prerequisites: Phys. 1a or 10,

3 credits; both semesters

Junior classification.

(May)

120—INDEPENDENT PROBLEMS. This comprises the complete design and possibly the construction of a machine or an apparatus or the complete design and specifications for a power plant, heating, ventilating and air conditioning system or industrial shop, including the management and direction of underclass assistants who will be then assigned such work as required; together with the estimat-

ing of the costs and time required to perform the work. Lectures and laboratory fourteen hours a week.

Prerequisite: Senior classification. 5 credits; both semesters
(West and others)

121—MACHINE DESIGN. (For Electrical Engineers.) Similar to Mech. Eng. 100a with special attention to the mechanical features of electrical machines. Lecture one hour; drafting room five hours a week.

Prerequisite: Eng. Draw. 18. 2 credits; both semesters,
Prerequisite or Concurrent: summer school (Jett, Meyer)
Applied Mech. 100a.

122a—MECHANICAL ENGINEERING SEMINAR. Studies of current engineering literature and problems; presentation of papers and discussions. All presentation to be electrically recorded and reproduced and at least one record of each student to be placed on file. Two hours a week.

Prerequisite: Junior classification. 1 credit; 1st semester
(West and others)

122b—MECHANICAL ENGINEERING SEMINAR. Continuation of Mech. Eng. 122a. Two hours a week.

Prerequisite: Senior classification. 1 credit; 2nd semester
(West and others)

201a—AUTOMOTIVE ENGINEERING. An advanced course in the essentials of motor vehicle design, construction and operation. Drafting room, laboratory and lectures by appointment.

6 credits; both semesters (Meyer)

201b—AUTOMOTIVE ENGINEERING. Continuation of 201a.

6 credits; both semesters (Meyer)

202a—POWER PLANT ENGINEERING. Advanced work in the design, selection, layout and operation of heat-power plant equipment.

6 credits; 1st semester (West)

202b—POWER PLANT ENGINEERING. Continuation of 202a.

6 credits; 2nd semester (West)

203a—HEATING, VENTILATING AND AIR CONDITIONING. Advanced work in the design, selection, layout and operation of heating, ventilating and air conditioning equipment.

6 credits; 1st semester (May)

203b—HEATING, VENTILATING AND AIR CONDITIONING. Continuation of 203a.

6 credits; 2nd semester (May)

204a—ADVANCED MACHINE DESIGN. The application of the principles of mechanics of materials, dynamics and kinematics to the design of complete machines. This involves a knowledge of shop practice and methods of construction.

6 credits; 1st semester (Jett, Meyer)

204b—ADVANCED MACHINE DESIGN. Continuation of 204a.
6 credits; 2nd semester (Jett, Meyer)

205a, 205b, 205c—POWER PLANT ENGINEERING AND OPERATION. A graduate course in Mechanical Engineering open to six students only. This is a twelve months' course starting about June 1st and includes a summer session of sixteen weeks followed by two regular semesters of eighteen weeks each. Each student will be employed at the University Power Plant as an assistant to the regular experienced plant operating engineer. This employment will be for twenty-four and thirty-two hours per alternate weeks for the entire time.

Included in this course are studies in power plant operation, fuel and ash handling, furnace and firing equipment, steam generators, prime movers, combustion, draft production and flue gas disposal, lubrication, tests and reports, power plant design, specifications and installation. Lectures, recitations and drafting twenty-four hours a week; operation twenty-four and thirty-two hours alternate weeks.
Prerequisite: A bachelor's degree in 14, 16, 16 credits; both
Mechanical Engineering, Electrical semesters, summer
Engineering or equivalent. school (West)

METALLURGICAL ENGINEERING

120—ASSAYING. This course comprises the determination of the constituents of ores and metallurgical products by means of fire methods, primary attention being given to the determination of the precious metals. Laboratory four hours a week.

Prerequisites: Chem. 8, Met. 27. 2.0 credits; 1st semester
(Beebe)

121—FUEL AND METALLURGICAL LABORATORY. This course comprises the analytical determination of the constituents of ores and metallurgical products by both wet and dry methods as well as the determinative methods utilized in the analysis of coals and other fuels. Laboratory four hours a week.

Prerequisites: Chem. 8, Met. 27. 2 credits; 2nd semester
(Beebe)

128—METALLURGY OF NON-FERROUS METALS. This course comprises a study of the principles and processes employed in the production and preparation for use of copper, lead, aluminum and other non-ferrous metals such as gold, silver, zinc, etc., and of their respective alloys. Lectures and recitations three hours a week.

Prerequisite: Met. 27. 3 credits; 2nd semester (Crouse)

130—METALLURGICAL CALCULATIONS: GENERAL AND NON-FERROUS. This course comprises a study of the calculations involved in the practical application of the principles of general

metallurgy and of the metallurgy of copper, lead, aluminum and other non-ferrous metals. Recitations and problems three hours a week.
Prerequisites: Chem. 8, Met. 28. 3 credits; 1st semester
(Crouse)

131—METALLURGICAL CALCULATIONS: FERROUS. This course involves a consideration of the metallurgy of iron and steel from the standpoint of the calculations used in figuring charges, slags, heat efficiencies and similar factors. Recitations and problems two hours a week.
Prerequisites: Met. 29, Met. 130. 2 credits; 2nd semester
(Crouse)

140—THE SCIENCE OF METALS. This is a first course in physical metallurgy and involves a consideration of the correlation of the structure of metals and alloys to their physical properties together with the effects of mechanical work and heat. Lectures and recitations three hours a week.
Prerequisites: Physics 2b; Chem. 8; 3 credits; 2nd semester
Met. 26 or 27. (Crouse, Tarnopol)

142—HEAT TREATMENT. This course comprises a study of the methods used and the principles involved in the heat treatment of metals and alloys. Lectures and recitations two hours a week; laboratory four hours a week.
Prerequisites: Met. 29, Met. 60. 3.3 credits; 2nd semester
(Crouse, Beebe, Tarnopol)

150—INDUSTRIAL MINERAL PREPARATION AND USES. This course comprises a study of the more common non-metallic substances utilized in industry such as carbon, lime, clay, nitrogen, etc. Lectures and recitations three hours a week.
Prerequisite: Met. 27. 3 credits; 2nd semester (Beebe)

160—ORE DRESSING. This course comprises a study of the principles and practice of ore concentration processes and other processes necessary in the preparation of mineral substances for refining or use. Lectures and recitations three hours a week.
Prerequisites: Physics 2b, 3 credits; 1st semester (Emrath)
Geol. 12, Met. 27.

161—FLOTATION. This course comprises a study of the principles involved in concentration of ores by flotation with some discussion of the application of these principles in practice and the preparation of ores for such treatment. Lectures and recitations two hours a week.
Prerequisite: Met. 160. 2 credits; 2nd semester (Emrath)

163—ORE DRESSING LABORATORY. This course comprises laboratory investigation and practice in the use and design of the

equipment employed in ore dressing, coal dressing and other mineral preparation processes. Laboratory two hours a week.

Prerequisite: Met. 160. 2.3 credits; 2nd semester (Emrath)

164—ELEMENTS OF LOW TEMPERATURE CARBONIZATION.

An elementary course in the study of the principles involved in the low temperature carbonization of coals and other carbonaceous materials, including hydrogenation. Lectures and recitation three hours a week, with assigned reference reading.

Prerequisites: Phys. 2a, 3.0 credits; 2nd semester (Crouse)

Chem. 8.

165—METHODS OF PREPARATION AND TREATMENT OF COALS FOR MARKET, FOLLOWING MINING. A study of the principles involved in screening, washing, grading, treatment for ash and dust reduction, etc. Lectures and recitations three hours a week with assigned reference reading.

Prerequisites: Min. 20, 3.0 credits; 2nd semester (Emrath)

Met. 160.

175a—SEMINAR. This course includes general round table discussions of various metallurgical principles and problems, the preparation and delivery of papers and reports on metallurgical subjects, extemporaneous speaking and the briefing of technical books and articles in the current literature. Four hours a week.

Prerequisite: Senior classification. 2 credits; 1st semester (Crouse, Beebe, Tarnopol)

175b—SEMINAR. A continuation of Metallurgy 175a. Four hours a week.

Prerequisite: Senior classification. 2 credits; 2nd semester (Crouse, Beebe, Tarnopol)

205—HEAT TREATMENT OF METALS AND ALLOYS. This is an advanced course in which the various factors involved in the heat treatment of metals and alloys are considered with special emphasis upon 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: Met. 142. 6 credits; both semesters (Crouse, Tarnopol)

207—TECHNOLOGY OF ALLOYS. This course comprises a study of the principles and practices used in the production of alloys of various kinds with special stress upon 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.

Prerequisites: Chem. 131b, 6 credits; both semesters (Crouse)
Met. 141.

208—ADVANCED METALLOGRAPHY. This course comprises a detailed study of the structure of metals and alloys together with their preparation for study under the microscope. In addition instruction is given in the taking of microphotographs. Reference reading and laboratory work are emphasized. Lectures and recitations two hours a week; laboratory eight hours a week.

Prerequisites: Chem. 131b,
Met. 141.

6 credits; both semesters
(Crouse, Tarnopol)

209—ADVANCED ORE DRESSING. This course comprises a study of the technique of ore dressing, plant design and gives an opportunity for original research in concentration problems. Lectures and recitations two hours a week; laboratory eight hours a week.

Prerequisites: Met. 161, 162.

6 credits; both semesters
(Emrath)

210—TECHNOLOGY OF LOW TEMPERATURE CARBONIZATION. This course comprises a detailed study of the principles and practices employed in the low temperature carbonization of carbonaceous materials such as bituminous and cannel coals. Reference reading and laboratory work are emphasized. Lectures and recitations two hours a week; laboratory eight hours a week.

Prerequisite: Sufficient back-

ground in Physics, Chemistry and Metallurgy, this background to be determined by the Head of the Department after consultation with the student.

6 credits; both semesters
(Crouse)

211—ELEMENTS OF OIL SHALE ENGINEERING. This course 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. Lectures and recitations two hours a week.

Prerequisite: A sufficient background of Physics, Chemistry and Geology.

2 credits; both semesters
(Crouse)

212—OIL SHALE TECHNOLOGY. This course involves a detailed study of the principles employed and the methods used in the production of oil from shale. Reference reading and laboratory work are emphasized. It is desirable that the student have some knowledge of physical and organic chemistry. Lectures and recitations two hours a week; laboratory eight hours a week.

Prerequisites: Sufficient background in Chemistry and Physics; Min. 20; Met. 27.

6 credits; both semesters
(Crouse)

MINING ENGINEERING

110—MINING OF STRATIFIED MINERAL DEPOSITS. This course comprises a study of the methods used and equipment involved in the mining of coal and other stratified mineral deposits. Lectures and recitations two hours a week.

2 credits; 1st semester (Emrath)

111—MINE VENTILATION. This course comprises a study of the principles involved in the ventilation of underground mine workings and of the design of mechanical equipment for such purposes. Lectures and recitations three hours a week.

Prerequisite: Phys. 2b.

3 credits; 2nd semester (Emrath)

122a—THE MINING OF METALLIC MINERAL DEPOSITS. A study of the technical aspects of methods of mining of ore deposits both stratified and unstratified with particular reference to underground mining operations. Lectures and recitations three hours a week.

3.0 credits; 1st semester (Emrath)

122b—THE MINING OF SURFACE MINERAL DEPOSITS. A study of the technical aspects of methods of mining of ore deposits both stratified and unstratified with particular reference to surface mining operations. Lectures and recitations three hours a week.

Prerequisite: Min. 122a.

3.0 credits; 2nd semester (Emrath)

123a—MINING GEOLOGY AND PROSPECTING. A study of the processes of mineral deposition, of the origin of ore deposits and of the mineral deposits in general, particularly as these features of such deposits bear on the technical phases of mining them. Lectures and recitations two hours a week.

Prerequisites: Geol. 7, Geol. 12.

*2.0 credits; 1st semester
(Emrath)*

123b—MINING GEOLOGY AND PROSPECTING. Continuation of Mining 123a. A study of representative examples of deposits of the industrial metals, minerals and mineral fuels and the technical aspects of methods of systematic search for such deposits. Lectures and recitations three hours a week with assigned reference reading.

Prerequisite: Min. 123a.

3.0 credits; 2nd semester (Emrath)

125—MANAGEMENT OF COAL MINES. A study of the economic and technical aspects of coal mine management. Lectures and recitations two hours a week, with assigned reference reading.

Prerequisite: Senior classification.

*2.0 credits; 1st semester
(Emrath)*

150—INDEPENDENT WORK ON MINING PROBLEMS. This course is designed to be elastic enough to allow the individual student to select any feasible mining problem that he may desire. The problem selected must have the approval of the Head of the Department and

be under the direct supervision of one of the instructors in the Department. The work will be done primarily outside of the classroom and will be independent in character except for necessary consultations with the instructor in charge.

Prerequisites: To be determined in each case by the Head of the Department. 3 credits; 2nd semester (Crouse, Emrath)

175a—SEMINAR. This course includes general round table discussions of various mining principles and problems, the preparation and delivery of papers and reports on mining subjects, extemporaneous speaking and the briefing of technical books and articles in the current literature. Four hours a week.

Prerequisite: Senior classification. 2 credits; 1st semester (Crouse, Emrath)

175b—SEMINAR. A continuation of Mining 175a. Four hours a week.

Prerequisite: Senior classification. 2 credits; 2nd semester (Crouse, Emrath)

203—MINE ORGANIZATION. This course comprises a detailed study of the structure and function of a mining enterprise from both the financial and the engineering standpoints. Lectures and recitations three hours a week.

3 credits; both semesters (Emrath)

206—EXPLOSIVE ENGINEERING. This course comprises a study of the principles involved in the use of explosives in large scale mining and quarrying practice. Lectures and recitations two hours a week.

2 credits; both semesters (Emrath)

207—ADVANCED PROSPECTING. This course comprises a detailed study of the principles involved in the geophysical investigation of the minerals of the earth's crust. Lectures and recitations two hours a week.

2 credits; both semesters (Emrath)

208—COAL DUST INVESTIGATION. This course is essentially research in the design and utilization of a laboratory scale gallery for the investigation of the explosive qualities of native bituminous coals. Laboratory twelve hours a week.

4 credits; both semesters (Emrath)

209—ADVANCED MINE ENGINEERING. This course comprises 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.

7 credits; both semesters (Emrath)

PETROLEUM PRODUCTION ENGINEERING

101a—PETROLEUM LABORATORY. A study of the principles involved in the accumulation of petroleum in the reservoir rock materials, in the working of these principles in the establishment of flow, saturation, permeability, and porosity conditions as encountered in production from the reservoir rock materials. Lectures and recitations two hours a week, laboratory eight hours a week.

Prerequisite: Phys. 2b.

4.7 credits; 2nd semester

Concurrent: Civ. Eng. 120.

(Emrath)

101b—PETROLEUM LABORATORY. Continuation of Petroleum Engineering 101a. Lectures and recitations two hours, laboratory eight hours a week. Reference reading and reports required.

Prerequisite: Pet. Eng. 101a.

4.7 credits; 1st semester (Emrath)

102a—OIL PROPERTY DEVELOPMENT. A study of the economic and technical circumstances that influence the choice of method of development of a petroleum property for production. Lectures and recitations two hours a week with assigned reference reading.

Prerequisite: Junior classification.

2.0 credits; 2nd semester

102b—OIL PROPERTY DEVELOPMENT. Continuation of Petroleum Engineering 102a. Lectures and recitations two hours a week with assigned reference reading and problems.

Prerequisite: Pet. Eng. 102a.

2.0 credits; 1st semester

103—PRODUCTION OF GAS AND OIL BY DRILLED WELLS. A study of the technical features of various drilling methods, or methods of preparation and equipment of wells for production, etc. Lectures and recitations three hours per week.

Prerequisite: Junior classification.

3.0 credits; 1st semester

104—FIELD STORAGE, PRELIMINARY REFINING AND TRANSPORTATION OF PETROLEUM. A study of the technical and economic principles applied in design, layout and construction of tanks, reservoirs, preliminary refining apparatus, pipe lines, etc., for the handling of production from petroleum properties. Lectures and recitations three hours a week with assigned reference reading.

Prerequisite: Min. 20.

3.0 credits; 2nd semester

105—DEEP BORE HOLE SURVEYS AND PROBLEMS. Lectures and recitations two hours a week.

Prerequisite: Junior classification.

2.0 credits; 2nd semester

106—OIL FIELD HYDROLOGY. A study of the technical principles involved in describing the effects of waters associated with oil and gas deposits in reservoir rocks. Lectures and recitations three hours a week.

Prerequisites: Pet. Eng. 101b,

3.0 credits; 2nd semester

Pet. Eng. 102b.

120—SEMINAR. This course includes general round table discussions of various petroleum principles and problems, the preparation and delivery of papers on petroleum subjects, extemporaneous speaking and the briefing of technical books and articles in the current literature. Four hours a week.

Prerequisite: Senior classification.

*2 credits; 2nd semester
(Emrath)*

VIII. FINE ARTS

ART

112a—ADVANCED COMPOSITION. A study of pictorial organization for advanced students. Six studio hours a week.

Prerequisite: 12 credits in Drawing and Painting 2 credits; 1st semester (Fisk)

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, applied design or historical research. Open only to advanced students upon approval of Department Head.

3 credits; 1st semester (Rannells)

115b—INDEPENDENT WORK. Continuation of 115a.

3 credits; 2nd semester (Rannells)

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 and Painting, and approval of instructor. 4 credits; 1st semester (Fisk)

116b—ETCHING. Continuation of 116a. Eight studio hours and weekly problems.

4 credits; 2nd semester (Fisk)

139a—HISTORY OF MODERN ART. Lectures, conferences and reports.

3 credits; 1st semester (Rannells)

139b—HISTORY OF MODERN ART. Lectures, conferences and reports.

3 credits; 2nd semester (Rannells)

151a-b—CRITICISM OF ART. Analyses, interpretations, evaluations. Specific arts, periods of art, styles of art, are examined in the light of philosophical and historical modes of art criticism.

Prerequisites: Two years of studio work in art, 2 years in history of art. 3 credits; both semesters (Rannells)

159a—INTERMEDIATE PAINTING. Still life and outdoor painting in oil and water-color mediums. A study of pictorial means and

requirements. Composition problems and nine studio hours a week.

*Prerequisite: 12 credits in Drawing 3 credits; 1st semester
and Painting, or approval of (Fisk)
instructor based on actual
examples of work accomplished.*

159b—INTERMEDIATE PAINTING. Continuation of 159a.
3 credits; 2nd semester (Fisk)

167a—ADVANCED PAINTING. Still life and outdoor painting in oil and water-color mediums. An introduction to professional requirements in picture making. Composition problems and fifteen studio hours a week.

*Prerequisite: 15 credits in Drawing 5 credits; 1st semester
and Painting, or approval of (Fisk)
instructor based on actual examples
of creative work accomplished.*

167b—ADVANCED PAINTING. Continuation of 167a.
5 credits; 2nd semester (Fisk)

142a—DIRECTED TRAVEL AND STUDY IN EUROPE. A survey of European art. Lectures, readings, notebooks—day by day preparation for the study of original works of art on the tour. This work begins on shipboard.

3 credits; summer (Rannells)

137—HISTORY OF RENAISSANCE ART IN ITALY. Lectures and reports.

3 credits; 1st semester (Rannells)

138—HISTORY OF RENAISSANCE ART IN THE NORTH. Flemish, German, and French Art. Lectures and reports.

3 credits; 2nd semester (Rannells)

MUSIC

110a-d—INDEPENDENT WORK. The principles of double counterpoint, canon, and fugue. A four-voice fugue must be submitted as a final project.

3 credits

215a, b—PIANO. A study of the major works of piano literature, such as concerti of Mozart, Beethoven, and Brahms.

3 credits

216a, b—STRINGS. A study of the literature of the violin including the advanced Etudes, such as Fiorillo, Rode, and Dont; and major concerti such as Mendelssohn, Bruch, Beethoven, and others.

3 credits

217a, b—VOICE. A study of the more advanced type of song literature covering the classic, romantic, and modern.

3 credits

218a, b—ORGAN. A study of the major works of Bach, Mendelssohn, Franck, Widor, and modern pieces of American, French, German, and English schools.

3 credits

228a, b—CONCERT BAND. A course designed to furnish methods of organization, direction, and participation in concert music.

1 credit

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 (Pittman)

264—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; 1st semester (Moreland)

161a-161b—CONSTITUTIONAL LAW I and II. Dodd's 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.
2 credits; each semester (Eblen)

101a-101b—CONTRACTS I and II. Williston's Cases. Fourth edition. 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)

221a-221b—EQUITY I and II. Chafee and Simson'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, equitable conversion, equitable servitudes, misrepresentations, mistake, hardship, plaintiff's conduct as a defense.
6 credits; 1st and 2nd semesters (Pittman)

123—NEGOTIABLE INSTRUMENTS. Bills and Notes, Britton's Cases (2nd edition). Formal requisites of negotiability, acceptance, delivery, endorsement, rights and duties of holder, liability of maker, acceptor, drawer and endorser.

3 credits; 1st semester (Murray)

260a-260b—PRIVATE CORPORATIONS I and II. Frey's Cases. Characteristics, formation, powers and liabilities, rights of stockholders' directors, legislative control, dissolution, creditors.

2 credits, 1st semester; 3 credits, 2nd semester (Evans)

104—PROPERTY I and II. Personal and Real 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. 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.

2 credits; each 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 (Roberts)

162—PROPERTY IV. Future Interest. Leach's Cases on Future Interests. Rights of entry, possibilities of reverter, reversions, remainders, executory limitations, limitations to classes, powers, rule against perpetuities and illegal restraints and conditions.

3 credits; 2nd semester (Roberts)

266—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. Bohlen's Cases. 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 (Ehlen)

265—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. Costigan'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)

267—ADMINISTRATIVE LAW. Stason's Cases. 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 (Pittman)

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 petit jury, the prosecuting attorney, counsel for defense, the verdict, methods of review.

2 credits; 1st semester (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 (Randall)

148—DOMESTIC RELATIONS. Jacob's Cases. Marriage and divorce, property interests of husband and wife, mutual obligations of the spouses, parent and child.

2 credits; 2nd semester (Moreland)

145—INSURANCE. Goble's Cases. Insurable interests, the contract, concealment, representations and warranties, implied conditions, waiver and estoppel, construction.

3 credits; 2nd semester (Murray)

173—CREDIT TRANSACTIONS. Sturges' Cases on Security. This course deals with the subject matter usually covered in courses in suretyship and mortgages; also, problems of collateral, banking, distribution of stocks and bonds, pledges and conditional sales.

3 credits; 1st semester (Roberts)

178—CREDITOR'S RIGHTS. Hanna's Cases. Enforcement of judgments; fraudulent conveyances; general assignments; receivership; bankruptcy; assets; distribution.

3 credits; 1st semester (Roberts)

179—LEGISLATION. Typical federal and state statutes will be used. The history of legislation, legislative agencies, content, preparation, province and subject matter, legislative drafting, means of making laws effective, mechanics, interpretation, operation, amendment, abrogation and repeal, relation of traditional law to legislation. Three hours per week. Parkinson's Cases.

2nd semester (Eblen)

249—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 (Randall)

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)

250—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 (Moreland)

147—QUASI-CONTRACTS. Woodruff'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; 1st semester (Murray)

253—TAXATION. Magill and Maguire's Cases. Jurisdiction, public purpose, classification, exemptions, taxation of governmental agencies, direct and indirect taxes.

3 credits; 1st semester (Eblen)

144—USE OF LAW BOOKS. Selected Problems, Eldean's How to Find the Law. How to find the law, use of digests, reports, textbooks, and encyclopedias.

No credit; 1st semester (Librarian)

267—TRADE REGULATION. Oppenheim's Cases. Contracts not to compete at common law; competitive practices; intimidating and molesting; unfair practices; unfair advertising; combinations; the earlier statutes and the N. I. R. A.

2 credits; summer session (Eblen)

277—STATUTORY INTERPRETATION. de Sloovere's Cases. Judicial notice; process of interpretation; subject matter and purpose of the statute; context; associated words; extrinsic aids; relation

to other statutes and to the common law; mandatory and directory provisions; operation; effect; repeal.

2 credits; summer session (Murray)

142—INDUSTRIAL RELATIONS. 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 Workmen's Compensation Act.

2 credits; 1st semester (Moreland)

GRADUATE STUDENTS

FELLOWS

William Glenn Clark	Hickory
Claude Winston Faulkner	Barbourville
Richard Abner Godfrey	Lexington
Flavius W. Wyman	Lowes

SCHOLARS

Thornton Hogan Anderson	Lexington
Joseph Earl Bourgeois	Lexington
LeGrand Geary Briggs	Lexington
Mary Noka Hood	Scottsville
James Franklin Hopkins	Noxapater, Mississippi
Guy Jacobs Johnson	Lexington
Mary Kathryn Robinson	Lexington
Eugene Hester Thompson, Jr.	Lexington

OFFICERS OF GRADUATE CLUB

PRESIDENT

J. Eduardo Hernandez	Lexington
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VICE-PRESIDENT

Albert L. Betz	Lexington
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SECRETARY

Garland A. Murphy	Murray
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TREASURER

Mary Katherine Rice	Lexington
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REGISTER OF GRADUATE STUDENTS 1937-1938

Name	Major	Address
Acree, John Casper	Agriculture	Calhoun
Adams, Emily C.	Education	Harrodsburg
Adams, Mrs. Esther N.	Unclassified	Lexington
Adams, Henry A.	Education	Owenton
Adams, Lutie W.	Education	Fleming
Adams, Mrs. Mary P.	English	Taylorsville
Adams, Otis L.	Education	Crofton
Adams, Ruth	Political Science	Paintsville
Adkins, James L.	Education	Barbourville, W. Va.
Adkinson, Louise H.	Education	Carrollton
Adkinson, Ruth	English	Carrollton
Akers, Aston K.	Agriculture	Amba
Akers, Catherine L.	Unclassified	Louisville
Alexander, Sue P.	Education	Ashland
Allcock, Oliver C.	Agr. Education	Lowes
Allen, Mrs. Amy L.	English	Fort Gay, W. Va.
Allen, Edyth L.	Anat. and Phys.	Phil
Allen, James F.	Chemistry	Liberty
Allen, Lindsey E.	Education	Hodgenville
Allen, Nancy C.	Education	Lexington
Allen, Woodrow W.	Education	Pippapass
Allison, James R.	Education	Clinton
Allphin, Charles	Physical Education	Crittenden
Alms, Ruth M.	Education	Lexington
Alton, James T.	Agr. Education	Vine Grove
Ambrose, Luther M.	Education	Berea
Amis, Cora Mae	Library Science	Himyar
Ammerman, Anne K.	Geology	Lexington
Anderson, Margaret J.	Unclassified	Clarksville, Tenn.
Anderson, N. J.	Education	Lancaster
Anderson, Otho B.	Unclassified	Hopkinsville
Anderson, Pearl	Education	Lexington
Anderson, Ross C.	Commerce	Booneville
Anderson, T. H.	Political Science	Lexington
Anderson, Verna	Commerce	Manchester, Tenn.
Anderson, Vernon	Education	Manchester, Tenn.
Andrew, George William	Education	Pine Ridge
Angel, August D.	Education	Viper
Anthony, John D.	Unclassified	Dahlonega, Georgia
Archdeacon, James W.	Education	Lexington
Archer, Maurice Lee	Unclassified	Sandy Hook

Name	Major	Address
Arnett, Cromer H.	Education	Belfrey
Arnett, Edgar	Unclassified	Erlanger
Arnett, T. Crawford	Education	Lynn Grove
Arnold, Ansel B.	Education	Butler
Arterberry, Terry L.	Education	Tompkinsville
Arthur, Susan L.	English	Flat Lick
Ashby, Leo	History	Bowling Green
Atkinson, Frank L.	Political Science	Louisville
Atkinson, Patsy D.	Sociology	Winchester
Averitt, Ruth	Education	Lexington
Bacon, James R.	Physical Education	Barbourville
Bailey, Edgar W.	Education	Ashland
Bailey, George W.	Education	Ashland
Bain, Charles M.	Physical Education	Louisville
Bain, Mildred W.	Physical Education	Louisville
Baker, Charles G.	Public Health	Hazard
Baker, Jack A.	Sociology	Lexington
Baker, Minnie C.	Education	Lexington
Baker, W. Maurice	Education	Olive Hill
Ball, Edward E.	Agr. Education	California
Ballou, Roscoe P.	Education	Whitley City
Barbe, Lucy A.	English	Richmond
Baril, Charles A.	Physical Education	Perryville
Barker, Powell E.	Education	Georgetown
Barker, Robert E.	Education	Harlan
Barnes, Augustine E.	Geology	Lexington
Barnes, Mrs. Edna F.	Home Economics	Berea
Bartholomew, Paul C.	Political Science	South Bend, Ind.
Bass, Gertrude M.	Unclassified	Louisville
Bates, Hugh H., Jr.	Bacteriology	Henderson
Batsel, Paul W.	Education	Bremen
Baucom, Mrs. Edna S.	Unclassified	Lexington
Baugh, Erma B.	Education	Winchester
Baugh, Lucille G.	Botany	Winchester
Beam, Albert A.	Education	Bardstown
Bean, Ernest K.	Chemistry	Minerva
Beck, John E.	Education	Smiths Grove
Bell, Clarence S., Jr.	Agriculture	Scottsville
Bell, Frank C.	Agriculture	Providence
Bell, Goldie	English	Monticello
Bell, Katharine F.	Home Econom.	Washington, D. C.
Belt, Rupert A.	Education	Dawson Springs
Bennett, Rachel E.	Library Science	Georgetown
Berry, Marshall S.	Sociology	Marion
Bersot, Marion D.	Education	Ghent
Bertram, Charles O.	Unclassified	Windy

Name	Major	Address
Betz, Albert L.	Education	Lexington
Bewley, Ben W.	Unclassified	Pendleton
Binford, Joseph R.	Education	Versailles
Bishop, David K.	Education	Louisville
Bishop, Helen E.	Education	Wilmore
Black, Mrs. Ream C.	Education	Lexington
Blackburn, Anna J.	Unclassified	Winchester
Blackburn, John D.	Hygiene	Bowling Green
Blackburn, William O.	Unclassified	Dry Ridge
Bleidt, Everett P.	Agriculture	Lexington
Blevins, Mrs. Frances	Unclassified	Lexington
Bohon, Anna G.	Education	Louisville
Bolick, Hazel M.	Home Ec., Rutherford College, N. C.	
Bolin, Patti	H. E. Education	Clinton
Bond, Jessie L.	Latin	Humbolt, Tenn.
Bond, Lucille L.	Mathematics	Meta
Booth, Gladys	Education	Carlisle
Bosley, Lillian F.	English	Danville
Bosse, Joseph W.	Physical Educ.	Cincinnati, Ohio
Boswell, James M.	Mathematics	Cynthiana
Bourgeois, Joseph E.	German	Lexington
Bowers, Barbara N.	Ancient Lang.	Indianapolis, Ind.
Bowling, J. D.	Education	Lothair
Bowman, Arch B.	Education	Scoville
Bowman, Leila F.	Education	Lexington
Bowmer, Nina A.	Commerce	Phil
Boyd, Bettie	History	Lexington
Boyd, G. Robert	Education	Franklin
Boyers, Cecil	Com. Education	Covington
Braden, Wallace H.	Unclassified	Ashtabula, Ohio
Bradford, Lawrence A.	Unclassified	Flemingsburg
Bradner, James W.	Unclassified	Middlesboro
Brannon, Mary Jean	Unclassified	Maysville
Bretz, Josephine	Public Health	Moscow, Ohio
Bridges, Lucile H.	Psychology	Lexington
Briggs, LeGrand G.	French	Lexington
Britt, Edward C.	Unclassified	Lexington
Brock, Raymond A.	Education	Sparta
Brockman, George F., III	Public Health	Louisville
Broderick, Albert J.	Unclassified	Falmouth
Broderick, Winifred D.	Unclassified	Louisville
Brooks, Lucy A.	Unclassified	Parksville
Brophy, Joseph F.	History	Hazard
Brown, Amy F.	Hygiene	Alexis, Illinois
Brown, Claud H.	Com. Education	Lexington
Brown, Elva D.	History	Brooksville

Name	Major	Address
Brown, Emil E.	Animal Industry	Ordinary
Brown, Irene	English	Versailles
Brown, Irene Thomas	History	Cropper
Brown, Joe B.	Agr. Education	Olive Hill
Brown, Otis F.	Education	Jeffersontown
Brown, Ralph R.	Psychology	Lexington
Brown, Raymond Lee	Education	Beaver Dam
Brown, Mrs. Thelma E.	Psychology	Lexington
Brown, William Robert	Education	Crittenden
Broyles, Ocea E.	Education	Brumfield
Brueck, John W.	Education	Lexington
Brumback, Hattie M.	Ancient Languages	Erlanger
Brumbaugh, Mabel	Education	Winchester
Bryan, Charles V.	Unclassified	Campbellsville
Bryan, Frances E.	Unclassified	Louisville
Bryant, Richard B.	Education	Hardyville
Bryant, Susie	Education	Lexington
Buchanan, Charles R.	Education	Campbellsville
Buchanan, Lewis W.	Education	Artemus
Buckhold, Wilbert W.	Hygiene	Hyden
Budden, Charles J.	Anat. and Phys.	Louisville
Buffet, Benjamin R.	Bacteriology	Bogota, N. J.
Burberry, Gene	English	Georgetown
Burcham, Charles W.	Education	Berea
Burks, Nathaniel W.	Education	Cynthiana
Burns, Bryson V.	Education	Lexington
Burns, Elta J.	Education	Clarkson
Burrows, J. G.	Education	Ethelsville, Ala.
Butler, Richard I.	History	Paris
Butterfield, John P.	Unclassified	Berea
Byars, Franklin H.	Unclassified	West Liberty
Byrn, Margaret N.	H. E. Education	Bowling Green
Cairnes, Ruel W.	Education	Beaver Dam
Calkins, Harmon E.	Bacteriology	Lexington
Cameron, Norman H.	Commerce	Ayden, N. C.
Cammack, Owen F.	Education	Owenton
Campbell, Louise O.	English	Lexington
Campbell, William A.	Unclassified	Richmond
Capurso, Alexander A.	Psychology	Philadelphia, Penn.
Carey, Fred M.	Education	Kenova, W. Va.
Carpenter, Ahna L.	Education	Lexington
Carpenter, Cliff D.	Animal Pathology	Lexington
Carpenter, Winfred L.	Education	West Liberty
Carr, John B.	Agr. Education	Science Hill
Carr, Willie Viley	Education	Lexington
Carrell, William M.	History	Lexington

Name	Major	Address
Carruth, Hayden K.	English	Wilmore
Carruth, John V.	Physics	Wilmore
Carter, Gilbert	Unclassified	Harrodsburg
Cartmell, Richard B.	Education	Maysville
Carty, David J.	Education	Salysersville
Carty, Jackson C.	Education	Pineville
Cash, Henley L.	Unclassified	Lancaster
Caskey, William P.	Unclassified	West Liberty
Cassidy, Catherine E.	History	Lexington
Cassidy, Wiley L.	History	Johnson City, Tenn.
Cassity, Hobert W.	Mathematics	Blairs Mills
Catron, Bert G., Jr.	Education	Barbourville
Catron, Thomas	Education	Corbin
Caudill, Arch B.	Unclassified	Blackey
Caudill, C. Cecil	Political Sci.	East Bank, W. Va.
Cawood, Thelma G.	Education	Winchester
Chamberlain, Mary F.	Unclassified	Wilmore
Chambers, Henry C.	Com. Education	Burnside
Chambers, Henry S.	Agr. Education	Canmer
Chandler, Kathryn	English	Walton
Chapman, Lucile	History	Ashland
Chapman, Martha J.	Education	Port Royal
Cheek, Elizabeth I.	Education	Danville
Cheek, William A.	Education	Louisa
Cherry, Ralph W.	Education	Harrodsburg
Chick, Mary E.	Education	Lexington
Childers, Willie B.	Agr. Education	Carlisle
Childs, Vera M.	English	East Grand Forks, Minn.
Chilton, W. D.	Education	Bloomfield
Chrisman, Richard G.	Political Science	Lexington
Chumbler, Roy O.	Education	Lexington
Ciccorella, Stephen	Education	Somerville, Mass.
Clark, Helen L.	Commerce	Seneca, S. C.
Clark, William G.	Mathematics	Hickory
Clark, William M.	Physical Education	Somerset
Clarke, James H.	Agriculture	Millersburg
Clarke, John W.	Unclassified	Maysville
Clarke, William S.	Education	Leitchfield
Clatworthy, Willard H.	Mathematics	Lackey
Clay, Agnes M.	Unclassified	Harlan
Clay, Mrs. Coral F.	Unclassified	Paintsville
Claypool, James B.	Unclassified	Bradfordsville
Clayton, Margaret E.	English	Columbia
Clifton, Carl M.	Agriculture	Oldtown
Cocanougher, Robert E.	Education	Junction City
Cochran, Lewis W.	Physics	Hustonville

Name	Major	Address
Cochran, Martha V.	Com. Education	Mt. Vernon, Ohio
Codell, Rose Mary	Education	Winchester
Codell, Virginia A.	English	Winchester
Coffman, Ben F.	Education	Slaughters
Coffman, Carl S.	Unclassified	Salt Rock, W. Va.
Coffman, John A.	French	Owensboro
Cole, Charles T.	Education	Albany
Colegrove, Anna E.	Ancient Languages	Ashland
Coleman, Ralph B.	Economics	Olive Hill
Collins, Maurine J.	H. E. Education	Mays Lick
Combs, Leroy	Unclassified	Prestonsburg
Comer, Hubert W.	Education	Long Grove
Comer, Jewel	Education	Gamaliel
Comfort, George O., Jr.	Polit. Science	Kalamazoo, Mich.
Compton, Mrs. C. P.	Unclassified	Louisa
Congleton, Mrs. Mary A.	English	Richmond
Conley, Chloron L.	Agriculture	Hazard
Connelly, Ronald	Commerce	Frankfort
Connelly, Ruth S.	Education	Sherman
Connor, Anna L.	Political Science	Lexington
Conrad, Ann M.	Ancient Languages	Dry Ridge
Conrad, Mabel F.	Education	Williamstown
Cook, Delbert B.	Education	Louellen
Cook, Frances A.	English	Lexington
Cook, Mrs. Mary Y.	English	Canmer
Coons, Louise A.	Sociology	Lexington
Cooper, Van Buren	Education	Whittier, N. C.
Cotton, Walter P.	Unclassified	Ozark, Missouri
Cottrell, Dorothy E.	Psychology	Owensboro
Courter, Ruth Lee	Mathematics	Frenchburg
Covington, Virginia M.	English	Georgetown
Cox, Floyd	Education	Marrowbone
Cox, Nelda L.	H. E. Education	Wilmore
Crace, Allington	Agriculture	Hazard
Cracraft, Mary E.	Education	Mays Lick
Craig, Frank H.	Agr. Education	Hitchins
Crawford, Charles B.	History	Cabin Creek, W. Va.
Crawford, Mrs. Elizabeth	Education	Bloomfield
Crawford, Thomas C.	Com. Education	Perryville
Creech, Oma	Hygiene	Pine Mountain
Croft, Lysle W.	Psychology	Lexington
Crombie, Mrs. Robert W.	Music	Millersburg
Cronin, Mrs. Virginia D.	French	Lexington
Crosby, Irvine H.	Agr. Education	Simpsonville
Crosby, Leonard A.	Pub. Health	Elkton
Crouse, Thomas R.	Phys. Educ.	Jamestown, N. D.

Name	Major	Address
Crowder, M. Florence	English	Lawrenceburg
Cruickshank, Grace A.	Political Science	Lexington
Crump, Mary F.	Education	Lexington
Crutcher, Frank D.	Unclassified	Lexington
Crutcher, G. L.	Education	Louisville
Cabbage, Adeline S.	Education	Owenton
Culbertson, Doyle C.	Polit. Science	Ashland
Cullis, Lela E.	Education	Lexington
Cundiff, Marke	Anat. and Phys.	Somerset
Cundiff, Roger F.	Education	Lebanon
Curd, Edward T.	Education	Hazel
Current, Louise	Mathematics	Lexington
Currie, John W.	Zoology	Winchester
Curry, Bronston L.	Education	Bowling Green
Curry, L. C.	Education	Bowling Green
Curry, Mrs. L. G.	Unclassified	Glasgow Junction
Curry, Lillard G.	Education	Glasgow Junction
Curtis, James W.	Psychology	Lexington
Cutler, Thomas H.	Civ. Engineering	Frankfort
Dagley, Cynthia R.	Education	Lexington
Dagley, Iva	Romance Languages	Lexington
Dale, Arna P.	Unclassified	Whitesville
Dale, Gilbert R.	Education	Whitesville
Dalzell, Fan Lee	Education	Lexington
Daniel, Charles B.	Physical Education	Shelbyville
Darnell, John D.	Political Science	Lexington
Daulton, Russell T.	Unclassified	Ashland
Davidson, Jacob Edwin	Mathematics	Lexington
Davidson, Myrtle L.	History	Hazard
Davidson, William K.	Education	Jackson
Davis, Mrs. Allen	English	Cynthiana
Davis, Annabelle	Commerce	Lexington
Davis, Charles A.	Physical Education	Barbourville
Davis, Curtis L.	Mathematics	Sandy Hook
Davis, Elizabeth W.	Sociology	Lexington
Davis, Guthrie S.	Education	Sandy Hook
Davis, Hugh L.	Agr. Education	Harrodsburg
Davis, Marguerite	Mathematics	Flemingsburg
Davis, Mary M.	English	Glasgow
Davis, Millie	Unclassified	Barbourville
Davis, Robert E.	Education	Noctor
Day, Murlin W.	History	Lexington
De Moisey, John R.	Physical Education	Walton
Denes, Nicholas G.	Physical Education	Garrett, Ind.
Dennis, Joseph W.	Unclassified	Duncan
Depp, Oren R.	Anat. and Phys.	Glasgow

Name	Major	Address
DeWitt, Lee H.	Physical Education	Louisville
Dicken, Keith O.	Education	California
Dickens, Lucien E.	Education	Lexington
Dickerson, Henry H.	Agriculture	Greensburg
Dickey, Mrs. Katherine	Education	Lexington
Dikeman, Flo A.	H. E. Education	Farmington, Ill
Dillon, Chester C.	Education	Jacksonville, Ala.
Dillon, Lacy A.	Education	Lexington
Dodd, Anna Elizabeth	Unclassified	Lexington
Dodson, Lucille	Mathematics	Wilmore
Dodson, Norman E.	Education	Somerset
Dodson, Susie E.	Education	Mayslick
Dorn, Mrs. Etta M.	Com. Educ.	Greenwood, S. C.
Dorn, Thomas E., Jr.	Commerce	Greenwood, S. C.
Dorsey, Clarene H.	English	Glasgow
Dorsey, Leroy G.	History	Flemingsburg
Dotson, Harold B.	Unclassified	Lexington
Dotson, John H.	Agr. Education	Stanton
Drennan, Robert M.	Physical Education	Lancaster
Drescher, Erwin C.	Public Health	Louisville
Dryden, Ray N.	Education	Mt. Olivet
Duboise, Thomas	Agr. Education	Vanceboro, N. C.
Duncan, Gladys C.	Mathematics	Winchester
Dunigan, Thomas H.	Education	Annnville
Dunn, John E.	Hygiene	Smithland
Durham, Mary E.	Commerce	Greensburg
DuVall, William N.	Agr. Education	Maysville
Eagle, Delbert P.	History	Paint Lick
Earle, Mary E.	Education	Lexington
Eaves, James C.	Mathematics	Central City
Edney, V. J.	Physical Education	Georgetown
Edwards, Dorothy	Education	Lexington
Edwards, Ralph G.	Education	Walton
Eldred, William G., Jr.	Political Science	Lawrenceburg
Ellington, Ethel H.	Education	Morehead
Ellington, Russell F.	Physical Education	Louisville
Elliott, Eleanor F.	Home Economics	Morning View
Ellis, Fannie B.	Education	Harrodsburg
Ellis, George S.	Agr. Education	Booneville
Ellis, Mary H.	Education	Paris
Ellison, Clarence B.	Physical Education	Waynesburg
Elrod, Julius M.	Farm Econom.	Mount Berry, Ga.
Embry, Joel T.	Unclassified	Stanford
England, Gilbert H.	Education	Campbellsburg
Engle, Fred A.	Education	Richmond
Engle, Mary Edith	Psychology	Lexington

Name	Major	Address
Engle, Myrtle M.	Psychology	Princeton
Ervin, Dana R.	Education	East Bank, W. Va.
Ervin, Ethel R.	Education	East Bank, W. Va.
Ervin, J. Stuart	Education	Clendenin, W. Va.
Erwin, Grace	Romance Languages	Rome, Ga.
Eskew, William C.	Unclassified	Marion
Estridge, Perle P.	Education	Hyden
Ethington, Rosemary	H. E. Education	Pleasureville
Evans, Mrs. Edith R.	Unclassified	Lexington
Evans, Kerr R.	Unclassified	Georgetown
Evans, Louie	Unclassified	Barbourville
Evans, Nancy C.	English	Richmond
Eversole, Roy G.	Education	Hazard
Everton, William H.	Sociology	Lexington
Faber, Lillian G.	Education	Erlanger
Fancher, Philip D.	Education	Morganfield
Faughn, Wilma	Commerce	Benton
Faulconer, Lorine H.	English	Lexington
Faulkner, Claude W.	English	Barbourville
Fay, Richard A.	Mech. Engineering	Millersburg
Feebach, John B.	Education	Carlisle
Fehrman, Ray F.	Botany	Newport
Fentress, Elza E.	Unclassified	Falls of Rough
Ferguson, Roy E.	Education	Orwell, Ohio
Fieber, Marjorie	Library Science	Nicholasville
Fields, A. Orell	Education	Whitesburg
Fields, Carl R.	Economics	Georgetown
Fields, Frank C.	Unclassified	Grayson
Figgins, Mrs. Helen M.	Unclassified	Lexington
Fine, Esther	Unclassified	Louisville
Fisher, Gladys T.	Education	Millersburg
Fisher, James B.	Elec. Engineer	Georgetown
Fitch, Howard M.	Mech. Engineering	Louisville
Fitz-Hugh, Thomas E.	Education	Lewisburg
Flege, Helen L.	Education	Williamstown
Flege, Robert F.	Education	Irvine
Fleming, Frances U.	Political Science	Louisville
Fleming, Mabel	History	McRoberts
Floyd, Patrice E.	English	Burgin
Floyd, William B.	Education	Henderson
Foley, Elizabeth L.	Bacteriology	Versailles
Foley, S. Marshal	Education	Sunrise
Fonville, Anne L.	Bacteriology	Jackson, Tenn.
Ford, Carl G.	Education	Prestonsburg
Ford, Thomas E.	Agriculture	Elizabethtown
Ford, W. Clarence	Mathematics	Louisville

Name	Major	Address
Forsythe, George W.	Commerce	Lexington
Foster, Elizabeth	English	Birmingham, Ala.
Foster, Jack C.	Bacteriology	Central Point, Ore.
Foust, Geneva	Education	Owensboro
Foust, John L.	Education	Owensboro
Fouts, J. D.	Public Health	London
Fowler, Lytle C.	Commerce	Woodbury, Tenn.
Fowler, Orlan C.	Education	Clarksburg, W. Va.
Fox, Kathleen	Education	Columbia
Foxworth, Carolyn	Library Science	Lexington
Foxworth, Jean	Unclassified	Lexington
Franklin, Mattie M.	History	Dawson Springs
Frazer, Hugh P.	Civ. Engineering	Lexington
Frazier, Chalmer H.	Mathematics	Prestonsburg
Frazier, Kathryn S.	Music	Prestonsburg
Frazier, Paul	English	Stanton
Freeman, John D.	Geology	Lexington
Friedl, Joe J.	Education	Gary, W. Va.
Frisch, Isadore	Political Science	Lexington
Fry, Helen E.	Unclassified	Lexington
Fryer, Ercel R.	Unclassified	Winchester
Fulks, Richard B.	Public Health	Pineville
Fuller, Edith	English	Lexington
Fulton, Thelma P.	English	Miami, Fla.
Gabbard, Eugene F.	Education	Booneville
Gagle, Raymond	Philosophy	Vincennes, Ind.
Gaither, Lee B.	Political Science	Mays Lick
Galbraith, Milton A.	Chemistry	Carlisle
Gambill, Ethel S.	Commerce	Blaine
Gans, Flora A.	History	Louisville
Gardner, Ralph A.	Philosophy	Somerset
Garr, Mrs. Theresa R.	French	Anchorage
Gary, J. Carson	Education	Clarkson
Gary, Weller R.	Education	Fallston, N. C.
Gaston, Fletcher S.	Com. Education	Naperville, Ill.
Geiser, Rosa S.	Education	Lebanon
Gerster, Dale E.	Physics	Lexington
Gibson, Hayden T.	Education	Wilmore
Gifford, Chloe	Unclassified	Lexington
Gilb, Elmer T.	Unclassified	Lexington
Gilb, Stella S.	Physical Education	Lexington
Gilbert, Geraldine D.	Anat. and Phys.	Balkan
Giles, George W.	Education	Cropper
Giles, Hershel R.	Physical Education	Harlan
Gillkey, John A.	History	Paris
Gill, Glenn B.	Commerce	London

Name	Major	Address
Gill, R. Wayne	Physical Education	Decatur, Ill.
Gilliland, William P.	Education	Covington
Gillock, Morgan E.	Political Science	Port Royal
Gish, Delmas	Education	Central City
Glasgow, Arney W.	Education	Corinth
Glass, Mrs. Anna L.	French	Georgetown
Glass, John M.	Education	Rockdale
Glass, Mattie M.	Unclassified	Nicholasville
Glazier, Reuben H.	Unclassified	Russellville
Gleason, George T.	Economics	Waverly
Glenn, M. F.	Education	Stone
Godbey, Louise	Education	Lexington
Godby, Amos P.	Unclassified	Somerset
Godfrey, Richard A.	Political Science	Lexington
Goff, Ada W.	Education	Hinton, W. Va.
Goff, Marion F.	Agriculture	Lexington
Goff, Robert P.	Bacteriology	Hinton, W. Va.
Goheen, Lester B.	Agr. Education	Brewers
Golden, Reese A.	Unclassified	Mammoth Cave
Gooch, Margaret E.	Romance Languages	Lexington
Goode, Richard B.	Commerce	Lexington
Goodwin, Clarence T.	Physical Education	Corbin
Grabruck, Walter H.	Physical Education	Pineville
Graddy, Kathryn	Unclassified	Owensboro
Grafman, Milton L.	History	Lexington
Gragg, Elizabeth G.	Education	Pineville
Graham, Beulah	Mathematics	Brandenburg
Graham, Herman, Jr.	Education	Paducah
Graham, John F.	Agriculture	Princeton
Graham, Thomas R., Jr.	Education	La Center
Grass, Ruth V.	Mathematics	Griffithsville, W. Va.
Graves, Irene H.	Education	Morehead
Graves, Lottie M.	Unclassified	Scottsville
Gravitt, Elizabeth R.	Education	Lexington
Gray, Florence E.	Psychology	Dorchester, Mass.
Gray, Gwendolyn L.	Education	Lexington
Gray, Ola M.	Unclassified	Louisville
Greathouse, Gladys M.	English	Wilmore
Green, Ann Elizabeth	Unclassified	Louisville
Green, Annie K.	Economics	Portland, Tenn.
Greene, Cyrus E.	Physical Education	Owenton
Greenwood, Walter B.	Unclassified	Lexington
Gregory, Grover K.	Unclassified	Independence
Gregory, John W.	Unclassified	Somerset
Gregory, Martha A.	Unclassified	Benton
Grehan, Henry E.	Unclassified	Lexington

Address	Name	Major	Address
atur, Ill.	Grider, Roscoe L.	Unclassified	Waco
ovington	Griffin, W. T.	Education	Danville
rt Royal	Griffith, Fleming B.	Political Science	Ravenna
tral City	Griggs, Edna E.	Education	Lexington
Corinth	Grise, Presley M.	Education	Richmond
rgetown	Grise, Strauther W.	Education	Fort Smith, Ark.
Rockdale	Gross, Emily	Physical Education	Lexington
olasville	Groves, Fergus C.	Physical Education	Louisville
ssellville	Gullette, Arthur T.	Education	Columbia
Waverly	Gullette, Mrs. Arthur T.	English	Columbia
Stone	Gum, Anna C.	Education	Lexington
exington	Gum, Louise	Education	Lexington
Somerset	Guthrie, Mildred B.	History	Lexington
exington	Guy, Hollis P.	Education	Lexington
, W. Va.	Hacker, Henry L.	Education	McRoberts
exington	Hadden, Ben E.	Unclassified	Elkton
, W. Va.	Hagan, Elizabeth M.	Sociology	Winchester
Brewers	Hager, Cornelius	Education	Nicholasville
th Cave	Halbert, Mrs. Marie G.	Unclassified	Lexington
exington	Hale, W. J.	Education	Lexington
exington	Hall, Albert C.	Education	Lexington
Corbin	Hall, Helen K.	Education	Pleasureville
Pineville	Hall, Theodore O.	Education	Greenville
vensboro	Hallmon, Jesse	Agr. Education	Benton
exington	Hamilton, Curtis J.	Phys. Educ.	Williamson, W. Va.
Pineville	Hamilton, George D.	Education	Richmond
ndenburg	Hamilton, John J.	Bacteriology	Covington
Paducah	Hamilton, Nancy	English	Union City
inceton	Hamilton, Thomas F.	Education	Campbellsville
a Center	Hamon, Ruby J.	Education	Grayson
e, W. Va.	Hanger, Mrs. Betty R.	History	Richmond
Morehead	Hankenson, Homer G.	Phys. Education	Rock Falls, Ill.
cottsville	Harding, Clara J.	Education	Campbellsville
exington	Hargis, Pauline B.	Education	Monticello
er, Mass.	Harman, Ruth E.	Education	Pikeville
exington	Harmon, Ella M.	Unclassified	Perryville
ouisville	Harney, Clarence W.	Public Health	Richmond
Wilmore	Harp, Laura L.	Sociology	Lexington
ouisville	Harper, Elizabeth	H. E. Education	Oakville
d, Tenn.	Harris, Dorothy C.	Bacteriology	Lexington
Owenton	Harris, Frances	Commerce	Rome, Ga.
exington	Harris, Pascal B.	Agr. Education	Rineyville
pendence	Harrison, Antoinette	Education	Lexington
Somerset	Harrison, Mrs. Bruce E.	H. E. Education	Utica
Benton	Harrison, Lena M.	Education	Trinity
exington	Harrison, Lura C.	Bacteriology	Columbia

Name	Major	Address
Harrison, Roswell W.	English	Milton
Hart, Charles W.	Unclassified	Bardstown
Hartford, Ellis F.	History	Louisville
Haselden, Jane	Psychology	Lancaster
Haskins, Margaret G.	Education	Lexington
Havens, Athol V.	Psychology	Murray
Hawkins, Robert D.	Engineering	Lexington
Hayden, Patrick C.	Agr. Education	West Louisville
Haynes, Frank H.	Agriculture	Hardinsburg
Hazelip, Eunice	English	Bowling Green
Heaton, Lois J.	Education	Lexington
Heberling, May D.	Ancient Languages	Georgetown
Helton, Robert	Education	Wallins
Hembree, Sillous G.	Education	Corbin
Henderson, Arthur K.	Physical Education	Wilmore
Henderson, Sherman D.	Education	Mt. Sterling
Henninger, John M.	Bacteriology	Hardinsburg
Henry, William T.	Unclassified	Georgetown
Hensley, Irma L.	Library Science	Catlettsburg
Henson, John G.	Political Science	Lexington
Hernandez, Juan Eduardo	Psychology	Lexington
Hertlein, June	Education	Springfield
Heskamp, Mrs. Effie S.	Library Science	Columbia
Hibbard, Coy M.	Agr. Education	Beech Grove
Hicks, Carl A.	History	Catlettsburg
Hicks, Clarissa	Education	Hindman
Hicks, Golia I.	Hygiene	Maysville
Hieronymus, Charles J.	Education	Tallega
Hieronymus, William S.	Agriculture	St. Helens
Hill, Charles L.	Agriculture	Russellville
Hill, West T., Jr.	English	Louisville
Hilliard, Charles D.	Education	Obion, Tenn.
Hilliard, Ruth L.	Ancient Languages	Milford, Ohio
Hilton, Everett P.	Agr. Education	Lexington
Hines, Elizabeth J.	Mathematics	Huntington, W. Va.
Hinsdale, Reuben C.	Education	Covington
Hiteman, Elsie F.	Anc. Languages	Morning View
Hixson, Mrs. Lona M.	Education	Lexington
Hoagland, Marjorie F.	Political Science	Lexington
Hodgkin, Boswell B.	Unclassified	Winchester
Hoffman, Gladys	Education	Ashland
Hogan, Herbert	Economics	Beattyville
Hogg, Helen H.	English	Jackson
Holland, Ferne	English	Barbourville
Holland, Jesse H.	Unclassified	Van Lear
Holmes, Lillian M.	Political Science	Lexington

Name	Major	Address
Holt, Hattie E.	English	La Center
Honerkamp, Martha L.	Education	Georgetown
Hood, Anna M.	Education	Lexington
Hood, Mary N.	Bacteriology	Scottsville
Hopkins, James F.	History	Noxapater, Miss.
Hopkins, Ralph L.	Chemistry	Berea
Hopper, Sue R.	Unclassified	Mays Lick
Horlacher, Mrs. Vaneta	Unclassified	Lexington
Horne, Mrs. Laura D.	Latin	Ragland, W. Va.
Horton, Herman	Education	Grayson
Hoskins, D. C.	Library Science	Grays Knob
Howard, Mrs. Aughtum S.	Mathematics	Calvert City
Howard, Delmon W.	Unclassified	Betsy Layne
Howard, Herbert C.	History	Ashland
Howard, Mrs. Myrtle H.	Unclassified	Betsy Layne
Howard, Noel J.	Unclassified	Lexington
Howard, Richard P.	Mech. Engineering	Lexington
Howard, Robert F.	Unclassified	Cawood
Howard, Wendell E.	Education	Ewing
Howe, Leonora A.	English	Lexington
Howton, Ernest A.	Unclassified	Mays Lick
Hozier, John B.	Public Health	Louisville
Hubard, Stephen S.	Chemistry	Lexington
Hubbard, Charles	Education	Henderson
Hubbard, Mrs. Geneva R.	Unclassified	Henderson
Huddleston, James I.	Education	Harrodsburg
Huddleston, Joseph J.	Phys. Educ.	Winamac, Indiana
Huddleston, Mrs. Lucile G.	Education	Harrodsburg
Huddleston, Waymon B.	Education	Bow
Hudson, Hazel H.	Education	London
Hudson, Leonard L.	Education	Bowling Green
Huffman, Jane E.	English	Toledo, Ohio
Hughes, Charles M.	Agr. Education	Tollesboro
Hughes, Mrs. Clara W.	Romance Languages	Lexington
Hume, Ben Jeff	Commerce	Taylorsville
Hume, Mary L.	Physical Education	Paris
Humphreys, Margaret B.	Education	Lexington
Hunnicut, Mrs. Florence	English	Portland, Tenn.
Hurley, George H.	Education	Paducah
Hutchinson, Clifford E.	Education	Boston
Hutson, Woodfin, Sr.	Education	Paducah
Iglehart, Chester A.	Education	Owensboro
Insko, Chester A.	Education	Augusta
Ireland, Stella T.	Education	Lexington
Irvine, Jessie F.	Psychology	Paris
Irvine, Kate T.	English	Paris

Name	Major	Address
Jackes, Herman D., Jr.	Mech. Engineering	Syracuse, N. Y.
Jackson, Mrs. Adelia W.	Library Science	Lexington
Jackson, Anna Mae	English	Beattyville
Jackson, Hamilton S.	Education	Philpot
Jackson, Mrs. Hamilton S.	English	Philpot
Jackson, Katharine W.	Mathematics	Morehead
Jackson, Vester A.	Unclassified	Clinton
Jackson, William H.	History	Louisa
Jacobs, Thelma F.	Sociology	Lexington
James, Russell	Education	Cabin Creek, W. Va.
Jarboe, Le Roy	Unclassified	Hardinsburg
Jarvis, Zella P.	Education	Barbourville
Jeffries, Lynn	Agriculture	Campbellsville
Jennings, William E.	Unclassified	Lexington
Jesse, Edwin G.	Agriculture	Owingsville
Jesse, Elizabeth F.	Library Science	Nicholasville
Jessee, Iva E.	Education	Wesleyville
John, Charlotte E. E.	Mathematics	Lexington
John, Ellsworth H.	Public Health	St. James, Mo.
Johns, Elbert	Unclassified	Bledsoe
Johnson, Arthur G.	Unclassified	Winchester
Johnson, Charles F.	Civ. Engineering	Mayfield
Johnson, Dorothy S.	History	Ashland
Johnson, Elizabeth W.	Education	Lexington
Johnson, Ellis T.	Physical Education	Morehead
Johnson, Frances I.	Library Science,	Tunica, Miss.
Johnson, Guy J.	Political Science	Lexington
Johnson, Howard	Education	Ravenswood, W. Va.
Johnson, Jesse C.	Education	Artemus
Johnson, Laura A.	Bacteriology	Lexington
Johnson, Lena O.	Education	Lexington
Johnson, Robert F.	Education	Crestwood
Johnson, Roy E.	Political Science	London
Johnson, Sheila	Unclassified	Fort Thomas
Johnston, Carter D.	Chemistry	Lexington
Jones, Cloyde C.	Education	Corbin
Jones, Earle D.	Education	Maysville
Jones, Helen F.	English	Lexington
Jones, Hugh A.	Agr. Education	Robards
Jones, Iris C.	English	Union City
Jones, Jessie E.	Education	Buechel
Jones, John A.	Education	Campbellsville
Jones, Luther	Education	Dizney
Jones, Mary E.	Latin	Bowling Green
Jones, Masie T.	Education	Lexington
Jones, Minnie L.	Unclassified	Harlan

Name	Major	Address
Jones, Ralph	Agriculture	Owensboro
Jones, Warren F.	Unclassified	Winchester
Judy, Mildred L.	Romance Languages	Lexington
Kaenzig, Joseph G.	Education	Versailles
Karnes, Gilbert H.	Agriculture	Lebanon
Kaut, Ruth	Unclassified	Greenup
Kaut, Thelma N.	Education	Riverton
Kelley, Jack	Agr. Education	Hazel
Kelley, James O.	Unclassified	Sulphur
Kelley, Lillian M.	Education	Lexington
Kelley, Nannie B.	Latin	Lexington
Kelly, Wendell C.	Public Health	Indianapolis, Ind.
Kendall, Thomas A.	Chemistry	Lexington
Kenney, William B.	Agriculture	Paris
Kent, Samuel B.	Unclassified	Morgantown
Ketcham, Angie	Education	Barbourville
Key, Judith	Psychology	Maysville
Kidd, Frances Evelyn	Education	Corbin
Kidd, William H.	Education	Hazard
King, Donald L.	Education	Straits Corners, N. Y.
King, Frances	Unclassified	Cynthiana
King, V. Doyle	Unclassified	Henderson
King, W. Ralph	Agr. Education	Stanford
Kirk, Bernice R.	History	Stone
Kiser, Orlando L.	Sociology	Lexington
Knight, James S. P.	Public Health	St. Johns, Nwfld.
Kolb, Charles F.	History	Lexington
Kreke, George J.	Physics	Lexington
Kriegel, Bess T.	Education	Lexington
Kriener, Harlan	Education	Junction City
Kuhn, Woodrow J.	Unclassified	Williamstown
Lackey, Ellen H.	English	Louisa
Lair, Jesse L.	Education	Pineville
Lake, Willard M.	Political Science	McHenry
Lamar, Carl F.	Agr. Education	Hawesville
Lampert, Jeannette C.	Psychology	Lexington
Lancaster, Wilford A.	Education	Butler
Land, Sarah M.	Education	Lexington
Landrum, William G.	Education	Mt. Vernon
Langford, John L.	Agr. Education	Cookeville, Tenn.
Lanier, Doris M.	Psychology	Danville
Larkin, Louise	Education	Paris
Lassiter, Mary G.	Education	Murray
Lassiter, Oury M.	Education	New Concord
Latham, Ruby L.	French	Wilmore
Laughlin, Bob	Physical Education	Mt. Sterling

Name	Major	Address
Lawrence, Armon J.	Education	Lexington
Lawrence, David V.	Physical Education	Sulphur
Lawson, Carl E.	Education	Corbin
Layman, Morton B.	History	Corbin
Lea, Noel L.	Unclassified	Morgan
Leake, James C.	Education	Huntington, W. Va.
Ledford, Eloise M.	Com. Education	Lancaster
Lee, Aaron	Unclassified	Lexington
Lee, Mary E.	Unclassified	Lexington
Lee, O. R.	Chemistry	London
Lehman, Joe G.	English	Elkhart, Ind.
Lester, Clyde D.	Unclassified	Mayfield
Lester, Furman M.	Unclassified	Dalton
Letton, George C.	Unclassified	Stanford
Lewis, B. Edison	Education	Whitesburg
Lewis, Charles G.	Phys. Educ.	Crothersville, Ind.
Lewis, Eileen	History	Ashland
Lewis, Gladys	History	Ashland
Lewis, Jane S.	Education	Lexington
Lewis, Mildred S.	Education	Lexington
Ligon, Champ	Economics	Lexington
Limburg, Charles C.	Psychology	Lexington
Lindsay, Blanche L.	Education	Maysville
Lisanby, Cornelius R.	Unclassified	Frankfort
Little, Fay Ward	Education	Paint Lick
Little, Ruth P.	English	Wilmore
Lloyd, Dorothy P.	English	Corbin
Locke, Mrs. Mae W.	Commerce	London
Logan, Robert M.	Chemistry	Lawrence, Mass.
Logsdon, Eddie	Education	Cumberland
Long, Virgil E.	Sociology	Winchester
Longstreth, Alvin E.	Phys. Education	Little Rock, Ark.
Loudenback, Vernon C.	English	Siloam
Loudenslager, R. L.	Education	Lexington
Lowry, Lucie	English	Louisville
Loyd, John S.	Agriculture	Elizabethtown
Luten, N. Elise	Commerce	Louisville
Lutes, Abbye M.	Education	Vada
Lutes, Nettye	Com. Education	Vada
Lutz, Florence V.	Commerce	Louisville
Lynch, Thomas P.	Economics	Bridgeport, Conn.
Lynn, Justine	English	Morganfield
Lyon, Kathryn R.	Sociology	Winchester
Lyon, Paul	Zoology	Forkton
Lytle, William T.	Education	West Louisville
McAnelly, Jesse G.	Education	Oil Springs

Name	Major	Address
McCaw, Lucy E.	Education	Lexington
McClure, Howard V.	Education	London
McClure, J. E.	Unclassified	Owensboro
McClure, Lena R.	English	West Liberty
McClure, Maureen	English	West Liberty
McClure, Vivian A.	Education	Lebanon
McConnell, Margratha	History	Marion
McCord, Ruth C.	Education	Winchester
McCormack, Sarah M.	Commerce	Nicholasville
McCray, Carl A.	Education	Berea
McCrea, Alice L.	Bacteriology	Lexington
McCubbin, Lewis	Unclassified	Fullerton
McDaniel, Grace	H. E. Education	Leitchfield
McDaniel, Mildred L.	Political Science	Paris
McElroy, O. L.	Unclassified	Eminence
McFarland, Mitchell	Unclassified	Lakeville
McGary, William F.	Unclassified	Arlington
McGrath, James M.	Public Health	St. Marys, Newfld.
McGriff, Charles L.	Unclassified	Winchester
McGuire, Clinton C.	Education	Matthew
McGuire, Henry S., Jr.	Bacteriology	Lexington
McIntosh, Ralph H.	Education	Whitesville, W. Va.
McKeetham, Mrs. Mary S.	Education	Waynesburg
McKenzie, Doris	Bacteriology	Dania, Fla.
McKenzie, Walter	Unclassified	Flat Gap
McKinster, Reba A.	Unclassified	Louisa
McMullin, Edgar E.	Education	Leitchfield
McMullin, Thomas E.	Psychology	Winchester
McNamara, Nell G.	Unclassified	Mt. Sterling
McNeill, William R.	Education	Cadiz
McRight, Ralph	Physical Education	Paducah
McWhorter, Foster N.	Education	Crab Orchard
Mack, Clinton O.	Zoology	Jackson
Mack, Mrs. Marian T.	Mathematics	Jackson
Mackey, Mrs. Flora B.	English	Williamsburg
Macy, Ezra E.	Unclassified	Phoenix, Ariz.
Magill, David M.	Commerce	Salyersville
Mahan, Fred C.	Civ. Engineering	Frankfort
Mahin, Jessamine	Education	Wilmore
Mahn, Robert	Education	New Bremen, Ohio
Mai, Charles F.	Unclassified	Louisville
Majors, Paul A.	Bacteriology	Princeton
Mann, Henry M.	Education	Covington
Mann, Nelle	Unclassified	Carlisle
Marcum, Marie	Home Economics	Richmond
Marsee, John W.	Unclassified	Lancaster

Name	Major	Address
Martin, Charles E.	History	Barlow
Martin, Charles H.	English	Williamsburg
Martin, Donald W.	Agriculture	Henderson
Martin, Earl R.	Education	Louisville
Martin, Maurice	Unclassified	Bardstown
Martin, Mildred	Education	Lexington
Martin, Robert R.	Education	Richmond
Martin, William R.	Education	Waddy
Massie, William K.	Public Health	Lexington
Mathews, Hamilton T.	Education	Williamstown
Mathews, Ruth E.	English	Lexington
Mathis, Edward W.	Education	Ashland
Matson, R. J.	Agriculture	Carlisle
Mattox, Ezra A.	Education	Blue Diamond
Maxwell, R. S.	History	Versailles
Maxwell, Virginia D.	Library Science	Versailles
May, Alton P.	Education	Worthville
May, Earl C.	Unclassified	Lexington
Maynard, Fred	Education	Greenup
Meadors, Theodore H.	Education	Corbin
Medsker, Mrs. Maurine D.	Unclassified	Lexington
Merrifield, William D.	Education	Irvine
Messamore, Ford	History	Cobden, Ill.
Meyers, John P.	Commerce	Lexington
Michel, Gerald H.	Unclassified	N. Kingsville, Ohio
Midgett, Elwin W.	Com. Education	Lebanon, Tenn.
Miles, Margaret	Education	Lexington
Miller, Byron A.	Education	Campbellsville
Miller, E. M.	Education	Beverly
Miller, Mrs. Gladys T.	Unclassified	Parksville
Miller, Harold M.	Education	Dry Ridge
Miller, Leonard	Physical Education	Morehead
Miller, Mrs. Lillian E.	Education	Lexington
Miller, Raymond H.	Sociology	Georgetown
Mills, Ralph H.	Unclassified	Georgetown
Mills, Robert I.	Education	Tompkinsville
Mills, Robert L.	Education	Erlanger
Mims, Bernard N.	Physics	Baldman
Miracle, Ethel M.	Unclassified	Barbourville
Mitchell, Harold C.	Physical Education	Blue Diamond
Mitchell, Harry T.	Unclassified	Lexington
Mitts, Eleanor	Chemistry	Williamstown
Mohney, Jack B.	Anat. and Phys.	Lexington
Monson, Saida B.	Unclassified	Cynthiana
Montague, Elizabeth	Unclassified	Lexington
Montgomery, Kathern E.	Physics	Vine Grove

Name	Major	Address
Montgomery, Mary K.	Physical Education	Lexington
Montgomery, Wilbert C.	Agriculture	Whitesburg
Moore, Bessie I.	English	Falmouth
Moore, Buell G.	Unclassified	Kuttawa
Moore, Eunice	Education	Lexington
Moore, John H.	Animal Industry	Georgetown
Moore, John W.	Commerce	Berea
Moore, Lenore W.	Unclassified	Lexington
Moore, Marvin S.	Political Science	Burlington
Moore, Paul K.	Education	Batavia, Ohio
Moore, Russell C.	Unclassified	Berea
Moore, William J.	Public Health	Bardwell
Mooses, Walter W.	History	Richmond
Moosnick, Franklin B.	Bacteriology	Versailles
Morgan, Alpha	Home Economics	Garrett
Morgan, Clarence E.	Unclassified	Lexington
Morgan, Herman T.	Unclassified	Mt. Sterling
Morris, David	Education	Louisa
Morrison, Helen G.	Sociology	Wilmore
Moseng, Lloyd R.	Education	Harlan
Mountjoy, James R.	Physical Education	Danville
Mullins, R. Lester	Education	Williamstown
Murphy, Garland A.	Com. Education	Murray
Murrill, Virginia M.	Unclassified	Lexington
Myers, Gene	Physical Education	Lexington
Nagley, Forrest R.	Education	Cedarville, Ohio
Nallinger, Earl M.	Commerce	Lexington
Nance, James W.	Unclassified	Edmonton
Napier, John T.	Polit. Science	Collinsville, Okla.
Nash, Dorothy C.	English	Trinity
Nave, Ruth N.	Home Economics	Lexington
Neel, Charles O., Jr.	Education	Fisherville
Neel, Joe K.	Zoology	Lexington
Neiser, Richard W.	Education	Newport
Nelson, Alfred W.	Physical Education	Louisville
Nelson, Mrs. Ruth B.	Unclassified	Hazard
Newman, Clinton H.	Agriculture	Versailles
Newton, Lucille H.	Education	Lexington
Newton, Reason G.	Education	Gilbertsville
Nichols, Dorothy O.	Psychology	Lexington
Nicholson, Horace	Agriculture	Versailles
Nickell, Roy	Agriculture	Nickell
Norbeck, Mildred E.	Education	Oakdale
Nuckols, Samuel C., Jr.	English	Versailles
Oakes, Newton	Commerce	Oldtown
O'Brien, Helen L.	Lib. Science	Huntington, W. Va.

Name	Major	Address
Ockermann, Kenneth R.	Physiology	Lexington
Odor, Hubert B.	Unclassified	Williamstown
Offutt, Celeste L.	Sociology	Lexington
Ogg, Casper W.	Unclassified	St. Helens
Ohne, Ida M.	Ancient Languages	Ghent
Omer, Mary I.	Psychology	Madisonville
Orsburn, Roy	Public Health	Greenville
Osborn, John S.	Agriculture	Barbourville
Osborn, Scott C.	English	Martin
Overton, Emily J.	Com. Education	Owensboro
Owen, J. Loice	Agriculture	Sacramento
Owen, Robert T.	Polit. Science	Gravel Switch
Owens, Sarah C.	English	Danville
Owsley, Mary E.	Library Science	Lexington
Page, A. A.	History	Pikeville
Page, Tate C.	Phys. Education	Lexington
Palmeter, Mary A.	English	Ravenna
Parks, Carmon M.	Education	Murray
Parks, William R.	Political Science	Berea
Parmenter, Derric C.	Public Health	Greenup
Parris, Henry H.	French	Lexington
Parrish, Dean M.	Chemistry	Paris
Parsons, V. Gladys	Unclassified	Big Stone Gap, Va.
Partington, J. Edwin	Psychology	Paoli, Ind.
Pates, Jeanette W.	Unclassified	Lexington
Patrick, Amy H.	Education	Carlisle
Patrick, Olney M.	Education	Frankfort
Patterson, Charles E.	Education	Bowling Green
Patton, Samuel W.	Education	Whitley City
Paxton, Mrs. Harry W.	Unclassified	Shelbyville
Peckham, Henry L., Jr.	Hygiene	Washington, D. C.
Peel, Emily	Library Science	Nicholasville
Pell, William H.	Mathematics	Lewisport
Pelphrey, Nell M.	H. E. Education	Lancaster
Pennington, John E.	Unclassified	Webbville
Pennycuff, Henry G.	Agr. Education	Shopville
Perkins, Harry D.	Education	Covington
Perkins, William H.	Education	Texas
Perrin, Theodora L.	Hygiene	Custer, S. D.
Perry, Eudenah H.	H. Economics	Dawson Springs
Perry, Rose Agnes	History	Louisville
Perry, W. Robert	Education	Morganfield
Phelps, Eunice C.	Education	Paintsville
Phelps, Lyle K.	Education	Paintsville
Phillips, Mrs. Elizabeth D.	English	Lexington
Phillips, Fred T.	Unclassified	Henderson

Name	Major	Address
Pieratt, Charles E.	Education	Mt. Sterling
Piercy, L. B.	Unclassified	Cobb
Pigue, Mrs. H. G.	Unclassified	Fulton
Pillow, Ward	Education	Water Valley
Pirtle, John P.	Agr. Education	Prospect
Plymale, Julia M.	Education	Kenova, W. Va.
Plymale, Lewis	Botany	Kenova, W. Va.
Porter, R. Clay	Mech. Engineering	Clinton
Powell, Julius K.	Education	Harrodsburg
Praither, Mrs. Anne S.	Education	Lexington
Prather, Alice D.	Unclassified	Independence
Prather, John I.	Zoology	Independence
Prewitt, Neal H.	Education	Junction City
Prezioso, Celic	Com. Education	Covington
Price, Robert E.	Unclassified	Graham
Prince, Louis R.	Physics	Easley, S. C.
Pritchett, Grayden M.	Sociology	Madisonville
Proctor, Eula	Education	Georgetown
Proctor, Ruby	Education	Burgin
Pruden, Ora	English	Owensboro
Pruitt, Elizabeth R.	English	Millersburg
Pruit, Goebel B.	Agriculture	Nancy
Pugsley, Donald W.	Mathematics	Berea
Purdom, Christopher H.	Education	Lancaster
Puterbaugh, Allen S.	Education	Leitchfield
Quillen, Rodney W.	Education	Heidelberg
Race, Madelyn	Unclassified	Bay City, Mich.
Rader, Clifford R.	Political Science	Richmond
Randolph, James R.	Physics	Sturgis
Rankin, Rebecca R.	English	Cynthiana
Rankin, Rome	Physical Education	Richmond
Ransdell, Marvin S.	Public Health	Prestonsburg
Ransdell, Mary E.	Education	Lexington
Rapier, Virginia	Unclassified	Maysville
Rasdall, Mackie	Unclassified	Smiths Grove
Ratti, G. A., Jr.	Chemistry	Indianapolis, Ind.
Rawlings, James L.	Agriculture	Flemingsburg
Rawlins, Vivian Mae	Unclassified	Donerail
Ray, Willie C.	Education	Shelbyville
Rayburn, Waylon F.	Education	Murray
Reagan, Mary C.	Education	Lexington
Reckzeh, John K.	Mathematics	Mays Lick
Redmon, Virginia H.	Education	Pikeville
Reed, Curtis J.	Education	Fleming
Reed, John S.	Unclassified	Carlisle
Rees, Janie	English	Owenton

Name	Major	Address
Reeves, Marjorie G.	Bacteriology	Leicester, N. C.
Regenstein, Alma	Home Economics	Richmond
Reid, John O., Jr.	Education	Stanford
Renick, Oberia O'Hara	Unclassified	Lexington
Reynolds, Beulah A.	Romance Languages	Wilmore
Reynolds, Margaret M.	Education	Lexington
Reynolds, Robert S.	Markets and R. F.	Lexington
Rice, David R.	Public Health	Taylorsville
Rice, Martin L.	Agr. Education	Royalton
Rice, Mary K.	Education	Lexington
Rice, Nakoma	English	Providence
Richardson, Walter G.	History	Pineville
Richman, Mrs. Bamma B.	English	Durham, N. C.
Riddle, Freddie	English	Phelps
Riddle, James S.	Education	Nicholasville
Riggins, Frances A.	Unclassified	Harrodsburg
Riggins, Mary K.	H. E. Education	Harrodsburg
Rigsby, Fred E.	Education	Ashland
Riley, Mrs. Bessie B.	Education	Lexington
Riley, Hershel R.	Unclassified	Munfordville
Riney, Carrie S.	Education	Elizabethtown
Ringo, Luther Ryan	Civ. Engineering	Owensboro
Risner, Benjamin, Jr.	History	Calvin
Ritter, Catherine C.	English	Louisville
Roaden, Ova G.	Education	Alva
Robards, Mildred O.	Unclassified	Lexington
Robbins, D. A.	Unclassified	Brodhead
Robbins, Earl G.	Agr. Education	Lexington
Robbins, Lewis R.	Unclassified	Stanton
Roberts, A. D.	History	Nancy
Roberts, Amster D.	Unclassified	Greendale
Roberts, Byron M.	Education	Paris
Roberts, Elizabeth F.	Education	Covington
Robey, Mary L.	Unclassified	Georgetown
Robinson, Bess	Education	Mt. Sterling
Robinson, Claude B.	Economics	Christiana, Tenn.
Robinson, Donna E.	Education	Newport
Robinson, Mary K.	Education	Lexington
Robinson, Sallie A.	Ancient Languages	Lexington
Robinson, Verne G.	German	Hobart, Ind.
Rodes, Mary C.	History	Danville
Roe, Mrs. James A.	Home Economics	Cynthiana
Rogers, Mrs. Erleen J.	Education	Hopkinsville
Rogers, Mrs. Frances L.	Education	Mt. Sterling
Rogers, Isabel	Music	Beckley, W. Va.
Rogers, John H.	Agriculture	Clinton

Name	Major	Address
Rogers, Sarah S.	Unclassified	Frankfort
Rohrer, Frank E.	Agr. Education	Clinton
Rollins, Mary D.	Unclassified	Pineville
Roman, Roy Lee	Agriculture	Buechel
Romansky, Bertha B.	H. Economics	Summerlee, W. Va.
Romine, Joe W.	Com. Education	Finley
Ross, Albert G.	English	Bowling Green
Ross, Lucy J.	Education	Carlisle
Rossiter, Mrs. Jeanette	H. E. Education	LaFayette
Roswell, Charles A.	Chemistry	Lexington
Rothwell, Hermon E.	Agriculture	Benton
Rouse, Jack T.	Education	Louisville
Rouse, Julia A.	Education	Park Hills
Rowell, Elsie	Education	Louisville
Rowland, Clayton	Commerce	Scoville
Rowland, Thomas W.	Education	Vanceburg
Ruby, Zula Mae	H. E. Education	Mackville
Rupert, Joe F.	Phys. Education	Catlettsburg
Russell, Katherine K.	Education	Morganfield
Ryan, Charles O.	Unclassified	Lawrenceburg
Sabel, Joe E.	Education	Stamping Ground
Sageser, Henry W.	Education	Louisville
Salzer, Amanda	Education	Lexington
Salzers, James R.	Education	Lexington
Sammons, Mildred C.	Unclassified	Madisonville
Sams, Gertrude B.	Unclassified	Lexington
Sanders, John H.	Education	Greensburg
Sanders, Paul R.	English	Charleston, S. C.
Sanders, Robert L.	History	Louisville
Sartain, Carl C.	Physics	Lexington
Saslow, Samuel	Bacteriology	Cleveland, Ohio
Schneider, Grace	Education	Louisville
Schroeder, Jacob H.	Physics	Goessel, Kansas
Scibiorski, Albert C.	Chemistry	Warren
Scott, Ellen	Political Science	Paris
Scott, Jesse A.	Education	Lexington
Scott, Katherine	English	Erlanger
Scott, Mrs. Mary W.	Education	Georgetown
Scroggin, William D.	Physical Education	Morehead
Scudder, James W.	Public Health	Carlisle
Scutchfield, Beecher L.	Bacteriology	Prestonsburg
Settle, Evan E., Jr.	Education	Bedford
Sharon, Robert E.	Education	Independence
Sharpe, Dorothy J.	English	Nicholasville
Sharpe, Foyster	Education	Richmond
Sharpton, Clarence T.	Education	Berea

Name	Major	Address
Sharpton, Mrs. Lucille	Unclassified	Berea
Shaw, Josephine	Com. Educ.	Clarksville, Tenn.
Shaw, Nelle C.	Unclassified	Frankfort
Shearer, Willa Mae	Unclassified	Lexington
Sheils, Edward E.	English	Williamsburg
Shelby, Jane R.	Unclassified	Frankfort
Shelton, A. M.	Education	Georgetown
Shelton, Asa M.	Mathematics	Winchester
Shelton, Dorothy E.	Unclassified	Murray
Shepherd, Clarence C.	Unclassified	Whitley City
Shepherd, Mary K.	English	Wheelwright
Shields, Harry A.	Hygiene	Warsaw
Shirley, Robert L.	Education	Danville
Shoopman, Rosemary	English	Somerset
Short, Ezra J.	Unclassified	Blaine
Shropshire, Mrs. Virginia	English	Paris
Shultz, Fred T.	Education	Sturgis
Simmons, James W.	Agriculture	Russellville
Simmons, Stella L.	Education	Lebanon Junction
Simons, Claude, Jr.	Phys. Education	Lexington
Simons, Royce E.	Education	Slaughters
Sims, James H.	Commerce	Lexington
Skinner, B. V.	Zoology	Westchester, Ohio
Skinner, Charles E.	Unclassified	Lexington
Slusher, Richard W.	Education	Beverly
Slusher, William M.	Education	Pineville
Smith, Mrs. Anna C.	Unclassified	Georgetown
Smith, Bess V.	English	Canada
Smith, Charles F.	History	Midway
Smith, Charlotte F.	Home Economics	Danville
Smith, Daniel B.	Education	Guerrant
Smith, Edna J.	Education	Richmond
Smith, Emily C.	Music	Midway
Smith, Eugene W.	Physics	Newark, Mo.
Smith, Glenn R.	Sociology	Lexington
Smith, Helen C.	English	Dry Ridge
Smith, Herbert F.	Agr. Education	Hebbardsville
Smith, Jean L.	Education	Lexington
Smith, Laura G.	Unclassified	Lexington
Smith, Lucy L.	Education	New Castle
Smith, Mrs. Robert L.	Education	Jenkins
Smith, Roy B.	Education	Owensboro
Smith, Wilbur K.	Sociology	Wilmore
Smith, William A.	Political Science	Union City
Smoot, Harry F.	Agriculture	Owenton
Snead, Christy	Com. Education	Spencer, W. Va.

Name	Major	Address
Southord, John B.	Unclassified	Luzerne
Sparks, Willie D.	Education	Davisville
Sparrow, John C.	Political Science	Louisville
Spears, Woodridge	English	Tulga
Spencer, Cecil W.	Agr. Education	Ashland
Spillman, Claude O.	Education	Berea
Spragens, William H.	Mathematics	Lebanon
Spurlin, Robert P., Jr.	Hygiene	Louisville
Spurlock, H. L.	Unclassified	Oneida
Stamper, Lily	History	Beattyville
Stark, Nola Nell	Education	Topeka, Kan.
Starks, Effie F.	Bacteriology	Midway
Starns, Clarence W.	Education	Campton
Stephens, Mrs. Thelma B.	H. E. Education	Whitley City
Stewart, Charles T.	Political Science	Lexington
Stewart, James H.	Mathematics	Lexington
Stewart, Julia V.	H. E. Education	Rome
Stewart, Marion T.	Unclassified	Beaver Dam
Stewart, Mary E.	H. E. Education	Richmond
Stinson, Carl H.	Unclassified	Manchester
Stout, Charles D.	Unclassified	Taylorsville
Stover, Jackson	Education	Milton, W. Va.
Stratton, Alza	English	Lexington
Striplin, Charles F., Jr.	Phys. Education	Lexington
Stroker, Francis M.	History	Clintonville
Strother, J. Park	Education	Covington
Strubel, Carolyn M.	Education	Louisville
Sturgeon, George	Unclassified	Fredonia
Sturgill, V. L.	Education	Ashland
Sturkey, Lorenzo	Physics	McCormick, S. C.
Suddarth, Emma E.	English	Knoxville
Sullivan, Bernice W.	Education	Huntington, W. Va.
Summerville, Mildred	Unclassified	Marion
Survant, William G.	Agriculture	Whitesville
Swan, Lois M.	Education	Pasadena, Calif.
Swann, Layson B.	Hygiene	Louisville
Sweeney, John T.	Education	Lexington
Sweeney, Mary Anne	Education	Lexington
Sweeney, Winifred J.	Education	Lexington
Sweeny, Robert Todd	Unclassified	Owensboro
Sweets, F. Martin	Education	Louisville
Switzer, Samuel L.	Agr. Education	Owenton
Tabb, W. R.	Agr. Education	Hawesville
Tabor, Mae A.	History	East Lynn, W. Va.
Talbert, Charles G.	Mathematics	Carlisle
Talbott, Anna L.	Unclassified	Lexington

Name	Major	Address
Tamplin, Clarence D.	Education	Racine, W. Va.
Tanner, Luther W.	Education	Evarts
Tapp, Leamon	Agr. Education	Smith Mills
Tarkington, Charles N.	Farm Economics	Moreland
Tarro, Domnick A.	Phys. Education	Bethany, Ill.
Tarter, Virgil K.	Education	Maysville
Taylor, Alfred P.	Unclassified	Owensboro
Taylor, Elizabeth T.	Home Economics	Lexington
Taylor, Elma E.	Education	Morning View
Taylor, Harry J.	Education	Corbin
Taylor, Leonard C.	Education	Livermore
Taylor, Lester C.	Education	Houston
Taylor, Rhea A.	Phys. Education	Gate City, Va.
Taylor, Truman	Agriculture	Hopkinsville
Teasley, Huel	Agr. Education	Glendale
Telford, Josephine L.	Education	Richmond
Tempel, Mrs. Geneva H.	Education	Shelbyville
Terrill, Ethel	Education	Berea
Tharp, Max M.	Farm Economics	Lexington
Thomas, Nettie P.	Home Economics	Victory
Thompson, Celeste R.	Unclassified	Lexington
Thompson, Dorothy B.	Physical Education	Owensboro
Thompson, Eugene H., Jr.	French	Lexington
Thompson, Jack	History	Perryville
Thompson, Joe R.	Agriculture	Owingsville
Thompson, Robert I.	Education	Hickory
Thorn, John M., Jr.	Political Science	Lexington
Threlkeld, J. Ernest	Agr. Education	Madisonville
Thurber, Donald B.	Public Health	Louisville
Thurman, Homer C.	Unclassified	Somerset
Thurman, Newman R.	Education	Finchville
Thurman, Paul W.	Education	Lexington
Tiller, Berthol L.	Education	Gratz
Todd, Jack R.	Chemistry	Lexington
Tolman, Helen L.	English	Georgetown
Toombs, Sara Cole	Education	Lexington
Towell, Charles A.	Education	Georgetown
Travelstead, Chester C.	English	Bowling Green
Travis, Oattie B.	Agriculture	Jamestown
Traylor, Lorell A.	Unclassified	Providence
Traylor, Milton O.	Unclassified	Princeton
Traylor, Robert E.	Education	Princeton
Triplett, Ishmael	Education	Prestonsburg
Tripp, Lavern	Mathematics	West Frankfort, Ill.
Trivette, Elizabeth	Unclassified	Jonancy
Trott, William D.	Phys. Education	Evansville, Ind.

Name	Major	Address
Tudor, Mrs. Martha B.	Education	Woodburn
Tudor, Tabitha	History	Nicholasville
Turner, Daily R.	History	Morris Fork
Turner, Earl K.	Education	Wooton
Turnipseed, Allan L.	History	Dover
Tuttle, Arthur L., Jr.	Unclassified	Danville
Tye, Mrs. Bertha K.	Unclassified	Barbourville
Tyree, Mabel I.	English	Lexington
Tyson, Willie K.	Unclassified	Perry, Fla.
Ubben, John H.	Unclassified	Pella, Iowa
Valentine, Shellie F.	Unclassified	Himyar
Vallandingham, Pauline	Education	Georgetown
Van Deren, Sarah M.	English	Cynthiana
Van Hoose, Richard	Education	Frankfort
Vannoy, Carl G.	Education	Madisonville
Van Winkle, Ivan C.	Education	Vanceburg
Vaughan, Mary E.	History	Hopkinsville
Vaughn, Beverly C.	Met. Engineering	Lexington
Vaughn, Effie	Com. Education	Clay
Veatch, Sophronia S.	Unclassified	Harrodsburg
Venable, Keith S.	Agriculture	Hopkinsville
Vice, Lucille	Education	Lexington
Vincent, Dencil M.	Agriculture	Browder
Vincent, James O.	Education	Brownsville
Wade, Dallas C.	Elec. Engineering	Lexington
Wadlington, George G.	Education	Dawson Springs
Wahlkampf, Edward E.	Com. Education	Welch, W. Va.
Walker, Andrew J.	Education	Corbin
Walker, Fletcher C.	Agriculture	Burkesville
Walker, Roberta B.	Education	Lexington
Walker, Samuel	Political Science	Richmond
Wall, Janie E.	Commerce	Elberton, Ga.
Wallace, Charlton O.	Mech. Eng.	Hollis, L. I., N. Y.
Wallingford, Elizabeth	English	Maysville
Walsh, John J.	Education	Lexington
Walters, Charles D.	Education	Scuddy
Walters, Roy N.	Sociology	Berea
Walton, Erle W.	Education	Cynthiana
Warren, Clarence O.	Agriculture	Ewing
Warren, Frances M.	Education	Lexington
Warren, Guy	Agriculture	Paducah
Warren, Mrs. Harriet L.	Education	Lexington
Warren, Mary P.	Education	Lexington
Washburn, Mildred	Education	Bowling Green
Waters, Dewey E.	Chemistry	Lexington
Waters, Ella H.	Economics	Washington, N. C.

Name	Major	Address
Watters, Richard W.	Education	Caseyville
Webb, Mrs. Clara P.	Latin	Ravena
Webb, Herbert J.	Agriculture	Globe
Webster, Franklin	Physical Education	Williamstown
Webster, Mary P.	Unclassified	Williamstown
Weibel, Roscoe E.	Philosophy	Helton
Weisiger, Carroll, Jr.	Psychology	Louisville
Wells, Alice M.	Education	Paintsville
Wells, Susan E.	Home Economics	Owensboro
Wells, Thelma K.	Bacteriology	Richmond
Wesley, William M.	Unclassified	Grayson
West, Logan	Agriculture	Stanford
West, Wilda V.	Phys. Education	Mineola, Texas
Whaley, Sara Elizabeth	Education	Paris
Whalin, Eugene B.	Education	Corinth
Wheeler, Samuel E.	Agr. Education	Kirksville
Wheeler, Virginia	Agriculture	Buechel
White, Emery H.	Education	Bowling Green
White, Howard T.	Public Health	Youngstown, Ohio
White, Vee	Education	Manhattan, Kansas
Whitehouse, Harvey J.	History	Carlisle
Whitehouse, Scott	Bacteriology	Carlisle
Whitenack, Rachel	Art	Harrodsburg
Whittaker, Rawdy	Education	Cornishville
Whittinghill, Frank T., Jr.	Geology	Owensboro
Wilder, O. B.	Political Science	Midway
Wilds, Edith	Education	Burgin
Wiley, Kathryn L.	Journalism	Barbourville
Wiley, Miller B.	Education	Barbourville
Wilkey, John J.	Agr. Education	Dixon
Wilkie, Mrs. Katharine	English	Lexington
Williams, Alice J.	Political Science	Walton
Williams, Cratis D.	English	Blevins
Williams, Frances D.	Sociology	Elizaville
Williams, Granville B.	Bacteriology	Eubank
Williams, Helen L.	Library Science	Lancaster
Williams, Henry O.	Education	Henderson
Williams, Mrs. Hilda B.	English	Winchester
Williams, J. Sankey	Unclassified	Paintsville
Williams, Martha R.	Com. Education	Falmouth
Williams, Martin L.	Education	Clinton
Williams, Paul E.	Unclassified	Fort Thomas
Williams, Ruth M.	Com. Education	Corbin
Williamson, Harold C.	Psychology	Lexington
Willis, Frank B.	English	Lexington
Willis, Una G.	Unclassified	Dycusburg

Name	Major	Address
Wills, Richard B.	Zoology	Paris
Wilson, Bernard E.	Phys. Education	Crab Orchard
Wilson, Dorothy E.	English	Berea
Wilson, Homer	History	Monterey
Wilson, Ray W.	Agriculture	Nicholasville
Wilson, Stephen S.	Agr. Education	Caneyville
Wilson, Vernon C.	Education	Annville
Wilson, William C.	Agriculture	Lexington
Wilson, William T.	Zoology	Munfordville
Winburn, Hobart	Education	Virgil
Winchester, L. C.	Education	Hardinsburg
Winder, Minnie C.	Education	Maysville
Winfrey, William R.	Agriculture	Whetstone
Winter, William W.	Unclassified	Grayson
Wolverton, Masie	English	Lexington
Wood, Lula C.	History	Maysville
Woods, Mrs. Lucy G.	Education	Pineville
Woodward, R. E.	Education	Auburn
Wooldridge, Mary C.	Home Economics	Lexington
Word, Carroll E.	Education	Augusta
Worth, John	Education	Lexington
Wrather, Stephens E.	Agriculture	Lexington
Wright, J. Rondle	Physics	Bowling Green
Wright, Roy H.	Physics	Hampton, Va.
Wright, Sara L.	English	Maysville
Wright, Theodore M.	Education	Bellevue
Wyatt, Forest E.	Education	Tyner
Wyatt, Margaret E.	Unclassified	Berea
Wyatt, R. B.	Agriculture	Cynthiana
Wylie, Pauline	English	Huntington, W. Va.
Wyman, Flavius W.	Chemistry	Lowes
Yancey, Sarah K.	Commerce	Lexington
Yeksigian, Leo C.	Education	Louisville
Youmans, Charles V.	Mathematics	Louisville
Young, Duke W.	Unclassified	Mt. Sterling
Young, Mrs. Grace M.	History	Clendenin, W. Va.
Young, John M.	History	Morganfield
Young, Margaret E.	Home Economics	Morganfield
Young, Will	Education	Wingo
Young, Mrs. Will	English	Wingo
Zachary, John L.	Agr. Education	Liberty
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