BULLETIN

UNIVERSITY OF KENTUCKY



SUMMER SESSION 1922

JUNE 26 TO AUGUST 5

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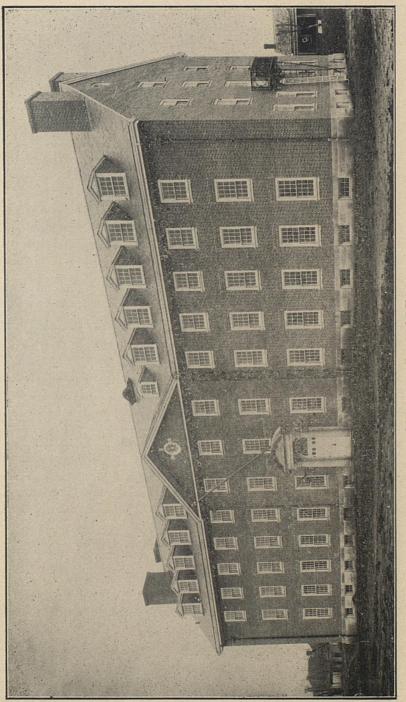
No. 1

UNIVERSITY CALENDAR

Summer Session, 1922, June 26 to August 5.

Commencement Week, 1922.

June 11	Sunday .	Baccalaureate Sermon
June 12	Monday	Board of Trustees meets.
June 13	Tuesday	Class Day.
June 13	Tuesday	Alumni Banquet
June 14	Wednesday	Fifty-fifth Annual Com- mencement.
Sept. 18-19, 1922	Monday and Tuesday	Registration for First Semester.
February 5, 1923	Monday	Registration for Second Semester
June 13, 1923	Wednesday	Fifty-sixth Annual Commencement.



MEN'S DORMITORY A handsome building for men, just completed. Open for Summer Session students.

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Wellington Patrick A. B., A. M., Director of the Summer Session.

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Instructor in Farm Crops

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Acting Dean, College of Engineering and Professor of Electrical
Engineering

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Professor of Zoology and Head of Department

NELLIE A. GARD, B. S., M. A.

Instructor in Home Economics

EDWIN STANTON GOOD, M. S.

Professor of Animal Husbandry

PERCY KENCALL HOLMES, A. M., M. D.

Professor of Hygiene and Public Health and Head of Department

JOHN JULIAN HOOPER, M. S. A.

Professor of Dairy Husbandry

JOHN SHERMAN HORINE, M. E.

* HALLA. Assistant Professor of Mechanical Drawing

LEVI JACKSON HORLACHER, M. S.

Assistant Professor of Animal Husbandry

MARGARET, BENNETT HORSFIELD, A. B.

Instructor in Romance Language and Literature

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Professor of Ancient Languages and Literatures and Head of Department

PERRY ELMER KARRAKER, M. A.

Associate Professor of Soils

JAMES BYRON KELLEY, B. S. IN A. E. IN M. E.

Professor of Agricultural Engineering

JACOB GARRETT KEMP, A. M., PH. D.

Associate Professor of Physics

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Superintendent of City Schools, Paris, Kentucky

GRANT COCHRAN KNIGHT, A. M.

Instructor in English

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Professor of Law and Dean of the College of Law

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Professor of Music and Head of Department

SIMEON E. LELAND, A. M.

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Assistant Professor of Mathematics

Moses Edward Ligon, M. A.,

Principal, Ashland High School, Ashland, Kentucky

CLARENCE WENTWORTH MATHEWS, B. S.

Professor of Horticulture and Head of the Department

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

JOHN RICHARD MITCHELL, A. B.

Assistant Professor of Chemistry

COLUMBUS RUDOLPH MELCHER, A. M.

Dean of Men and Professor of German Language and Literature and 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

MABEL H. POLLITT, A. M.

Acting Dean of Women and Instructor in English

LEO E. ROBERTS, B. S., M. S.

Assistant Professor of Vocational Teacher Training

WILLIAM LEWIS ROBERTS, J. D.

Instructor in Law

CHRISTIAN A. RUCKMICK, A. M., PH. D.

Associate Professor of Psychology, Wellesley College

STEPHEN THADDEUS SAUNIER

Instructor in Blacksmith Shop

MORRIS SCHERAGO, B. S., D. V. M.

Assistant Professor of Bacteriology and Acting Head of the Department

LEROY J. SINDELL, B. A., B. S., A. M.

Professor of Vocational Teacher Training and Head of the Department

DAVID NORTON SINGER

Instructor in Auto Engineering

OLUS JESSE STEWART, M. S.

Instructor in Chemistry

GORDON THURMAN

Instructor in Machine Shop

FRANKLIN ELLIOTT TUTTLE, M. A., PH. D.

Professor of Chemistry and Head of the Department

JAMES EDWARD TUTHILL, PH. D.

Professor of History and Political Science and Head of the Department

GEORGE HAYMAKER VANSELL, M. A.

Assistant Professor of Zoology

GLADYS VAN METER

Instructor in Physical Education

WILLIAM SNYDER WEBB, M. S.

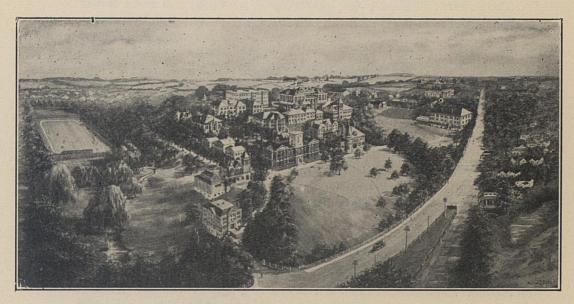
Professor of Physics and Head of the Department

EDWARD WIEST, A. M., PH. D.

Professor of Economics and Head of the Department of Economics and Sociology

ALFRED CHARLES ZEMBROD, M. A.

Professor of Romance Languages and Literatures and Head of the Department



BIRD'S EYE VIEW OF THE CAMPUS



AN OPEN GATE

THE SUMMER SESSION

The Summer Session at the University of Kentucky has had a steady growth in the past few years. The attendance last year was the largest in the history of the institution. So popular has the work become and so large has the attendance grown that it has become necessary for the institution greatly to enlarge its facilities for summer work.

The work of the Summer Session is designed for teachers, students, and persons seeking information and training. The entire plant of the University is available for use, including laboratories, libraries and buildings. The faculty for the coming year has been enlarged. Work will be offered to satisfy the demands of teachers in every field of school activity. It is no longer necessary for the high school teachers of the State, city superintendents and members of college faculties to leave the State for college work during the summer.

THE SCOPE OF THE WORK

The College of Arts and Sciences will offer an enlarged program of studies in the field of Botany, Chemistry, Economics and Sociology, Education, English, German, History and Political Science, Ancient Languages, Mathematics, Music, Physics, Physical Education and Athletics, Psychology, Romance Languages, Hygiene and Public Health, and Zoology.

The College of Agriculture has enlarged its staff and program of studies. A wide range of subjects will be covered in Animal Husbandry, Agronomy, Home Economics, Entomology, and Horticulture.

The College of Engineering will offer courses in Electrical Engineering, Drawing, and Practical Mechanics, including woodshop and machine shop work.

The College of Law offers subjects in law.

CORRESPONDENCE COURSES

The Department of University Extension, through its Bureau of Correspondence Study affords an opportunity 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 toward 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 their resident work at the time when many of them are free to do so. While attending the Summer Session, call at the University Extension office for information regarding correspondence work.

ROOMS AND BOARD

The University dormitories, Patterson Hall, Maxwell Hall, and Smith Hall, will be open to women during the Summer Session. The rental will be \$1.50 a week and up. Rooms will also be provided for married couples.

A New Dormitory for Men has just been completed. This building will be open to Summer School students, and accommodations may be had for sixty or seventy-five persons only. The rental will be \$15.00 for the session for each person.

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 furniture will be furnished.

THE UNIVERSITY CAFETERIA will be open for the entire session of six weeks and meals may be had there at reasonable rates. Meals are not served on Sundays.

RESERVATION OF ROOMS. Students desiring to obtain accommodations in the dormitories will be required to make reservations in advance. This should be done sometime before the session opens. A deposit of \$2.00 should be sent to the Registrar. When such deposits are received, rooms will be held until Monday evening, June 26. No room will be held longer unless the entire fee for the room is sent in advance.

BOARD AND ROOMS IN THE UNIVERSITY NEIGHBORHOOD

Accommodations for rooms and board in the University neighborhood may be had by inquiring at the office of the Dean of Men. Room may be had at rates varying from \$10 to \$25.00 a month. Board may be had at rates varying from \$5.00 to \$8.00 a week. All rooms listed have been inspected and certain standards maintained. Men who have not had reservations made at dormitories should, on their arrival at the University, apply at the office of the Dean of Men for information as to available rooms. All women students should apply at the office of the Dean of Women. Women are not permitted to occupy rooms at private homes without the specific approval of the Dean of Women.

FEES

The fees for the Summer Session for the present year have been slightly increased over last year in order to cover the increased cost of the Summer Session. A minimum fee of \$10.00 will be charged for any one course. For more than one course, a fee of \$15.00 will be

charged, and this will cover all the necessary expenses for any or all courses which the student may desire to take. The fee for students in the College of Law will be \$20.00. All fees must be paid on registration

REGISTRATION

Registration for the Summer Session will take place on Monday, June 26.

During registration, arrangements will be made for students to consult the deans of their respective colleges. The student should attempt to arrange his schedule so that he may take his courses with a view to graduation.

ENTRANCE CREDITS. Students entering the University for the first time should present their entrance credits either at the time of registration or before. Blanks for filing entrance credit should be obtained from the Registrar.

CREDIT

Students in attendance at the Summer Session may be admitted to classes irrespective of their educational attainments. No entrance examination in required, but instructors must be consulted concerning prerequisites for certain courses. Students who have full entrance credit to the University will be given credit toward graduation. No student will be permitted to carry more than eight semester hours of work for credit during the Summer 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.

CHANGING COURSES

Students may not change a course after registration except on recommendation of the Dean of the College in which he is registered, and upon the approval of the Registrar. No student will be permitted to change a course after the first week of the session.

APPOINTMENT BUREAU

The University strives to secure appointments for its graduates in the schools and academies of the State and elsewhere. To this end 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.

ENLARGED PROGRAM IN EDUCATION

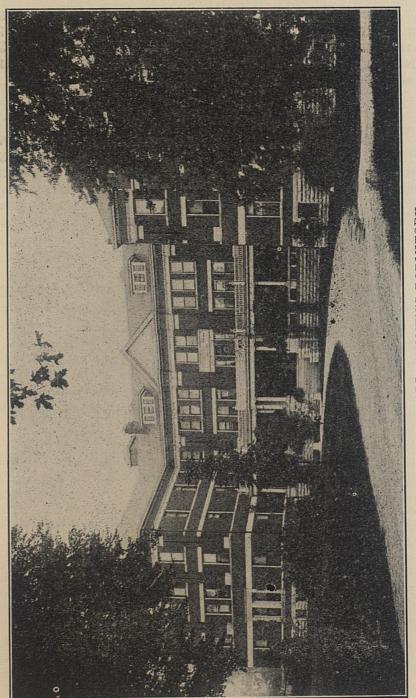
In order to meet the demands of the State for a larger program for teachers, superintendents, principals, and high school teachers, a larger program of studies in the field of education will be offered. Special announcements will be made of the teaching staff and lecture staff of work in this field.

UNIVERSITY PUBLIC LECTURES

Plans are being made for an attractive series of lectures to be given during the Summer Session. These will be given by lecturers and educators of note. These lectures will afford an opportunity to students and other members of the University community to hear speakers of authority and distinction. Detailed announcements of this work will be ready for distribution about the time the Summer Session opens.

GRADUATE WORK

Graduate work will be offered by special arrangement with the heads of departments and the chairman of the Graduate Committee.



PATTERSON HALL, WOMEN'S DORMITORY

COLLEGE OF ARTS AND SCIENCES

PAUL PRENTICE BOYD, M. A., 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, Geology, German Language and Literature, History and Political Science, Hygiene and Public Health, Journalism, Mathematics and Astronomy, Military Science, Music, Philosophy, Physical Education, Physics, Psychology, Romance Language and Literatures, Vocational Teacher Training, Zoology.

SUMMER SESSION COURSES

Courses for the Summer Session are offered by a large number of these departments. In a few of the departments it has not been found desirable to offer work in the summer.

DEPARTMENTS OF INSTRUCTION

Ancient Languages and Literatures Professor Jones

LATIN

- 1. Beginning Latin. A thoro drill in declensions, conjugations, simple rules of syntax. A special effort will be made to show the close connection between Latin and English. Three credits. Professor Jones.
- 2. CAESAR. The equivalent of four books will be read, but the selections will be taken mainly from the fifth, sixth and seventh books which portray the customs of the Britons, Germans and Gauls. Exercises in prose composition. Three credits. Professor Jones.
- 3. CICERO AND SALLUST. The four speeches of Cicero against Catiline will be read. A comparative study of the orator and the historian. Three credits. Professor Jones.
- 4. Vergil. The first, second, fourth and sixth books of the Aeneid will be read. Special attention to the meter and to mythology. 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.

For those who want a course in HOW TO TEACH LATIN, it is suggested that they take Course 1. If the students prefer, they may take Horace instead of Livy.

GREEK

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

ART

Miss Elliott

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. Miss Elliott.

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. Miss Elliott.

10a Theory and Practice of Teaching Art. Structural (synthetic) method of art teaching, compared with academic (analytic) method. General principles of teaching as applied to art instruction. Teaching under criticism. Required of those registered for art teacher's certificate. Prerequisites, parallel Art 1, 2, and Education 1, 2. Two credits. Miss Elliott.

BACTERIOLOGY

Assistant Professor Scherago

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 or 11. Lectures and laboratory. Four credits. Assistant Professor Scherago.

2a. ELEMENTARY MICROBIOLOGY. A more elementary course in Bacter lology for students who have not had the prerequisite courses for Bacteriology 102. Four credits. Assistant Professor Scherago.

BOTANY

Professor McFarland

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 ac-

companied 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. Systematic Botany. 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 schools. No college credit. One-half high school entrance credit given to those desiring high school credit.

CHEMISTRY

:--- 1

Professor Tuttle, Assisant Professor Mitchell and Mr. Stewart

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. Stewart.

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.

11. AGRICULTURAL ANALYSIS. An introductory course in quantitative analysis arranged for the students in the course in agriculture. The elements of quantitative analysis are studied with special reference to the constituents of soil, fertilizers and agricultural products. Prerequisite, one year's work in General Chemistry. Five credits. Professor Tuttle.

- 12. Advanced Agricultural Analysis. A laboratory 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

Professor Wiest and Assistant Professor Leland

ECONOMICS

- 1a. Principles of Economics. An examination of the fundamental principles of economics and the application of these principles to practical problems. Open to sophomores, juniors and seniors. 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. Not open to freshmen. 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. Not open to freshmen. Three credits. Assistant Professor Leland.

SOCIOLOGY

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 organization, etc. Not open to freshmen. Three credits. Assistant Professor Leland.

EDUCATION

Assistant Professor Patrick, Assistant Professor Douglas, Mr. Kirkpatrick, Mr. Ligon

2. Methods and Aims of Teaching. A discussion of the teaching process, aims and method of study, and the preparation of classroom work. Text book and lectures. Three credits.

- 4. PRINCIPLES OF EDUCATION. A study of the principles and ideals of educational theory and practice. Text book and lectures. Required of Education majors. Open also to students in Agricultural Education. Three credits. Mr. Kirkpatrick.
- 7a. HISTORY OF EDUCATION. An introductory course required of all Education majors. The ancient and medieval periods are rapidly covered, the emphasis being placed on the Renaissance and the Reformation. Lectures and assigned readings. Three credits. Mr. Ligon.
- 7b. History of Education. A continuation of Course 7a. Required of all Education majors. Taken also by students in Agricultural Education. The Reformation period will be concluded, and the emphasis placed on the 18th and 19th century theorists, particularly Rousseau, Dewey, and Montesorri. Text book, lectures, and assigned readings. Three credits. Mr. Ligon.
- 9. PRINCIPLES OF SECONDARY EDUCATION. This course aims to develop the fundamental principles of secondary education, and to familiarize the student with the best current practice and methods of high school teaching. The State High School Supervision gives by way of concrete illustration a six weeks' series of lectures on High Schools of Kentucky. Required of all Education majors. Text book. Three credits. Mr. Ligon.
- 14. Principles of Social Education. A study of the development of the social mind with special reference to education. Text book, reading and reports. Three credits. Mr. Kirkpatrick.
- 15a. Administration and Supervision. A course in general principles required of all Education majors. Financial practices in cities and towns below twenty-five thousand will receive special emphasis. Three credits. Assistant Professor Douglas.
- 15b. Administration and Supervision. A course in general principles required of all Education majors. The principles of constructive supervision will be developed. A critical study will be made of the Junior High School movement with particular reference to the feasibility of the Junior High School for the smaller cities and towns. Three credits. Assistant Professor Douglas.
- 16. EDUCATIONAL PSYCHOLOGY. A discussion of the learning process from the experimental and scientific viewpoint. This course is based on Starch's Educational Psychology. Students in Agricultural Education take this. Three credits. Assistant Professor Douglas.
- 22. EDUCATIONAL MEASUREMENTS. A course in the theory and practice of measuring educational products and processes. The time is

largely devoted to the giving and scoring of tests and scales in reading, spelling, writing, etc. Two credits. Mr. Kirkpatrick

23. EXPERIMENTAL EDUCATION. A laboratory course for advanced students in education who wish to make an experimental study of some educational problem which the student may select after consultation with the instructor. Two credits. Mr. Kirkpatrick.

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. Text book, lectures and reports. Three credits. Assistant Professor Patrick.

113a. State and County Administration. The tendencies toward centralization in state and county administration will be analyzed and evaluated. A study of the county unit will be made with particular reference to its operation in Kentucky. This course is designed for county superintendents and candidates for that office. Open to juniors and seniors. Lectures, assigned readings and text. Two credits. Assistant Professor Douglas.

113b. State and County Administration. A comparative study of state and county financial accounting and reporting, in which Kentucky will be compared with Massachusetts, Minnesota, New Jersey and Illinois. This course is designed for county superintendents and candidates for that office. Open to juniors and seniors. Lectures, assigned readings and text. Two credits. Assistant Professor Douglas.

If there is not sufficient demand, courses 15a and 15b will be merged. This will also apply to 113a and 113b.

ENGLISH

Professor Dantzler, Mr. Knight, Miss Pollitt

1a. ENGLISH COMPOSITION. Practice in writing correct and clear English. A text will be used, but the instruction will be based also upon the study of representative English masterpieces. Three credits. Miss Pollitt.

3b. History of English Literature. 'This course is designed to give the student a survey of English literature from Wordsworth to the present. Readings and themes will be required. Three credits. Mr. Knight.

18. Teachers' Course. For those who intend to teach English in the high school. Methods of teaching composition and literature. Two credits. Professor Dantzler.

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. The leading authors will be studied in class; the minor writers will constitute parallel reading. Two credits. Professor Dantzler.
- 120. PRONUNCIATION OF MODERN ENGLISH. A study of present day pronunciation of English. Two credits. Professor Dantzler.
- 2a. Advanced Composition. (The Short Story Course.) Critical writing. This course is for those who have acquired some proficiency in expression and who wish to do further work in the subject. After a study of short story types the student in this course will construct original short stories and, if time allows, one act plays. The object is to cultivate facility and individuality of style, to become better acquainted with the art of composition. Two credits. Mr. Knight.

GERMAN LANGUAGE AND LITERATURE

Professor Melcher

- 1a. ELEMENTARY GERMAN. Drill upon prounuciation 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 selections from popular writers on science: Current German periodicals. Prerequisite, German 3a. Three credits. Professor Melcher.

HISTORY AND POLITICAL SCIENCE

Professor Tuthill

- 7. RECENT AMERICAN MOVEMENTS. The course will survey the various phases of our national development, using one of the newer publications as a basis of study. Prerequisite, one year of college history. Two credits. Professor Tuthill.
- 20. THE TWENTIETH CENTURY. An outline of the developments of European history since 1895. Lectures, text, reports. Three credits. Professor Tuthill.

118. THEORIES AND TEACHING OF HISTORY. Lectures on some theories of history, including Wells' recent work; several problems of teaching, illustrated by materials of visual and graphic instruction. Two credits. Professor Tuthill.

POLITICAL SCIENCE

51b. AMERICAN GOVERNMENT. A continuation of Political Science 51a. In 1921 the National Government was the subject of study; in 1922 the important role of the State and of local self-control will be emphasized. Three credits. Professor Tuthill.

HYGIENE AND PUBLIC HEALTH

Professor Holmes

1a. General Hygiene and Public Health. 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 bacteriology; 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. 1.3 credits. Professor Holmes.

1b. General Hygiene and Public Health. Continuation of Hygiene 1a. 1.3 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 the 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 theme work. Two credits. Professor Holmes.

MATHEMATICS

Professor Davis, Assistant Professor Downing, Assistant Professor LeStourgeon, and Mr. Blair.

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.

- 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. Prerequisite, one and one-half units of entrance algebra. Five credits. Professor Davis.
- 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 the study. Prerequisites, Mathematics 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.

MUSIC

Professor Lampert

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.

1a. 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.

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 the 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

Professor Boles and Miss Van Meter

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 each position, team work and coaching methods; study of the rules; physical condition; methods of indoor practice. Lectures and practical work. 2. Track. Instruction and practicable 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 practical work will include training, conditioning and player's 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. Miss Van Meter.
- 12. FOLK DANCING FOR WOMEN. This course includes folk and English country dances, suitable for grammar and high school. One credit. Miss Van Meter.
- 13. Schoolroom Games for Women. This course includes games of low organization suitable for the classroom. One credit. Miss Van Meter.

PHYSICS

Professor Webb and Associate Professor Kemp

1a. General Elementary Physics. For students who have had no previous training in Physics. Course covers elementary theory of mechanics and heat. Lecture and recitation one hour daily, laboratory two hours daily for first three weeks of Summer Session. Five credits. Associate Professor Kemp.

1b. General Elementary Physics. Continuation of Physics 1a. Course covers elementary theory of electricity, sound and light. Lecture and recitation one hour daily for second half of Summer Session. Five credits. Associate Professor Kemp

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

11b. General Elementary Physics, continuation of Physics 11a. Course covers elementary theory of electricity, sound and light. Lecture

and recitations one hour daily, laboratory two hours daily for second half of Summer Session (three weeks). Three credits. Associate Professor Kemp.

2a. General College Physics. Prerequisites, one year of high school Physics, Mathematics 2 and 3. Course covers general theory of mechanics and heat. Lectures and recitations one hour daily, laboratory six hours per week, in three two-hour periods. Three credits. Professor Webb.

2b. General College Physics. Continuation of Physics 2a. Course covers general theory of electricity, sound and light. Lectures and recitations one hour daily, laboratory six hours per week, in three two-hour periods. Three credits. Professor Webb.

Note: Engineering students who have failed in 3a and 5 may take 2a in Summer Session for credit, upon approval of head of department. The same condition would apply to those having failed in 3b and 6.

PSYCHOLOGY

Associate Professor Ruchmick

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

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. Associate Professor Ruckmick.

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. Associate Professor Ruckmick.

ROMANCE LANGUAGES

Professor Zembrod and Miss Horsfield

1a. ELEMENTARY FRENCH. Not open to Seniors. Three credits.

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

5a. ELEMENTARY SPANISH. Not open to Seniors. Three credits. Professor Zembrod.

101a. FRENCH NOVEL AND DRAMA. Advanced composition. Three credits.

ZOOLOGY

Professor Funkhouser and Assistant Professor Vansell.

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 the invertebrates. Four credits. Assistant Professor Vansell.

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.

3a. INSECT STUDY (GENERAL ENTOMOLOGY 3a). A beginning course in the study of insects. Gross anatomy, morphology and life histories of representatives of the most important orders with special attention to insects of economic importance. Three credits. Assistant Professor Vansell.

VOCATIONAL TEACHER TRAINING

Professor Barringer, Professor May and Assistant Professor Roberts

In cooperation with the Department of Vocational Teacher Training, special courses have been provided in 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.

In addition a special conference has been provided, special announcement of which will be made. This conference is definitely planned for the discussion of the problems of teachers. Such topics as the content of home economics courses in elementary schools and high schools, unit organization of courses, project methods, home projects, and problems in the administration of Home Economics in day schools, etc., will be covered. The conference will include group discussion, committee work, and reference work.

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

107. Special Methods for Vocational Agriculture Teachers. An advanced course. Open to others only by special permission. Attention will be given to significant outstanding problems such as related science in its bearing on agriculture, methods of conducting farm shop

work, teaching by means of the home project, visual instruction, community problems, and the organization of work as taught in the Smith-Hughes department of high schools. Three credits. Professor Barringer, Assistant Professor Roberts and others.

32. ADMINISTRATION OF VOCATIONAL EDUCATION. An introductory course intended primarily for city or 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 and others.

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

COLLEGE OF AGRICULTURE THOMAS P. COOPER, B. S. IN AGR., Dean.

AGRONOMY

Associate Professor Karraker and Mr. Fergus

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.

ANIMAL INDUSTRY

Professor Good, Professor Hooper, Assistant Professor Horlacher and Assistant Professor Martin

- 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.
- 3. ADVANCED POULTRY PRODUCTION. A continuation of Course 2, taking up the more advanced problems of feeding, incubation, brooding, management, and diseases. The laboratory work consists of the operation of incubators and brooders, grading and candling of eggs, and the feeding of laying hens. Prerequisites, Animal Industry 2. Four credits. Assistant Professor Martin.
- 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 of 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.
- 6b. Breeds of Beef Cattle, Sheep and Hogs. The origin, history and characteristics of each of the leading breeds of beef cattle, sheep and hogs are studied. Practice is given in the tracing of pedigrees. Representatives of the different breeds are scored and judged

according to their official standards. Three credits. Assistant Professor Horlacher.

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 upon nomenclature and the principles governing the selection of animals for the feed lot, for market and for breeding purposes. Required of freshmen in Agriculture. Three credits. Assistant Professor Horlacher.

12b. Types and Classes of Darry 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 groverning the selection of these animals for milk, work and breeding purposes. Required of freshmen in Agriculture. Three credits. Assistant Professor Horlacher.

13. Live Stock Judging. This course includes the theory and practice of live stock judging. Instruction is given in the scoring and placing of draft horses, beef cattle, sheep and hogs, from the standpoint of the breeder and the market. Special attention is given to show yard judging. Practice is given in writing and giving oral reasons for planing. Trips are taken to stock farms near Lexington where animals of excellent type are studied. Two credits. Assistant Professor Horlacher.

FARM ENGINEERING

Professor Kelley

- 1. FARM MACHINERY. Various types of tillage, seeding, harvesting and storage machinery are studied and compared in detail. Laboratory practice consists of examination of mechanical construction and operation of these machines indoors and in the field. Three 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.

HOME ECONOMICS

Professor Cornell, Assistant Professor Eichelberger, Miss Gard and others.

- 21. CLOTHING. Study of economy and quality in buying, and a comparison of home made and ready made garments. Making a dress form to measure and the making of wool, silk or velvet dresses. Three credits. Miss Gard.
- 23. Costume Design. Study of historic costumes Practical application of the principles of design to simple costumes. Study of the materials that are suitable for different types of costumes. Problems in design for different individuals and purposes, including theatrical productions. Prerequisites, Art. 2, Home Economics 20 and 26. Miss Gard
- 111. NUTRITION CLINIC. Modern methods of conducting nutrition classes both among children and adults. The importance of nutrition in regard to the mental and physical development of the child being especially stressed and the opportunities afforded through the child of reaching parents and other adults in the family group. An opportunity for actual practice will be possible in the laboratory where a nutritional class will be conducted with a group of children. Two credits. Assistant Professor Eichelberger.
- 120. Home Economics and the Community. This course is designed to acquaint the home economics worker with the possibilities in the development of community problems. It is to be conducted by one individual but the presentation of subject matter will be made by from fifteen to twenty specialists who will handle their particular subjects in from one to two lectures. Some of the subjects are: Child Welfare;

Camp Fire; Boy Scouts; Public Health; Parent-Teachers' Association; Play Ground Work; Community Recreation; Extension Service which would present topics of the school lunch and Boys' and Girls' Club Work; Red Cross; Nutrition Clinic. Papers will be required in which each member of the class will plan a campaign for her own community, using two or three of the organizations and subjects to accomplish her aims. Two credits. Professor Cornell.

103. Food and Nutrition. The chemistry of carbohydrates, proteins, fats, baking powder and minerals. Six credits. Not given for fewer than five students. Assistant Professor Eichelberger.

Home Economics Conference. This conference is definitely planned for home economics teachers in service. It will include such problems as study of definite aims and content of home economics, project method and home projects, and problems of administration in home economics in day schools. The conference will be conducted as class and committee work with outside reference work and preparation. Professor Cornell, Professor Campbell, and Miss Madison.

HORTICULTURE

Professor Mathews and Assistant Professor Olney

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 the laboratory and field exercises. Two credits.

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, several types of which are exhibited in the exeffective spray program. 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.

COLLEGE OF ENGINEERING

F. PAUL ANDERSON, M. E., Dean

WILLIAM EDWIN FREEMAN, A. B., E. E., Acting Dean.

DRAWING

Assistant Professor Horine

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. Assistant Professor Horine. 2.3 credits.

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. 2.3 credits. Assistant Professor Horine.

ELECTRICAL ENGINEERING

Assistant Professor Barnett

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. Prerequisites, Electrical Engineering 1. Three credits. Assistant Professor Barnett.

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. Mathematics 7b (Calculus, second part), must have been completed or be taken coordinately. Three credits. Assistant Professor Barnett.

7. DYNAMO DESIGN. Required of juniors in Mechanical and Electrical Engineering. This work involves all the calculations nec-

essary 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 Engineering 1. Electrical Engineering 2 must have been completed or be taken co-ordinately. Assistant Professor Barnett. Two credits.

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 Barnett.

MECHANICS OF ENGINEERING

Professor Freeman

- 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 in the parts of a machine. Special attention is given to the analysis of mechanisms involving link motions, 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. Professor Freeman.
- 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 students in the drawing room practice existing in our most comprehensive machine building establishments. Prerequisites, Mathematics 2, 4, 5, Drawing 3, 4. Four credits, Assistant Professor Horine.
- 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 Freeman.
- 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, 2.5 credit. Assistant Professor Horine.

PRACTICAL MECHANICS

Messrs. Dicker, Thurman, Saunier and Singer.

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 daily. 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

W. T. LAFFERTY, A. B., Dean.

The Summer Session of the College of Law will begin on the same date as the regular Summer Session at the University, and will extend over a period of eight weeks instead of six weeks. The courses offered are so arranged as to provide a full schedule of work for entering as advanced students and will be taught by members of the regular faculty. For subjects successfully completed the student will receive credit toward graduation. The tuition fee for the session will be \$20.00.

Introductory Law. A course of reading and lectures upon the Doctrine, System and History of the American Jurisprudence, to familiarize the student with the elementary conceptions and terms of the law, its form, source, literature and mechanics. Pound's Readings. Three credits. Professor Chalkley.

Common Law Pleading. Pleading in tort actions; trespass, ejectment, case, trover, replevin; pleading in contract actions; general and special assumpsit, debt, convenant; principles of general application concerning substance, form, objections to defects, curing defects, dilatory objections, cross demands. Tyler's STEPHENS on PLEADING. Two credits. Professor Chalkley.

OFFICE PRACTICE AND CRIMINAL PROCEDURE. Administrative duties as counselor, drafting of legal documents such as contracts, bills, deeds, mortgages, loans, trust deeds, assignments, powers of attorney, partnership agreements, articles of incorporation, wills, abstracting of titles, administration of estates. The various phases of criminal procedure up to the court trial will be taught. Two credits. Professor Lafferty.

MUNICIPAL CORPORATION. Nature of municipal corporations; distinction between municipal corporations and other corporations; functions, creative, alterations, dissolution; legislative control; organization, powers of such as police power to tax, power to contract and acquire, manage and dispose of property; liability on contracts and for torts; remedies. Beal's CASES ON MUNICIPAL CORPORATIONS. Two credits. Professor Roberts.

BILLS AND NOTES. Formal requisites of negotiability; acceptance; delivery; consideration; negotiation; by delivery, by endorsement; rights and duties of holders; liability of maker, acceptor, drawer, endorser; the discharge; the subject being treated both at common law and under the Negotiable Instruments Law. Cases on Bills and Notes. Two credits. Professor Roberts.

PUBLIC UTILITIES. Consideration will be given to the numerous class of business and undertakings which have a double aspect of

being privately owned and conducted for private profit but are subjected to abnormal duties of public service; common carriers, hotels, telephone, telegraph, express, gas, electric light, irrigation, pipe line, businesses, etc.; the basis of imposing this status and the method of imposing it; common law, statutes; the character and extent of its peculiar obligations at common law and under statutes; undiscriminatory service, provision of adequate facilities, reasonable rate, and the determination of reasonable rates. Burdick's CASES ON PUBLIC SERVICE COMPANIES. Two credits Professor Roberts

COURT PRACTICE. This course is designed to fit the student for actual court practice following his training in the various subjects of substantive law and office practice. This training will give a substantial knowledge of the work that young lawyers will experience in their professional career, including work in the various courts, trial practice and appeals. All proceedings will be conducted in the main under the Kentucky Code, but treated as to give a fair understanding of like work in other states. Two credits. Professor Lafferty.

Not all of the law courses will be given. The courses given will be determined by the demand.

For further information regarding law courses write to Dean W. T. Lafferty.

SCHEDULE OF LECTURES AND RECITATIONS SUMMER SESSION, 1922

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., Agiculture; 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.

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
Lectures and Chapel	sixth hour.

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.

COLLEGE OF ARTS AND SCIENCES

PAUL P. BOYD, Dean

	FAUL F. BOTD, Dean								
Course No.	SUBJECT	Hour	Days	Bldg.	Room No.	Instructor			
	ANCIENT LANGUAGES								
1 2 3 4 5 51	Beginning Latin	2 2 3 4	Daily Daily Daily Daily Daily Daily	A A A A A	303 303 303 303 303 303	Jones Jones Jones Jones Jones Jones			
1a 1a Lab. 1a Lab. 2a 10a	Drawing and Painting Drawing and Painting Drawing and Painting Drawing and Painting Art Structure Theory & Practice of Tch. Art	5 2 4 1, 2	Daily Daily Daily Daily Daily Daily Daily	WH WH WH WH WH	106 106 106 106 103 103	Elliott Elliott Elliott Elliott Elliott Elliott			
	BACTERIOLOGY								
102 102 Lab. 2a 2a Lab.	General Bacteriology General Bacteriology Elementary Microbiology Elementary Microbiology	1 2, 3 5 3, 4	Daily Daily Daily Daily	NH NH NH NH	205 106 205 104	Scherago Scherago Scherago			
	BOTANY								
1a Lab 1b 105 A	General Botany	4 7, 8 By By By	Daily Daily Appt. Appt. Appt.	WH WH WH WH WH	102	McFarland McFarland McFarland McFarland McFarland			
1b 3 4 7 8 9 11 12 14	General Inorganic Chemistry. Inorganic Preparations Qualitative Analysis Organic Chemistry Quantitative Analysis Quantitative Analysis Agricultural Analysis Advanced Agr. Analysis Advanced Quant. Analysis	3, 4 2, 3, 4, 5 2, 3, 4 1, 2, 3, 4	Daily Daily Daily Daily Daily Daily Daily Daily Daily	KH OC OC OC OC		Mitchell Stewart Mitchell Stewart Tuttle Tuttle Tuttle Tuttle Tuttle Tuttle			
		38				1,40010			

COLLEGE OF ARTS AND SCIENCES—Continued

No.	SUBJECT	Hour	Days	Bldg.	Room No.	Instructor
1a 4a 4a Lab. 109 51a	ECONOMICS & SOCIOLOGY Principles of Economics Principles of Accounting Principles of Accounting Business Law	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Daily MWF TThS TThS MWF Daily TThS Daily Daily Daily MWF TThS Daily MWF TThS Daily MWF TThS Daily MWF MW	WH WH WH WH	205 206 206 206 206 205	Wiest Wiest Wiest Leland Leland
15a 15b 113a 113b 16 2 4 7a 7b 9 14 22 23 108	Administration and Supervision Administration and Supervision County & State Administration County & State Administration Educational Psychology	8 1 2 5 3 5 8 9 1 8 2 3	Daily	EEEEEEEEEEA	106 106 106 106 106 202 201 202 202 202 201 201 201 105 Ch.	Douglas Douglas Douglas Douglas Douglas Ligon Kirkpatrick Ligon Ligon Ligon Kirkpatrick Kirkpatrick Kirkpatrick Kirkpatrick
1a 3b 18 111 114 120 2a	ENGLISH English Composition	$ \begin{cases} 3, 4 \\ 3 \\ 2 \\ 1 \\ 4 \\ 1 \end{cases} $	MWF TThS MWF Daily Daily MWF Daily Daily Daily	A A A A A A	302 301 205 301 205 205 301	Dantzler Knight

COLLEGE OF ARTS AND SCIENCES—Continued

			CIMITOL	o com	offi (ic	a
Course No.	SUBJECT	Hour	Days	Bldg.	Room No.	Instructor
	HISTORY AND POLITICAL SCIENCE				· 1	
7 20 118 51b	Recent American Movements The Twentieth Century Theories & Teaching of History American Government	1 2 3 4	Daily Daily Daily Daily	A A A	203 203 203	Tuthill Tuthill Tuthill Tuthill Tuthill
	HYGIENE AND PUBLIC HEALTH					1
1a, 1b	General Hygiene and Public Health	2, 3	Daily	NH	302	Holmes
103 104	School Hygiene	5	Daily Daily	NH NH	302 302	Holmes Holmes
	MATHEMATICS					
1 2 4	Plane Geometry Elementary Algebra Solid Geometry Plane Trigonometry	1, 2 3, 4 5 3, 4	Daily Daily Daily Daily	C&P C&P C&P C&P	306 303 303 310	Blair Downing Blair Davis
5 6 7a	College Algebra	1, 2 1, 2 3, 4 1, 2	Daily Daily Daily Daily	C&P C&P C&P	308 310 308	LeStourgeon Davis LeStourgeon
	MUSIC	1,.2		C&P	303	Downing
2a	Sight Singing	By By By	Appt. Appt. Appt.			Lampert Lampert
4a 5a	Public School Music	By By	Appt. Appt.			Lampert Lampert
9a	Normal Course in Band and Orchestra	Ву	Appt.			Lampert *
7	PHYSICAL EDUCATION Prin. of Coaching Baseball and					
8	Track	7	MTWThF MTWThF MTWThF	MS	104 104 104	Boles Boles
10	Schoolroom Games and Gym- nastics	5	MTWThF		104	Boles
12	Prin. of Coaching Basket ball (Women)	- 8 5	MTWThF MWF	WG .		Van Meter
13	Schoolroom Games for Women		MWF	TITO		Van Meter Van Meter

COLLEGE OF ARTS AND SCIENCES—Continued

			CILITOII,	0011	umuc	ou.
Course No.	SUBJECT	Hour	Days	Bldg.	Room No.	Instructor
	PHYSICS					
1a 1b 1a Lab.* 1b Lab.† 1la 11b 11a Lab.* 11b Lab.† 2a 2b 2a Lab. 2b Lab.	General Elementary Physics General Elementary Physics Gen. Elementary Physics, Lab. Gen. Elementary Physics, Lab. General Elementary Physics General Elementary Physics, Lab. Gen. Elementary Physics, Lab. Gen. Elementary Physics, Lab. General College Physics General College Physics General College Physics, Lab General College Physics, Lab General College Physics, Lab	3, 4 3, 4 1 2 3, 4 3, 4	Daily ThS	C&P C&P C&P C&P C&P C&P C&P C&P C&P C&P	200 200 203 203 200 200 203 203 103 105 3	Kemp Kemp Kemp Kemp Kemp Kemp Kemp Webb Webb
	PSYCHOLOGY					a a a a a a a a a a a a a a a a a a a
1 108a 110 110 Lab.	Introductory Psychology Human Measurements Experimental Methods Experimental Methods, Lab ROMANCE LANGUAGES	2 1 7 7,8	Daily Daily TTh MWF	NH NH NH NH	204 204 206 206	Ruckmick Ruckmick Ruckmick Ruckmick
5a 1a 101a 103a	Elementary Spanish Elementary French French Novel and Drama	3 4	Daily Daily Daily Daily	NH NH A A	303 303 204 204	Horsfield Horsfield Zembrod Zembrod
1a	General Zoology	5 3	Daily)	S	108	Vansell
10	General Zoology, Lab. General Zoology, Lab.	$\begin{cases} 4 \\ 5 \end{cases}$	Daily Daily Daily TThS Daily Daily	S S	105 2 108	Vansell Funkhouser
102 Lab. 106	Ornithology Ornithology Field & Lab. Work Insect Ecology Insect Ecology, Lab.	By 1	Daily Appt. Daily Daily	S		Funkhouser Funkhouser Funkhouser Vansell Vansell
	*For first half Summer Term. †For second half of Summer Term.		an Lagrangia di Sa	THE STATE OF	inie i Karit Karit	and a second sec

COLLEGE OF AGRICULTURE THOMAS P. COOPER, Dean

THOMAS P. COOPER, Dean								
Course No.	SUBJECT	Hour	Days		Bldg.	Room No.	Instructor	
	VOCATIONAL TEACHER							
107	TRAINING Special Methods	4	Daily		E		Roberts and	
107							Barringer	
107 Lab.	Special Methods Lab	Ву	Appt.				Roberts and Barringer	
32	Administration	3	Daily		E		May	
	AGRONOMY							
1,	Soils, Lec.	$\begin{cases} 3 \\ 2 \end{cases}$	Daily TThS	11	Agr.	303	Karraker	
12	Soils, Lab	7-9	MW	,	Agr.	302 304	Karraker Fergus	
8,	Cereals, Lec.	$\left\{ \begin{array}{c} 1 \\ 2 \end{array} \right.$	Daily MWF	5	Agr.			
82	Cereals, Lab.	7-9	TTh		Agr.	304	Fergus	
	FARM ENGINEERING		D .:		TD		Kelley	
1,	Farm Machinery Lec	7-9	Daily TTh		JP FEL	2	Kelley Kelley	
1 ₂ 6 ₁	Farm Shop, Lec.	2	MWF		JP	2	Kelley	
62	Farm Shop, Lab.	7-9	FS		GEL		Kelley	
	ANIMAL INDUSTRY	4	Doiler		Agr	301	Martin	
2_1 2_2	Farm Poultry Prod., Lec Farm Poultry Prod., Lab	7-9	Daily		Agr.		Martin	
3,	Adv. Poultry Prod., Lec	1, 2	Daily		Agr.	301	Martin	
32	Adv. Poultry Prod., \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1:30	Daily				Martin	
5,	Farm Dairying, Lec	3	Daily		Agr.	205	Hooper	
5 ₂	Farm Dairying, Lab	7-9	MW		Agr.	4	Hocper	
6b ₁	Hogs, Lec.	2	Daily		JP	1	Horlacher	
6b ₂	Breeds Beef Cattle, Sheep, and Hogs, Lab.	7-9	TTh		JP		Horlacher	
7a	Livestock Feeding	3	Daily		Agr.	301	Good	
7b	Livestock Feeding	5	Daily		Agr.	301	Gcod	
12a ₁	Types and Classes Beef Cattle, Sheep, Hogs, Lec.	. 3	Daily		JP	1	Horlacher	
12a ₂	Types and Classes Beef Cattle,	7-9	MW		JP		Horlacher	
12b ₁	Sheep, Hogs, Lab. Types and Classes Dairy							
12b ₂	Cattle, Horses, Mules, Lec Types and Classes Dairy	. 5	Daily		JP	1	Horlacher	
1202	Cattle, Horses, Mules, Lab	7-9	FS		JP		Horlacher	

COLLEGE OF AGRICULTURE—Continued

Course No.	SUBJECT	Hour	Days	Bldg.	Room No.	Instructor
7a ₁ 7a ₂ 7b ₁ 7b ₂	HORTICULTURE Vegetable Gardening, Lec Vegetable Gardening, Lab Fruit Growing, Lec Fruit Growing, Lab HOME ECONOMICS	1 7-9 2 7-9	MWF MW MWF TTh	Agr.	303	Olney Olney Olney Olney
21, 21, 23 103,	Clothing, Lec. Clothing, Lab. Costume Design Food and Nutrition, Lec. Food and Nutrition, Lab.	$ \begin{array}{c} 2 \\ 4-5 \\ 7-9 \\ 1 \\ 2 \\ 7-9 \end{array} $	TThS Daily MTWTh Daily { MWF { MTWThF	Agr. Agr. Agr. Agr.	205 202 202 103	Cornell Cornell Gard Eichelberger and others Eichelberger
111, 111, 120	Nutrition Clinic, Lec	4 4, 5	MWF TThS Daily	Agr. Agr. Agr.	101 103 101	and others Eichelberger and others Eichelberger and others Cornell

COLLEGE OF ENGINEERING

W. E. FREEMAN, Acting Dean

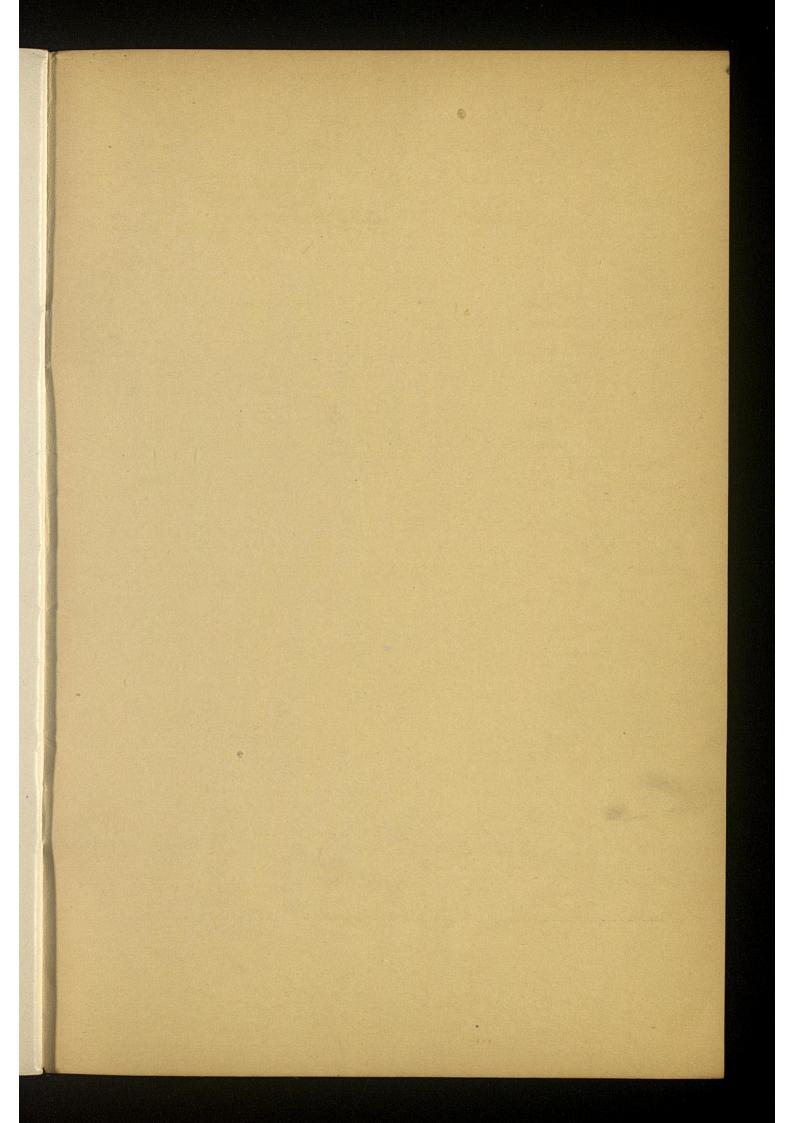
Course No.	SUBJECT	Hour	Days	Bldg.	Room No.	Instructor
	DRAWING					
1a 1b	Mechanical Drawing Mechanical Drawing	By	a day } Appt. { a day }	C&P	207	Horine
3 4a	Descriptive Geometry Advanced Drawing		Appt. } Daily a day }	C&P C&P	207 107	Horine Horine
4b	Advanced Drawing		Appt. { Appt. Appt.	C&P C&P	207	Horine Horine

COLLEGE OF ENGINEERING—Continued

Course No.	SUBJECT	Hour	Days	Bldg.	Room No.	Instructor
	ELECTRICAL ENGINEERING					
E. E. 2 E. E. 3 E. E. 9b E. E. 7	D. C. Dynamos	7, 8		MH MH MH	209 209 112 206	Barnett Barnett Barnett
3 6 4 7	ENGINEERING	3, 4 5 hrs. By 3 hrs.	Appt.	MH MH C&P	202 202 207 207	Freeman Freeman Horine
1 2	Wood Working	By 3 hrs.	Appt. } a day {	NS	NS	Dicker
4 5 6	Forge Shop	2 hrs.	Annt (MH NS MH	NS 109 NS 113	Dicker Saunier Thurman Singer

COLLEGE OF LAW W. T. LAFFERTY, Dean

Course No.	SUBJECT	Hour	Days	Bldg.	Room No.	Instructor
	LAW Introductory Law Common Law Pleading Office Prac. & Crim. Procedure Court Practice Municipal Corporations Bills and Notes Public Utilities	1 3 4 3 2 4	Daily Daily Daily Daily Daily Daily Daily Daily Daily		308 307 307 306 308 308 308	Chalkley Chalkley Lafferty Lafferty Roberts Roberts Roberts



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