BULLETIN

UNIVERSITY OF KENTUCKY

SUMMER SESSION, 1923

FIRST SESSION, JUNE 25, TO AUGUST 4

SUPPLEMENTARY SESSION, AUG. 6, TO SEPT. 8

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Vol. 15. No. 2.

SUMMER SESSION CALENDAR

Monday	June 25	Registration
Tuesday	June 26	Classes begin in all departments
Wednesday	July 4	Holiday—all classes suspended
Friday	August 3	Examinations begin
Saturday	August 4	Examinations close—end of first session
Monday	August 6	Registration, second session
Tuesday	August 7	Classes begin in all departments
Friday	September 7	Examinations begin, second session
Saturday	September 8	Examinations close—end of second session.

PATTERSON HALL, WOMEN'S DORMITORY

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OFFICERS OF ADMINISTRATION

Frank LeRond McVey, Ph. D., LL. D., President.
George Colvin, A B., LL. D., State Superintendent of Schools.
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Professor of Vocational Agriculture

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Assistant Professor of Secondary Education

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Instructor in Home Economics

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Assistant Professor of Mechanical Engineering

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Professor of Hygiene and Public Health and Head of Department

J. B. HOLLOWAY, A. B.,
High School Supervisor, Frankfort, Kentucky; Lecturer in Education

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Assistant Professor of Mechanical Drawing

LEVI JACKSON HORLACHER, M. S.,
Assistant Professor of Animal Husbandry

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Professor of Applied Mechanics

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Professor of Agricultural Engineering

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Instructor in English

Carl Albert Lampert,
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Simeon E. Leland, A. M.,
Assistant Professor of Economics

Flora Elizabeth LeStourgeon, Ph. D.,
Assistant Professor of Mathematics

Moses Edward Ligon, M. A.,
Principal, Ashland High School, Ashland, Kentucky

Joseph Holmes Martin, B. S. in Agr.,
Assistant Professor of Poultry

Augustus Noah May, B. Ped.,
Professor of Teacher Training in Industry

Frank Theodore McFarland, Ph. D.,
Professor of Botany and Head of Department

Columbus Rudolph Melcher, A. M.,
Dean of Men and Professor of German Language and Literature and Head of the Department

John Richard Mitchell, A. B.,
Assistant Professor of Chemistry

James Thomas Cotton Noe, A. M., Litt. D.,
Professor of Education, Head of the Department

Albert Jackson Olney, B. S., M. H.,
Assistant Professor of Horticulture and Assistant Horticulturist

Wellington Patrick, A. M.,
Assistant Professor; Director of the Summer Session, and Director of University Extension

George Roberts, B. Ped., M. S.,
Assistant Dean, College of Agriculture

William Lewis Roberts, J. D.,
Professor of Law

Stephen Thaddeus Saunier,
Instructor in Blacksmith Shop

Morris Scherago, B. S., D. V. M.,
Associate Professor of Bacteriology and Acting Head of the Department

Mrs. Alberta Wilson Server, A. B., M. A.,
Instructor in Romance Languages

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Professor of Vocational Teacher Training and Head of the Department

David Norton Singer,
Instructor in Auto Engineering

Augustus Sisk, A. B.,
Instructor in Mathematics

David N. Snedden, Ph. D.,
Columbia University, New York City; Lecturer in Education

Ashley V. Storm, Ph. D.
Professor of Agricultural Education, University of Minnesota; Lecturer in Vocational Education

Daniel Starch, Ph. D., Harvard University,
Lecturer in Education

Marshall Ney States, Ph. D.,
Associate Professor of Physics

Olus Jesse Stewart, M. S.,
Instructor in Chemistry

Allan Lee Swisher,
Instructor in Art

Gordon Thurman,
Instructor in Machine Shop

Franklin Elliott Tuttle, M. A., Ph. D.,
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Professor of Economics and Head of the Department of Economics and Sociology

J. C. Waller, A. M.,
Superintendent of Schools, Hopkinsville, Kentucky

Emma J. Woerner, B. S., M. A.,
Acting Dean of Women

GENERAL INFORMATION

The Summer Session of the University of Kentucky for 1923 will begin on June 25 and extend for a period of six weeks.

A special session will be arranged for a period of five weeks following the close of the first session. Announcement regarding the courses to be given in the second session will be made later.

CLASSES OF COURSES

Courses are offered for graduates and undergraduates in the College of Arts and Sciences, the College of Agriculture, the College of Engineering, and the College of Law. These courses are designed to meet the needs of teachers in colleges, normal schools, high schools, county and city superintendents, supervisors, and special students as lawyers, engineers, chemists, writers, social workers, playground directors, farmers, breeders and dairymen.

DESIGNATION OF COURSES

The courses in each department are numbered as in the University catalog, those primarily for undergraduates, from 1 to 99; those for both graduates and undergraduates, from 100 to 199; and those primarily for graduates from 200 on. All courses are fully described in the subsequent pages.

A LARGER PROGRAM FOR 1923

The attendance for 1922 was the largest in the history of the University. The interest and enthusiasm manifested have led the University to plan a larger program for 1923, and to offer courses especially designed to serve the needs of the teaching profession. The program has been enlarged in the field of Education especially, and other departments have been strengthened in their work. An attempt has been made to provide more satisfactory arrangements for graduate work.

TERMS OF ADMISSION

In general, students may be admitted to the Summer Session regardless of their advancement, provided they are qualified to carry the courses desired. The following general terms of admission are in force during the regular sessions and Summer Session students will do well to arrange for admission under some of the ways provided.

The requirements for admission for undergraduates who desire college credit, and who desire to become candidates for degrees, are as

follows: (1) By passing the examinations for entrance to the University as described in the general catalog; (2) by certificate of graduation from a standard accredited high school; (3) by certified standing from a state normal school, or (4) by presentation of evidence of satisfactory scholarship and character from an approved college or university at which the student has been in attendance. Admission to the graduate school is discussed later.

Students who have not previously entered the University will do well to present to the Registrar of the University at or before the beginning of the Summer Session, their scholastic record. When presenting transcripts of records from other institutions, the student's high school record should accompany them, since the student's classification often depends on the particular subjects taken in high school. The record will be formally passed upon by the entrance committee and the Registrar, who will issue to the student, on application, a statement of standing.

Applicants for admission to the College of Law as candidates for a degree must satisfy the general entrance requirements of the University, stated above, and in addition, must have thirty credits of college work, the equivalent of the freshman year in the College of Arts and Sciences.

Students who do not desire to become candidates for a degree need not comply with the entrance requirements. They may register in any course or courses which they are able to carry to advantage. If such students complete the work of a course satisfactorily, the Registrar will, upon application, issue a credit statement noting the hours of work carried and the grades earned. Credit toward graduation at the University of Kentucky, however, will be given only after regular matriculation by one of the methods described above.

Students who have been dismissed from the University will not be admitted to the Summer Session without the approval of the Committee on Attendance and Scholarship.

Students who desire to become candidates for degrees should, if possible, submit their credentials before entering, as it occasionally takes considerable time to settle the various questions which arise. Ask the Registrar for a form on which to submit credits.

GRADUATE WORK

The following brief statement of opportunities for graduate work in the Summer Session for 1923 is published for the information of those seeeking higher degrees. In the Summer Session in 1922, there was an increased demand on the part of high school teachers, prin-

cipals and city superintendents for opportunities for graduate work. To meet this increasing demand, the various departments are providing facilities for a larger program for graduate students.

ADMISSION TO THE GRADUATE SCHOOL

Graduates of the University of Kentucky are admitted to the Graduate School without examination. Graduates of other approved universities and colleges are admitted to the Graduate School upon filing with the Registrar of the University of Kentucky an official transcript of their undergraduate record. This record is considered by the Graduate Committee and in some cases it is necessary to prescribe undergraduate courses as a further preparation for candidacy for the degree sought. It is desirable that the student send the transcript to the Registrar of the University some weeks in advance of the opening of the Summer Session. Where the student has a baccalaureate degree from a standard institution, he will be admitted to the graduate school as a candidate for the particular advanced degree for which his undergraduate preparation fits him.

Graduate students who do not care to become candidates for a higher degree need not comply with the requirements indicated above.

College graduates who desire to confine their work to undergraduate courses and who do not expect to become candidates for a higher degree should not register in the graduate school, but with the Dean of the College in which their courses are listed.

No person is considered a candidate for a higher degree until he has first satisfied the entrance requirements to the Graduate School. Work of a graduate character done prior to such registration may be counted towards an advanced degree only after formal application is made to the registrar, which application must be approved by the graduate committee. Such credit can not be used to diminish the time requirement for residence.

RESIDENCE REQUIREMENTS

To obtain the master's degree the student must have been in pursuit of graduate studies at the University of Kentucky for a period of at least one year, or for four Summer Sessions. Three Summer Sessions of eleven weeks each or twelve weeks each will satisfy the residence requirements for the master's degree. The rules of the Graduate Committee at present provide that the student is not held to any particular number of hours or courses, but must satisfy such work as may be required in the field in which he selects his major

or minor. In some cases it is necessary, as a means of further preparation for graduate work, to assign to the student undergraduate courses to be completed before the major or minor work can be taken up.

As stated above, the student is not held to any particular number of hours or courses, but the following indicates roughly the amount of work generally required for the master's degree:

Major	12 credits
Minor	6 credits
Thesis	6 credits

In addition, the student must pass a satisfactory oral examination and be prepared to defend his thesis before a committee consisting of his major and minor professors. All courses must be selected with the advice and consent of the major professor.

GRADUATE COURSES IN THE SUMMER SESSION

The following courses given in the Summer Session for 1923 may be taken for graduate credit, for a major or minor, as indicated:

Ancient Languages 4, minor only.
Ancient Languages 201a, 201b, major or minor.
Bacteriology 102, minor only.
Bacteriology 103, major or minor.
Botany 105, minor only.
Botany 206a, 206b, 213a, 213b, major or minor.
Chemistry 7, 8, 9, 12, 14, minor only.
Economics 109, major or minor.
Education 108, 7a, 7b, minor only.
Education 215b, 217a, 220a, major or minor.
English 105, 110, 116, 109, 111, minor only.
English 205, major.
History 118, minor.
Hygiene 103, 104, minor only.
Mathematics 105, 106, major or minor.
Political Science 55, 57, minor only.
Physics 107, 108, major or minor.
Psychology 108, 110, minor only.
French 101a, minor only.
Spanish 103a, 104a, minor only.
Vocational Teacher Training 102, 107, 105, 191, 134, minor only.
Zoology 102, 106, minor only.
Agronomy 101, major or minor.
Animal Industry 203, major or minor.
Animal Industry 104, minor only.

During the Summer Session it is possible for graduate students to take majors in the following fields: Ancient Languages, Bacteriology, Botany, Economics, Education, English, Mathematics, Physics, Agronomy, Animal Industry. Minors may be taken in combination in the fields named for majors or in the following: Political Science, Psychology, Romance Languages, Vocational Teacher Training or Zoology.

High School Principals, City Superintendents, County Superintendents, and persons interested in the administration of education are often interested in taking graduate work in the following fields:

For the major, Education, with their special work in the field of Educational Administration. For the minor, Psychology, History of Education, Elementary Education, or Educational Psychology. Persons engaged in the teaching of agriculture, such as persons engaged under the provisions of the Smith-Hughes Act, will find opportunities for graduate work with a major in Educational Administration, or a major in Agriculture (either Agronomy or Animal Industry) and a minor in Education, or a minor in Vocational Teacher Training.

In the field of Education, graduate students may major in Administration only, but minors may be taken in Educational Psychology, Elementary Education, or History of Education.

FEES IN THE GRADUATE SCHOOL

The fee in the Graduate School is $15.00. Persons who have heretofore registered in the Graduate School will not be required to pay this fee again. Persons who register hereafter in the Graduate School will be required to pay the usual Summer Session fee each session.

AUDITORS

Adults who desire to pursue college work for their profit or pleasure, but without reference to a degree, and also those who desire merely to visit lecture courses in subjects which are of special interest to them, without being held responsible for the work expected of students working for credit, may register in the Summer Session as auditors. Auditors pay the same fees as other students and enjoy the same privileges, except that of being included in recitation and theme work.

REGISTRATION AND FEES

Registration and the payment of fees must precede entrance upon any part of the work of the Summer Session. Registration will take place on Monday, June 25, 1923, and lectures will begin on Tuesday morning, June 26.

The Summer Session fees will be as follows:

In the Graduate School	$15.00
In the College of Law	27.00
In all other Colleges	17.00

There will be no laboratory fees of any kind. Students who have heretofore entered the Graduate School have paid a fee of $15.00 and will not be required to pay a fee again. Graduate students who enter hereafter, however, will be required to pay the usual fee required of all students in the Summer Session.

There are no matriculation fees. All persons pay the same fee regardless of whether they take one course or more.

LATE REGISTRATION FEE

Students entering after the first day of the Summer Session are required to pay the late registration fee of $1.00 for each day they are late, the total amount of such fees paid by any one person not to exceed $5.00.

REFUNDS

During the first ten days after the opening of the Summer Session students withdrawing for sufficient reasons, may, on written recommendation of the Director of the Summer Session, receive a refund on the amount paid in fees, not to exceed 80% of all fees paid. In no case shall the amount refunded exceed 80%, and in no case will refunds be made after the first ten days.

RESIDENCE REQUIREMENTS AND DEGREES

Before a student can receive the baccalaureate degree he must have been in residence at the University of Kentucky for at least two semesters. Four Summer Sessions of six weeks each or three Summer Sessions of eleven or twelve weeks each will satisfy the residence requirements.

Courses taken through the Department of University Extension may be counted toward graduation to the extent of one year (32 credits), but credit earned in this way cannot be used to satisfy residence requirements. Extension courses cannot be used to satisfy any requirements on the master's degree.

For information as to degrees offered, the student should consult the general catalog of the University.

TEACHERS' CERTIFICATES

As provided by law, the University issues four kinds of teachers' certificates which are valid licenses to teach in the schools of the State. These certificates are issued by the Department of Education. The requirements for the various kinds of certificates are as follows:

(1) The Elementary Certificate. This certificate is issued on the completion of one year's work in the College of Arts and Sciences. It is necessary for the student to have received 30 credits with 6 credits in the Department of Education. The student may count 3 credits in general psychology toward the requirements in Education, but other subjects in the College of Arts and Sciences cannot be counted as satisfying this professional requirement. This certificate is valid to teach in the elementary schools of the State for a period of two years. It is valid to teach in high schools only in cases where the student has completed two or more years of college work.

(2) The Intermediate Certificate. This certificate is issued on completion of 60 credits in the College of Arts and Sciences, including 12 credits in Education, 3 of which may be in general psychology; 1 credit must be in observation and practice teaching, and 1 in conference on educational problems. This certificate is valid to teach in the elementary and high schools of the State for a period of four years.

(3) The Advanced Certificate. This certificate is issued on completion of 90 credits in the College of Arts and Sciences, including 18 credits in Education, three of which must be in observation and practice teaching, and 1 in conference on educational problems. This certificate is valid in any public school of the State for three years.

(4) The Life Certificate. This certificate is issued only to majors in Education, who must have twenty credit hours in Education, including three hours of observation and practice teaching and the prerequisite of three credits in general psychology.

Teachers of successful experience may, on application, apply their teaching experience to satisfy the requirements in observation and practice teaching.

ROOM AND BOARD

The University dormitories, Patterson Hall, Smith Hall, Boyd Hall, and the Men's Dormitory, will be open during the Summer Session. The rates will be as follows:

In the women's dormitories, $1.50 to $5.00 a week, according to kind of room occupied, and number in a room.

In the Men's Dormitory, all rooms available may be had for only $2.00 per week for each person in a room.

Dormitories, both for men and women, are furnished, with the exception of linen and blankets. Students having rooms in dormitories will be expected to bring with them the following articles: Sheets, pillow slips, blankets and towels. All other necessary articles will be furnished.

MEALS SERVED AT CAFETERIA. Meals will be served at the University Cafeteria at $4.75 a week. Cafeteria service will also be given. In the past meals have not been served on Sundays. During the Summer Session meals will be served seven days a week.

RESERVATION OF ROOMS. Students desiring to obtain accommodations in the dormitories will be required to make application in advance of the opening of the session. A deposit of $2.00 should be sent to the Director of the Summer Session. When such deposits are received rooms will be reserved and held until Monday evening, June 25. Rooms will not be held beyond that time unless special arrangements are made.

ROOMS AND BOARD IN LEXINGTON

Accommodations for rooms and board in the University neighborhood may be had by inquiring at the office of the Dean of Men. Rooms may be had at rates varying from $10.00 to $25.00 a month. Board may be had at from $5.00 to $7.00 a week. All rooms listed have been inspected and certain standards maintained. Men who have not had reservations made at the dormitories should, on their arrival at the University, apply at the office of the Dean of Men for information as to available rooms. The Dean of Men will also maintain an approved list of rooms for women.

CREDIT

Students in attendance at the Summer Session may be admitted to classes irrespective of their educational attainments. Students who have full entrance credit to the University will be given credit towards graduation. No student will be permitted to receive credit for more than eight semester hours of work during the first six weeks' session. The courses catalogued will be given as scheduled. Unless as many as five students apply for any particular course it will be subject to cancellation. A student may carry courses in the following combinations: Four two credit courses; two three credit courses and one two or one credit course; three courses of three credits each; two four credit courses; one four credit course, and in cases where the Dean of the College may approve, two three credit courses. These loads are maximum loads. In cases where the amount of credit in the combined load exceeds eight credits, the total credit is scaled down when the student's credits are turned in. In other words, where it is necessary or desirable for the student to carry nine credits of work, for example, he may do so, with the consent of the Dean of

his College, but his total number of points for graduation is increased by one point. This has the same effect as limiting the student to eight credits, but permits him to carry three 3-credit courses when necessary.

CHANGING COURSES

Students who desire to change courses after they have started should apply to their respective Deans, or to the Director of the Summer Session. Students may not be permitted to change courses after the first week of the Summer Session.

APPOINTMENT BUREAU

The University strives to secure appointments for its students and graduates in the schools and academies of the State and elsewhere. It keeps on file the names of all former students so that it may be able at any time to assist them to positions, and to be of service to the high schools of the State. The demand for University of Kentucky graduates is constantly increasing. The Committee on Appointments will be glad to receive any information concerning vacancies. Teachers seeking positions should file their names with the Registrar.

EXTENSION COURSES

The Department of University Extension through its Bureau of Correspondence Study offers opportunities to students who come to the University only during the Summer Session to continue their studies during the remainder of the year, and thus to accumulate additional credits towards their degrees, as well as to secure the training which regular study gives. On the other hand, students who are now pursuing correspondence courses have in the Summer Session an opportunity to complete some of the resident work. Call at the University Extension office for complete information.

EX-SERVICE MEN

Ex-service men, under the provisions of Kentucky Statutes, receive free tuition and room rent. This applies to the Summer Session as well as to regular sessions. It applies only to persons who entered the service in Kentucky. In order to receive the benefits of the law, such persons must file written application with the Registrar of the University at least thirty days prior to the opening of the Summer Session. Such applications must be accompanied by the certificate of discharge.

Administration Building.

COLLEGE OF ARTS AND SCIENCES

PAUL P. BOYD, PH. D., Dean.

ORGANIZATION

The College of Arts and Sciences embraces twenty-four departments: Anatomy and Physiology, Ancient Languages and Literatures, Art and Design, Bacteriology, Botany, Chemistry, Economics and Sociology, Education, English Language and Literature, History and Political Science, Hygiene and Public Health, Journalism, Mathematics and Astronomy, Military Science, Music, Philosophy, Physical Education, Physics, Psychology, Romance Languages and Literatures, Vocational Teacher Training and Zoology.

Courses for the Summer Session are offered in nearly all of these departments. The courses offered are listed under the various departments following:

ANCIENT LANGUAGES AND LITERATURES

1. BEGINNING LATIN. (Given as a Teachers' Course.) A thorough drill in declensions, conjugations, simple rules of syntax. A special effort will be made to show the close connection between Latin and English. Open to those who have had no Latin and also to others desiring a review in first year Latin and to those desiring a course in the teaching of Latin. Three credits. Professor Jones.

3. CICERO AND SALLUST. The four speeches of Cicero against Catiline will be read, and also Sallust's Catiline. A comparative study of the orator and the historian. Three credits. Professor Jones.

4. VERGIL. (Given as a Teachers' Course.) An effort will be made to show that the Aeneid was a great national poem to the Romans, containing their traditions and aspirations. Selections from Vergil's other writings will be read. Three credits. Professor Jones.

5. LIVY. Talks on foundation and development of the Roman State, the methods and aims of ancient writers of history as compared with those of today. Three credits. Professor Jones. (If the students prefer, Horace may be elected instead of Livy.)

201. PASTORAL POETRY. An advanced course in the study of pastoral poetry. (If students prefer, a course of Elegiac Poetry will be given instead.) Primarily for graduates. Open also to qualified under-graduates. Three credits. Professor Jones.

51. ELEMENTARY GREEK. Declensions, conjugations, rules of syntax. English derivatives from Greek words will be noted. Three credits. Professor Jones.

ART

1a. Drawing and Painting. Expression by line, light and shade color. Drawing from objects, cast, still life. Perspective, figure drawing, outdoor sketching. Mediums—charcoal, crayons, water color, oil. Four credits. Mr. Swisher.

2a. Art Structure. A study of the underlying principles of art through their applications, line, tone, color. Arrangements involving the use of good proportion, harmony, balance, rhythm, repetition, subordination, etc. Original design for textiles, mosaic, interior decorations, costume, etc. Two credits. Mr. Swisher.

10a. Theory and Practice of Teaching Art. Structural (synthetic) method of art teaching, compared with academic (analytical) method of teaching. General principles of teaching as applied to art instruction. Teaching under criticism. Two credits. Mr. Swisher.

BACTERIOLOGY

102. General Bacteriology. Morphology, classification, physiology, observation and cultivation of bacteria and related microorganisms; their influence on the plant food in the soil; their relation to certain fermentations. Bacteria in milk, water, air and soil. Relation of microorganisms to disease; sources and modes of infection; use of germicidal agents; theories of immunity. Prerequisite, Chemistry 8 to 11. Lectures and laboratory. Four credits. Associate Professor Scherago.

2a. Elementary Microbiology. A more elementary course in Bacteriology for students who have not had the prerequisite courses for Bacteriology 102. Four credits. Associate Professor Scherago.

103. Pathogenic Bacteriology. Prerequisite, course 102 or 2b. Lectures and Laboratory. Four credits. Associate Professor Scherago.

BOTANY

1a. General Botany. The course comprises a general survey of the morphology and physiology of plants, and is designed to give the student a comprehensive view of the entire vegetable kingdom, and to afford a substantial basis for advanced and special studies. While accompanied with lectures and recitations, the laboratory method is the form of instruction principally used. This course is well adapted to the needs of teachers of botany in the high schools of the State. Four credits. Professor McFarland.

105. Local Flora. This course is designed to acquaint the student with the latest views of classification of the entire plant kingdom. Theory as well as practice with the various keys will constitute

a part of the work. Attention will be given to the local flora. About 200 plants will be identified during the summer. Three credits. Professor McFarland.

A. High School Botany. A course for high school students designed especially for those who are qualifying to teach in the elementary scrools. No college credit. One-half high school entrance credit given to those desiring high school credit. Professor McFarland.

206a. Research in Morphology. Students prepared for independent work will be assigned to investigations in anatomy, histology or special morphology. Laboratory ten hours a week. Five credits. Professor McFarland.

206b. Research in Morphology. Continuation of course 206a. Laboratory ten hours a week. Five credits. Professor McFarland.

213a. Research in Systematic Botany. Students who desire to work in Systematic Botany will be assigned to work on some definite group. Prerequisite, Botany 105. Laboratory ten hours a week. Five credits. Professor McFarland.

213b. Research in Systematic Botany. Continuation of course 213a. Laboratory ten hours a week. Five credits. Professor McFarland.

CHEMISTRY

1b. General Inorganic Chemistry. Continuation of Chemistry 1a. Chemistry of the metals. Lectures, classroom exercises and laboratory work. Prerequisite, Chemistry 1a. Five credits. Assistant Professor Mitchell.

3. Inorganic Preparations. A practical laboratory course devoted to the preparation of inorganic compounds from the crude material. Prerequisite, one-half year's work in General Chemistry. Two credits. Mr. Stewart.

4. Qualitative Analysis. Laboratory work accompanied by recitation periods. Prerequisite, Chemistry 1b. Four credits. Mr. Mitchell.

7. Organic Chemistry. An elementary course for non-professional students. Prerequisite, Chemistry 1b. Four credits. Mr. Stewart.

8. Quantitative Analysis. A laboratory course accompanied by lectures and classroom exercises. Gravimetric and volumetric methods of analysis are studied in detail. Prerequisite, Chemistry 4. Five credits. Professor Tuttle.

9. Quantitative Analysis. A lecture and laboratory course devoted to the analysis of ores, alloys, etc. Prerequisite, Chemistry 8. Five credits. Professor Tuttle.

12. Advanced Agricultural Analysis. A labratory course having for its object the complete analysis of fertilizers, feeds, soils and agricultural products. Prerequisite, Chemistry 8 or 11. Professor Tuttle. Four credits.

14. Advanced Quantitative Analysis. The analysis of iron and steel, slags and rocks. Prerequisite, Chemistry 9. Five credits. Professor Tuttle.

ECONOMICS AND SOCIOLOGY

1a. Principles of Economics. An examination of the fundamental principles of economics and the application of these principles to practical problems. Three credits. Professor Wiest.

4a. Principles of Accounting. Instruction in the science and adaptation of the accounts of going concerns, together with sufficient practice to acquire proficiency. Three credits. Professor Wiest.

109. Business Law. A course designed to fill the need of an elementary training in business law. It includes a survey of the principles of contracts, sales, bills and notes, and that portion of the law of torts applicable to business practice. Three credits. Assistant Professor Leland.

51a. Introductory Sociology. A study presenting the fundamental principles and aims of sociology, developed along two lines; first, a theoretical approach to the subject through a consideration of social origins, social evolutions, social inheritance, and social progress, in the light of biology, psychology, education, economics, history, political science and general sociological methods; and, second, an examination of practical, concrete, social problems, such as characteristics of population, racial groupings, the family, child welfare, housing conditions, recreational values, community organizations, etc. Three credits. Assistant Professor Leland.

EDUCATION

3a. Elementary Education. An introductory course in Education dealing with the organization and problems of the elementary school. Three credits. Assistant Professor Fling.

2. Methods and Aims of Teaching. A discussion of the teaching process, aims and method of study, and the preparation of classroom work. Three credits. Assistant Professor Fling.

4. Principles of Education. A study of the principles of educational theory and practice. Required of students majoring in Education. Three credits. Supt. Waller.

5. Technique of Teaching. This course deals with methods of teaching in the high school. Motivation and the project method will be given special attention. Three credits. Assistant Professor Douglas.

7b. History of Education. A continuation of Education 7a. The reformation period will be concluded and the emphasis placed on the 18th and 19th century theorists, particularly Rousseau, Dewey and Montesorri. Required of students majoring in education. Three credits. Mr. Ligon.

9. Principles of Secondary Education. This course aims to develop the fundamental principles of secondary education. It will include a discussion of the development of the secondary curriculum and its relationship to college. Three credits. Mr. Ligon.

10. Aesthetic Education. An attempt is made in this course to familiarize the teachers, through lectures and stereopticon slides, with the various types of architecture and schools of sculpture and painting. It is a course in appreciation of art for teachers. Three credits. Professor Noe.

14. Principles of Social Education. A study of the development of the social mind with special reference to education. Three credits. Dr. Snedden and Supt. Waller.

17. High School Administration. A course in the organization and management of high schools, with particular reference to Kentucky high schools. An attempt will be made to make the course practical and the development of the high school curriculum will be emphasized. Three credits. Mr. Ligon and Mr. Holloway.

15. Administration and Supervision. A general course in school administration in smaller cities. Principles of constructive supervision will be developed. Supt. Waller.

18. Modern Educational Problems. A lecture course on modern educational problems. An opportunity is given to all teachers to take this course. No text is required. Students are graded on notebooks kept. One credit. Professor Noe, Dr. Snedden, Dr. Starch, Mr. Holloway, Director Patrick, and others.

16. Educational Psychology. A discussion of the learning process from the experimental and scientific points of view. Three credits. Assistant Professor Douglas, Dr. Starch and others.

22. Educational Measurements. A course in the theory and practice of measuring educational products and processes. Two credits. Assistant Professor Fling and Dr. Starch.

108. Public Education in the United States. This is a course in the history of 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 public education. Three credits. Assistant Professor Patrick and Dr. Snedden.

113a. State and County Administration. The tendencies toward centralization in state and county administration will be an-

alyzed and evaluated. A study of the county unit will be made with particular reference to its operation in Kentucky. Two credits. Assistant Professor Douglas.

217a. Seminar in Administration and Supervision. Two credits. Open only to graduates. Assistant Professor Douglas.

220a. Seminar in European Educational Systems. Open only to graduates. Two credits. Professor Noe.

ENGLISH

1a. English Composition. Practice in writing correct and clear English. This is the freshman course in English Composition. Three credits. Mr. Hincks.

3b. History of English Literature. This course is designed to give the student a survey of English literature from Wadsworth to the present. Three credits. Mr. Hincks.

18. Teachers' Course. A course for teachers discussing methods of teaching high school English composition and literature. Professor Freeman.

111. The English Novel. Introduction to the study of English fiction. Readings with a view to illustrate the evolution of the novel and to develop an appreciation of it as a form of literature. Three credits. Mr. Knight.

114. American Literature. A review course in the history of American literature. The leading authors will be studied in class; the minor writers will constitute parallel reading. Two credits. Mr. Hincks.

110. Shakespeare. A number of Shakespeare's plays are studied in an effort to appreciate drama and art. Three credits. Mr. Knight.

116. The Contemporary Drama. Development and tendencies in continental, British and American Dramatic literature, 1850-1923. Representative reading. Three credits. Mr. Knight.

105. Browning. An intensive study of the art and teaching of Browning. Lectures and papers. Two credits. Professor Freeman.

205. Chaucer. Chaucer's characteristics and literary influence are studied. Open to graduates and undergraduates. Three credits. Professor Freeman.

GERMAN LANGUAGE AND LITERATURE

1a. Elementary German. Drill upon pronunciation and rudiments of grammar, memorizing and repetition of easy colloquial sentences, reading, writing and speaking simple German. Three credits. Professor Melcher.

2a. Intermediate German. Reading of 150 to 200 pages of prose with practice in conversation and reproduction, oral and written,

based upon the matter read, memorizing of short German poems. Three credits. Professor Melcher.

4b. Advanced Reading and Composition. Reading continued: numerous short themes on assigned subjects, free reproduction. Collateral reading. Prerequisites, German 3a and 3b or 5. Three credits. Professor Melcher.

6. Scientific and Journalistic German. Reading of a graded scientific reader and selection from popular writers on science: Current German periodicals. Prerequisite, German 3a. Three credits. Professor Melcher.

HISTORY AND POLITICAL SCIENCE

7. Recent American Movements. This course will survey the recent phases of our national development, using one of the newer publications as a basis of study. Prerequisites, one year of college history. Two credits. Professor Coulter.

40. History of Kentucky. A general review of the principal elements and factors which have entered into the building of Kentucky as a Commonwealth, and as a unit in the nation. Two credits. Professor Coulter.

118. Teaching of History. A course for graduates and others interested in the problems of presenting history in the best manner to younger minds. Especially for high school teachers of history. Open to graduates and undergraduates. Graduate students may count the course as a minor. Two credits. Professor Coulter.

51a. American Government. A study of the rights, duties and responsibilities of citizens; mutual relations of the government and the citizen as a voter. The actual work of governmental bureaus and commissions rather than theory. Three credits. Assistant Professor Jones.

55. Comparative Government. A comparative study of the parties, governments and administrative systems of England, France, Switzerland, Canada, Australia and Brazil. May be taken as a minor by graduates. Two credits. Assistant Professor Jones.

57. Public Utilities. A comparison of public and private ownership of railways and municipal utilities; physical valuation and reasonable rates; administrative control; powers and functions of commissions. Two credits. Assistant Professor Jones.

60. American Foreign Service. The organization and activities of the State Department and the diplomatic and consular offices; duties and powers of consular officials. Prerequisite, Economics 1 and History 5 or Political Science 51, or equivalents. Two credits. Assistant Professor Jones.

Students may elect course 55 or 60, but not both.

HYGIENE AND PUBLIC HEALTH

105a. Advanced Hygiene. This course includes discussion of the causes of disease; prolongation of life; heredity in relation to disease; superstitions in relation to disease and health; the fundamental principles of baceteriology; the animal and insect carriers of disease; immunity in relation to disease; emotions in relation to health; physical exercise and its effect upon health; fatigue in relation to health; patent medicines, drugs and stimulants in relation to disease and health; food, water, clothing and air in relation to health, etc. Lecture and text book work. Two credits. Professor Holmes.

105b. Advanced Hygiene Continuation of Hygiene 105a. Two credits. Professor Holmes.

Students taking courses in General Hygiene should register for both Hygiene 1a and Hygiene 1b. Hygiene 1a will be given during the first three weeks and Hygiene 1b during the second three weeks.

103. School Hygiene. This course includes a discussion of health problems as they are particularly related to the school and the school child, such as the physical basis of education; general factors pertaining to growth; malnutrition in school children, tuberculosis in school children; the hygiene of ventilation; the hygiene of teeth, nose, throat and eyes of the school child; defects of hearing, sight, speech, etc.; hygiene of the mind of the school child; and some of the evil effects of school life. Lectures and text book work. Two credits. Professor Holmes.

104. Principles of Physical Education. This course will include a short history of physical education, a discussion of the various schools of physical education, the physiological effects of exercise, the principles of play, the psychology of athletic games, etc. Lecture and text book work. Two credits. Professor Holmes.

MATHEMATICS

A. Plane Geometry. A course in Plane Geometry for high school students. No college credit. Students desiring credit may receive one-half entrance unit. Mr. Blair or Mr. Sisk.

1. Elementary Algebra. This course is designed for those who enter the University with only one unit of high school mathematics, and is prerequisite for Mathematics 4 and 5. Quadratics and beyond. Three credits. Assistant Professor Downing.

2. Solid Geometry. This is given primarily for engineering students who enter conditioned in Solid Geometry. It is a prerequisite for analytics. Three credits. Mr. Blair.

4. Plane Trigonometry. A thoro course in Plane Trigonometry supplemented by enough algebra to fill out a semester's work. For

Arts and Sciences and Engineering students. Prerequisits, one and one-half units of entrance algebra. Five credits. Professor Davis or Mr. Blair.

5. College Algebra. Elementary Algebra is first reviewed in a way to give greater clearness as to assumptions, the number concept, and to introduce graphs and determinants. Following this, topics are taken up that will, together with those included in Mathematics 4, furnish the student with a fairly complete view of the subject. Prerequisite, one and one-half units of entrance algebra. Five credits. Assistant Professor LeStourgeon.

6. Analytic Geometry. A course in which particular emphasis is laid on the graphical representation of the various types of functions. The derivative is introduced as a tool for study. Prerequisites, Mathematics 2, 4 and 5. Five credits. Professor Davis.

7a. Differential Calculus. A course covering most of the subject as presented in the larger texts and including much drill work in the solution of problems. Some work in integration is done. Engineering students take this in the second semester of the sophomore year. Prerequisites, Mathematics 4, 5 and 6. Five credits. Assistant Professor LeStourgeon.

7b. Integral Calculus. A continuation of 7a. Three credits. Assistant Professor Downing.

*105. Differential Equations. A study of the theory of ordinary and partial differential equations, with applications to physics and mechanics. Text book work supplemented by lectures and reports. Three credits. Professor Davis.

*106. Advanced Calculus. A second course in calculus, affording a more critical view of the fundamental notions and theorems and including a study of elliptic integrals and functions defined by definite integrals. Work based on the texts of Byerly and Williamson. Three credits. Professor Davis.

9. Teachers' Course. A course in the history and pedagogy of mathematics, designed for students majoring in education with mathematics as their minor. Two credits. Mr. Blair.

MUSIC

This department seeks not only to supply means of self-expression, but also practical and technical assistance toward the development of men and women who wish to serve as supervisors of music, leaders of bands and orchestras, and as choir directors.

1. Sight Singing. This course develops speed in reading notes and skill in their vocal production and is very helpful for all forms of musical activities. One credit. Professor Lampert.

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*One or the other of these courses will be given if as many as five apply.

2a. Musical Appreciation. The object of this course is to provide material and methods for teaching history and appreciation of music in schools, and to enable all, even tho unable to play an instrument, to become acquainted with the art and really enjoy good music when they hear it. One credit. Professor Lampert.

3a. Harmony. The aim of this course is to give practice in chord combination and writing of melodies. This work forms the basis for the study of musical theory in the public schools. Two credits. Professor Lampert.

4a. Public School Music. This course is for those who wish to fit themselves for the supervision of music in the public schools. Two credits. Professor Lampert.

5a. General History of Music. This course is designed to cover the historical evolution of music and to develop an appreciation of its wide significance as an educative factor. Two credits. Professor Lampert.

9a. Normal Course in Band and Orchestra. A course designed to train leaders for band and orchestra work. This involves the study of notation, harmony, orchestration, conducting and learning to play an instrument. Two credits. Professor Lampert.

PHYSICAL EDUCATION AND ATHLETICS

7. Principles of Coaching Baseball and Track. The first three weeks are devoted to baseball and the next three to track. Not given for fewer than ten students. 1. Baseball. Theory and Practice in batting; base running, proper methods of fielding position, team work and coaching methods; study of the rules; physical condition; methods of indoor practice. Lectures and practical work. 2. Track. Instruction and practical demonstration in starting, sprinting, distance running, hurdling, high and broad jumping, pole vaulting, shot putting, javelin and discus; practical talks on methods of preparing contestants for different athletic events; study of physical condition, including endurance, speed, fatigue, and all means of training condition. Lectures and practical work. Two credits. Professor Boles.

8. Principles of Coaching Basket Ball. Instruction will be given in basket ball with the idea of fitting men to coach. The course will cover passing, goal throwing, dribbling, team play, how to condition a team, and the different styles of play used by the leading coaches. Lectures and practical work. Two credits. Professor Boles.

9. Principles of Coaching Football. The theoretical work will take up the rules from the standpoint of coach, players and officials; the several styles of offense and defense with consideration of their special strength and weaknesses; generalship and strategy. The prac-

tical work will include training, conditioning and players' equipment; punting, drop kicking, place kicking, kick off, and forward passing; tackling dummy and charging sled; special drills for linesmen, ends and backs; following the ball, interference and team work; fundamental plays, freak plays, and signal systems. Lectures and practical work. Two credits. Professor Boles.

10. Schoolroom Games and Gymnastics. The possibilities of exercise for elementary grades and high school will be shown. A review of schoolroom hygiene, with emphasis on proper seating, lighting, ventilation and exercise. One credit. Professor Boles.

11. Principles of Coaching Basketball for Women. Instruction in the organization, conduct and coaching theory of basketball as related especially to girls of high school age. Two credits.

12. Folk Dancing for Women. This course includes folk and English country dances, suitable for grammar and high school. One credit.

13. Schoolroom Games for Women. This course includes games of low organization suitable for the classroom. One credit.

PHYSICS

11a. General Elementary Physics. For students who have had no previous training in Physics. The course covers elementary theory of mechanics and heat. Lecture and recitation one hour daily, laboratory two hours daily for the first three weeks of the Summer Session. Three credits. Professor Webb.

11b. General Elementary Physics. Continuation of Physics 11a. The course covers elementary theory of electricity, sound and light. Lecture and recitation one hour daily, laboratory two hours daily for the second three weeks of the Summer Session. Three credits. Professor Webb.

12. Teaching of High School Physics. A course in the teaching of Physics designed to meet the needs of teachers of Physics. The course wil give instruction in the organization of material and conduct of a course in high school physics. Open to those who have had Physics as well as beginners. Three credits. Professor Webb.

13. Elements of Radio Communication. A course in the theory and practice of radio communication, including principles of receiving and broadcasting. Open to those who have had sufficient physics to carry the course. Physics 2b or 3b, or equivalent, should be prerequisites. Three credits. Associate Professor States.

107. Theoretical Mechanics. Prerequisite, Physics 2a or 3a and Calculus. Three credits. Associate Professor States. Open to graduates and qualified undergraduates.

108. Theory of Light. Prerequisites, Physics 2b or 3b and Calculus. Three credits. Professor Webb. Open to graduates and qualified undergraduates.

14a. General College Physics. Prerequisites, one year of high school Physics and Mathematics 2 and 3. Three credits. Associate Professor States.

14b. General College Physics. A continuation of Physics 14a. Three credits. Associate Professor States.

PSYCHOLOGY

1. Introductory Psychology. For those who have never had Psychology in college. The course covers in an elementray way the main facts and laws of normal human consciousness. Recitations and demonstrations. Three credits.

108a. Human Measurements. Open to those who have had Psychology 1 or its equivalent, or who are carrying it concurrently. The study of individual and group tests of general native ability. The uses of such tests with children and adults. Especially useful for teachers in understanding the intelligence of school children. Two credits.

110. Experimental Methods. Open to those who have Psychology 1 or its equivalent, or who are carrying it concurrently. Typical experiments in the laboratory are studied for technique. Two discussion hours and three two-hour laboratory periods. Three credits. Dr. Geissler.

ROMANCE LANGUAGES

1a. Elementary French. Not open to seniors. Three credits. Miss Horsfield.

1b. Elementary French. Prerequisite, French 1a or one year of high school French. Three credits. Miss Horsfield.

2a. French Reading. Grammar, composition, translation. Three credits. Miss Horsfield.

5a. Elementary Spanish. Not open to seniors. Three credits. Mrs. Server.

101a. French Novel and Drama. Advanced composition. Open to graduates for a minor by special arrangement. Three credits. Miss Horsfield.

5b. Elementary Spanish. Prerequisite, Spanish 5a or one year of high school Spanish. Three credits. Mrs. Server.

103a. Intermediate Spanish. Prerequisite, one year of college Spanish or two years of high school Spanish. Three credits. Mrs. Server.

104a. Spanish Literature. Open to graduates and qualified undergraduates. Graduates may take for a minor by a special arrangement. Three credits. Mrs. Server.

VOCATIONAL TEACHER TRAINING

In cooperation with the Department of Vocational Teacher Training, special courses have been provided for the Department of Home Economics for vocational teachers of Home Economics under the Smith-Hughes Act. Special attention is called, therefore, to the various courses for vocational teachers provided under the head of the Department of Home Economics, College of Agriculture.

A special course (No. 105) carrying two credits in graduate or under-graduate classification has been prepared for teachers now employed in the field of vocational agriculture. To minimize the danger of project depreciation thru lack of supervision it has been decided to make an intensive offering requiring residence at the University for only two weeks, with three hours of class work daily. The aim is to diagnose and prescribe for educational mal-adjustments first in the school and second in the community. Specialists of national reputation, Dr. Storm of the University of Minnesota and Dr. Davis of Peabody College, have been secured to assist the regular departmental staff in the offering. A dozen specialists in technical agricultural content are included in the lecturers for this feature course.

The State Director of Vocational Education and the State Teacher Trainer will meet the men enrolled for Course 105, two hours daily for special consideration of Kentucky's administrative and supervisory problems in vocational agriculture.

Courses in technical agriculture available for Smith-Hughes teachers, are listed under the College of Agriculture.

In addition, the following courses will be offered by the Department of Vocational Teacher Training:

32. Administration of Vocational Education. An introductory course intended primarily for city and county superintendents of schools, principals of high schools, supervisors, and others. Sound principles of the utilization of facilities for federally aided vocational education is the aim. Two credits. Professor May.

105. Special Problems in Vocational Agriculture. An advanced course dealing in detail with particular phases of the field of vocational education in agriculture. Directed readings and reports. Open only to teachers of vocational agriculture. Two credits. Professors Anderson, Davis, Storm and Mr. Barnes.

102. Vocational Agriculture in the High School. A strictly professional course suitable for teachers of agriculture or others definitely preparing themselves for this field. Four credits. Professor Anderson.

134. Part-Time General Continuation Teacher Training. A course designed to meet the present need and to supply teaching con-

tent for teachers of part-time general continuation classes. A plan of prospective state wide compulsory part-time education for employed minors will be evolved. Open to those who are or who intend to be, part-time teachers and to administrators who desire to be fully informed respecting this type of organization. Three credits. Professor May.

191. Community Studies and Their Applications. A course urging and prescribing extra mural contact for the teacher in the rural community particularly. Studies of rural activities and basic principles for encouraging the organization of desired ones or for cooperation with agencies already established, are the aims of the course. Two credits. Professor Anderson.

108. Vocational Legislation. The aim is to define and to provide a back ground for an intensive study of the Smith-Hughes Vocational Act and contemporary legislation. Suitable for county workers, club leaders, county agents, home demonstration agents, superintendents and principals of schools. Prepared especially for teachers or prospective teachers of vocational agriculture, home economics and trades. Two credits. Professor May.

165. Problems in Vocational Home Economics Education. A professional course dealing with aims, methods and contemporary secondary educational theories and practices. Designed for those already engaged in teaching home economics. Lectures, class discussions, individual assignments and reports. Two credits. Professor Tupper.

ZOOLOGY

1a. General Zoology. A general course in Zoology consisting of lectures, recitations and laboratory work. The first semester is devoted primarily to the study of invertebrates. Four credits. Assistant Professor Allen.

1b. General Zoology. A continuation of course 1a. The second semester is devoted primarily to the study of the vertebrates. Four credits. Professor Funkhouser.

102. Bird Study. (Ornithology 102.) A Study of the life-histories, anatomy and physiology of birds with particular reference to the habits, songs, eggs, nests, migrations and economic importance of our native birds. Three credits. Professor Funkhouser.

106. Insect Ecology. A study of the relation of insects to their environment with special reference to the life-histories, habits, associations, relations to hosts, economic importance and control. Prerequisite, course 3. Three credits. Assistant Professor Allen. Open to graduates for a minor.

Agricultural Experiment Station

COLLEGE OF AGRICULTURE

THOMAS P. COOPER, B. S. IN AGR., Dean.

AGRONOMY

1. SOILS. An introductory course in soils dealing with their origin, formation, classification and physical properties in relation to soil water, soil air, soil temperature and tillage operations; crop requirements for plant food; sources of plant food; plant food in the soil and losses of plant food; farm manures, fertilizers, lime materials and their use; crop rotations and farming systems in relation to the productiveness of soils. Prerequisites, Chemistry 1a and 1b and Geology 3. Five credits. Associate Professor Karraker.

8. CEREALS. The detailed study of the classification, botanical relations, distribution, composition, culture and improvement of the principal grain crops of the country. Laboratory work is designed to supplement lectures and recitations. Prerequisites, Agronomy 1, Botany 1a and 1b. Four credits. Mr. Fergus.

101. METHODS AND RESULTS OF FIELD EXPERIMENTATION. The essentials of successful field experimentation, the planning and laying out of model expriments and a study of the results obtained by experiment station workers and other investigators. Special attention is given to the interpretation of field results. Designed for students who expect to teach or engage in experimental work. Recommended for county agents and for teachers of vocational agriculture in high schools. Prerequisite, Agronomy 2. Open to graduates as a minor. Two credits. Professor Roberts.

FARM ENGINEERING

(The work in agricultural engineering is placed in the Department of Agronomy for administrative purposes.)

4. FARM MOTORS. The horse as a farm motor; his cost, upkeep and efficiency. Internal combustion engines, both stationary and tractors. Laboratory work consists of the actual operation of engines and tractors. Four credits. Professor Kelley.

6. FARM SHOP. In this course lectures and laboratory exercises will be given on the following: Use, care and sharpening of shop tools; joining, framing and rafter cutting, repairing of valves, water pipes, bearings, belts, etc. This course should be helpful in the repairing of all kinds of farm equipment. Two credits. Professor Kelley.

2. Farm Poultry Production. This course treats of the production of poultry on the general farm. It includes the following subjects: Breeds and varieties, feeding, housing, culling, incubation, brooding, diseases, and marketing of poultry products. Three credits. Assistant Professor Martin or assistant.

5. Farm Dairying. Instruction is given in the production of clean milk, the management of the dairy herd, the construction of dairy barns, and the marketing of milk. Students are taught to test milk for butter fat, acidity, and the use of the lactometer; the separation and care of cream; the ripening of cream, and the churning of butter. Practice is also given in the manufacture of soft cheese. Three credits. Professor Hooper.

7a. Live Stock Feeding. A study is made of the classes of nutrients of feed stuffs and the uses of each to the animal. A study is made of the processes of digestion, absorption, and assimilation. Feed stuffs and nutritive ratios are discussed. During the last two weeks of the course a study is made of hog feeding, including the use of forage crops. Occasional visits are made to the University farm to inspect the hog feeding experiments. Two credits. Professor Good.

7b. Live Stock Feeding. A continuation of 7a. It deals with the feeding of beef cattle, dairy cattle, horses and sheep. A part of the work consists of an inspection and study of the feeding of breeding and experimental animals on the University farm. Prerequisite, course 7a. Two credits. Professor Good.

12a. Types and Classes of Beef Cattle, Sheep and Hogs. A thorough study is made of the types and classes of beef cattle, sheep and hogs. Training is given in the scoring of individuals and in the comparative judging of rings of three or more animals. Special emphasis is laid on nomenclature and the principles governing the selection of animals for the feed lot, for marketing and for breeding purposes. Required of freshmen in Agriculture. Three credits. Assistant Professor Horlacher.

12b. Types and Classes of Dairy Cattle, Horses and Mules. A thorough study is made of the types and classes of dairy cattle, horses and mules. Training is given in the scoring of individuals and in the comparative judging of groups of animals. Special emphasis is laid upon the nomenclature and the principles governing the selection of these animals for milk, work and breeding purposes. Required of freshmen in agriculture. Three credits. Assistant Professor Horlacher.

17b. Breeds of Beef Cattle, Sheep and Swine; Judging. Prerequisites, Animal Industry 12a and 12b. Three credits. Assistant Professor Horlacher.

109. Poultry Judging. The time is equally divided between the judging of birds for exhibition points and egg production. The University is particularly fortunate in having specimens that have won premiums in open shows as well as hens that have made phenomenal egg records.

The history and development of the more important breeds and varieties of poultry are studied. In the laboratory work birds are washed, trained and fitted for the show room. Prerequisite Animal Industry 2. Four credits. Assistant Professor Martin.

104. Animal Breeding. A course in the principles of breeding as applied to live stock. The practical aspects of animal breeding are presented: Inbreeding, line breeding, cross breeding and breeding by selection. An analysis of some of the breeds will be made and the methods of successful breeders will be studied. Prerequisites, Animal Industry 12 and 9. Open to graduates for minor. Four credits. Professor Anderson.

203. Research in Genetics. A study of genetic experiments is made and an original problem in heredity and variation is assigned. Prerequisite, Animal Industry 9 (Genetics). Open to graduates for major or minor. Four credits. Professor Anderson.

HORTICULTURE

7a. Vegetable Gardening. The lectures will include a discussion of such fundamental subjects as location and arrangement of gardens, soil management, seed selection and improvement, seed testing, preparation of hot beds and cold frames, and manures and fertilizers. The more important classes of vegetables and particularly those requiring special or unusual treatment will be studied in detail.

The subject of spraying as related to vegetable gardening will be given attention in the lectures, and practice in the making and application of sprays will occupy a portion of the laboratory periods.

This Summer Session will provide an opportunity to study many phases of vegetable gardening that cannot be observed so favorably during the regular semesters, and particular emphasis will therefore be placed upon laboratory and field exercises. Two credits. Assistant Professor Olney.

7b. Fruit Growing. The Summer Course in this subject is arranged to cover the more important fruits grown in Kentucky, somewhat special attention being given to apple, grape and strawberry growing.

The lectures on apple growing will include a consideration of soils and sites, propagation, selection of stock and choice of varieties both for home and commercial uses, care of the young and mature orchard, pruning and training. To this end several periods will be devoted to the preparation and application of the various kinds of spray materials, together with a study of numerous types of apparatus used for the control of insect and fungus enemies.

In grape growing special emphasis will be laid upon methods of pruning and training, several types of which are exhibited in the experiment vineyard on the farm.

Strawberries will be studied from the standpoint of propagation, variety, character of both the standard and everbearing sorts, plant setting, culture, and harvesting and marketing.

If desired by a majority of the class, two or more periods at the close of the term will be given to a discussion of landscape horticulture, with special reference to the improvement of home and school grounds. Two credits. Assistant Professor Olney.

HOME ECONOMICS

4. Dietetics. Diet, the relation of food to health, the influence of age, sex and occupation on diet; the essentials of a chemically adequate food supply, and the bearing of various factors of food value upon the problems connected with the economic use of foods; planning of dietaries. Prerequisites, Chemistry 1a and 1b, Chemistry 7, Physiology 1, Home Economics 1a and 1b. Lectures six hours a week; laboratory 12 hours a week. Four credits. Miss Bell.

22. Advanced Clothing. Study of the essentials of tailored and semi-tailored clothing. Study of the essentials of child's wardrobe. Making one semi-tailored dress and suit. Problems in repairing, renovating and altering of clothing. Special problems in costuming and children's clothing. Prerequisites, Art 2a and 2b, Home Economics 20. 21, 23, 26, or equivalent. Lectures 3 hours a week; laboratory 12 hours a week. Three credits. Miss Gard.

25. Millinery. Fall, winter and summer millinery problems Making of wire, buckram, crinoline and willow frames and demonstrations of types of frames and hats suited to individual needs. Renovation problems. Laboratory 12 hours a week. Two credits. Miss Gard.

Vocational Home Economics teachers or prospective teachers seeking professional content are referred to the courses offered by the Department of Vocational Teacher Training and to the courses offered by the Department of Education.

MECHANICAL HALL

COLLEGE OF ENGINEERING

F. Paul Anderson, M. E., Dean.

CIVIL ENGINEERING

21. Hydraulics. Required of all juniors in Engineering. This course consists of text book exercises together with the solution of numerous problems covering the principles of hydrostatics and hydrodynamic pressure; the flow of water through orifices, nozzles, over weirs and thru pipes and open channels; also the loss from friction and other sources. Prerequisite, Physics 3a. Mathematics 7b must be completed or taken co-ordinately. Two credits. Assistant Professor Hawkins.

DRAWING

1a. Mechanical Drawing. Required of all freshmen in Engineering. Comprising: (a) Freehand lettering; (b) Exercises in the use of instruments; (c) Projections from Pictorial Views and descriptions; (d) Exercises in tinting and shading; (e) Tracing; (f) Blue printing. 2.3 credits. Assistant Professor Horine.

1b. Mechanical Drawing. Continuation of Drawing 1a. 1.3 credits. Assistant Professor Horine.

3. Descriptive Geometry. Required of all freshmen in Engineering. This work includes, first, the discussion of descriptive geometry as a branch of pure mathematics; later comes a consideration of the application of descriptive geometry principles as an aid to engineering drawing. The lectures and recitations are supplemented by work in the drawing room under course 1b. Prerequisite, Mathematics 2. Five credits. Assistant Professor Horine.

4a. Advanced Drawing. Required of all sophomores in Engineering. Comprising: (a) Working drawings of parts of machines and complete machines, both detail and assembly; (b) Technical sketching; (c) Plotting of surveys. Prerequisites, Drawing 1a and 1b. Two credits. Assistant Professor Horine.

4b. Advanced Drawing. Continuation of Drawing 4a. 2 credits. Assistant Professor Horine.

ELECTRICAL ENGINEERING

2. Direct Current Dynamos. Required of juniors in Mechanical and Electrical Engineering. This course involves a more intensive study of direct current generators and motors than is covered in course 1. Prerequisite, Electrical Engineering 1. Two credits. Assistant Professor Bureau.

3. Alternating Currents. Required of all juniors in Engineering. Elective for juniors or seniors in Industrial Chemistry. This work involves a study of the fundamental laws of alternating current measuring instruments, generators, motors, transformers and converters. Prerequisite, Electrical Engineering 1. Three credits. Assistant Professor Bureau.

7. Dynamo Design. Required of juniors in Mechanical and Electrical Engineering. This work involves all the calculations necessary in the design of a direct current generator or motor, together with a complete set of detailed drawings. Each student is assigned an individual problem. Prerequisite, Electrical Enginering 1. Electrical Engineering 2 must have been completed or taken co-ordinately. Two credits. Assistant Professor Bureau.

9b. Electrical Laboratory. Required of all juniors in Engineering. Elective for juniors or seniors in Industrial Chemistry. This is a continuation of Course 9a and is intended to parallel Course 3. Prerequisite, Electrical Engineering 9a. Electrical Engineering 3 must have been completed or be taken co-ordinately. One credit. Assistant Professor Bureau.

MECHANICS OF ENGINEERING

1. Mechanics of Materials. Required of all juniors in Engineering. This course presents to the student the laws governing the behavior of the different materials used in construction under the action of forces. Beams, columns and shafts of different shapes and materials are analyzed with reference to their resistance and deformation when subjected to compressional, tensional and torsional strains. Problems including the design of truss members, floors, girders and reinforced concrete construction are given. Prerequisite, Physics 3a, Mathematics 7b (Calculus, second part) must have been completed or taken co-ordinately. Professor Johnson.

3. Kinematics. Required of juniors in Mechanical and Electrical Engineering. This course is intended to familiarize the student with the mutual dependence of the movements of the parts of a machine. Special attention is given to the analysis of mechanisms involving link motion, gear, teeth, cams, communication of motion by rolling and sliding contact and quick return motions. Prerequisites, Mathematics 2, 4, 5, and Drawing 3. Three credits. Assistant Professor Hawkins.

4. Kinematic Design. Required of all juniors in Mechanical and Electrical Engineering. This course is given in connection with Mechanics of Engineering 3. It consists of independent designs of mechanisms, particular attention being paid to the training of the stu-

dents in the drawing room practice existing in our most comprehensive machine building establishments. Prerequisites, Mathematics 2, 4, 5. Drawing 3, 4. Four credits. Professor Johnson.

6. Analytical Mechanics. Required of all juniors in Engineering. This subject is given with a view of encouraging original analysis, logical proofs and rational conclusions with respect to the treatment of the equilibrium and motion of bodies under the action of forces. The application of the fundamental principles of mechanics to engineering problems is treated in a way calculated to interest the student in the application of analytical mechanics in his engineering work. Prerequisites, Physics 3a, Mathematics 7b (Calculus, second part), must be completed or taken co-ordinately. Five credits. Professor Johnson.

7. Machine Design. Required of juniors in Mechanical and Electrical Engineering. This course in design is especially arranged to equip juniors in the art of high class machine designing. A large part of the training consists in teaching students how to make first class working drawings. The problems given to the student are in all cases original designs. Much stress is laid upon the making of pattern drawing. In connection with this course the student spends part of his time in the shop making at least one pattern from his own drawings so that his attention will be called especially to the essential elements in foundry practice. A comprehensive library on machine tools, gas engines and apparatus is provided in the drawing room for reference. The main objects of the course are: First, to teach the student to investigate, analyze and record in the form of a standard drawing, some engineering idea; second, to produce a comprehensive logical and elegant machine design. Prerequisites, Mechanics of Engineering 1, 2, 3, 4. 1.3 credits. Assistant Professor Hawkins.

PRACTICAL MECHANICS

1. Wood Working. Required of all freshmen in Engineering. This work includes: (a) Recitations on the forms of wood working tools and the cutting and peculiarities of timber. (b) Lectures on the operation of the various forms of wood working machinery. (c) Bench work in wood, including exercises in the following operations: Planing, sawing, rabbeting, plowing, notching, splicing, mortising, tenoning, dove-tailing, framing, paneling and the general use of carpenters' tools. (d) Wood turning, involving the various principles of lathe work in wood. Four hours daliy. 2.7 credits. Mr. Dicker.

2. Pattern Making. Required of all freshmen in Engineering. This is a continuation of the course in wood working and is intended to give the student experience in the construction of patterns for use in

making iron and brass castings. The work in the shop is supplemented by frequent lectures and recitations on the theory of pattern making. Four hours daily. 2.7 credits. Mr. Dicker.

4. Forge Shop Work. Required of all sophomores in Engineering. Exercises in iron and steel forging. Prerequisites, Practical Mechanics 1 and 2. Four hours daily. 1.3 credits. Mr. Saunier.

5. Machine Shop Work. Required of all sophomores in Engineering. (a) Exercises in vice work in metal. (b) General machine work, including screw cutting, drilling, planing and the milling of iron, brass and steel. Prerequisites, Practical Mechanics 1 and 2. Four hours daily. 1.3 credits. Mr. Thurman.

6. Practical Automotive Work. Required of all sophomores in Engineering. The construction, assembling and repairing of power vehicles. A well equipped shop 40x160 feet is set aside for this purpose. Especial attention is given to the study of automobile mechanisms and the correction of defects in automotive appliances. Prerequisites, Practical Mechanics 1 and 2. 1.3 credits. Mr. Singer.

COLLEGE OF LAW

The purpose of the Summer Session of the College of Law is two-fold: (1) To afford to students already matriculated in the College who wish to do so, and to persons who expect to enter the College later, the opportunity to shorten the time required for graduation by utilizing the summer vacation for study and credit. (2) To afford to judges, administrative officers, and practitioners, those already admitted to the Bar, especially to the younger members, as well as those who contemplate applying for admission to the Bar of Kentucky, an opportunity for further study, review, discussion, conference, and advanced investigation.

The following courses are offered for the Summer Session of 1923:

1. The Common and Statute Law of Kentucky. This will comprise considerations of (a) The general statutes of Kentucky, their form, structure, and enactment; their construction and application as illustrated in cases decided by the Court of Appeals: (b) The Common Law of Kentucky as deduced from the statutes and decisions: (c) The great statutes and system of Common Law inherited from Virginia and England, so far as they are applicable to Kentucky, and not repugnant to the local and political circumstances. Each student should provide himself with Blackstone's Commentaries, Kent's Commentaries, and Walker's American Law as far as possible. These are all in the library, together with the reports of the Court of Appeals, but not enough copies can be furnished to supply all the students at the same time. Six hours a week. Three credits. Professor Chalkley.

II. Pleading. This will consist of a presentation through decided cases and commentary, of the underlying and controlling principles of Pleading at Law, whether at Common Law, or under the Reformed Procedure or Code of Kentucky.

Each student should provide himself with the Kentucky Code, a copy of the Tyler edition of Stephen on Pleading, Ames' Cases on Pleading, and as far as possible a copy of the first volume of Chitty on Pleading, any edition prior to 1834. Six hours a week. Two credits. Professor Chalkley.

III. Quasi-Contracts. Restitution at law for mistake, misrepresentation, duress and undue influence; illegality; impossibility; benefits received under contracts within and without the statute of frauds; benefits received without contract. Thurston's *Cases on Quasi Contracts. Six hours a week. Two credits.* Professor Roberts.

IV. Suretyship. Kinds of suretyship; statute of frauds; surety's defenses due to original defects in his obligation or in its subsequent

discharge; surety's right of subrogation, indemnity, contribution, or exoneration; creditor's right to surety's remedies. Ames' *Cases on Suretyship. Six hours a week. Two credits.* Professor Roberts.

V. INSURANCE. Nature of the contract; insurable interest; making the contract; concealment; representations; warranties; implied conditions of forfeiture; waiver and estoppel; rights under the contract; construction of the policy. Vance's *Cases on Insurance. Six hours a week. Two credits.* Professor Roberts.

Credit towards graduation will be awarded only to those students of the Summer Session who have the credits necessary for admission to the College of Law at the regular sessions.

SCHEDULE OF LECTURES AND RECITATIONS SUMMER SESSION, 1923

EXPLANATIONS AND ABBREVIATIONS

Colleges are arranged according to order in the catalog and the departments of each college are arranged alphabetically.

Days of recitations are indicated by the initial letters of the days. The buildings are indicated as follows: A, Administration; Agr., Agriculture; C & P, Civil and Physics; E, Education; ES, Experiment Station; KH, Kastle Hall; MG, Men's Gymnasium; WG, Women's Gymnasium; M, Mining; ML, Mining Laboratory; M & E, Mechanical and Electrical; NS, New Shop; OC, Old Chemistry; PH, Patterson Hall; S, Science; SF, Stoll Field; SP, Stock Judging Pavilion; SL Serum Laboratory; WH, White Hall; NH, Neville Hall; FEL Farm Engineering Laboratory; LT, Little Theater.

RECITATION HOURS

First hour:	8:00— 8:50
Second hour:	8:57— 9:47
Third hour:	9:54—10:44
Fourth hour:	10:51—11:41
Fifth hour:	11:48—12:38

Noon Hour

Sixth hour:	1:40— 3:00
Seventh hour:	3:00— 3:50
Eighth hour:	3:57— 4:47
Ninth hour:	4:54— 5:44

As will be noted from the schedule following, a few classes have been scheduled at 7:10 a. m., in order to avoid conflicts.

CHANGES IN THE PRINTED SCHEDULE

Any variation from the printed schedule must be authorized by the Registrar, who requires the approval of the dean and the head of the department concerned.

This schedule is published for the convenience of students in making up their courses before arriving at the University. It is subject to such slight changes as it may be necessary to make before the opening of the session. The University reserves the right to cancel any course if as many as five students fail to apply.

COLLEGE OF ARTS AND SCIENCES

PAUL P. BOYD, Dean

Course No.	SUBJECT	Hour	Days	Bldg.	Room. No.	Instructor
	ANCIENT LANGUAGES					
1	Beginning Latin	1	Daily	A	303	Jones
3	Cicero and Sallust	2	Daily	A	303	Jones
4	Vergil	4	Daily	A	303	Jones
5	Livy or Horace	5	Daily	A	303	Jones
*51	Elementary Greek	7:10	Daily	A	303	Jones
*201	Pastoral Poetry	7:10	Daily	A	303	Jones
	*Given at 7:10 a. m. or 6th hour. Only one given. Students who cannot be accommodated in this schedule will have special arrangements made for them.					
	ART					
1a	Drawing and Painting	2	Daily	WH	306	Swisher
1a	Drawing and Painting	5	Daily	WH	306	Swisher
1a Lab.	Drawing and Painting	2	Daily	WH	306	Swisher
1a Lab.	Drawing and Painting	4	Daily	WH	306	Swisher
2a	Art Structure, Lecture	1	Daily	WH	303	Swisher
10a	Theory & Practice of Tch. Art	4	Daily	WH	303	Swisher
2a	Art Structure, Lab.	2	Daily	WH	303	Swisher
	BACTERIOLOGY					
102	General Bacteriology, Lab.	1, 2	Daily	NH	106	Scherago
102	General Bacteriology, Lec.	5	Daily	NH	205	Scherago
2a	Elem. Microbiology, Lec.	2	Daily	NH	205	Scherago
2a	Elem. Bicrobiology, Lab.	4, 5	Daily	NH	106	Scherago
103	Pathogenic Bacteriology, Lec.	3	Daily	NH	205	Scherago
103	Pathogenic Bacteriology, Lab.	6, 7	Daily	NH	104	Scherago
	BOTANY					
1a	General Botany, Laboratory	1, 2	Daily	WH	102	McFarland
1a	General Botany	4	Daily	WH	101	McFarland
105	Local Flora	6, 7, 8	MT	WH	101	McFarland
A	High Schol Botany	5	Daily	WH	101	McFarland
206a	Research Morphology	By	Appt.	WH	101	McFarland
206b	Research Morphology	By	Appt.	WH	101	McFarland
213a	Systematic Botany	By	Appt.	WH	101	McFarland
213b	Systematic Botany	By	Appt.	WH	101	McFarland
	CHEMISTRY					
1b	General Inorganic Chemistry	1, 2, 3, 4	Daily	KH	.....	Mitchell
3	Inorganic Preparations	3, 4	Daily	KH	.....	Stewart
4	Qualitative Analysis	2, 3, 4, 5	Daily	KH	.....	Mitchell
7	Organic Chemistry	2, 3, 4	Daily	KH	.....	Stewart
8	Quantitative Analysis	1, 2, 3, 4	Daily	OC	.....	Tuttle
9	Quantitative Analysis	1, 2, 3, 4	Daily	OC	.....	Tuttle
12	Advanced Agr. Analysis	1, 2, 3, 4	Daily	OC	.....	Tuttle
14	Advanced Quant. Analysis	1, 2, 3, 4	Daily	OC	.....	Tuttle

Course No.	SUBJECT	Hour	Days	Bldg.	Room. No.	Instructor
	ECONOMICS & SOCIOLOGY					
1a	Principles of Economics	1 2	Daily MWF	WH	205	Wiest
4a	Principles of Accounting	4 5	TThS TThS	WH	206	Wiest
4a Lab.	Principles of Accounting	4 5	MWF MWF	WH	206	Wiest
109	Business Law	1 2 5	Daily MWF TThS	WH	206	Leland
51a	Introductory Sociology	4	Daily	WH	205	Leland
	EDUCATION					
3a	Elementary Education	7	Daily	E	204	Fling
2	Methods and Aims of Teaching	6	Daily	E	204	Fling
4	Principles of Education	8	Daily	E	201	Waller
14	Social Education	7	Daily	E	204	Snedden and Waller
5	Technique of Teaching	4	Daily	E	105	Douglas
7b	History of Education	4	Daily	E	106	Ligon
10	Aesthetic Education	1	Daily	E	106	Noe (2)
9	Prin. of Sec. Education	1	Daily	E	201	Ligon
17	High School Administration	5	Daily	E	201	Ligon and Holloway
15	Administration and Supervision	6	Daily	E	105	Waller and Snedden
18	Modern Educational Problems	3	Daily	LT	.....	Noe, Snedden, and others (1)
16	Educational Psychology	5	Daily	E	201	Douglas, Starch
22	Educational Measurements	4	Daily	E	204	Fling & Starch
108	Public Education in U. S.	2	Daily	E	103	Patrick and Snedden
113a	State and County Administration	8	Daily	E	105	Douglas
217a	Seminar in Adm. and Sup.	7	Daily	E	105	Douglas
220a	Seminar in European Systems	2	Daily	E	106	Noe

1. Modern Educational Problems is a feature course given by a number of persons. See special announcement.

2. A feature course given especially for teachers in the grades and teachers of high school subjects.

	ENGLISH					
110	Shakespeare	1 2	Daily MWF	A	.....	Knight
111	English Novel	5	Daily	A	.....	Knight
116	Contemporary Drama	4	Daily	A	.....	Knight
3b	History of English Literature	1 2	Daily MWF	A	.....	Hincks
114	American Literature	5	Daily	A	.....	Hincks
1a	English Composition	2 4	TThS Daily	A	.....	Hincks
18	Teachers' Course	1 2	Daily MWF	A	.....	Freeman
105	Browning	5	Daily	A	.....	Freeman
205	Chaucer	4	Daily	A	.....	Freeman

Course No.	SUBJECT	Hour	Days	Bldg.	Room. No.	Instructor
	GERMAN					
1a	Elementary German	1	Daily	A	304	Melcher
2a	Intermediate German	2	Daily	A	304	Melcher
4b	Adv. Reading and Composition	4	Daily	A	304	Melcher
6	Scientific & Journalistic German	5	Daily	A	304	Melcher
	Special arrangements will be made for students desiring German who cannot make their work fit this schedule.					
	MATHEMATICS					
6	Analytics	1–2	Daily	C&P	310	Davis
*105	Differential Equations	4–5	Daily	C&P	310	Davis
*106	Advanced Calculus	4–5	Daily	C&P	310	Davis
7b	Integral Calculus	1–2	Daily	C&P	303	Downing
1	Elementary Algebra	4–5	Daily	C&P	303	Downing
5	College Algebra	1–2	Daily	C&P	308	LeStourgeon
7a	Differential Calculus	4–5	Daily	C&P	308	LeStourgeon
2	Solid Geometry	2	Daily	C&P	306	Blair
4	Plane Trigonometry	4–5	Daily	C&P	306	Blair or Davis
9	Teachers' Course	6	Daily	C&P	306	Blair
A	Plane Geometry	1–2	Daily	C&P	307	Sisk or Blair
	*105 or 106 will be given.					
	HISTORY AND POLITICAL SCIENCE					
7	Recent American Movements	1	Daily	A	203	Coulter
40	History of Kentucky	2	Daily	A	203	Coulter
118	Teaching of History	4	Daily	A	203	Coulter
51a	American Government	1, 2	Daily	A	202	Jones
57	Public Utilities	4	Daily	A	202	Jones
*55	Comparative Government	5	Daily	A	202	Jones
*60	American Foreign Service	5	Daily	A	202	Jones
	*Either 55 or 60 will be given according to demand.					
	HYGIENE & PUBLIC HEALTH					
105a, 105b	Advanced Hygiene	1, 2	Daily	NH	302	Holmes
103	School Hygiene	4	Daily	NH	302	Holmes
104	Principles of Physical Ed.	5	Daily	NH	302	Holmes
	MUSIC					
1a	Sight Singing	1	MWF	WH	.....	Lampert
2a	Musical Appreciation	1	TThS	WH	.....	Lampert
3a	Harmony	2	Daily	WH	.....	Lampert
4a	Public School Music	4	Daily	WH	.....	Lampert
5a	General History of Music	5	Daily	WH	.....	Lampert
9a	Normal Course in Band and Orchestra	7	Daily	WH	.....	Lampert

PHYSICAL EDUCATION

Course No.	SUBJECT	Hour	Days	Bldg.	Room. No.	Instructor
	PHYSICAL EDUCATION					
7	Principles of coaching track	1–2	ThFS	MG	104	Boles
	Practical work	7–8	Th	SF		Boles
8	Principles of coaching basket ball	1–2	MTW	MG	104	Boles
	Practical work	7–8	W	SF		Boles
9	Principles of coaching football	4–5	ThFS	MG	104	Boles
		7–8	T	SF		Boles
10	Schoolroom games for men	4	MTW	MG	104	Boles
		7–8	M	MG	104	Boles
	For Women					
11	Principles of coaching basket ball	6, 7	MTW	WG	.....	
		6, 7	ThF	WG	.....	
12	Folk Dancing	2	Daily	WG	.....	
13	Schoolroom Games	1	Daily	WG	.....	
	PHYSICS					
11a	Elementary Physics	1	Daily	C&P	202	Webb
11a	Elementary Physics, Lab.	4, 5	MWF	C&P	203	Webb
11b	Elemnetary Physics	2	Daily	C&P	200	Webb
11b	Elementary Physics, Lab.	4, 5	TThS	C&P	203	Webb
14a	General College Physics	7:10	Daily	C&P	103	States
14a	General College Physics, Lab.	4, 5	MWF	C&P	105	States
14b	General College Physics	1	Daily	C&P	103	States
14b	General College Physics, Lab.	4, 5	TThS	C&P	3	States
13	Radio Communication	3	MTThF	C&P	.....	States
13	Radio Laboratory	4, 5	TTh	C&P	.....	States
12	Teaching of H. S. Physics	By	Appt.	C&P	.....	Webb
107	Theoretical Mechanics	By	Appt.	C&P	.....	States
108	Theory of Light	By	Appt.	C&P	.....	Webb
	PSYCHOLOGY					
1	Introductory Psychology	2	Daily	NH	204	
108a	Human Measurements	1	Daily	NH	204	
110	Experimental Methods	7	TTh	NH	206	
110	Experimental Methods, Lab.	7, 8	MWF	NH	206	
	ROMANCE LANGUAGES					
2a	French Reading	2	Daily	A	204	Horsfield
1b	Elementary French	4	Daily	A	204	Horsfield
		5	TThS			
		6	Daily			
1a	Elementary French	5	MWF	A	204	Horsfield
		1	Daily			
5a	Elementary Spanish	2	MWF	NH	304	Server
		4	Daily			
5b	Elementary Spanish	2	TThS	NH	304	Server
103a	Intermediate Spanish	5	Daily	NH	304	Server
101a	French Novel	3	Daily	A	204	Horsfield
104a	Spanish Literature	3	Daily	NH	304	Server

PHYSICAL EDUCATION--Continued

Course No.	SUBJECT	Hour	Days	Bldg.	Room. No.	Instructor
	VOCATIONAL TEACHER TRAINING					
102	Vocational Agr. in H. S.	7:10	Daily	NH	205	Anderson
191	Community Studies	1	Daily	NH	303	Sindell
32	Adm. of Voc. Education	4	Daily	NH	303	May
134	Part Time Gen. Con. Teaching	2	Daily	NH	303	May
105	Special Problems in Voc. Agr.	2, 4, 5	Daily	NH	303	Anderson and others
108	Vocational Legislation	6	Daily	NH	303	May
165	Problems in Vocational Home Economics Education	2	Daily	NH	301	Tupper
	ZOOLOGY					
1a	General Zoology	3	Daily	S	108	Allen
1a Lab.	General Zoology, Lab.	4	Daily	S	105	Allen
1b	General Zoology	2	Daily	S	108	Funkhouser
1b Lab.	General Zoology, Lab.	3	Daily	S	103	Funkhouser
102	Ornithology	4	Daily	S	108	Funkhouser
102 Lab.	Ornithology	5	Daily	S	103	Funkhouser
106	Insect Ecology	1	Daily	S	108	Allen
106 Lab.	Insect Ecology, Lab.	2	Daily	S	105	Allen

COLLEGE OF AGRICULTURE

THOMAS P. COOPER, Dean

Course No.	SUBJECT	Hour	Days	Bldg.	Room. No.	Instructor
	AGRONOMY					
1_1	Soils, Lec.	1 2	Daily TThS	Agr.	303	Karraker
1_2	Soils, Lab.	6-8	MW	Agr.	303	Karraker
8_1	Cereals, Lec.	4 5	Daily MWF	Agr.	302	Fergus
8_2	Cereals, Lab.	6-8	TTh	Agr.	304	Fergus
6_1	Farm Shop. Lec.	2	MWF	JP	.....	Kelley
6_2	Farm Shop, Lab.	6-8	Twice wkly	By A	ppt.	Kelley
4_1	Farm Motors	1	Daily	JP	304	Kelley
4_2	Farm Motors, Lab.	6-8	MTWTh			Kelley
	ANIMAL INDUSTRY					
2_1	Farm Poultry Prod., Lec.	2	Daily	Agr.	301	Martin
2_2	Farm Poultry Prod., Lab.	6–8	TTh	JP	.....	Martin
5_1	Farm Dairying, Lec.	5	Daily	Agr.	205	Hooper
5_2	Farm Dairying, Lab.	6–8	MW	Agr.	4	Hooper
7a	Livestock Feeding	1	Daily	JP	2	Good
7b	Livestock Feeding	5	Daily	JP	2	Good
$12a_1$	Types and Classes Beef Cattle, Sheep, Hogs, Lec.	4	Daily	JP	1	Horlacher
$12a_2$	Types and Classes Beef Cattle, Sheep, Hogs, Lab.	6–8	MW	JP	.....	Horlacher
$12b_1$	Types and Classes of Horses, Mules and Dairy Cattle	5	Daily	JP	1	Horlacher
$12b_2$	Types and Classes of Horses, Mules and Dairy Cattle, Lab.	6–8	TTh	JP	1	Horlacher
203	Research in Genetics	By Appt.	Daily	.....	.....	Anderson
104	Animal Breeding	By Appt.	Daily	.....	.....	Anderson
$17b_1$	Breeds of Beef Cattle, Sheep and Swine; Judging	2	Daily	JP	1	Horlacher
$17b_2$	Breeds of Beef Cattle, Sheep and Swine; Judging	6–8	ThF	JP	1	Horlacher
109_1	Poultry Judging and Breeding	1	Daily	Agr.	301	Martin
109_2	Poultry Judging and Breeding, Lab.	6–8	MWF	JP	.....	Martin
	HORTICULTURE					
$7a_1$	Vegetable Gardening, Lec.	1	MWF	Agr.	303	Olney
$7a_2$	Vegetable Gardening, Lab.	6-8	MW	.....	.....	Olney
$7b_1$	Fruit Growing, Lec.	2	MWF	Agr.	303	Olney
$7b_2$	Fruit Growing, Lab.	6-8	TTh	.....	.....	Olney
	HOME ECONOMICS					
22_1	Advanced Clothing, Lec.	1	TThS	Agr.	202	Gard
22_2	Advanced Clothing, Lab.	1, 2, 4, 5	MWF	Agr.	202	Gard
25	Millinery	6, 7, 8	MTWTh	Agr.	202	Gard
4_1	Dietetics, Lec.	1, 3	TThS	Agr.	101	Bell
4_2	Dietetics, Lab.	1, 2, 3	MWF	Agr.	103	Bell

COLLEGE OF ENGINEERING

F. PAUL ANDERSON, Dean

Course No.	SUBJECT	Hour	Days	Bldg.	Room. No.	Instructor
	CIVIL ENGINEERING					
21	Hydraulics	5	MTW ThF	MH	209	Hawkins
	DRAWING					
1a	Mechanical Drawing	3 hrs.	Daily	C&P	207	Horine
1b	Mechanical Drawing	2 hrs.	Daily	C&P	207	Horine
3	Descriptive Geometry	1, 2	Daily	C&P	107	Horine
4a	Advanced Drawing	3 hrs.	Daily	C&P	207	Horine
4b	Advanced Drawing	3 hrs.	Daily	C&P	207	Horine
	ELECTRICAL ENGINEERING					
E. E. 2	D. C. Dynamos	3	Daily	MH	209	Bureau
E. E. 3	Alternating Currents	4	Daily	MH	209	Bureau
		5	MWF	MH	209	Bureau
E. E. 9b	Electrical Lab.	6, 7	MWF	MH	112	Bureau
E. E. 7	Dynamo Design	3 hrs.	Daily	MH	209	Bureau
	MECHANICS OF ENGINEERING					
1	Mechanics of Materials	1–2	Daily	MH	201	Johnson
3	Kinematics	1	Daily			
		2	MWF	MH	209	Hawkins
6	Analytical Mechanics	3, 4	Daily	MH	201	Johnson
4	Kinematic Design	5 hrs.	a day			
		By	Appt.	MH	209	Hawkins
7	Machine Design	3 hrs.	a day			
		By	Appt.	MH	209	Hawkins
	PRACTICAL MECHANICS					
1	Wood Working	3 hrs.	Daily	NS	NS	Dicker
2	Pattern Making	3 hrs.	Daily	NS	NS	Dicker
4	Forge Shop	2 hrs.	Daily	MH	109	Saunier
5	Machine Shop	2 hrs.	Daily	NS	NS	Thurman
6	Automobile Shop	2 hrs.	Daily	MH	.....	Singer

COLLEGE OF LAW

	LAW					
	Common and Statute Law of Ky.	1	Daily	S	308	Chalkley
	Pleading	2	Daily	S	308	Chalkley
	Quasi-Contracts	2	Daily	S	307	Roberts
	Insurance	4	Daily	S	307	Roberts
	Suretyship	5	Daily	S	307	Roberts

The third hour daily is reserved for conferences, group meetings, and special occasions.

ORGANIZATION

UNIVERSITY OF KENTUCKY

Lexington, Kentucky

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