

W. J. Crutcher.

Bulletin

University of Kentucky



Summer Session, 1928

First Term: June 11 to July 14

Second Term: July 16 to August 18

January, 1928



Published by the University of Kentucky, Lexington. Entered as Second Class Matter at the Post Office, Lexington, Ky., under the Act of July 16, 1894.

Acceptance for mailing at special rate of postage provided for in section 1103, Act of October 3, 1917, authorized June 30, 1920.

Vol. 20

No. 1

SUMMER SESSION CALENDAR

Saturday	May 12	Last date for ex-service men to make application for free tuition and room rent.
Monday	June 11	Registration for first term.
Tuesday	June 12	Classes begin.
Thursday	June 14	Last date for making changes in registration or in schedule without payment of fee.
Monday	June 18	Last date upon which a student may register for credit for the first term's work.
Monday	June 18	Last date upon which a student may be dropped without a grade by the dean.
Tuesday	June 19	Last date on which a student may withdraw and receive a refund of matriculation fee for the first term.
Friday	July 13	Registration for second term.
Saturday	July 14	Examination for first term.
Monday	July 16	Classes begin.
Thursday	July 19	Last date for making changes in registration or in schedule without payment of fee.
Monday	July 23	Last date for registering for second term without special permission of heads of departments concerned.
Monday	July 23	Last date upon which a student may be dropped without a grade by the dean.
Tuesday	July 24	Last date upon which a student may withdraw and receive a refund of matriculation fee for the second term.
Saturday	August 18	Examinations for the second term.

Bulletin

University of Kentucky



Summer Session, 1928

First Term: June 11 to July 14

Second Term: July 16 to August 18

January, 1928

CONTENTS

	Page
Admission	10
Changes in Registration	18
College of Agriculture	36
College of Arts and Sciences	22
College of Commerce	48
College of Education	43
College of Engineering	39
College of Law	42
Ex-Service Men	20
Faculty	4
Fee for Change in Classification	19
Fees	18
General Information	9
General Requirements for the Master's Degree	16
Late Classification Fee	18
Late Registration	18
Marking System	19
Officers of Summer Session	3
Officers of Administration	3
Placement Service	20
Recreation for Summer Session Students	21
Reduced Railroad Rates	18
Refunds	18
Requirements for Graduation—	
College of Arts and Sciences	12
College of Agriculture	13
College of Engineering	14
College of Law	14
College of Education	14
College of Commerce	15
The Graduate School	16
Room and Board	19
Residence Requirements for Graduation	11
Schedule of Lectures and Recitations	50
Student Load	17
Teachers' Certificates	16

OFFICERS OF THE SUMMER SESSION

FRANK LEROND McVEY, Ph. D., LL. D., President.
W. C. BELL, M. A., State Superintendent of Schools.
WILLIAM S. TAYLOR, Ph. D., Director of the Summer Session.
WELLINGTON PATRICK, Ph. D., Assistant Director of the Summer Session.

OFFICERS OF ADMINISTRATION

FRANK LEROND McVEY, Ph. D., LL. D., President.
W. C. BELL, M. A., State Superintendent of Schools.
PAUL PRENTICE BOYD, M. A., Ph. D., Dean, College of Arts and Sciences.
THOMAS POE COOPER, B. S. in Agr., Dean, College of Agriculture.
FREDERICK PAUL ANDERSON, M. E., Dean, College of Engineering.
ALVIN E. EVANS, Ph. D., J. D., Dean, College of Law.
WILLIAM S. TAYLOR, Ph. D., Dean, College of Education.
EDWARD WIEST, A. M., Ph. D., Dean, College of Commerce.
W. D. FUNKHOUSER, Ph. D., Dean, Graduate School.
WELLINGTON PATRICK, Ph. D., Director of University Extension.
COLUMBUS RUDOLPH MELCHER, A. M., Dean of Men.
SARAH G. BLANDING, A. M., Dean of Women.
MRS. P. K. HOLMES, Dean of Women in the Summer Session.
EZRA L. GILLIS, A. B., Registrar.
DAVID HOWARD PEAK, A. M., Business Agent.
MARGARET ISADORA KING, A. B., Librarian.

FACULTY

- ADAMS, JESSE E., Ph. D.
Professor of Education.
- ALLEN, WILLIAM RAY, Ph. D.
Associate Professor of Zoology.
- ANDERSON, WALTER SEWELL, M. A.
Professor of Genetics.
- BARKENBUS, CHARLES, Ph. D.
Assistant Professor of Organic Chemistry.
- BARNES, G. IVAN, A. M.
*Director of Vocational Education, State Department of Education,
Frankfort, Kentucky.*
- BARNETT, BRINKLEY, B. M. E.
Assistant Professor of Electrical Engineering.
- BEDFORD, MATTHEW HUME, Ph. D.
Assistant Professor of Physical Chemistry.
- BOLES, STANLEY ATWOOD, M. A.
Head of Department of Physical Education; Director of Athletics.
- BOYNTON, PAUL L., Ph. D.
Associate Professor of Psychology.
- BRADY, GEORGE KEYPORTS, Ph. D.
Associate Professor of English.
- BRAUER, ALFRED, M. A.
Assistant Professor of Zoology.
- BROWN, MARION C., M. A.
Instructor in Mathematics.
- BUREAU, ERNEST ADOLPHE, Ph. B., M. M.
Professor of Electrical Engineering.
- CHAPLEY, LYMAN, B. L.
Professor of Law.
- DANTZLER, LEHRE L., M. A.
*Professor of Philology; Head of Department of English Language
and Literature.*
- DAVIS, JOSEPH MORTON, M. A.
Professor of Mathematics.
- DEY, MARY
Instructor in Home Economics.
- DICKER, JOHN BORN
*Superintendent of Shops; Head of Department of Practical
Mechanics.*
- DUNCAN, MRS. MAY K., A. B.,
Instructor in Education.

- EBERLING, ERNEST J., A. M.
Professor of Economics.
- FARQUHAR, EDWARD F., M. A.
Professor of Literature.
- FERGUS, ERNEST NEWTON, B. S. in Agr., M. Sc.
Assistant Professor of Farm Crops, Assistant Agronomist in the Experiment Station.
- FINN, WILLIAM GOEBEL, M. S.
Assistant Professor of Agricultural Economics and Farm Mechanics.
- FISKE, EDWARD
Assistant Professor in Art.
- FREEMAN, WILLIAM EDWIN, A. B., E. E.
Assistant Dean of the College of Engineering; Head of Department of Electrical Engineering.
- FUNKHOUSER, WILLIAM DELBART, Ph. D.
Dean of the Graduate School; Professor of Zoology; Head of Department.
- GRAHAM, JAMES LARMOUR, M. A., Ph. D.
Assistant Professor of Psychology.
- GREHAN, ENOCH BACON, A. B.
Professor of Journalism; Head of Department.
- GRIFFIN, GERALD, A. B.
Instructor in Journalism.
- HAMMONDS, CARSIE, M. A.
Professor of Agricultural Education.
- HANSEN, LAURENTZA, M. A.
Instructor of Home Economics and Education.
- HOLLOWAY, J. B., M. A.
Supervisor of High Schools, State Department of Education, Frankfort, Kentucky.
- HOLMES, HENRY BERT, M. A.
Instructor in Romance Languages.
- HORINE, JOHN SHERMAN, M. E.
Assistant Professor of Drawing.
- HORLACHER, LEVI JACKSON, M. S. in Agr.
Associate Professor of Animal Husbandry; Assistant to the Dean.
- JENNINGS, WALTER WILSON, Ph. D.
Professor of Economics.
- JOHNSON, E. C., B. S.
Assistant Professor of Marketing and Rural Finance.

- JOHNSON, JAMES RICHARD, B. M. E.
Professor of Applied Mechanics.
- JONES, THEODORE TOLMAN, M. A.
Professor of Ancient Languages and Literatures; Head of Department.
- KARBAKER, PERRY ELMER, M. A.
Associate Professor of Soils and Assistant Agronomist in the Experiment Station.
- KELLEY, ABNER WELLINGTON, M. A.
Instructor in English.
- KING, MARGARET ISADORA, A. B.
Librarian; Instructor in Library Science.
- KNAPP, C. M., Ph. D.
Associate Professor of History.
- KOPPIUS, OTTO TOWNSEND, Ph. D.
Associate Professor of Physics.
- LAMPERT, CARL ALBERT
Professor of Music; Head of Department.
- LATIMER, CLAIBORNE G., Ph. D.
Professor of Mathematics.
- LEGGETT, J. L., M. A.
Professor of Education, Transylvania College, Lexington, Kentucky.
- LELAND, SIMEON ELBRIDGE, Ph. D.
Professor of Economics.
- LIGON, MOSES EDWARD, A. M.
Professor of Secondary Education; Principal of University High School.
- MAY, AUGUSTUS NOAH, B. Ped.
Professor of Industrial Education.
- McFARLAN, ARTHUR C., Ph. D.
Professor of Geology; Head of Department.
- McFARLAND, FRANK T., Ph. D.
Professor of Botany; Head of Department.
- MCLAUGHLIN, MARGUERITE, A. B.
Assistant Professor of Journalism.
- MELCHER, COLUMBUS RUDOLPH, M. A.
Dean of Men; Professor of German Language and Literature; Head of Department.
- MITCHELL, JOHN RICHARD, A. B.
Assistant Professor of Chemistry.
- NOE, JAMES THOMAS COTTON, A. M., Litt. D.
Professor of Education.

- OLNEY, ALBERT JACKSON, M. H., S. M.
*Professor of Horticulture and Assistant Horticulturist in the
 Experiment Station.*
- PAYNE, JOHN HOWARD
Superintendent of Schools, Maysville, Kentucky.
- PATRICK, WELLINGTON, Ph. D.
Director of University Extension; Assistant Professor of Education.
- PORTMANN, VICTOR R., A. B.
Instructor in Journalism.
- RHODES, THEODORE D., A. B., M. D.
Assistant Professor of Hygiene and Public Health.
- ROBERTS, WILLIAM L., A. B., A. M., J. D.
Professor of Law.
- ROSS, CLAY CAMPBELL, Ph. D.
Professor of Educational Psychology.
- RUSH, JAMES EDWIN, S. B., C. P. H., M. D.
Professor of Hygiene and Public Health; Head of Department.
- RUSSELL, DALE, M. A.
Associate Professor of Education.
- SCHERAGO, MORRIS, B. S., D. V. M.
Professor of Bacteriology; Head of Department.
- SERVER, MRS. ALBERTA WILSON, M. A.
Assistant Professor of Romance Languages.
- SHERMAN, ROY V., Ph. D.
Assistant Professor of Political Science.
- SOUTH, D. E., A. B.
Instructor in Mathematics.
- TAYLOR, WILLIAM SEPTIMUS, Ph. D.
Dean, College of Education; Director of the Summer Session.
- THURMAN, GORDON OWEN
Instructor in Machine Shop.
- TUTHILL, EDWARD, Ph. D.
Professor of History; Head of Department.
- VANDENBOSCH, AMRY, Ph. D.
Assistant Professor of Political Science.
- WATKINS, ISAAC GREEN
Assistant in Engineering Laboratories.
- WEAVER, RALPH HOLDER, Ph. D.
Assistant Professor of Bacteriology.
- WEBB, WILLIAM SNYDER, M. S.
Professor of Physics; Head of Department.

WHITE, A. S., A. M., J. D.

Instructor in Political Science.

WIEST, EDWARD, Ph. D.

Dean, College of Commerce; Professor of Economics.

WILFORD, EDWARD JAMES, B. S.

Associate Professor of Animal Husbandry.

YATES, LAWRENCE, A. M.

Assistant Professor of English.

ZEMBROD, ALFRED CHARLES, M. A.

Professor of Romance Languages and Literatures; Head of Department.

ZIMMERMAN, ALEC JULIUS

B. S. in Ind. Chem.

Instructor in Chemistry.

ZWICK. W. WALTERS, M. D.

Associate Professor of Hygiene and Public Health.

GENERAL INFORMATION

LENGTH OF SESSION

The summer session of the University of Kentucky for 1928 will be ten weeks in length and will be divided into two terms, the first to begin June 11 and close July 14, and the second to begin July 16 and close August 18.

Classes during the summer session will begin at 7:30 a. m. The first hour will be from 7:30 to 8:20, the second hour from 8:30 to 9:20, the fifth hour closing at 12:20 daily.

The courses listed for each term may be found in this catalog. No courses other than those scheduled will be offered.

CLASSES OF COURSES

Courses will be offered for graduates and for undergraduates in the College of Agriculture, the College of Arts and Sciences, the College of Commerce, the College of Education, the College of Engineering and the College of Law.

FOR WHOM PLANNED

The summer session program of the University of Kentucky has been planned to meet the needs of the following groups:

1. Teachers in the public schools who wish additional training in their special lines of work and who desire to work toward college degrees.
2. Teachers in private and parochial schools who wish additional training in their special lines of work and who desire to work toward college degrees.
3. Supervisors of grade school work in special subjects.
4. City superintendents who desire to acquaint themselves with recent progress in education and who have special problems for solution.
5. County superintendents who desire to study the problems of the organization and administration of rural education and problems relating to the social life of the community.
6. Teachers in junior colleges who desire additional training in the particular fields in which they work and who are working toward higher degrees.
7. Normal school and college teachers who desire additional training in their chosen fields and who are working toward advanced degrees.
8. Undergraduates in agriculture, arts and sciences, commerce, education, engineering and law who find it desirable to shorten the period of their college courses.
9. Persons desiring training for Y. M. C. A., Y. W. C. A. and social welfare service, including playground directors.

ADMISSION

Students will be admitted to the University as their previous training warrants. They will be admitted to the freshman class, to advanced standing, to special courses as special students, or admitted as graduate students.

TO THE FRESHMAN CLASS

An applicant for admission to the freshman class of any of the colleges of the University except the College of Law must offer credit for fifteen units of high school or other secondary school work, so chosen as to include the five basic units prescribed by all the colleges. Only students who hold certificates of graduation from an accredited high school will be admitted without examination. No student will be admitted as a candidate for a degree with less than fifteen units.

TO THE COLLEGE OF LAW

The College of Law is co-educational. Both men and women are admitted either in the regular session or in the summer session. The same requirements for admission to the summer session prevail as for the regular session—the completion of two years of college work, or sixty semester hours.

Students from other law schools of the American Association of Law Schools are admitted on the same terms as students of the University of Kentucky College of Law. Students from non-Association member schools may be admitted as unclassified students.

TO ADVANCED STANDING

Candidates who can present equivalents of any part of the college work may secure advanced standing and thereby reduce the number of hours required for graduation. They may secure this advanced standing by one of two methods:

a—By examination on each subject for which credit is desired.

b—By transfer from a college or university. An official statement must be submitted to the Registrar certifying in detail the work for which credit is desired.

AS SPECIAL STUDENTS

A graduate of another university or college may enter the University to pursue any special work. Other persons may be admitted as special students under the following conditions:

a—They must be prepared to do the work desired, and give good reason for not taking a regular course.

b—They must be at least twenty-one years of age.

AS GRADUATE STUDENTS

The Graduate School is open to students who are graduates of this or any other university or college of recognized standing. Application for admission to this school should be made to the Registrar of the University, and should be accompanied by official certificates attesting the candidate's completion of an undergraduate course.

For further information, see statement of the Graduate School.

BY CERTIFICATE

Persons who desire to enter the University by certificate instead of by examination must have their credits certified by the superintendent or principal of the school in which they may be secured. Blank forms for such certificates will be furnished by the Registrar of the University on application. These certificates should be properly made out, signed and mailed to the Registrar as early as possible and not later than one week before registration. Only graduates of accredited schools or those who have completed the accredited course will be admitted upon certificate. A diploma, such as is given at graduation to high school pupils, can not be substituted for this certificate.

BY EXAMINATION

If not a graduate of an accredited high school the student must present entrance credits for 15 units, including those prescribed, and pass examinations in four subjects as follows:

1. ENGLISH (including composition.)
2. MATHEMATICS (algebra and plane geometry).
3. TWO SUBJECTS of at least one unit each to be selected by the student. The list of entrance subjects may be procured from the Registrar.

If the student is not a graduate of the school from which he comes, he will not be admitted on entrance examinations within one year after leaving such school unless he presents a statement of honorable dismissal.

RESIDENCE REQUIREMENTS FOR GRADUATION

Two semesters of work at the University of Kentucky will satisfy the residence requirements for the bachelor's or the master's degree. Three summer terms are considered equivalent to one semester. For the bachelor's degree thirty semester credits must be completed in the senior year (the work to be done in the college from which the student is to be graduated). For the master's degree, at least twenty-four credits must be completed, in addition to the thesis.

REQUIREMENTS FOR GRADUATION

COLLEGE OF ARTS AND SCIENCES

DEGREES

The college offers courses leading to the following degrees: Bachelor of Arts, Bachelor of Science, Bachelor of Arts in Journalism, Bachelor of Science in Industrial Chemistry.

THE DEGREE OF BACHELOR OF ARTS

For the degree of Bachelor of Arts the student is required to gain a total of 127 credits and 127 points, that is, a standing of 1, subject to the following conditions:

OUTLINE OF REQUIREMENTS FOR GRADUATION

- I. GENERAL REQUIREMENTS
- | | |
|------------------------|-----------------|
| Matriculation Lectures | .3 credit |
| Military Science (men) | 5.6 credits |
| Physical Education | 2.8 credits |
| Hygiene | 2.6 credits |
| English | 6 to 12 credits |
- (12 if only 3 units entrance.)
- II. GROUP REQUIREMENTS Lower Division Freshman and Sophomore years.
1. Foreign Languages, 6 to 18 credits. (6 in 1 language if 3 or more units entrance; 12 if only 2 units entrance; 18 if only 1 or no unit entrance).
French, German, Greek, Italian, Latin or Spanish.
 2. History and Social Sciences, 6 to 12 credits (6 in one department if 1 unit entrance in History; 12 including 6 credits in History, if no entrance in History).
Economics, History, Political Science or Sociology.
 3. Mathematics, Philosophy or Psychology, 6 credits in one department.
 4. Physical Science, 6 to 10 credits in one department.
Astronomy, Chemistry, Geology or Physics.
 5. Biological Science, 6 to 8 credits in one department.
Bacteriology, Botany, Physiology or Zoology.
- III. MAJOR 20 credits, Upper Division, Junior and Senior years. Any department, exclusive of elementary courses.
- IV. MINORS 20 credits, Upper Division, Junior and Senior years. May be in two departments or related groups, exclusive of elementary courses. Consult Head of Major Department.

- V. ELECTIVES IN OTHER COLLEGES OF THE UNIVERSITY. Not more than 30 credits.
- VI. In the Arts-Education course the student must take 20 credits in one minor.
- VII. RESIDENCE RULE. The Senior year must be spent in residence in this college.
- VIII. TOTAL CREDITS REQUIRED, 127 credits.

COLLEGE OF AGRICULTURE

To receive the degree of Bachelor of Science in Agriculture, a student must complete 139.3 credits of work with a standing of 1.

These credits are classified as follows:

Prescribed subjects, non-agriculture	48.0 credits
Prescribed subjects, agriculture	32.3 credits
Electives required in agriculture	30.0 credits
Free electives	29.0 credits
Total	139.3 credits

Students who have not had physics in high school will be required to take a six-credit course in college which will reduce the number of free elective credits to 23. The free electives may be in agriculture. It will thus be seen that there is opportunity to take work in agriculture amounting to 91.3 credits.

To receive the degree of Bachelor of Science in Home Economics, a student must complete 133.1 credits of work with a standing of 1.

The amount of work a student will be permitted to carry is indicated in outline of courses. However, if a student has maintained a standing of 2 during a semester, he may, upon permission of the dean, carry additional hours the following semester.

No student will be allowed to carry fewer than 12 credit hours of work exclusive of Military Science and Physical Education.

The maximum and minimum hours for special students are the same as for regular students.

Prior to the senior year all candidates for the degree in agriculture must satisfy the dean that they have had at least one year's work on the farm or work for two summer vacations of three months each.

A student desiring to do work in any department of instruction should select his courses of study upon the advice of the head of the department.

COLLEGE OF ENGINEERING

COURSES OF STUDY AND DEGREES

The College of Engineering offers instruction leading to the following baccalaureate degrees:

- Bachelor of Science in Civil Engineering.
- Bachelor of Science in Mechanical Engineering.
- Bachelor of Science in Mining Engineering.
- Bachelor of Science in Metallurgical Engineering.

The courses of study leading to these degrees are identical during the freshman and sophomore years. Familiarity with such fundamental subjects as chemistry, drawing, English, mathematics, physics and practical mechanics is essential to the successful study and practice of any branch of the engineering profession. Furthermore, after two years of college work a student is better able to make a definite choice of the branch of engineering which he is best fitted to follow. During the junior and senior years the courses are planned to give the special training that is best suited to each branch of the profession.

For a detailed description of the curriculum, write for a catalog of the regular session.

COLLEGE OF LAW

The summer session in the College of Law for 1928 occupies ten weeks. Certain courses may be completed at the end of the first five weeks, and in their place others will be taken up for the second five weeks period. Certain other courses will occupy the entire session.

Examinations will be held as soon as the courses are completed.

The summer session is a regular part of the work of the school, and the same quantity and quality of work is required in the summer session as in the regular session. An effort has been made to provide a full program, not only for the first year students, but also for second and third year students. Approximately one-third of the year's work can be accomplished in the summer session. Students who attend three summer sessions will shorten the time required for obtaining the law degree by nine months, and by attending two regular academic sessions will be entitled to the degree of Bachelor of Laws.

COLLEGE OF EDUCATION

The College of Education grants two degrees: A Bachelor of Arts in Education and a Bachelor of Science in Education.

Students who major in education and select their group work in English, mathematics, the social sciences, the natural sciences or the languages will be entitled to consideration for the degree of Bachelor of Arts in Education.

Students who major in education and select their group work in art education, agriculture, engineering or home economics will be entitled to consideration for the degree of Bachelor of Science in Education.

For a degree in education the student is required to present a total of 127 credits with a standing of 1.

THE DEGREE OF BACHELOR OF ARTS IN EDUCATION

The following is the work required in all curricula leading to the degree of Bachelor of Arts in Education:

ARTS AND SCIENCES

English	6 credits
Science	6 credits
Social Sciences	6 credits
Psychology	3 credits
Physical Education	1.4 credits
General Hygiene	2.6 credits
Military Science (Men)	5.6 credits

Total Academic Subjects 30.6 credits

PROFESSIONAL SUBJECTS

Educational Psychology	3 credits
Survey of Education	2 credits
Educational Psychology	3 credits
Tests and Measurements	4 credits
School Organization	3 credits
Directed Teaching	5 credits
Educational Sociology or Philosophy of Education	4 credits

24 credits

GROUP ELECTIVES

Group Electives in First Minor	24 to 30 credits
Group Electives in Second Minor	24 to 30 credits
Free Electives	15 to 24 credits

COLLEGE OF COMMERCE

The degree of Bachelor of Science in Commerce is conferred upon students who present 127 credits with a standing of at least "1" and who complete all the required courses. Required subjects vary somewhat according to the curriculum selected. The minimum requirements are listed in the General-Business Curriculum of the General Catalog. Unless two units in the ancient or foreign languages are offered for entrance, one year of language in college is required. It is strongly recommended that all commerce students elect at least one year of language.

THE GRADUATE SCHOOL

THE GROWTH OF THE GRADUATE PROGRAM

The demand for graduate work at the University of Kentucky has grown rapidly in recent years. High school teachers, supervisors, principals and superintendents of schools, and teachers in normal schools and junior and senior colleges are seeking the education and training represented by higher degrees. To meet this demand, the several colleges of the University are providing larger programs of work 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 an official transcript of their undergraduate record. It is desirable that this record be sent some weeks in advance of the opening of the summer session. In some cases it is necessary to prescribe undergraduate courses as a further preparation for candidacy for the degree sought. This is required of students coming from institutions not on our accredited list and also of students whose undergraduate work has not sufficiently prepared them to proceed with graduate study in their major field.

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

GENERAL REQUIREMENTS FOR THE MASTER'S DEGREE

Candidates for the Master of Arts and Master of Science degrees are required to secure twenty-four credits in courses and 36 weeks in residence, and in addition write an acceptable thesis. Only courses numbered above 100 are given graduate credit. At least twelve credits must be done in the major subject. The thesis must be written in this field.

The graduate student is required to take the regular examination in courses and at the completion of the thesis is given an oral examination in his major and minor studies by an examining committee made up of the Dean of the Graduate School and his major and minor professors. At this time he is also expected to defend his thesis.

TEACHERS' CERTIFICATES

The act governing the certification of teachers by the University of Kentucky passed by the General Assembly of 1926 provides for the issuance of certificates through the College of Education, University of Kentucky, as follows:

A COLLEGE ELEMENTARY CERTIFICATE, valid for two years of teaching in any elementary school of the State, shall be issued upon completion of at least thirty-two semester hours of work, including six semester hours in education. This certificate shall be renewed for two years upon completion of at least sixteen or more additional semester hours of college work, at least eight of which must be earned in residence.

A STANDARD CERTIFICATE, valid for three years of teaching in any public school of the Commonwealth, shall be issued upon completion of at least sixty-four semester hours of college work, including twelve semester hours in education. This certificate shall be renewed upon evidence of thirty-two additional semester hours of college work, including six semester hours of education. It may be extended for life when the applicant has met the requirements for a baccalaureate degree in the College of Education and presents in addition thereto three years of successful teaching experience after graduation from the University of Kentucky.

A COLLEGE CERTIFICATE, valid for three years of teaching in any public school of the Commonwealth, shall be issued to persons completing a curriculum in the College of Education and receiving a degree therefrom. This certificate shall be renewed for life after three years of successful experience in educational work in the public schools. Credit for one year of graduate work may be accepted in lieu of one year of successful experience as above provided.

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.

STUDENT LOAD

The normal load for the average student is six semester hours for each term. Students presenting a standing of 2 (average of "B") or better will be allowed to carry seven semester hours either term, which will be the maximum load for summer session students. No student will be allowed to earn more than thirteen hours during the two terms.

No student will be allowed to carry more than the normal load without filing a petition for extra work with the dean of his college and having it approved by the Scholarship and Attendance Committee. Persons entering five days late will be required to carry one credit less than the amount specified above.

REDUCED RAILROAD RATES

The Southeastern Passenger Association has granted railroad rates of one and one-half fare for round trip tickets for the summer session of 1928. This rate applies to the entire southeastern territory with the exception of stations in Virginia and Washington, D. C. Tickets will be on sale June 7 to June 13, inclusive, and July 12 to July 18, inclusive. The final limit on all tickets will be August 24. These tickets must be validated by the regular passenger agent at Lexington before the return journey is commenced.

Please write to the Director of the Summer Session for proper identification blanks before you come to the summer session.

FEEES

The tuition fee for each college, with the exception of the College of Law, is \$18.00 a term. In the College of Law, there is just one term of ten weeks and the fee is \$50.00 for the term.

Any student registering for a course in the College of Law shall pay the tuition fee for this College, namely, \$50.00. This applies not only to students majoring in law but to students in all other colleges.

REFUNDS

During the first eight days after the opening of either term of the summer session, students may 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 eight days.

LATE REGISTRATION

Students entering the University after the regular registration period will be charged an additional fee of \$2.00 for the first day and \$1.00 a day thereafter, the total not to exceed \$5.00.

No student will be permitted to matriculate later than one week after the opening of the term without special permission of the heads of departments concerned and the Dean of the College. No student will be allowed to register for credit for the first term's work after June 16 nor for the second term's work after July 21.

CHANGES IN REGISTRATION

After three days following the regular registration period, a fee of \$2.00 will be charged for transfer from one college or school to another.

LATE CLASSIFICATION FEE

Students who fail to arrange classification within the scheduled time will be charged a fee of \$2.00. No change in registration will be permitted after the dates indicated in the calendar.

FEE FOR CHANGE IN CLASSIFICATION

After three days following the regular registration period a fee of \$2.00 will be charged for any change in schedule.

MARKING SYSTEM

Results of work will be recorded in the Registrar's office as follows:

- A. Exceptionally high quality, valued at 3 points for each credit.
- B. Good, valued at 2 points for each credit.
- C. Fair, valued at 1 point for each credit.
- D. Unsatisfactory, indicates a deficiency and gives no points, but gives credit for graduation if with such credits the student's standing is 1 or more.
- E. Failure, valued at 0 points and no credits.
- I. Incomplete.
- X. Absent from examination.

The *standing* of a student is defined as the ratio of his total number of points to his total number of credits. For example, a student who makes an average mark of C thruout his course of 120 semester hours, would have 120 points and 120 credits, and a standing of *one*. An average mark of B would give the student 240 points and 120 credits and a standing of *two*. When a semester's work is to be considered "standing" is understood to be the ratio of the number of points gained to the number of credits scheduled.

ROOM AND BOARD

The University residence halls will be open during the summer session. The rates will be as follows:

In the women's residence halls, \$1.50 to \$3.00 a week will be charged according to the room occupied. A deposit of \$5.00 should be sent to the Registrar. When such deposit is received, the room will be reserved and held until Monday evening, June 11. Rooms will not be held beyond that time unless special arrangements are made. All women students will be required to stay in the women's halls unless special permission is obtained from the Dean of Women.

In the men's hall, all rooms available may be had for only \$2.50 per week for each person in a room, bed linen included. A deposit of \$5.00 should be sent to the Dean of Men. When such deposit is received, the room will be reserved and held until Monday evening, June 11. Rooms will not be held beyond that time unless special arrangements are made.

Residence halls for women are furnished, with the exception of linen and blankets. Students having rooms in the women's halls 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 during the summer session.

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 rented from \$10.00 a month per student in double rooms to \$12.00 a month for single rooms and up. Board usually costs 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.

UNIVERSITY HEALTH SERVICE. The services of a physician and nurse will be available to the students registered in the summer session during both terms. Consultations may be had at the offices of the Department of Hygiene.

PLACEMENT SERVICE

There is a constantly growing demand for the services of the graduates of the University of Kentucky. The institution receives more requests for teachers than it has applicants for positions. The Placement Service is operated through the College of Education, and every attempt is made to procure for the students and for the graduates of the University the type of employment which will enable each one to achieve the best results.

The University desires to be of greatest service to the public schools of Kentucky by training an efficient group of teachers and by placing each one of these in the type of position where he can do his best work. Each student in attendance at the University who desires a position should register with the Placement Service on the second floor of the Education Building. Superintendents and principals of schools desiring teachers should write to the Placement Service, College of Education, for the credentials of persons available.

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 were residents of Kentucky at the time of their enlistment. 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 application must be accompanied by the certificate of discharge.

RECREATION FOR SUMMER SESSION STUDENTS

The teachers of Kentucky should be acquainted with Lexington and with the historical blue grass country surrounding it. The public school children should know more about Henry Clay and his work, should know the story of the battle at Bryan's Station and how the women saved the day by marching out in a band to carry water back into the fort when they were besieged by Indians.

The teachers of Kentucky should see the picturesque capitol at Frankfort only thirty miles from Lexington; should see the high bridge across the Kentucky River, for many years the highest and today the second highest bridge in the world. They should see and know more about the beautiful stock farms of the blue grass, the home of the thoroughbred horses.

Lexington is connected with all the other cities of the blue grass region by interurban and motor bus lines, thus making it possible to get out into the country quickly, easily and at a small cost. The University is planning a series of trips for its summer school students in order to offer them the opportunity to become acquainted with the blue grass section and to learn to know its wealth of beauty and attractions.

COLLEGE OF ARTS AND SCIENCES

PAUL P. BOYD, M. A., PH. D., DEAN

ANCIENT LANGUAGES AND LITERATURE

S 150a. TEACHERS' COURSE IN LATIN; BASED ON FIRST YEAR WORK. A hasty review of Bennett's Beginners' Book, and the reading of Selections from the last three books of Caesar. Discussion of the principles of teaching Latin, stressing the connection between Latin and English, the merits of the different texts, etc. First term. Two credits. Professor Jones.

S 150b. TEACHERS' COURSE IN LATIN; BASED ON THE SECOND YEAR WORK. This course will follow closely the recommendations of the Classical League Investigating Committee. A considerable amount of easy Latin will be read, taken from several authors. Discussion of Latin exhibits and other means of arousing interest in the work. Second term. Two credits. Professor Jones.

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

S 4a. SELECTIONS FROM OVID AND VIRGIL. This has proven to be one of our most interesting Latin courses. Ovid gives us mythology at first hand and Virgil portrays the traditions and aspirations of the Romans. Both terms. Two credits. Professor Jones.

S 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. Both terms. Two credits. Professor Jones. (If the students prefer, Horace may be elected instead of Livy.)

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

S 109. LATIN LITERATURE (SELECTIONS). The authors studied will be selected by the class. Primarily for graduates. Open also to qualified undergraduates. First term. Two credits. Professor Jones.

S 110. LATIN LITERATURE (SELECTIONS). This is a reading course and the authors selected will be such as are new to the members of the class. For graduates and for properly qualified undergraduates. Second term. Two credits. Professor Jones.

One other course will be offered the second term. It may be Latin Composition, or a reading course in either Latin or Greek, as the students elect. Two credits.

ANTHROPOLOGY AND ARCHAEOLOGY

101. PRINCIPLES OF ANTHROPOLOGY. Lectures. First term. Two credits. Professor Funkhouser.

102. KENTUCKY ARCHAEOLOGY. Lectures. Second term. Two credits. Professor Webb.

ART

S 71a. DRAWING AND PAINTING. The principal problem will consist of landscape 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. First term. Three credits. Mr. Fiske.

S 73a. DRAWING AND PAINTING. Landscape painting for more advanced students. Three credits. First term. Mr. Fiske.

BACTERIOLOGY

8. BACTERIA IN RELATION TO MAN. An elementary course in bacteriology dealing in a general way with the relation of microorganisms to man and his environment. The development of the science of bacteriology; the role of microorganisms in the constructive and destructive processes in nature; the forms, structure and functions of microorganisms; the relation of microorganisms to industry; relation of microorganisms to disease. This course does not fulfill the requirements for advanced work in bacteriology. Second term. Two credits. Assistant Professor Weaver.

102. GENERAL BACTERIOLOGY. Morphology, classification physiology, observation and cultivation of bacteria and related microorganisms; their relation to certain fermentations and to the preservation of food; their influence on the plant food in the soil. Microorganisms in milk, water, air, and soil. Relation of microorganisms to disease; sources and modes of infection; use of germicidal agents; theories of immunity. Prerequisite, Chemistry 1b. First term. Four credits. Professor Scherago.

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

infectious diseases; agglutination, precipitation and complement fixation reactions. Anaphylaxis. Prerequisite, course 102 or 2b. Second term. Four credits. Assistant Professor Weaver.

107. BACTERIOLOGY OF WATER AND SEWAGE. The microflora of water; importance of the colon-typhoid group of bacteria in water; methods of water analysis and interpretation of results; special media used in isolating and identifying the colon-typhoid group of bacteria; methods of water purification; microflora of sewage; methods of sewage analysis; methods of sewage disposal; bacteriological study of swimming pools; methods of analysis; effect of treatment on bacterial content; regulations concerning swimming pools. Water purification plants, sewage disposal plants and swimming pools will be visited and studied. Prerequisite, Bacteriology 102 or 2b. First term. Four credits. Professor Scherago.

110b. LABORATORY DIAGNOSIS. Laboratory methods employed in the public health diagnostic laboratories. Students must obtain permission in writing from the instructor, to register in this course. First term. Three credits. Professor Scherago.

201a. RESEARCH IN BACTERIOLOGY. Second term. Five credits by appointment. Assistant Professor Weaver.

BOTANY

1a. GENERAL BOTANY. This is the first semester's work of the general course in botany and involves a critical study of the lower forms of plant life, such as the algae, fungi and the moss plants. Attention is given to the physiology, structure, method of reproduction and economic importance. First term. Four credits. Professor McFarland.

1b. GENERAL BOTANY. This is a continuation of Botany 1a and involves a detailed study of the ferns, fern allies and the seed plants. Considerable attention is given to methods of reproduction and course of development. Some account of heredity is given. Second term. Four credits. Professor McFarland.

20. DENDROLOGY (TREE STUDY). This course is designed to give the student a thorough knowledge of the native and exotic trees of the State. Lectures will be given in the field when the weather permits. Practice in using various keys and the making of keys will be given during the course. Besides the regular lectures, two all-day field trips will be required. One of these trips will be to Natural Bridge and the other will be taken somewhere along the Kentucky River. No prerequisites. Both terms. Two credits. Professor McFarland.

CHEMISTRY

1a. GENERAL INORGANIC CHEMISTRY. Lectures, classroom and laboratory work. First term. Five credits. Assistant Professor Mitchell.

1b. GENERAL INORGANIC CHEMISTRY. Continuation of Chemistry 1a. Chemistry of the metals. Lectures, classroom and laboratory work. Prerequisite, Chemistry 1a. Second term. Five credits. Assistant Professor Mitchell.

4. QUALITATIVE ANALYSIS. Laboratory work accompanied by recitation periods. Prerequisite, Chemistry 1b. First term. Four credits. Mr. Zimmerman.

7. ORGANIC CHEMISTRY. An elementary course for non-professional students. Prerequisite, Chemistry 1b. Both terms. Four credits. Assistant Professor Barkenbus.

8. QUANTITATIVE ANALYSIS. Prerequisite, Chemistry 4. Recitation and laboratory work. Both terms. Five credits. Assistant Professor Bedford.

106. ADVANCED ORGANIC CHEMISTRY. Prerequisite, Chemistry 113b. Laboratory work. Both terms. Five credits. Assistant Professor Barkenbus.

109. QUANTITATIVE ANALYSIS. Prerequisite, Chemistry 8. Recitation and laboratory work. Both terms. Five credits. Assistant Professor Bedford.

115a. PHYSICAL CHEMISTRY. Recitation and laboratory work. First term. Three credits. Assistant Professor Bedford.

115b. PHYSICAL CHEMISTRY. Prerequisite, Chemistry 115a. Lectures, recitations and laboratory work. Second term. Three credits. Assistant Professor Bedford.

ENGLISH LANGUAGE AND LITERATURE

S 1a. ENGLISH COMPOSITION. Practice in writing correct and clear English. Accuracy of expression is desired rather than proficiency in style. A textbook will be used, but the instruction will be based upon the study of representative English masterpieces. Required of all freshmen. Two credits. Both terms. Professor Yates.

S 1b. ENGLISH COMPOSITION. This course is a continuation of English 1a. Required of all freshmen. This course with English 1a is prerequisite to all other courses in English. Two credits. Both terms. Professor Yates.

S 3a. HISTORY OF ENGLISH LITERATURE. This course is designed to give the student a general survey of English literature from the old English period to the present. Readings from selected masterpieces. Prerequisite, English 1a or 1b. Two credits. First term. Professor Yates.

S 3b. HISTORY OF ENGLISH LITERATURE. This course is a continuation of course 3a. Both courses are prerequisite to all other courses in literature. Two credits. Second term. Professor Yates.

26. LIBRARY METHODS FOR TEACHERS. Two credits. First term. Miss King.

105. BROWNING. An intensive study of the art and teaching of Browning. Two credits. First term. Professor Dantzler.

S 107. VICTORIAN POETRY. An intensive study of the chief Victorian poets. Two credits. Second term. Associate Professor Brady.

S 110. SHAKESPEARE. Shakespeare's plays are studied in an effort to appreciate drama and art. Two credits. First term.

S 111. THE ENGLISH NOVEL. A study of the development of the novel. Two credits. First term.

S 114a. AMERICAN LITERATURE. The literature of America is studied in its relation to national life and thought. The leading authors will be studied in class while the minor writers will constitute parallel reading. Two credits. First term.

S 114b. AMERICAN LITERATURE. Two credits. Second term. Mr. Kelley.

S 116. CONTEMPORARY DRAMA. Problems in the development of contemporary drama. Two credits. First term. Professor Farquhar.

120. PRONUNCIATION OF MODERN ENGLISH. A study of present-day pronunciation with a view to determine a standard of correct pronunciation. Two credits. First term. Professor Dantzler.

S 130. COMPARATIVE LITERATURE. Contributions of Greek and Roman thought to modern civilization. Classics read in translation. Two credits. Second term. Associate Professor Brady.

S 136. VICTORIAN PROSE. An intensive study of the thought of the Victorian age as found in representative prose writers. Two credits. Second term. Associate Professor Brady.

S 137. EDGAR ALLEN POE. An intensive study of the work of Poe. Two credits. First term. Professor Farquhar.

S 140. ENGLISH LITERATURE FROM 1660 TO 1774. A survey of those literary types which have their origin or are developed in the Augustan age. Two credits. Second term. Mr. Kelley.

S 142. THE RENAISSANCE. Two credits. Second term. Mr. Kelley.

S 201a. LITERARY CRITICISM. A course for graduate students only in literary criticism. Two credits. First term. Professor Farquhar.

S 205. CHAUCER. For graduates only. Two credits. First term. Professor Dantzler.

GEOLOGY

S 2a. ELEMENTARY GEOLOGY. A study of those forces and processes which determine the surface features of the earth, and which in the past have contributed to the present topography. Emphasis is placed on the application of an understanding of these processes to the interpretation of earth history. First term. Two credits. Professor McFarlan.

16b. MINERAL RESOURCES. An elementary study of the non-metallic mineral resources of the United States with respect to their origin, geologic occurrence, distribution and uses. The course includes a short introduction to the geological principles involved in the formation of mineral deposits. No prerequisite. First term. Two credits. Professor McFarlan.

S 18. ELEMENTS OF GEOGRAPHY. An introductory study of the influence of physical environment on man. It is the purpose of the course to develop a conception of the various types of environment, such as climate, land forms, soils, surface and ground waters, mineral resources, and native vegetation, and their influence on the life and activities of man. First term. Two credits. Professor McFarlan.

GERMAN LANGUAGE AND LITERATURE

S 1a. ELEMENTARY GERMAN. Six hours a week. First term. Two credits. Professor Melcher.

S 1b. ELEMENTARY GERMAN. Six hours a week. First term. Two credits. Professor Melcher.

S 2a. INTERMEDIATE GERMAN. Six hours a week. First term. Two credits. Professor Melcher.

S 2b. INTERMEDIATE GERMAN. Six hours a week. First term. Two credits. Professor Melcher.

S 3a. COMPOSITION AND READING. Six hours a week. First term. Two credits. Professor Melcher.

S 3b. COMPOSITION AND READING. Six hours a week. First term. Two credits. Professor Melcher.

S 4a. ADVANCED READING AND COMPOSITION. Six hours a week. First term. Two credits. Professor Melcher.

S 6. SCIENTIFIC AND JOURNALISTIC GERMAN. Six hours a week. First term. Two credits. Professor Melcher.

HISTORY

A. AMERICAN HISTORY

S 5a. HISTORY OF THE UNITED STATES. Beginning with the colonies about 1750, omitting the minor military campaigns, but emphasizing the progress of the nation in fundamentals. Topics will be assigned. Not open to freshmen. First term. Two credits. Professor Knapp.

S 5b. HISTORY OF THE UNITED STATES. A continuation of History 5a, beginning about 1865. Second term. Two credits. Professor Knapp.

S 166a. DIVISION AND REUNION, 1850-1877. An intensive study of sectionalism in the United States from 1850 to 1860. The political, military, economic, industrial, and educational aspects of the period of the Civil War and Reconstruction. Emphasis on the problems of the Border States. Prerequisite, History 5a, or its equivalent. First term. Two credits. Professor Knapp.

S 111. DIVISION AND REUNION, 1850-1877. A continuation of course 166. Second term. Two credits. Professor Knapp.

S 107a. HISTORY OF LATIN AMERICA. A rapid survey of the colonial period of Latin America, the struggle for independence, and a study of the development of the problems of political, economic, and social relations. Lectures, text, and reading. First term. Two credits. Professor Knapp.

S 107b. HISTORY OF LATIN AMERICA. A continuation of course 107a. Second term. Two credits. Professor Knapp.

B. EUROPEAN HISTORY

S 119a. THE FRENCH REVOLUTION. A study of the revolutionary period in Europe from 1787 to 1815, including Napoleon I. First term. Two credits. Professor Tuthill.

S 120. THE TWENTIETH CENTURY. A study of the recent history of Europe and regions subject to European domination. First term. Two credits. Professor Tuthill.

HYGIENE AND PUBLIC HEALTH.

1a. HYGIENE. This course includes the historical development of the scientific facts upon which the present-day preventive medicine is builded; the various theories of disease, the fundamental principles of biology and bacteriology; the methods whereby diseases are disseminated; methods of entrance into the body; theories of immunity, etc. First term 1.3 credits. Associate Professor Zwick.

1b. HYGIENE. Continuation of 1a. A statistical method of approach to the problems in the field of hygiene, emphasizing the importance of the morbidity and mortality occurring from various causes through the lack of application of preventive medicine. Second term. 1.3 credits. Assistant Professor Rhodes.

105a. ADVANCED HYGIENE. 1a and 1b prerequisites. This course deals with the specific problems in the field of hygiene and the methods of prevention in each field. First term. Two credits. Associate Professor Zwick.

105b. ADVANCED HYGIENE. 105a prerequisite. Continuation of 105a. Second term. Two credits. Assistant Professor Rhodes.

JOURNALISM

S 1a. FIRST YEAR JOURNALISM. Typewriting, reporting. First term. Two credits. Miss McLaughlin.

S 1b. FIRST YEAR JOURNALISM. Reporting. First term. Two credits. Miss McLaughlin.

S 3a. JOURNALISM. Etymology, study of words, spelling. First term. Two credits. Professor Grehan.

S 3b. JOURNALISM. Verbal criticism. First term. Two credits. Professor Grehan.

S 2b. JOURNALISM. Advanced reporting. Second term. Two credits. Mr. Griffin.

S 5b. JOURNALISM. Copy reading, proof reading, headlining, make-up of newspaper. Second term. Two credits. Mr. Portmann.

S 105. JOURNALISM. Law of the Press. Study of the Law of Libel, Copyrighting, etc., as regards the press. Second term. Two credits. Mr. Portmann.

MATHEMATICS

S 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. Open only to college students. Quadratics and beyond. Second term. Two credits. Professor Davis.

S 2. SOLID GEOMETRY. This is given primarily for engineering students who enter conditioned in solid geometry. It is a prerequisite for analytics. Second term. Two credits. Mr. South.

S 4. PLANE TRIGONOMETRY. A thorough 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. First term. Four credits. Mr. Brown.

S 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. Second term. Four credits. Mr. South.

S 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. First term. Four credits.

S 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. First term. Four credits. Professor Latimer.

S 7b. INTEGRAL CALCULUS. A continuation of 7a. Both terms. Two credits. Second term. Professor Davis.

S 14. MATHEMATICS OF FINANCE. First term. Four credits. Mr. Brown.

*S 103. THEORY OF EQUATIONS. First or second term. Two credits. Professor Davis or Professor Latimer.

*S 105. DIFFERENTIAL EQUATIONS. Second term. Two credits. Professor Davis.

*S 106a. ADVANCED CALCULUS. Second term. Two credits. Professor Davis.

*S 109. THEORY OF FUNCTIONS OF A COMPLEX VARIABLE. First term. Two credits. Professor Latimer.

*S 111. HIGHER ALGEBRA. First term. Two credits. Professor Latimer.

NOTE.—Only one of the courses marked * will be given the first term.

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.

13a. SIGHT READING. An elementary course in music designed for those who have had no previous musical instruction. Helpful to those who wish to express themselves either vocally or instrumentally. Includes teaching of notes, time, etc. First term. Two credits. Professor Lampert.

8a. CHORUS. Selections for mixed voices will be studied for public presentation. First term. One-half 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 though unable to play an instrument, to become acquainted with the art and really enjoy good music when they hear it. First term. 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. First term. Two credits. Professor Lampert.

4a. PUBLIC SCHOOL MUSIC. This course is not only for those who wish to fit themselves for the supervision of music in the public school, but is also designed for teachers in the grades. First term. Two credits. Professor Lampert.

PHYSICS

1a. GENERAL ELEMENTARY PHYSICS. For students who have had no previous training in physics. The course covers elementary theory of mechanics and heat. Lectures and recitations two hours daily. Laboratory six hours per week. First term. Five credits. Professor Webb.

1b. GENERAL ELEMENTARY PHYSICS. Prerequisite, Physics 1a. A continuation of Physics 1a, covering electricity, sound and light. Lecture and recitation two hours daily. Laboratory six hours per week. Second term. Five credits. Professor Webb.

3a. GENERAL COLLEGE PHYSICS. Prerequisite, one year of high school Physics and Mathematics 2 and 3. Course covers mechanics, heat and wave motion with particular emphasis on the solution of problems. Lecture and recitation two hours daily. First term. Four credits. Associate Professor Koppius.

3b. GENERAL COLLEGE PHYSICS. Prerequisite, Physics 3a. A continuation of Physics 3a, covering electricity, sound and light. Lecture and demonstrations two hours daily. Second term. Four credits. Associate Professor Koppius.

S 5. MEASUREMENTS IN MECHANICS AND HEAT. Prerequisite, credit in or simultaneous study of Physics 3a. Lecture two hours per week. Laboratory eight hours per week. First term. Two credits. Associate Professor Koppius.

S 6. ELECTRICAL MEASUREMENTS. Prerequisite, Physics 3a and 5, and credit in or simultaneous study of Physics 3b. Lectures two hours per week. Laboratory eight hours per week. Second term. Two credits. Associate Professor Koppius.

S 51a. INTRODUCTION TO PHYSICS. A non-mathematical, non-laboratory introduction to Physics, consisting of five demonstration lectures and one recitation per week, covering the subject of mechanics, heat and sound. Lectures are arranged to stimulate interest in the science of Physics by making its introduction popular, as well as scientific. Content and method of presentation should be helpful and of interest to all teachers of General Science, Physics and Chemistry in High Schools. First term. Two credits. Professor Webb.

S 51b. INTRODUCTION TO PHYSICS. A continuation of S 51a. Second term. Two credits. Professor Webb.

S 223a. GENERAL PHYSICS. Prerequisites, 1 year of Elementary Physics and Mathematics 2 and 3. Course covers Mechanics, Heat and

Wave Motion. This course limited to graduate students in the College of Education. Lectures and recitations 14 hours per week. Laboratory eight hours per week. First term. Six credits. Associate Professor Koppius.

S 223b. GENERAL PHYSICS. Prerequisites, Physics S 223a, a continuation of Physics 223a. Covers Electricity, Sound and Light. Limited to graduate students in College of Education. Lectures and recitations 14 hours per week. Laboratory eight hours per week. Second term. Six credits. Associate Professor Koppius.

POLITICAL SCIENCE

S 15a. PROBLEMS OF CITIZENSHIP. This course is designed especially for the introductory course in the field of Political Science, but will be found very helpful to students who do not have an opportunity to take courses in government. The problems dealt with are the newspaper, the negro problem, feminism and the woman movement, capital and labor, socialism, international relations. First term. Two credits. Assistant Professor Sherman.

S 15b. PROBLEMS OF CITIZENSHIP. A continuation of course S 15a. Second term. Two credits. Assistant Professor Sherman.

S 51a. AMERICAN GOVERNMENT. A study of the foundation of the American federal government and a closeup view of the machinery of the federal government at work. First term. Two credits. Assistant Professor Sherman.

S 51b. AMERICAN GOVERNMENT. A continuation of course S 51a, with a part of the time devoted to the work of the state and local governments. Second term. Two credits. Assistant Professor Sherman.

S 101a. LATIN AMERICAN RELATIONS. This course will be a brief survey of the political and economic relations of the United States and Latin America. Second term. Two credits. Mr. White.

S 150a. INTERNATIONAL LAW. An elementary course in international law, with casebook and text. First term. Two credits. Assistant Professor Vandenbosch.

S 150b. INTERNATIONAL LAW. A continuation of course S 150a. Second term. Two credits. Mr. White.

S 152. MUNICIPAL GOVERNMENT. This course gives a brief sketch of the rise of city government. A study of the older forms of mayor and council as well as the commission and manager forms. Considerable attention will be given to city administration. First term. Two credits. Assistant Professor Sherman.

S 153. CITY ADMINISTRATION. This course deals with the practical problems that face city administration. City planning, methods of administering municipal utilities, the administration of the police

and fire departments, municipal finance, and all other phases of the activity of city officials. Second term. Two credits. Assistant Professor Sherman.

S 160. FOREIGN SERVICE. This course deals with the organization and work of the state department and the diplomatic and consular service and its various ramifications. First term. Two credits. Professor Vandenbosch.

S 161. INTERNATIONAL RELATIONS. Deals with the agencies which are cooperative in drawing the nations of the world into closer association. The work of the International Postals Union, International Bureau and associations of agriculture, economics and banking, international boundary commissions, river commissions and transportation commissions, together with such agencies as the League of Nations, the World Court and the Hague Tribunal. Second term. Two credits. Mr. White.

S 171. POLITICAL THEORY. This course deals with the general theories of the state and modern government with emphasis on the underlying basis of democracy. First term. Two credits. Assistant Professor Vandenbosch.

PSYCHOLOGY

S 1. INTRODUCTORY PSYCHOLOGY. For those who have never had psychology in college. The course covers in an elementary and brief manner the main facts and laws of normal human behavior. Recitations and demonstrations. Second term. Two credits. Associate Professor Boynton.

S 2a and b. GENERAL PSYCHOLOGY. A beginning course in psychology in which the fundamental laws and principles of human behavior are analyzed and studied. A more complete and thorough analysis than is possible in the briefer course, S 1. Recitations and demonstrations. First term. Four credits. Assistant Professor Graham.

S 7. PSYCHOLOGY OF THE CHILD. A study of the child in infancy, childhood and adolescence. Consideration of the problems of behavior arising during these periods and the ways of meeting them. The significance of individual differences in relation to native tendencies and training. An introductory course in psychology is prerequisite. First term. Two credits. Associate Professor Boynton.

S 104. SOCIAL PSYCHOLOGY. A study of the individual in his social group. Psychological analysis of social conditions which influence individual activity. Types of group behavior. An introductory course in psychology is prerequisite. First term. Two credits. Associate Professor Boynton.

108a. HUMAN MEASUREMENTS. Theory of intelligence with a study of individual and group tests of general mental ability. The history and significance of the testing movement. Especially useful for teach-

ers in understanding the literature on intelligence tests of school children. An introductory course in psychology is prerequisite. Second term. Two credits. Associate Professor Boynton.

108b. HUMAN MEASUREMENTS. A study of all types of psychological tests, other than intelligence tests. A review of the history and use of special aptitude or achievement tests in business, education and individual guidance. Of value to school administrators in determining upon the training and curriculum for special pupils. An introductory course in psychology is prerequisite. First term. Two credits. Assistant Professor Graham.

S 114. ABNORMAL PSYCHOLOGY. A study of abnormal human behavior with an analysis of causes, treatment and social significance. Consideration will be given to special conditions such as feeble-mindedness, psychopathy, the insanities, dissociated or multiple personality, hypnotism and mental hygiene. Clinics at the state institute for the feeble-minded and the Eastern State Hospital. An introductory course in psychology is prerequisite. Second term. Two credits. Associate Professor Boynton.

S 116. COMPARATIVE PSYCHOLOGY. A study of certain fundamental principles and laws of general activity derived from an analysis of animal behavior. A history of the development of animal psychology with a review of its most important literature. Special attention will be given to the problem of how animals learn, together with its significance in the interpretation of human learning. An introductory course in psychology is prerequisite. First term. Two credits. Associate Professor Boynton.

120a. INDEPENDENT WORK. A course designed especially for graduate students and for advanced undergraduates with a special interest in psychology. Individual problems will be assigned in accordance with the interests of the students, and the work will be carried on independently by them with regular consultations. No one admitted except by consent of instructor. First term. Two credits. Associate Professor Boynton.

120b. INDEPENDENT WORK. A continuation of 120a. Second term. Two credits. Associate Professor Boynton.

ROMANCE LANGUAGES

S 1a. ELEMENTARY FRENCH. Open to freshmen. First term. Two credits. Assistant Professor Server.

S 1b. ELEMENTARY FRENCH. Continuation of French 1a. Prerequisite, one year of high school French or French 1a. Second term. Two credits. Mr. Holmes.

S 2a. INTERMEDIATE FRENCH. Prerequisite, two years of high school French or two semesters of college French. First term. Two credits. Professor Zembrod.

S 2b. INTERMEDIATE FRENCH. Continuation of French 2a. Second term. Two credits. Mr. Holmes.

S 6a. FRENCH NOVEL AND DRAMA. First term. Two credits. Professor Zembrod.

S 110a. FRENCH LITERATURE OF THE SEVENTEENTH CENTURY. First term. Two credits. Professor Zembrod.

S 5a. ELEMENTARY SPANISH. A course in Spanish for beginners. First term. Two credits. Assistant Professor Server.

S 5b. ELEMENTARY SPANISH. A continuation of Spanish 5a. Prerequisite, one year of high school Spanish or Spanish 5a. Second term. Two credits. Mr. Holmes.

S 7a. INTERMEDIATE SPANISH. Prerequisite, two years of high school Spanish or two semesters of college Spanish. First term. Two credits. Assistant Professor Server.

S 7b. INTERMEDIATE SPANISH. A continuation of Spanish 7a. Second term. Two credits. Mr. Holmes.

S 112a. SPANISH LITERATURE OF THE NINETEENTH CENTURY. First term. Two credits. Assistant Professor Server.

ZOOLOGY

1a. GENERAL ZOOLOGY. Recitations and laboratory. First term. Four credits. Asst. Professor Brauer.

1b. GENERAL ZOOLOGY. Recitations and laboratory. Second term. Four credits. Asst. Professor Brauer.

11. NATURE STUDY. Lectures, recitations and laboratory. Three credits. First term. Professor Allen.

101a. HISTOLOGY. Recitations and laboratory. Second term. Three credits. Asst. Professor Brauer.

102. ORNITHOLOGY. Lectures, recitations and laboratory. Two credits. Second term. Professor Funkhouser.

106. EMBRYOLOGY. Lectures and laboratory. Four credits. First term. Asst. Professor Brauer.

107a. COMPARATIVE ANATOMY. Lecture and laboratory. Four credits. First term. Professor Allen.

108a. PRINCIPLES OF ZOOLOGY. (Evolution) Lectures. Two credits. First term. Professor Funkhouser.

108b. PRINCIPLES OF ZOOLOGY. (Heredity) Lectures. Two credits. Second term. Professor Funkhouser.

110a. INDEPENDENT WORK. Three credits. First term. Professor Funkhouser, Professor Allen.

110b. INDEPENDENT WORK. Three credits. Second term. Professor Funkhouser, Assistant Professor Brauer.

COLLEGE OF AGRICULTURE

THOMAS P. COOPER, B. S. in Agr., Dean and Director

AGRONOMY

S 102. SOIL MANAGEMENT. A course presenting recent advances in soil knowledge with particular reference to practical applications. Two credits. First term. Associate Professor Karraker.

106. FIELD CROP IMPROVEMENT. The application of the principles of genetics to plant improvement, technique of plant breeding and the results of plant breeding are studied. Prerequisites, a course in Farm Crops and one in Genetics. Two credits. First term. Assistant Professor Fergus.

ANIMAL INDUSTRY

104. ANIMAL BREEDING AND ADVANCED GENETICS. A course in the principles of breeding as applied to livestock. 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, Breeds of Livestock and Genetics. Four credits. First term. Professor Anderson.

106. PORK PRODUCTION. Three credits. First term. Associate Professor Wilford.

107. SHEEP PRODUCTION. Three credits. First term. Professor Horlacher.

119. GENETICS. The fundamental principles of heredity and variation, fertilization, variation, mutation, selection, pure lines, and hybrids. Three credits. First term. Professor Anderson.

120. SYSTEMS OF LIVESTOCK PRODUCTION. The aim of this course is to give a broad general view of the livestock industry. A study is made of livestock production in the more important countries. Three credits. First term. Professor Horlacher.

FARM ECONOMICS

107a. SPECIAL PROBLEMS IN FARM MANAGEMENT. Problems assigned will bear on some phase of the general problem of efficient farm organization and management. Among the problems which may be considered are: (1) Input as related to output in farm organization and cost of production; (2) Choice and combination of enterprises as related to efficiency; (3) Land values as related to profits and other factors. Original data obtained by the Department of Farm Economics in various field studies will be available for use in the problems assigned. Three credits. First term. Assistant Professor Finn.

HORTICULTURE

1. GENERAL HORTICULTURE. A comprehensive study of the field of horticulture, designed to facilitate further acquirement for those who later consider the subject in detail, and at the same time provide a useful treatment of the subject for those whose chief interest will lie in other fields. The course includes a study of fundamental principles involved in the functioning of fruit trees and an outline of the methods and problems of the fruit grower. Since it is given wholly within the growing season, laboratory and field observations will be especially emphasized. Required of Sophomores. Four credits. First term. Professor Olney.

MARKETING AND RURAL FINANCE

S 108. MARKETING. A study of the principles and methods of marketing farm products. Consideration is given to the services involved in marketing such as assembling, grading, transportation, warehousing, distribution, selling and financing; the methods of marketing at country points and in central markets; the classes and functions of middlemen; marketing specific commodities; market price and price-making factors; market information; market risks; future trading; marketing costs; grades and standards; co-operative marketing and weaknesses in marketing methods and remedies proposed. Prerequisite, Economics 1a. Two credits. First term. Assistant Professor Johnson.

S 112. FARM FINANCE. A study of the principles involved in the financing of the production and marketing of farm products. Credit needs of agriculture, including short time, intermediate and farm mortgage credit requirements of the farmer are studied. The organization and operation of the farm loan system, and other agencies which aid in satisfying the credit needs of agriculture are considered. Methods of financing marketing operations, including the movement and storage of products and the financing problems of cooperative marketing associations are considered. Prerequisite, Farm Economics 4. Two credits. First term. Assistant Professor Johnson.

HOME ECONOMICS

*4. DIETETICS. A study of nutrition from the physiological standpoint with emphasis on digestive, absorptive and metabolic processes. Practice is given in normal dietaries. The course will be equivalent to the course offered the fall semester under the same number. Prerequisites, Chemistry 7, Home Economics 6b and Home Economics 3. Four credits. First term. Miss Dey.

*S 9. FOODS. A course dealing with the selection and preparation of food, planning and serving meals, discussion and demonstration of

desirable dishes for school lunches. Three credits. First term. Miss Dey.

S 10. CLOTHING. A study of underlying principles of clothing construction, selection of materials and relation of health to clothing. Three credits. First term.

29. COSTUME DESIGN. The application of art principles to clothing. A study is made of historic costume as a basis for modern dress; analysis is made of individuals as to size, age and personal coloring with selection of lines, colors and textures to meet their needs. The course will be equivalent to the course offered the fall semester under the same number. Prerequisites, Art 2b, Home Economics 26, and Home Economics 30. Three credits. First term.

110. CHILD CARE AND TRAINING. Survey of the field of child care and training from prenatal life through the pre-school period. It includes consideration of problems of prenatal life and infancy; standards for normal growth; breast and artificial feeding; habit formation; general care and hygiene. Two credits. First term. Miss Dey.

116. ADVANCED COSTUME DESIGN. Three credits. First term. Miss Hansen.

*Either home Economics 4 will be given or Home Economics S9, depending upon the demand.

COLLEGE OF ENGINEERING

F. PAUL ANDERSON, M. E., Dean

CIVIL ENGINEERING

21. HYDRAULICS. This course consists of textbook 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 through pipes and open channels; also the loss from friction and other sources. Prerequisites, Physics 3a, Mathematics 7a. Both terms. Two credits. Professor Johnson.

DRAWING

1a. MECHANICAL DRAWING. (a) Freehand lettering; (b) exercises in the use of instruments; (c) projection from pictorial views and description; (d) exercises in tinting and shading; (e) tracing; (f) blue printing. First term. Two credits. Associate Professor Horine.

1b. MECHANICAL DRAWING. Continuation of Drawing 1a. First term. Two credits. Associate Professor Horine.

S 3. DESCRIPTIVE GEOMETRY. 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. Prerequisite, Mathematics 2. First term. Four credits. Associate Professor Horine.

4a. ADVANCED DRAWING. (a) Working drawings of parts of machines and complete machines, both detail and assembly; (b) technical sketching; (c) plotting of surveys. Prerequisite, Drawing 1b. First term. Two credits. Associate Professor Horine.

4b. ADVANCED DRAWING. Continuation of Drawing 4a. First term. Two credits. Associate Professor Horine.

ELECTRICAL ENGINEERING

S 1. ELEMENTS OF ELECTRICAL ENGINEERING. A study of the fundamental laws of electrical engineering and of direct current generators, motors, and other apparatus. First term. Two credits. Professor Freeman, or Professor Bureau.

2. DIRECT CURRENT DYNAMOS. A detailed study of the principles and of the construction of direct current generators and motors. Prerequisite, Electrical Engineering 1. Both terms. Two credits. Professor Freeman, or Professor Bureau.

S 3. ALTERNATING CURRENTS. This work involves a study of the fundamental laws of alternating currents and of alternating current

measuring instruments, generators, motors, transformers and converters. Prerequisite, Electrical Engineering 1. Both terms. Two credits. Professor Freeman, or Professor Bureau.

S 7. DYNAMO DESIGN. Includes all calculations necessary in the design of a direct current generator or motor together with a complete set of drawings. Electrical Engineering 2 must be taken at the same time. Both terms. Two credits. Professor Freeman, or Professor Bureau.

9a. ELECTRICAL LABORATORY. A series of experiments with direct current apparatus. This course should be taken at the same time as Electrical Engineering S 1. First term. One credit. Professor Bureau, or Assistant Professor Barnett.

9b. ELECTRICAL LABORATORY. 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 at the same time. Both terms. One credit. Professor Bureau, or Assistant Professor Barnett.

ENGINEERING MECHANICS

S 1. MECHANICS OF MATERIALS. A study of the laws governing the action of different materials of construction under the action of forces. Beams, columns, shafts and plates are analyzed with references to their resistance and deformation when subjected to strains. Prerequisites, Mathematics 7a and Physics 3a. First term. Four credits. Professor Johnson.

S 4. KINEMATIC DESIGN. Designs of mechanisms and machine parts particular attention being paid to training students in the drawing room practice existing in an up-to-date machine building establishment. Prerequisites, Drawing 4b and Engineering Mechanics 3. First term. Three credits. Associate Professor Horine.

S 6. ANALYTICAL MECHANICS. This subject is given with a view of encouraging original analysis, logical proofs and rational conclusions with respect to the treatment of equilibrium and motion of bodies under the action of forces. Prerequisites, Mathematics 7a and Physics 3a. Both terms. Four credits. Professor Johnson.

S 7. MACHINE DESIGN. Beginning with the design of simple machine parts this course extends into the design of more complicated elements, requiring some knowledge of the strength and rigidity of materials. The course is a continuation of Engineering Mechanics 4. The course terminates in the design of a complete machine. First term. Two credits. Associate Professor Horine.

MECHANICAL ENGINEERING

S 8. STEAM LABORATORY. This course includes a study of the apparatus used in connection with the steam engine. The experiments are intended to familiarize the student with the simple methods of measuring heat units and determining mechanical power. Prerequisites, Physics 5, Chemistry 1b and Mathematics 7a. Both terms. One credit. First term. Professor Freeman and Mr. Watkins. Second term. Mr. Watkins.

PRACTICAL MECHANICS

S 7a. WOOD SHOP AND FOUNDRY. This course covers bench work, wood turning and pattern making. First term. Two credits. Assistant Professor Dicker.

S 7b. WOOD SHOP AND FOUNDRY. A continuation of course 7a. First term. Two credits. Assistant Professor Dicker.

8a. FORGE, MACHINE AND AUTOMOBILE SHOPS. Prerequisite, Practical Mechanics 7b. First term. Two credits. Mr. Thurman.

8b. FORGE, MACHINE AND AUTOMOBILE SHOPS. This is a continuation of course 8a. First term. Two credits. Mr. Thurman.

COLLEGE OF LAW

ALVIN E. EVANS, Ph. D., J. D., Dean

FIRST YEAR SUBJECTS

AGENCY. Six hours per week for ten weeks, from the eleventh day of June to the 18th day of August. Wambaugh's Cases. 8:30 to 9:20 daily. Open to second year students. Four credits. Professor Chalkley.

DOMESTIC RELATIONS. Six hours per week for five weeks, from the sixteenth day of July to the eighteenth day of August. Woodruff's Cases. 10:30 to 11:20 daily. Open to second year students. Two credits. Professor Chalkley.

PERSONAL PROPERTY. Six hours per week for five weeks, from the eleventh day of June to the fourteenth day of July. Warren's Cases. 9:30 to 10:20 daily. Two credits. Professor Roberts.

SECOND AND THIRD YEAR SUBJECTS

NEGOTIABLE INSTRUMENTS. Six hours per week for ten weeks from the eleventh day of June to the eighteenth day of August. Smith and Moore's Cases, second edition. 7:30 to 8:20 daily. Four credits. Professor Roberts.

THE LAW OF OIL AND GAS. Six hours per week for five weeks, from the sixteenth day of July to the eighteenth day of August. Culp's Cases 9:30 to 10:20 daily. Two credits. Professor Roberts.

PUBLIC UTILITIES. Six hours per week for five weeks, from the eleventh day of June to the fourteenth day of July. Burdick's Cases. 10:30 to 11:20 daily. Two credits. Professor Chalkley.

COLLEGE OF EDUCATION

WILLIAM S. TAYLOR, Ph. D., Dean

ADMINISTRATION

S 101. SCHOOL ORGANIZATION. Both terms. Two credits. First term. Associate Professor Russell. Second term, Professor Leggett.

S 125. THE SUPERVISION OF ELEMENTARY INSTRUCTION. This course has been designed especially for teachers who are preparing for work in supervision or who desire a better understanding of the relationship between teacher and supervisor, and for supervisors and principals who are interested in a more thorough understanding of the fundamental principles that underlie the supervision of instruction in the elementary schools. Second term. Two credits. Professor Adams.

S 131. FINANCING PUBLIC EDUCATION. A critical study of the costs of education and of methods for providing funds to meet these costs. Second term. Two credits. Professor Leggett.

S 143. COUNTY SCHOOL ADMINISTRATION. This course deals with the problems of the school administrator and is especially designed from the viewpoint of the county superintendent. It has two aspects. (1) Principles of efficient county administration. (2) A discussion of the problems of the county superintendent's work. A partial list of the problems considered are: The most efficient local unit for administration, supervision, the school plant, public school finance, records and reports, attendance, publicity, office routine, etc. First term. Two credits. Professor Patrick.

S 146. SCHOOL BUILDINGS AND EQUIPMENT. A study of modern standards for school buildings and their equipment; actual scoring of buildings will be done. First term. Two credits. Associate Professor Russell.

S 201a. EDUCATIONAL ADMINISTRATION. First term. Two credits. Professor Leggett.

S 201b. EDUCATIONAL ADMINISTRATION. Second term. Two credits. Professor Payne.

S 231. FINANCING PUBLIC EDUCATION. First term. Two credits. Associate Professor Russell.

S 232. HIGH SCHOOL ADMINISTRATION. First term. Two credits. Professor Ligon.

AGRICULTURAL EDUCATION

S 180. METHODS OF TEACHING VOCATIONAL AGRICULTURE. The purpose of this course is to acquaint the men with the job of the vocational agriculture teacher. First term. Two credits. Professor Hammonds.

S 187. ADVANCED PROBLEMS IN AGRICULTURAL EDUCATION. This course is designed for men who have had experience in teaching vocational agriculture in the high school. Part-time and short-course work, project planning, field trips, content of courses, and similar problems will be taken up as suits the needs of the group. First term. Two credits. Professor Hammonds.

EDUCATIONAL PSYCHOLOGY

S 16. EDUCATIONAL PSYCHOLOGY. A discussion of the learning process from the experimental and scientific points of view. Both terms. Two credits. First term, Professor Patrick. Second term, Professor Ross.

S 119. PSYCHOLOGY OF ELEMENTARY EDUCATION. First term. Two credits. Professor Ross.

122a. EDUCATIONAL TESTS AND MEASUREMENTS. A course in the theory and practice of measuring educational products and processes. First term. Two credits. Professor Ross.

122b. EDUCATIONAL TESTS AND MEASUREMENTS. A continuation of 122a. Second term. Two credits. Professor Ross.

223. STATISTICAL METHODS IN EDUCATION. Both terms. Two credits. Professor Ross.

ELEMENTARY EDUCATION

36. READING IN THE ELEMENTARY GRADES. A practical course in methods of teaching oral and silent reading in the primary grades. Discussion of aims, type lessons, means of testing and appropriate reading material for each grade. Both terms. Two credits. Mrs. Duncan.

37. LANGUAGE, SPELLING AND WRITING IN THE PRIMARY GRADES. Discussion of principles and methods involved in teaching language, spelling and writing in the primary grades. First term. Two credits. Mrs. Duncan.

39. NUMBER WORK, HISTORY AND GEOGRAPHY IN THE PRIMARY GRADES. A course dealing with the fundamental principles and practices in teaching number work and social science in the primary grades. Second term. Two credits. Mrs. Duncan.

43. CHILDREN'S LITERATURE IN THE ELEMENTARY SCHOOL. A course in story telling and study of stories, poems and books suitable for various ages and stages of development from grades I to VI. Both terms. Two credits. Mrs. Duncan.

130a. THE TEACHING OF HEALTH IN PUBLIC SCHOOLS. A course dealing with the objectives of health education and methods of reaching these objectives through instruction. This course is intended primarily for teachers in the grades and high schools who are teaching this subject. First term. Two credits. Dr. Rush.

130b. THE TEACHING OF HEALTH IN THE PUBLIC SCHOOLS. A continuation of Education 130a. Second term. Two credits. Dr. Rush.

S 145. RURAL SCHOOL SUPERVISION. The work in this course is taken up from the viewpoint of the supervisor in the rural field. Stress will be laid upon (1) the principles of organization for supervision in order to bring about a greater economy of the supervisor's time, (2) an intensive discussion of the problems of the supervisor with suggestions on how to solve them, and (3) agencies through which the work of the supervisor may best function. First term. Two credits. Professor Patrick.

HISTORY OF EDUCATION

S 117b. HISTORY OF EDUCATION. This course is a survey of the history of education from Greece to the beginning of education in America. First term. Two credits. Professor Noe.

120. GREAT EDUCATORS AND THEIR WORK. A study of the lives and writings of the world's educators to enable the student to appreciate more fully the ideals, attitudes and contributions to society of the men and women in education who have served best. First term. Two credits. Professor Noe.

S 220. COMPARATIVE EDUCATION. A course giving comparisons of systems of education. First term. Two credits. Professor Noe.

HOME ECONOMICS EDUCATION

S 167. METHODS OF TEACHING RELATED ART. First term. Three credits. Miss Hansen.

INDUSTRIAL EDUCATION

S 74. VOCATIONAL GUIDANCE. A course designed to give teachers, principals, superintendents and welfare workers a comprehensive view of the factors in vocational guidance, the agencies contributing to or influencing life choices and an analysis of the human and economic resources of a given civic unit. First term. Two credits. Professor May.

S 72. SPECIAL METHODS IN TRADE AND INDUSTRIAL EDUCATION.— This is a course which is intended to meet the needs of teachers who have had experience and can profit by a round table discussion of the

improvement of methods of teaching of trade and industrial subjects. This course should be required of every teacher receiving subsidy for any phase of industrial education. Two credits. First term. Professor May.

S 75. REORGANIZATION OF INDUSTRIAL ARTS. This is a much needed course for persons interested in the problem of adjustment of industrial arts education and has to do with the factors of reorganization, curricula construction, case-type learners, objectives of industrial arts and objectives of vocational education. Two credits. First term. Professor May.

PHILOSOPHY OF EDUCATION AND EDUCATIONAL SOCIOLOGY

S 4. PRINCIPLES OF EDUCATION. A study of the principles of educational theory and practice. Required of students majoring in education. Second term. Two credits. Mr. Payne.

19b. MODERN EDUCATIONAL PROBLEMS. This course for the first term of the 1928 summer session will be devoted to a symposium on Kentucky's leaders in the past and the effect of their work on problems today. Thirty eminent men in the fields of education, exploration, history, literature, military life, science and government will be studied. First term. One credit. Mrs. Lafferty, Deans Funkhouser and Anderson, Professors Gillis, Roberts, Buckner, Noe, Taylor and others.

114a. EDUCATIONAL SOCIOLOGY. A study of the development of the social mind with special reference to education. First term. Two credits. Professor Adams.

114b. EDUCATIONAL SOCIOLOGY. A continuation of Education 114a. Second term. Two credits. Professor Adams.

S 127a. PROBLEMS IN CURRICULUM BUILDING. A critical study of the content of the curriculum and of the principles which should guide us in curriculum building. First term. Two credits. Mr. Barnes.

S 127b. PROBLEMS IN CURRICULUM BUILDING. A critical study of the content of the curriculum and of the principles which should guide us in curriculum building. Second term. Two credits. Mr. Payne.

140a. PHILOSOPHY OF EDUCATION. An integrating course in modern educational philosophy conducted on the discussion plan. Particularly valuable for principals and superintendents. First term. Two credits. Professor Adams.

140b. PHILOSOPHY OF EDUCATION. A continuation of 140a. Second term. Two credits. Professor Adams.

200. PHILOSOPHY OF EDUCATION. First term. Two credits. Professor Adams.

S 222a. THESIS COURSE. First term. Two credits. Dean Taylor.

S 222b. THESIS COURSE. Second term. Two credits. Dean Taylor.

SECONDARY EDUCATION

S 105. THE TECHNIQUE OF TEACHING. This course deals with methods of teaching in the high school. Motivation and the project method will be given special attention. Both terms. Two credits. First term, Professor Hammonds. Second term, Mr. Holloway.

S 126. THE JUNIOR HIGH SCHOOL. This is a course designed to give to school administrators in general the plans underlying junior high school organization, the development of junior high schools in the United States and their place in the public school program of the state. Both terms. Two credits. First term, Professor Ligon. Second term, Mr. Holloway.

S 150. THE SENIOR HIGH SCHOOL. This course is designed to give to school administrators and to instructors who plan to be high school principals a knowledge of the organization of the senior high school, the problems that arise in its administration, with particular emphasis upon such problems as the purpose of the home room, extra curricula activities in the senior high school, records and reports to be kept, and objectives of high school instruction. Both terms. Two credits. First term, Professor Ligon. Second term, Mr. Holloway.

COLLEGE OF COMMERCE

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

1a. PRINCIPLES OF ECONOMICS. An examination of the fundamental principles of economics and the application of these principles to practical problems. Not open to freshmen. First term. Three credits. Dean Wiest.

8. ECONOMIC GEOGRAPHY. A brief study of the earth's physical characteristics and their relation to man's activities, including the effects of climate, natural resources, and means of transportation upon the development of social, political and economic phases of life. Second term. Three credits. Professor Jennings.

102. LABOR PROBLEMS. A study of the labor market in its industrial phases, including such directly related topics as immigration, unemployment and labor organizations. Prerequisite or concurrent course, Commerce 1. First term. Three credits. Professor Jennings.

104. PUBLIC FINANCE. A study of public receipts; public expenditures; the principles of taxation with special reference to their application to tax systems, federal and state. Attention will be given to the current problems in taxation. Prerequisite, course 1. First term. Three credits. Professor Leland.

105. MONEY AND BANKING. Nature and functions of money; the importance of credit; relation of money and credit to prices; bank deposits and loans; complete study of our national banking system and comparison with those of foreign countries. Prerequisite, course 1. First term. Three credits. Dean Wiest.

110. BUSINESS CYCLES. In this course a study is made of the nature and characteristics of the economic factors which underlie the cyclical fluctuations in business conditions. Attention is also directed toward the methods of business and investment forecasting and their practical application. Prerequisites, courses 1 and 107. Second term. Three credits. Professor Eberling.

115. CONTEMPORARY ECONOMIC THOUGHT. A survey of current literature of theoretical economics. Special emphasis is placed on theories of value and distribution. Prerequisite, course 1. First term. Three credits. Professor Leland.

116. BUSINESS ORGANIZATION. A study of business organization primarily from a social point of view. The course traces the origin and development of forms of business organization; treats the advantages and disadvantages of the various forms; includes a study of the trust or combination movement and its effects upon society. Prerequisite or concurrent, course 1. Second term. Three credits. Professor Eberling.

125. ADVANCED ECONOMIC HISTORY OF EUROPE. This course is intended to serve as an economic background for students interested in European affairs. It discusses population, immigration, labor, agriculture, industry, and finance and the effects of the various lines of development upon national life. First term. Three credits. Professor Jennings.

134. ADVANCED ECONOMIC HISTORY OF THE UNITED STATES. This course is intended primarily as an economic background for social science students. It studies English colonial policy, population growth, immigration, territorial expansion, agriculture, manufactures, tariff, labor, industrial combinations, commerce, transportation facilities, money and banking, and conservation. Second term. Three credits. Professor Jennings.

SCHEDULE OF LECTURES AND RECITATIONS

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, D, standing for daily. The buildings are indicated as follows: A, Administration; Arm, Armory; AC, Art Center; Agr, Agriculture; BH, Boyd Hall; CP, Campus Playhouse; C & P, Civil and Physics; E, Education; ES, Experiment Station; FEL, Farm Engineering Laboratory; KH, Kastle Hall; LB, Law Building; NG, New Gymnasium; WG, Women's Gymnasium; M, Mining; ML, Mining Laboratory; MH, Mechanical Hall; NH, Neville Hall; NS, New Shop; OC, Old Chemistry; PH, Patterson Hall; S, Science; SF, Stoll Field; SP, Stock Judging Pavilion; SL, Serum Laboratory; WH, White Hall.

RECITATION HOURS

First Hour	7:30— 8:20
Second Hour:	8:30— 9:20
Third Hour:	9:30—10:20
Fourth Hour:	10:30—11:20
Fifth Hour:	11:30—12:20

Noon Hour

Sixth Hour:	1:30— 2:20
Seventh Hour:	2:30— 3:20
Eighth Hour:	3:30— 4:20

FIRST TERM
COLLEGE OF ARTS AND SCIENCES

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
ANCIENT LANGUAGES							
S150a	Teachers' Course in Latin.....	2	1	D	A	303	Jones
S3	Cicero and Sallust	2	5	D	A	303	Jones
S4a	Selections from Ovid and Vergil	2	4	D	A	303	Jones
S5	Livy	2	3	D	A	303	Jones
S51	Elementary Greek	2	By Appt.	D	A	303	Jones
S109	Latin Literature (Selections)....	2	2	D	A	303	Jones
ANTHROPOLOGY AND ARCHAEOLOGY							
101	Principles of Anthropology.....	2	5	D	C&P	200	Funkhouser
ART							
S71a	Drawing and Painting	3	1, 2, 3	D	AC		Fiske
S73a	Drawing and painting	3	3, 4, 5	D	AC		Fiske
BACTERIOLOGY							
{ 102 ₁	General Bacteriology, Lec.....	4	2	D	KH	111	Scherago
{ 102 ₂	General Bacteriology, Lab.....		3, 4	D	KH	Sb12	Scherago
{ 107 ₁	Bact. of Water & Sewage, Lec.	4	1	D	KH	Sb11	Scherago
{ 107 ₂	Bact. of Water & Sewage, Lab.		4, 5	D	KH	Sb111	Scherago
110b	Laboratory Diagnosis	3	By Appt.		KH	Sb12	Scherago
BOTANY							
1a ₁	General Botany, Lec.-Rec.....	4	2	D	WH	101	McFarland
1a ₂	General Botany, Lab.		3, 4	D	WH	102	McFarland
20	Dendrology	2	1	D	WH	101	McFarland
CHEMISTRY							
1a	General Inorganic Chemistry....	5	1, 2, 3, 4	D	KH		Mitchell and others
4	Qualitative Analysis	4	1, 2, 3, 4	D	KH		Zimmerman
7	Organic Chemistry	4	1, 2, 3	D	KH		Barkenbus
8	Quantitative Analysis	5	1, 2, 3, 4, 5	D	KH		Bedford
106	Advanced Organic Chemistry ...	5	By Appt.	D	KH		Barkenbus
109	Quantitative Analysis	5	1, 2, 3, 4, 5	D	KH		Bedford
115a	Physical Chemistry	3	1, 2	D	KH		Bedford
ENGLISH LANGUAGE AND LITERATURE							
S1a	English Composition	2	1	D	A	4	Yates
S1b	English Composition	2	2	D	A	4	Yates
S3a	History of English Literature....	2	3	D	A	4	Yates
26	Library Methods for Teachers..	2	1	D	NH	205	King
105	Browning	2	2	D	A	205	Dantzler
S110	Shakespeare	2	2	D	A	301	
S111	English Novel	2	3	D	A	301	

COLLEGE OF ARTS AND SCIENCES—Continued

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
	ENG. LANG & LITER.—Cont.						
S114a	American Literature	2	4	D	A	301	
S116	Contemporary Drama	2	2	D	A	302	Farquhar
120	Pronunciation of Mod. English..	2	1	D	A	205	Dantzler
S137	Edgar Allen Poe	2	1	D	A	302	Farquhar
S201a	Literary Criticism	2	4	D	A	302	Farquhar
S205	Chaucer	2	3	D	A	205	Dantzler
	GEOLOGY						
S2a	Elementary Geology	2	2	D	S	203	McFarlan
S18	Elements of Geography	2	3	D	S	203	McFarlan
16b	Mineral Resources	2	5	D	S	203	McFarlan
	GERMAN LANGUAGE AND LITERATURE						
S1a	Elementary German	2	1	D	A	304	Melcher
S1b	Elementary German	2	2	D	A	304	Melcher
S2a	Intermediate German	2	3	D	A	304	Melcher
S2b	Intermediate German	2	3	D	A	304	Melcher
S3a	Composition and Reading.....	2	4	D	A	304	Melcher
S3b	Composition and Reading.....	2	4	D	A	304	Melcher
S4a	Adv. Reading and Composition	2	By Appt.		A	304	Melcher
S6	Scientific and Journalistic Ger.	2	By Appt.		A	304	Melcher
	Special arrangements will be made for students who cannot accommodate themselves to this schedule.						
	HISTORY						
S5a	History of the United States....	2	1	D	A	203	Knapp
S166a	Division and Reunion	2	2	D	A	203	Knapp
S119a	French Revolution	2	3	D	A	203	Tuthill
S107a	History of Latin America.....	2	4	D	A	203	Knapp
S120	Twentieth Century	2	5	D	A	203	Tuthill
	HYGIENE						
1a	Hygiene	1.3	1	D	A	6	Zwick
105a	Advanced Hygiene	2	2	D	A	6	Zwick
	JOURNALISM						
S1a	Reporting	2	2	D	S	5	McLaughlin
S1b	Reporting (Cont.)	2	3	D	S	5	McLaughlin
S3a	Etymology	2	1	D	S	1	Grehan
S3b	Verbal Criticism	2	2	D	S	1	Grehan
	MATHEMATICS						
S4	Plane Trigonometry	4	1, 2	D	C&P	305	Brown
S6	Analytic Geometry	4	1, 2	D	C&P	308	

COLLEGE OF ARTS AND SCIENCES—Continued

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
MATHEMATICS—Cont.							
S7a	Differential Calculus	4	3, 4	D	C&P	308	Latimer
S7b	Integral Calculus	2	3	D	C&P	303	
S14	Mathematics of Finance	4	3, 4	D	C&P	310	Brown
*S103	Theory of Equations	2	5	D	C&P	308	Latimer
*S109	Theory of Function	2	5	D	C&P	308	Latimer
*S111	Higher Algebra	2	5	D	C&P	308	Latimer
	Note:—Only one of the courses marked with star will be given. Choice will be left to class.						
MUSIC							
13a	Sight Reading	2	1	D	Mus. Bld.		Lampert
2a	Music Appreciation	1	2	MWF	Mus. Bld.		Lampert
3a	Harmony	2	3	D	Mus. Bld.		Lampert
4a	Public School Music	2	4	D	Mus. Bld.		Lampert
8a	Chorus5	6	MWF	Mus. Bld.		Lampert
PHYSICS							
{ 1a	Gen. Elementary Physics, Lec...	5	1	D	C&P	200	Webb
{ 1a	Gen. Elementary Physics, Rec...		2	D	C&P	200	Webb
{ 1a	Gen. Elementary Physics, Lab...		3, 4	MWF	C&P	203	Webb and Asst.
3a	General Col. Phy., Lec. and Rec.	4	3, 4	D	C&P	200	Koppius
{ S5	Measurements in Mech. and						
	Heat, Lec.	2	1	TTh	C&P	103	Koppius
{ S5	Measurements in Mech. and		1, 2	MWF	C&P	105	Koppius & Asst.
	Heat, Lab.		2	TTh			
S51a	Introduction to Physics, Lec....	2	1	D	C&P	200	Webb
S223a	General Physics	6	By Appt.		C&P		Koppius
POLITICAL SCIENCE							
S15a	Problems of Citizenship	2	1	D	A	202	Sherman
S51a	American Government	2	2	D	A	202	Sherman
S150a	International Law	2	2	D	A	204	Vandenbosch
S152	City Government	2	4	D	A	204	Sherman
S160	Foreign Service	2	3	D	A	204	Vandenbosch
S171	Political Theory	2	1	D	A	204	Vandenbosch
PSYCHOLOGY							
S2a & b	General Psychology	4	1, 2	D	NH	306	Graham
S7	Psychology of the Child.....	2	2	D	NH	304	Boynton
S104	Social Psychology	2	1	D	NH	304	Boynton
108b	Human Measurements	2	4	D	NH	306	Graham
S116	Comparative Psychology	2	3	D	NH	306	Boynton
120a	Independent Work	2	By Appt.		NH	302	Boynton

COLLEGE OF ARTS AND SCIENCES—Continued

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
ROMANCE LANGUAGES AND LITERATURE							
S1a	Elementary French	2	3	D	S	307	Server
S2a	Intermediate French	2	3	D	SS	307	Zembrod
S5a	Elementary Spanish	2	1	D	S	307	Server
S6a	French Novel and Drama.....	2	2	D	SS	309	Zembrod
S7a	Intermediate Spanish	2	2	D	S	307	Server
S110a	French Lit. of 17th Century.....	2	1	D	S	309	Zembrod
S112a	Spanish Lit. of 19th Century.....	2	2	D	S	307	Server
ZOOLOGY							
{ 1a ₁	General Zoology, Rec.....	4	2	D	S	108	Brauer
{ 1a ₂	General Zoology, Lab.		7:00 to 8:20	D	S	103	Brauer
{ 11 ₁	Nature Study, Rec.	3	3	D	S	108	Allen
{ 11 ₂	Nature Study, Lab.		4	D	S	105	Allen
106	Embryology	4	3, 4, 5	D	S	103	Brauer
{ 107a ¹	Comparative Anatomy, Lab.	4	7:00 to		S	105	Allen
{ 107a ²	Comparative Anatomy, Lec.....		8:20	D	S	105	Allen
108a	Prin. of Zoology (Evolution)....	2	4	D	S	108	Funkhouser
110a	Independent Work	3	By Appt.		S	108	Funkhouser, Allen

COLLEGE OF AGRICULTURE

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
AGRONOMY							
S102	Soil Management	2	5	D	Agr.	303	Karraker
106	Field Crop Improvement	2	1	D	Agr.	304	Fergus
ANIMAL INDUSTRY							
104	Animal Breeding and Advanced Genetics	4	2, 3	D	Agr.	301	Anderson
106	Pork Production	3	{ 3	D	Agr.	303	Wilford
{ 107 ¹	Sheep Production	3	{ 6, 7	MWF			
{ 107 ²	Sheep Production, Lab.	3	{ 1	D			
119	Genetics	3	{ 6, 7, 8	TTh	JP		Horlacher
120	Systems of Livestock Production	3	{ 4	D	Agr.	301	Anderson
		3	{ 5	TThS			
		3	{ 4	D			
			{ 5	MWF	Agr.	205	Horlacher
FARM ECONOMICS							
107a	Special Problems in Farm Management	3	{ 1	D	Agr.	301	Finn
			{ 1 hr.	By Apt.			
HORTICULTURE							
1	General Horticulture	4	{ 1	D	Agr.	303	Olney
			{ 6, 7, 8	MWF			
MARKETING AND RURAL FINANCE							
S108	Marketing	2	2	D	Agr.	304	Johnson
S112	Farm Finance	2	3	D	Agr.	304	Johnson
HOME ECONOMICS							
{ *4 ₁	Dietetics	4	1	D	Agr.	205	Dey
{ *4 ₂	Dietetics, Lab.		6, 7	D	Agr.	1	Dey
{ *S9 ₁	Foods	3	2	MWF	Agr.	205	Dey
{ *S9 ₂	Foods, Lab.		3, 4	D	Agr.	103	Dey
{ S10 ₁	Clothing	3	{ 1	Th	Agr.	202	
			{ 2	TTh			
{ S10 ₂	Clothing, Lab.		3, 4	D	Agr.	202	
29	Costume Design	3	By Appt.				
110	Child Care and Training	2	By Appt.				Dey
116	Advanced Costume Design	3	{ 3	MWF	Agr.	202	Hansen
			{ 6, 7	D			

*Either Home Economics 4 will be given or Home Economics S9, depending upon the demand.

COLLEGE OF ENGINEERING

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
CIVIL ENGINEERING							
21	Hydraulics	2	5	D	MH	201	Johnson
DRAWING							
1a	Mechanical Drawing	2	18 hrs.	By Apt.	C&P	207	Horine
1b	Mechanical Drawing	2	18 hrs.	By Apt.	C&P	207	Horine
4a	Advanced Drawing	2	18 hrs.	By Apt.	C&P	207	Horine
4b	Advanced Drawing	2	18 hrs.	By Apt.	C&P	207	Horine
S3	Descriptive Geometry	4	3 & 4	D	C&P	107	Horine
ELECTRICAL ENGINEERING							
S1	Elements of Electrical Eng.....	2	4	D	MH	202	Freeman or Bureau
2	D. C. Dynamos	2	3	D	MH	202	Freeman or Bureau
S3	Alternating Currents	2	2	D	MH	202	Freeman or Bureau
S7	Dynamo Design	2	22 hrs.	By Apt.	MH	104	Freeman or Bureau
9a	Electrical Lab.	1	6, 7	MWF	MH	108	Bureau or Barnett
9b	Electrical Lab.	1	6 & 7	MWF	MH	108	Bureau or Barnett
ENGINEERING MECHANICS							
S6	Analytical Mechanics	4	3 & 4	D	MH	201	Johnson
S1	Mechanics of Materials	4	2 & 3	D	MH	201	Johnson
S4	Kinematic Design	3	36 hrs.	By Apt.	MH		Horine
S7	Machine Design	2	18 hrs.	By Apt.	MH		Horine
MECHANICAL ENGINEERING							
S8	Steam Laboratory	1	6, 7, 8	TTh	MH	112	Freeman and Watkins
PRACTICAL MECHANICS							
S7a	Wood Shop and Foundry.....	2	24 hrs.	By Apt.	NS		Dicker
S7b	Wood Shop and Foundry.....	2	24 hrs.	By Apt.	NS		Dicker
8a	Forge, Machine & Auto Shops..	2	18 hrs.	By Apt.	NS		Thurman
8b	Forge, Machine & Auto Shops..	2	18 hrs.	By Apt.	NS		Thurman

COLLEGE OF LAW

(All law courses run through both terms of the Summer Session.)

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
	First Year						
	Agency	4	2	D	Law	102	Chalkley
	Domestic Relations	2	4	D	Law	102	Chalkley
	Personal Property	2	3	D	Law	102	Roberts
	Second and Third Years						
	Negotiable Instruments	4	1	D	Law	102	Roberts
	Oil and Gas Law.....	2	3	D	Law	102	Roberts
	Public Utilities	2	4	D	Law	102	Chalkley

COLLEGE OF EDUCATION

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
ADMINISTRATION							
S101	School Organization	2	1	D	Ed.	203	Russell
S143	County School Administration..	2	4	D	Ed.	203	Patrick
S146	School Buildings & Equipment	2	2	D	Ed.	205	Russell
S201a	Educational Administration	2	3	D	Ed.	203	Leggett
S231	Financing Public Education.....	2	4	D	Ed.	204	Russell
S232	High School Administration	2	1	D	Ed.	204	Ligon
AGRICULTURAL EDUCATION							
S180	Methods of Teaching Vocational Agriculture	2	3	D	Ed.	204	Hammonds
S187	Adv. Prob. in Agric. Education	2	3	D	Ed.	204	Hammonds
EDUCATIONAL PSYCHOLOGY							
S16	Educational Psychology	2	1	D	Ed.	105	Patrick
S119	Psychology of Elementary Ed...	2	4	D	Ed.	106	Ross
122a	Educa. Tests & Measurements	2	3	D	Ed.	105	Ross
223	Statistical Methods in Educa...	2	5	D	Ed.	105	Ross
ELEMENTARY EDUCATION							
36	Reading in the Elem. Grades....	2	1	D	Ed.	202	Duncan
37	Language, Spelling and Writing in the Elementary Grades	2	4	D	Ed.	202	Duncan
43	Teaching Literature to Children	2	3	D	Ed.	202	Duncan
130a	The Teaching of Health in Public Schools	2	4	D	NH	302	Rush
S145	Rural School Supervision	2	2	D	Ed.	202	Patrick
HISTORY OF EDUCATION							
S117b	History of Education	2	2	D	Ed.	106	Noe
120	Great Educators and Their Work	2	3	D	Ed.	106	Noe
S220	Comparative Education	2	5	D	Ed.	106	Noe
HOME ECONOMICS EDUCATION							
167	Methods of Teaching Relative Art	3	{ 2 2 hrs.	D By Apt.	Ed.	304	Hansen
INDUSTRIAL EDUCATION							
S74	Vocational Guidance	2	5		Ed.	205	May
S72	Special Methods in Trade and Industrial Education	2	2	D	Ed.	303	May
S75	Reorganization of Industrial Arts	2	4	D	Ed.	202	May

COLLEGE OF EDUCATION—Continued

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
	PHILOSOPHY OF EDUCATION AND EDUCATIONAL SOCIOLOGY						
19b	Modern Educational Problems..	1	5	D	Ed.	Aud.	Taylor & others
114a	Educational Sociology	2	4	D	Ed.	105	Adams
S127a	Prob. in Curriculum Building....	2	2	D	Ed.	204	Barnes
140a	Philosophy of Education	2	2	D	Ed.	105	Adams
200	Philosophy of Education	2	1	D	Ed.	201	Adams
S222a	Thesis Course	2	6	D	Ed.	105	Taylor
	SECONDARY EDUCATION						
S105	The Technique of Teaching.....	2	4	D	Ed.	205	Hammonds
S126	The Junior High School	2	2	D	Ed.	Aud.	Ligon
S150	The Senior High School	2	3	D	Ed.	303	Ligon

COLLEGE OF COMMERCE

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
1a	Principles of Economics	3	7:30-8:45	D	WH	303	Wiest
102	Labor Problems	3	7:30-8:45	D	WH	306	Jennings
104	Public Finance	3	7:30-8:45	D	WH	205	Leland
105	Money and Banking	3	10:30-11:45	D	WH	306	Wiest
115	Contemporary Econ. Thought..	3	10:30-11:45	D	WH	205	Leland
125	Adv. Economic Hist. of Europe	3	10:30-11:45	D	WH	303	Jennings

**SECOND TERM
COLLEGE OF ARTS AND SCIENCES**

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
ANCIENT LANGUAGES							
S150b	Teachers' Course in Latin	2	1	D	A	303	Jones
S3	Cicero and Sallust	2	5	D	A	303	Jones
S4a	Selections from Ovid and Virgil	2	4	D	A	303	Jones
S5	Livy	2	3	D	A	303	Jones
S51	Elementary Greek	2	By Appt.	D	A	303	Jones
S110	Latin Literature (Selections).....	2	2	D	A	303	Jones
ANTHROPOLOGY AND ARCHAEOLOGY							
102	Kentucky Archaeology	2	5	D	C&P	200	Webb
BACTERIOLOGY							
8	Bacteria in Relation to Man.....	2	3	D	KH	111	Weaver
{ 103 ¹	Pathogenic Bacteriology, Lec.....	4	1	D	KH	111	Weaver
{ 103 ²	Pathogenic Bacteriology, Lab.....		4, 5	D	KH	Sb11	Weaver
201a	Research in Bacteriology	5	By Appt.		KH	111	Weaver
BOTANY							
{ 1b ¹	General Botany, Lec.-Rec.	4	2	D	WH	101	McFarland
{ 1b ²	General Botany, Lab.		3, 4	D	WH	102	McFarland
20	Dendrology	2	1	D	WH	101	McFarland
CHEMISTRY							
1b	General Inorganic Chemistry	5	1, 2, 3, 4	D	KH		Mitchell and others
7	Organic Chemistry	4	1, 2, 3	D	KH		Barkenbus
8	Quantitative Analysis	5	1, 2, 3, 4, 5	D	KH		Bedford
106	Advanced Organic Chemistry	5	By Appt.	D	KH		Barkenbus
109	Quantitative Analysis	5	1, 2, 3, 4, 5	D	KH		Bedford
115b	Physical Chemistry	3	1, 2	D	KH		Bedford
ENGLISH LANGUAGE AND LITERATURE							
S1a	English Composition	2	1	D	A	4	Yates
S1b	English Composition	2	2	D	A	4	Yates
S3b	History of English Literature.....	2	3	D	A	4	Yates
S107	Victorian Poetry	2	3	D	A	205	Brady
S114b	American Literature	2	4	D	A	4	Kelley
S130	Comparative Literature	2	4	D	A	205	Brady
S136	Victorian Prose	2	2	D	A	205	Brady
S140	English Lit. from 1660 to 1774.....	2	2	D	A	205	Kelley
S142	The Renaissance	2	1	D	A	205	Kelley
HISTORY							
S5b	History of the United States.....	2	2	D	A	203	Knapp
S107b	History of Latin America	2	4	D	A	203	Knapp
S111	Division and Reunion	2	3	D	A	203	Knapp

COLLEGE OF ARTS AND SCIENCES—Continued

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
HYGIENE							
1b	Hygiene	1.3	1	D	NH	302	Rhodes
S105b	Advanced Hygiene	2	2	D	NH	302	Rhodes
JOURNALISM							
S2b	Advanced Reporting	2	1	D	S	5	Griffin
S5b	Copyreading	2	5	D	S	1	Portmann
S105	Law of the Press	2	4	D	S	1	Portmann
MATHEMATICS							
S1	Elementary Algebra	2	3	D	C&P	303	Davis
S2	Solid Geometry	2	4	D	C&P	310	South
S5	College Algebra	4	2, 3	D	C&P	310	South
S7b	Integral Calculus	2	2	D	C&P	303	Davis
*S103	Theory of Equations	2	4	D	C&P	303	Davis
*S105a	Differential Equations	2	4	D	C&P	303	Davis
*S106a	Advanced Calculus	2	4	D	C&P	303	Davis
<p>Note:—Only one of the starred courses will be given. Choice will be left to class.</p>							
PHYSICS							
{ 1b	Gen. Elem. Physics, Lec.....	5	1	D	C&P	200	Webb
{ 1b	Gen. Elem. Physics, Rec.....		2	D	C&P	200	Webb
{ 1b	Gen. Elem. Physics, Lab.....		3, 4	MWF	C&P	203	Webb and Asst.
3b	Gen. Col. Physics, Lec.-Rec.....	4	3, 4	D	C&P	103	Koppius
S6	Electrical Measurements, Lec...	2	1	TTh	C&P	103	Koppius
S6	Electrical Measurements, Lab...		{ 1, 2	{ MWF }	C&P	3	Koppius & Asst.
			{ 2	{ TTh }			
S51b	Introduction to Physics, Lec.....	2	1	D	C&P	200	Webb
S223b	General Physics	6	By Appt.		C&P		Koppius
POLITICAL SCIENCE							
S15b	Problems of Citizenship	2	2	D	A	204	Sherman
S51b	American Government	2	2	D	A	204	Sherman
S101a	Latin American Relations	2	4	D	A	202	White
S150b	International Law	2	1	D	A	202	White
S153	City Administration	2	4	D	A	204	Sherman
S161	International Relations	2	2	D	A	202	White
PSYCHOLOGY							
S1	Introductory Psychology	2	1	D	NH	306	Boynton
S114	Abnormal Psychology	2	2	D	NH	306	Boynton
S108a	Human Measurements	2	4	D	NH	306	Boynton
120b	Independent Work	2	By Appt.		NH	302	Boynton

COLLEGE OF ARTS AND SCIENCES—Continued

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
ROMANCE LANGUAGE AND LITERATURE							
S1b	Elementary French (Cont.)	2	3	D	S	307	Holmes
S2b	Intermediate French (Cont.)	2	2	D	S	307	Holmes
S5b	Elementary Spanish (Cont.)	2	1	D	S	307	Holmes
S7b	Intermediate Spanish	2	2	D	S	307	Holmes
ZOOLOGY							
{ 1b ₁	General Zoology, Rec.	4	2	D	S	108	Brauer
{ 1b ₂	General Zoology, Lab.		7:00 to 8:20	D	S	103	Brauer
101a	Histology	3	3, 4	D	S	103	Brauer
102	Ornithology	2	3	D	KH		Funkhouser
108b	Prin. of Zoology (Heredity)	2	3	D	S	108	Funkhouser
110b	Independent Work	3	By Appt.				Funkhouser and Brauer

COLLEGE OF ENGINEERING—SECOND TERM

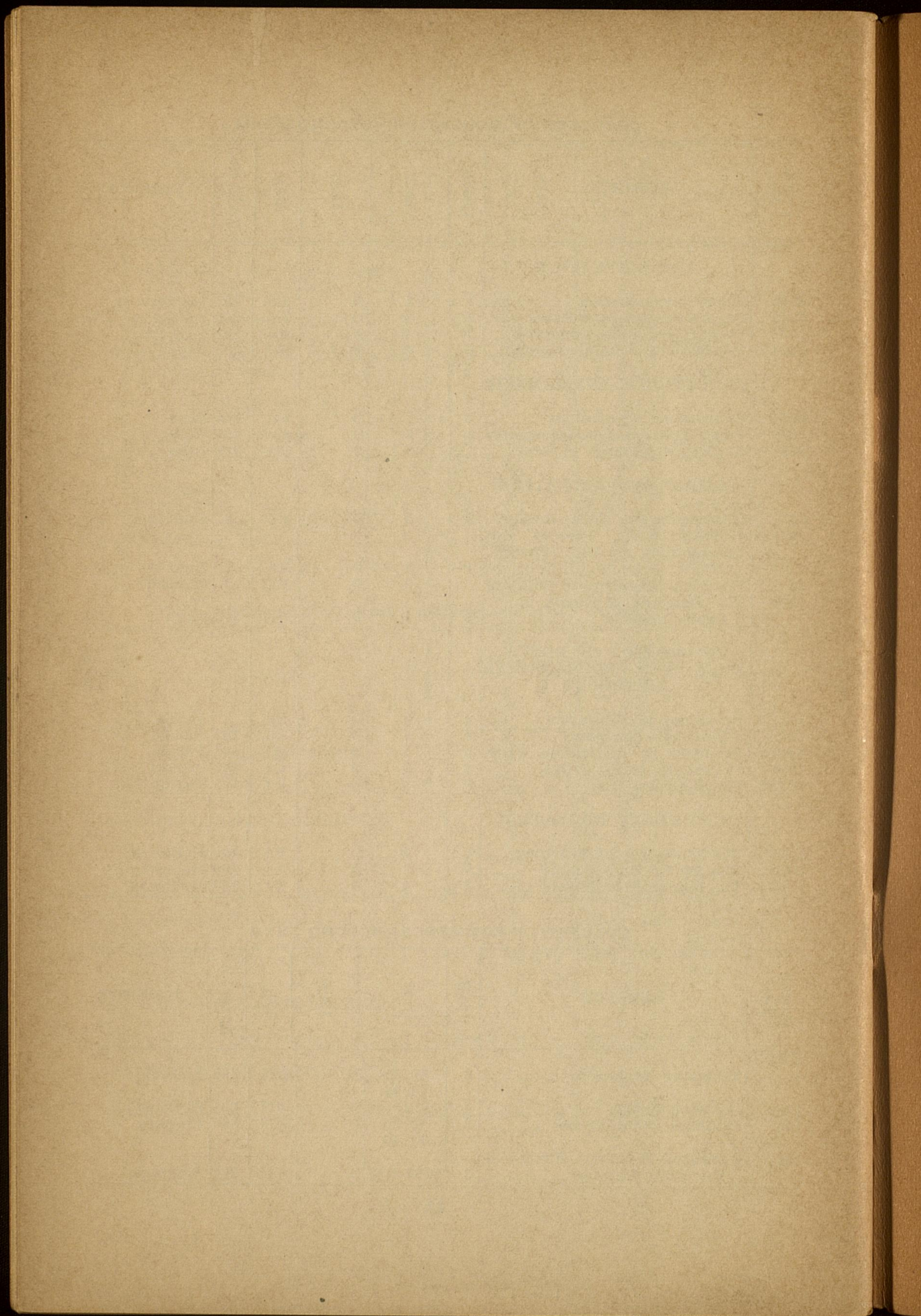
Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
CIVIL ENGINEERING							
21	Hydraulics	2	5	D	MH	201	Johnson
ELECTRICAL ENGINEERING							
2	D. C. Dynamos	2	3	D	MH	202	Freeman or Bureau
S7	Dynamo Design	2	22 hrs.	By Apt.	MH	104	Freeman or Bureau
S3	Alternating Currents	2	4	D	MH	202	Freeman or Bureau
9b	Electrical Lab.	1	6 and 7	MWF	MH	108	Bureau or Barnett
ENGINEERING MECHANICS							
S6	Analytical Mechanics	4	2 and 3	D	MH	201	Johnson
MECHANICAL ENGINEERING							
S8	Steam Laboratory	1	6, 7, 8	TTh	MH	112	Watkins

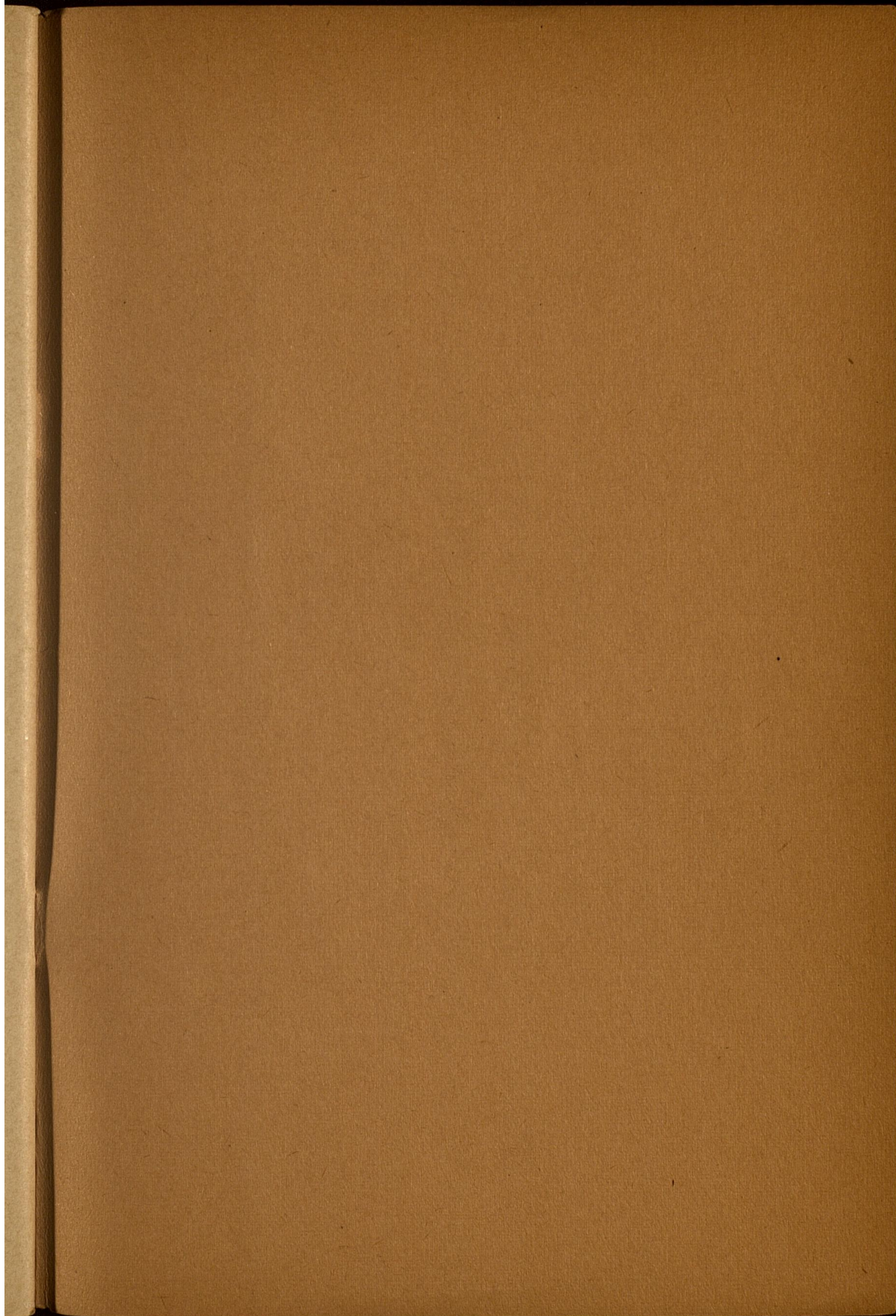
COLLEGE OF EDUCATION—SECOND TERM

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
ADMINISTRATION							
S101	School Organization	2	1	D	Ed.	202	Leggett
S125	Supervision of Instruction	2	1	D	Ed.	205	Adams
S131	Financing Public Education.....	2	4	D	Ed.	202	Leggett
S201b	Educational Administration	2	2	D	Ed.	202	Payne
EDUCATIONAL PSYCHOLOGY							
S16	Educational Psychology	2	2	D	Ed.	205	Ross
122b	Educ. Tests and Measurements	2	3	D	Ed.	205	Ross
223	Statistical Methods in Educ.....	2	5	D	Ed.	205	Ross
ELEMENTARY EDUCATION							
36	Reading in the Elem. Grades....	2	5	D	Ed.	2	Duncan
39	Number Work, History and Geography in the Primary Grades	2	3	D	Ed.	2	Duncan
43	Teaching Literature to Children	2	2	D	Ed.	2	Duncan
130b	The Teaching of Health in Public Schools	2	4	D	NH	302	Rush
PHILOSOPHY OF EDUCATION AND EDUCATIONAL SOCIOLOGY							
S4	Principles of Education	2	5	D	Ed.		Payne
114b	Educational Sociology	2	4	D	Ed.	105	Adams
S127b	Problems in Curriculum Build.	2	1	D	Ed.	105	Payne
140b	Philosophy of Education	2	3	D	Ed.	105	Adams
S222b	Thesis Course	2	6	D	Ed.	105	Taylor
SECONDARY EDUCATION							
S105	The Technique of Teaching	2	1	D	Ed.	106	Holloway
S126	The Junior High School	2	2	D	Ed.	106	Holloway
S150	The Senior High School	2	4	D	Ed.	106	Holloway

COLLEGE OF COMMERCE—SECOND TERM

Course No.	SUBJECT	Credit	Hour	Days	Bldg.	Room No.	Instructor
8	Economic Geography	3	10:30-11:45	D	WH	205	Jennings
110	Business Cycles	3	7:30-8:45	D	WH	306	Eberling
116	Business Organization	3	10:30-11:45	D	WH	306	Eberling
134	Advanced Economic History of the United States	3	7:30-8:45	D	WH	205	Jennings





ORGANIZATION

UNIVERSITY OF KENTUCKY

Lexington, Kentucky

FRANK L. McVEY, Ph. D., LL. D., *President*

COLLEGE OF ARTS AND SCIENCES

Paul P. Boyd, Ph. D., Dean

Courses in Arts, Sciences, Journalism

COLLEGE OF AGRICULTURE

Thos. P. Cooper, B. S., Dean and Director

Courses in Agriculture and Home Economics

Experiment Station

Extension Division of Agriculture

COLLEGE OF ENGINEERING

F. Paul Anderson, M. E., Dean

W. E. Freeman, A. B., E. E., Assistant Dean

COLLEGE OF LAW

Alvin E. Evans, Ph. D., J. D., Dean

COLLEGE OF EDUCATION

William S. Taylor, Ph. D., Dean

COLLEGE OF COMMERCE

Edward Wiest, Ph. D., Dean

GRADUATE SCHOOL

William D. Funkhouser, Ph. D., Dean

SUMMER SESSION

William S. Taylor, Ph. D., Director

Wellington Patrick, Ph. D., Assistant Director

UNIVERSITY EXTENSION DEPARTMENT

Wellington Patrick, Ph. D., Director.

For information regarding courses and catalogs, address Ezra L. Gillis, Registrar, University of Kentucky, Lexington, Kentucky.



The
EIGHTH ANNUAL
EDUCATIONAL CONFERENCE

University of Kentucky



October 30 and 31
1931

LEXINGTON, KENTUCKY



Loose Item

FRIDAY MORNING, OCTOBER 30

GENERAL PROGRAM, MEMORIAL HALL

President Frank L. McVey, Presiding

- 9:30 a. m. Organ Recital.
- 10:00 a. m. New Emphases in Elementary Education—Ernest Horn, Dean, School of Education, University of Iowa.
- 10:40 a. m. New Emphases in Secondary Education—Joseph Roemer, Professor of Education, George Peabody College for Teachers.
- 11:20 a. m. New Emphases in College Education—William S. Gray, Dean, School of Education, University of Chicago.

FRIDAY AFTERNOON, OCTOBER 30

SECTIONAL PROGRAMS

Elementary Education, Memorial Hall

Doctor Jesse E. Adams, Presiding

- 2:00 p. m. Progressive Trends in Early Elementary Education—Mary Browning, Supervisor of Elementary Schools, Louisville.
- 2:45 p. m. Progressive Trends in Later Elementary Education—Ernest Horn, University of Iowa.

SECONDARY EDUCATION

Auditorium Training School Building

Professor J. B. Holloway, Presiding

- 2:00 p. m. New Movements in Secondary Education—Joseph Roemer, George Peabody College of Teachers.
- 2:35 p. m. An Adequate Program of Testing for the High School—C. C. Ross, Professor of Education, University of Kentucky.
- 2:55 p. m. The High School Library—Susan Elizabeth Miller, Lexington High School.

COLLEGE EDUCATION

Room 111, McVey Hall

Dean Paul P. Boyd, Presiding

- 2:00 p. m. Our Program for Junior College Education in Kentucky—J. W. Gaines, President, Bethel Woman's College, Hopkinsville.
- 2:40 p. m. A Reorganization of Junior College Education—William S. Gray, University of Chicago.

THE KENTUCKY ACADEMY OF SOCIAL SCIENCES
PROGRAM

Room 231, Training School Building

Professor J. C. Jones, Presiding

- 2:00 p. m. A Revision of the Constitution by Convention—
Samuel L. Wilson, Lexington (for revision) and
E. P. Jouette, Louisville (against revision).
Discussion—J. Catron Jones, Lexington.

FRIDAY EVENING, OCTOBER 30

Ballroom, Lafayette Hotel

President Frank L. McVey, Presiding

- 6:00 p. m. Banquet—Sponsored by the Lexington City Teachers' Club, the Fayette County Teachers' Association, and the honorary fraternities of Phi Delta Kappa and Kappa Delta Pi at the University of Kentucky.
- 7:00 p. m. Special Musical Program and Community Singing. Led by J. W. Ireland, Superintendent of Schools, Frankfort. Mrs. Frank C. Foxworth at the piano.
- 7:30 p. m. The Relation of Government to Education—Thomas Reed, Chairman of the Policy Committee of the American Political Science Department, Ann Arbor.
The Teacher—Cotton Noe, Lexington.

SATURDAY MORNING, OCTOBER 31

GENERAL PROGRAM

Memorial Hall

President Frank L. McVey, Presiding

- 9:30 a. m. The Elementary School of Tomorrow—Ernest Horn, University of Iowa.
- 10:15 a. m. The High School of Tomorrow—Joseph Roemer, George Peabody College for Teachers.
- 11:00 a. m. Reorganization of Our Colleges to Meet New Problems—William S. Gray, University of Chicago.

THE KENTUCKY ACADEMY OF SOCIAL SCIENCES
PROGRAM

Room 111, McVey Hall

Professor J. C. Jones, Presiding

- 9:00 a. m. Farm Problem—J. C. Stone, Washington, D. C.; James W. Thompson, Paris, Kentucky; and Thomas Cooper, University of Kentucky.
- 11:00 a. m. Unemployment—E. F. Siler, Louisville. and J. W. Martin, University of Kentucky.

FRIDAY NOON, OCTOBER 30

Luncheon

University Training School Cafeteria

SATURDAY, OCTOBER 31

BREAKFAST MEETING

Kentucky Association of Registrars

University Commons, 7:30 a. m.

Professor V. F. Payne, Transylvania College, Presiding.

The Combined Office, Registrar-Dean—Maurice F. Seay, Dean,
Union College.

Discussion—Frank L. Rainey, Dean, Centre College.

A Report of the Buffalo Convention, American Association of
Collegiate Registrars—Mary Page Milton, Registrar,
Morehead State Teachers College.

Round Table—Led by Ezra L. Gillis, Registrar, University of
Kentucky.

SATURDAY NOON, OCTOBER 31

Luncheon and Business Session

The Kentucky Academy of Social Sciences

University Commons

INSPECTION LIBRARY BUILDING

October 30

1:00 p. m. to 2:00 p. m.

October 31

1:00 p. m. to 5:00 p. m.