

Main Building. Station Building.

New Dormitory.

Mechanical Hall.

CAMPUS OF STATE COLLEGE OF KENTUCKY.

## CATALOGUE

OF THE

## OFFICERS STUDIES AND STUDENTS

OF THE

# STATE COLLEGE OF KENTUCKY

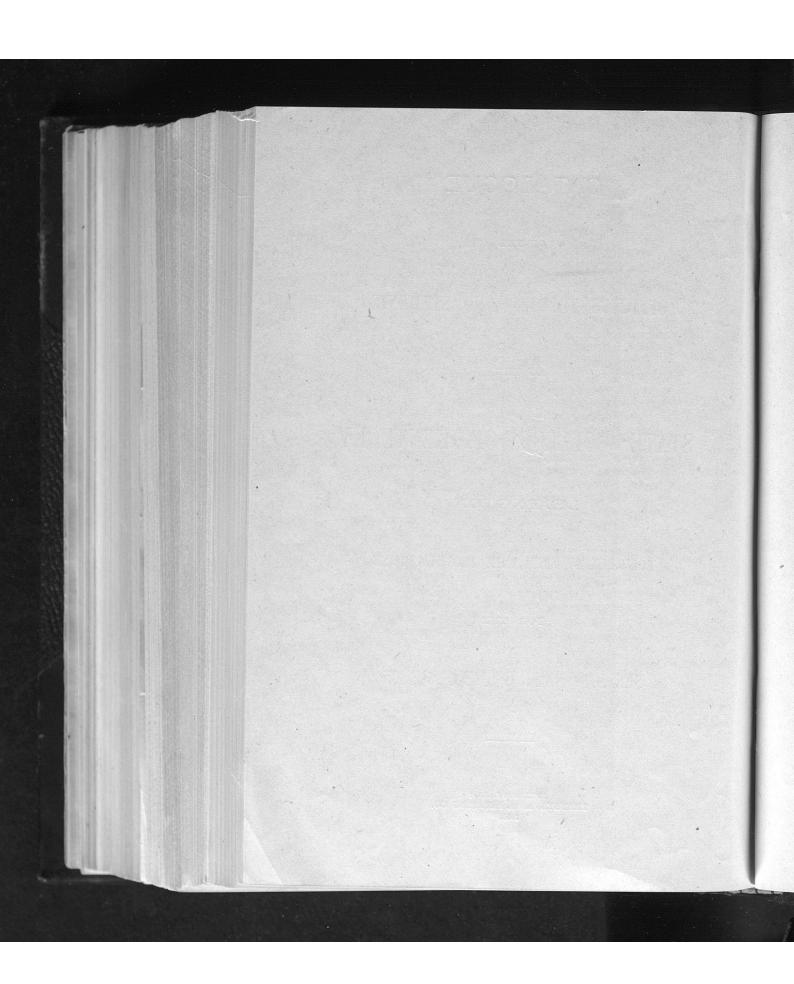
LEXINGTON

TOGETHER WITH THE REGULATIONS

FOR THE

SESSION ENDING JUNE 6 1895

LEXINGTON, KY.: TRANSYLVANIA PRINTING CO. 1895.



## Contents.

THE STATE COLLEGE OF KENTUCKY	
History	
Object	
The Normal School.	
The Kentucky Agricultural Experiment Station	
Location	2
LocationGrounds.	:
Buildings	4
Buildings BOARD OF TRUSTEES.	4
FACULTY	(
ASSISTANT INSTRUCTORS	. 7
OTHER OFFICERS.	8
IN MEMORIAM.	8
THE EXPERIMENT STATION	9
Board of Control.	10
Officers of the Station.	10
DEPARTMENTS AND COURSES OF STUDY.	10
History, Political Economy and Metaphysics	11
Agriculture, Horticulture and Botany	11
The English Language and Literature	12
Military Science	14
Chemistry	15
Mathematics and Astronomy.	15
French and German	17
Greek and Latin.	18
The Academy.	19
The Normal School	19
Civil Engineering	21
Civil Engineering	22
Zoology and Entomology.  Mechanical Engineering.	22
Anatomy and Physiology	24
Anatomy and Physiology	25
Veterinary Science	25
Geology and Palæontology	26
Physics	27
	29

GROUPING OF COURSES FOR DEGREES	30
For the Degree of B. S., Major Study, Mathematics	30
For the Degree of B. S., Major Study, Chemistry	32
For the Degree of B. S., Major Study, Biology	37
For the Degree of A. B	41
For the Degree of B. Ped	43
For the Degree of B. C. E	48
For the Degree of B. M. E	52
For the Degree of B. Agr	58
For the Certificate in Veterinary Science	65
THE ACADEMY, COURSES IN	68
BUSINESS DEPARTMENT	70
REGULATIONS	73
Traveling Expenses of Students	73
College Expenses	73
Boarding	75
Beneficiaries	75
Appointees to the Normal Course	76
Student Labor	76
Certificates of Character	77
The Monitress	77
MILITARY DEPARTMENT	78
GRADUATES 1895	79
NAMES OF UNDERGRADUATES—	
Arranged Alphabetically	80
Arranged in Classes	88
STUDENTS OF THE BUSINESS COLLEGE	92
CALENDAR	99
COLLEGE DIRECTORY	100

## The State College of Kentucky.

#### History.

GRICULTURAL and Mechanical Colleges in the United States owe their origin to an act of Congress, entitled "An act donating public lands to the several States and Territories which may provide colleges for the benefit of agriculture and the mechanic arts," approved July 2, 1862. The amount of land donated was 30,000 acres for each representative in the National Congress, Under this allotment Kentucky received 330,000 acres. Several years elapsed before the Commonwealth established an Agricultural and Mechanical College under the act. When established it was not placed upon an independent basis, but was made one of the Colleges of Kentucky University, to which Institution the annual interest of the proceeds of the Congressional land grant was to be given for the purpose of carrying on its operations. The land-scrip had meanwhile been sold for fifty cents per acre and the amount received-\$165,000-invested in six per cent. Kentucky State bonds, of which the State became custodian in trust for the College.

The connection with Kentucky University continued till 1878, when the act of 1865, making it one of the Colleges of said University, was repealed, and a Commission was appointed to recommend to the Legislature of 1879-80, a plan of organization for an institution, including an Agricultural and Mechanical College, such as the necessities of the Commonwealth required. The city of Lexington offered to the Commission (which was also authorized to recommend to the General Assembly the place which, all things considered, offered the best and greatest inducements for the future and permanent location of the College) the City Park, containing fifty-two acres of land, within the limits of this city, and thirty thousand dollars in city bonds, for the erection of buildings. This offer the county of Fayette supplemented by twenty thousand dollars in county bonds, to be used either for the erection of buildings or for the purchase of land. The offers of the city of Lexington and of the county of Fayette were accepted by the General Assembly.

By the act of incorporation, and the amendments thereto, constituting the charter of the Agricultural and Mechanical College of Kentucky, liberal provision is made for educating, free of tuition, the energetic young men of the Commonwealth whose means are limited. The Normal Department, for which provision is also made, is intended to aid in building up the Common School system by furnishing properly qualified teachers. This College, with the associate departments which will, from time to time, be opened as the means placed at the

disposal of the Trustees allow, will, it is hoped, in the not distant future do a great work in advancing the educational interests of Kentucky. Being entirely undenominational in its character, it will appeal with confidence to the people of all creeds and of no creed, and will endeavor, in strict conformity with the requirements of its organic law, to afford equal advantages to all, exclusive advantages to none. The liberality of the Commonwealth in supplementing the inadequate annual income arising from the proceeds of the land-scrip invested in State bonds, will, it is believed, enable the Trustees to begin and carry on, upon a scale commensurate with the wants of our people, the operations of the institution whose management and oversight have been committed to them by the General Assembly of Kentucky.

#### Object.

In the act of Congress making provision for the class of colleges to which the State College partly belongs, it is declared "that their leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life."

#### The Normal School.

The Normal Department of the State College exists under the authority of acts of the General Assembly, approved April 23 and April 29, 1880. Section 7 of the first act briefly defines the object for which the Department was established, "but a Normal Department or course of instruction for irregular periods, designed more particularly, but not exclusively, to qualify teachers for common and other schools, shall be established in connection with the College." The second act provides the necessary endowment to make the Department effective.

The number of students annually enrolled in the Normal School has exceeded expectation. As they come from all parts of the State, and many of them return well prepared for the profession of teaching, they must greatly promote the efficiency of our common schools generally, and demonstrate the wisdom of the General Assembly in providing an inexpensive Normal School, centrally located and easy of access, to keep the State always supplied with well trained teachers.

#### The Kentucky Agricultural Experiment Station.

This Department of the State College originated in a resolution of the Executive Committee of the Board of Trustees, adopted in September 1885, when the Department was organized and a Director

appointed. In 1886 the Station was recognized and named by the General Assembly, and in 1887, it and a similar Station in every other State were each endowed by Congress with an annual appropriation of \$15,000.

The work of the Station is directed to two objects: 1 To a constant succession of experiments by specialists, in order to learn what applications of science will ensure the best returns from the farm the garden, the orchard, the vineyard, the stock-yard and the dairy; 2 To the publication of bulletins announcing such results of the experiments as are found to be valuable to any of our people that seek profit from either of those prime sources of wealth, the soil, the flock or the herd.

Results of experiments have been published in six reports and fifty-three bulletins, and general appreciation of their utility is shown in the fact that, while no bulletin is sent except upon application for it, the mailing list of the Station contains more than 11,000 names and is ever increasing.

With an ample endowment, a large and commodious building planned for the purpose, adequate apparatus, a good experimental farm conveniently situated, and seven capable scientists always employed and in correspondence with other stations, The Kentucky Agricultural Experiment Station is not only an important adjunct of the College in the education of students for the leading industrial pursuit, but directly or indirectly through the wide and continual diffusion of knowledge for the benefit of so large a proportion of our population, it is bound to be extremely useful to the Commonwealth at large.

#### Location.

The Agricultural and Mechanical College of Kentucky is established in the old City Park grounds of the City of Lexington, given to the Commonwealth for this purpose. The site is elevated, and commands a good view of the city and surrounding country.

Lexington is now the most important railroad center in Kentucky, being in immediate communication with Louisville, Cincinnati, Maysville, Chattanooga, and with more than seventy counties in the Commonwealth. The long established reputation of the city for refinement and culture renders it attractive as a seat of learning, and the large body of fertile country adjacent, known as the "Blue Grass Region," with its splendid stock farms, affords unsurpassed advantages to the student of agriculture who desires to make himself familiar with the best breeds of horses, cattle, sheep and swine in America.

#### Grounds.

The campus of the College consists of 52 acres of land, located within the corporate limits of Lexington. The South Limestone street electric car line extends along the greater part of its western border, giving opportunity to reach in a few minutes any part of the city. The campus is laid out in walks, drives and lawns, and is planted with a choice variety of native and exotic trees and shrubs, to which additions are constantly being made. A portion of the land has recently been reserved for a botanical garden in which will be grown the more desirable native plants, with a view to testing their adaptability to cultivation, and to give increased facilities to students taking agricultural and biological courses. Two and a half acres, forming the north-east portion of the campus, enclosed and provided with a grand stand, is devoted to field sports of students.

About three-quarters of a mile south of the campus, on the Nicholasville pike, an extension of South Limestone street, is the Experiment Station Farm, consisting of forty-eight and a half acres. Here the field experiments of the Station are conducted, and students have opportunities to witness tests of varieties of field crops, dairy tests, fertilizer tests, fruit spraying tests, in short, all of the scientific experimentation of a thoroughly equipped and organized Station. The front of the farm is pasture and orchard. The back portion is divided off into two hundred one-tenth acre plots, for convenience in making crop tests.

Buildings.

The main college building is a structure of stone and brick, 140 feet long and 68 feet in width. It contains the office of the President and of the Business Agent, and on the third floor, counting the basement floor as one, is the chapel, in which each day the students and Faculty meet, and in which are held public gatherings and such other meetings as bring together the entire student body. The remaining space in this building is occupied by recitation rooms and by the society rooms of the students.

The Station building is a handsome structure, well planned for the object for which it is made. It is seventy feet in length by fifty-four feet in width, with a tower projection in front, and an octagonal projection eighteen by eighteen on the north side. The building is two stories high, and has a basement eleven feet from floor to ceiling. The main entrance is on the first floor, on the west side of the building, through an archway fifteen feet wide. The basement is occupied in part by the Station and in part by the College. The next floor above is devoted to office and laboratory work of the Station, while the upper floor accommodates the College work in Chemistry.

The building devoted to Mechanical Engineering covers altogether

an area of about 10,897 square feet, is constructed of stone and pressed brick, and is well furnished with modern conveniences for work in this branch of engineering. It contains rooms as follows: Recitation room:  $34'\times25'$ ; recitation room,  $25'\times23'$ , library and exhibition room  $25'\times23'$ ; office  $10'\times12'$ ; drawing room,  $34'\times35'$ ; engine room,  $20'\times30'$ : tool room,  $30'\times6'$ ; wash room,  $30'\times10'$ , boiler house,  $27'\times27'$ ; wood shop,  $80'\times34'$ ; machine shop  $42'\times35'$  blacksmith shop,  $35'\times35'$ ; foundry  $35'\times37'$ .

A new brick two-story building has been erected and furnished with modern conveniences for the work in Veterinary Medicine.

Two large brick dormitories on the campus afford boarding conveniences for students who wish to lessen expense in this direction. Other buildings on the campus are a brick dwelling for the President and a frame cottage at present occupied by the Commandant.

On the Experiment Farm are a brick dwelling occupied by the Director of the Station, and the usual farm buildings for the care of tools, the protection of stock, and the like.

### Board of Trustees.

#### Chairman Ex-officio,

HIS EXCELLENCY, GOV. JOHN YOUNG BROWN.

#### Secretary.

#### V. E. MUNCY.

JUDGE P. P. JOHNSTON	Favette County.
DR. R. J. SPURR	Favette County
PHILEMON BIRD, Esq	Shelby County.
HON R. A. SPURR	Favette County
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PRESIDENT JAMES K. PATTERSON, Ex-officio.

#### Executive Committee.

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R. A. SPURR.
DAVID H. JAMES.
J. T. GATHRIGHT.
ROBERT RIDDELL.

V. E. MUNCY, Secretary.

### Faculty.

(In the order of appointment.)

JAMES KENNEDY PATTERSON Ph. D., F. S. A., PRESIDENT, Professor of History, Political Economy and Metaphysics.

JOHN SHACKLEFORD, A. M., VICE-PRESIDENT, Professor of English and Logic.

JAMES GARRARD WHITE, A. M.,

Professor of Mathematics and Astronomy.

JOHN HENRY NEVILLE, A. M., Professor of Greek and Latin.

WALTER KENNEDY PATTERSON, Principal of the Academy.

JOSEPH HOEING KASTLE, Ph. D., Professor of Chemistry.

RURIC NEVILLE ROARK, A. B., Principal of the Normal School.

HARRISON GARMAN, M. S., Professor of Zoology and Entomology.

FREDERIC PAUL ANDERSON, M. E., Professor of Mechanical Engineering.

JAMES POYNTZ NELSON, C. E., M E., Professor of Civil Engineering.

SAMUEL ELSWORTH BENNETT, D. V. M., Professor of Veterinary Science.

CLARENCE WENTWORTH MATHEWS, B. S., Professor of Agriculture, Horticulture and Botany.

JOSEPH WILLIAM PRYOR, M. D., Professor of Anatomy and Physiology.

ARTHUR McQUISTON MILLER, A. M., Professor of Geology and Palæontology.

MERRY LEWIS PENCE, M. S., Professor of Physics.

SAMUEL MILLER SWIGERT, CAPT. 2D CAV., U. S. A., Commandant, and Professor of Military Science.

PAUL WERNICKE,

Acting Professor of French, German and Spanish.

### Assistant Instructors.

JOHN LEWIS LOGAN, A. B., First Assistant in the Academy.

JOHN WESLEY NEWMAN, B. S., Assistant in the Normal School.

ROBERT LEE BLANTON, M. LIT., Assistant Professor of Greek and Latin.

JOSEPH MORTON DAVIS, A. B., B. S., Second Assistant in the Academy.

VICTOR EMANUEL MUNCY, B. S., Third Assistant in the Academy.

JAMES HENRY WELLS, B. M. E. Assistant Professor of Mechanical Engineering.

JAMES RICHARD JOHNSON, B. M. E., Assistant in Shop-work and Drawing.

WILLIAM ANDREW PATTERSON, B. S.,

Assistant Professor of History.

EDWIN CHESTERFIELD AULICK, A. B..

Assistant in Latin.

#### Other Officers.

MRS. LUCY BERRY BLACKBURN,

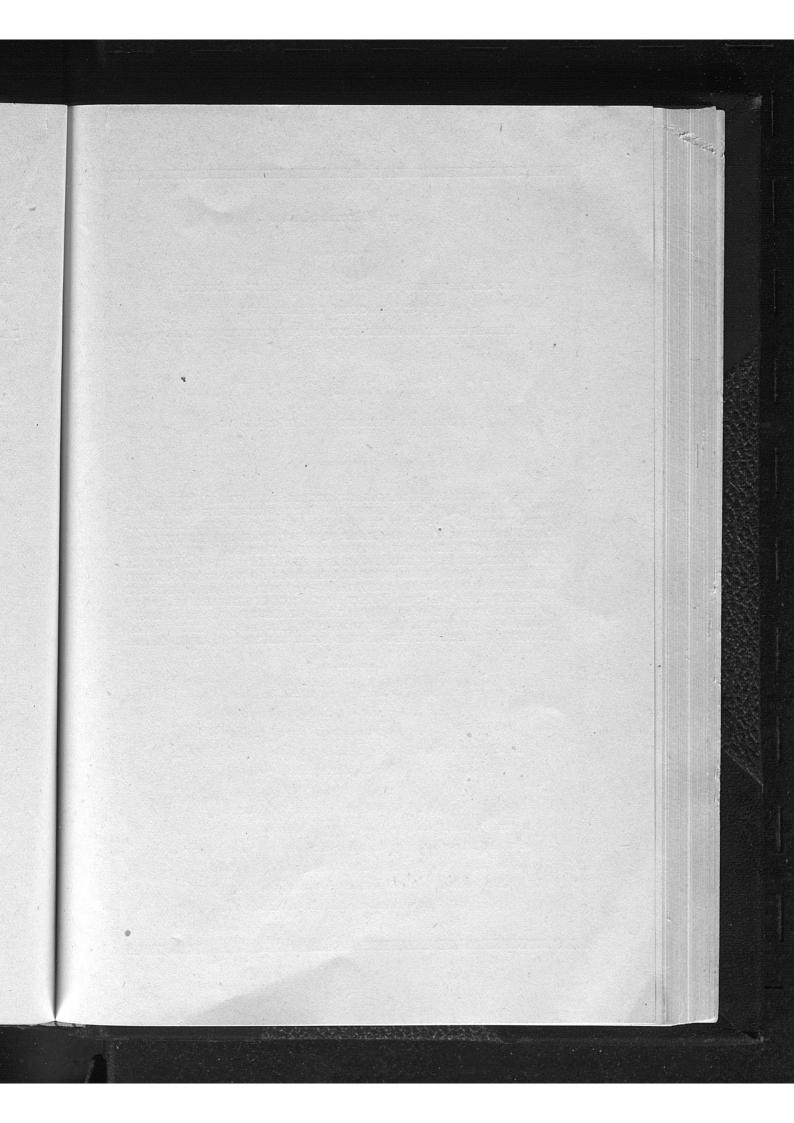
Monitress.

JAMES G. WHITE, Business Manager.

RURIC N. ROARK, Secretary of the Faculty.

JOSEPH W. PRYOR, M. D., Surgeon of the Battalion. MISS MARY HODGES,

Stenographer.



### In Memoriam.

TO PERPETUATE THE MEMORY OF EMINENT WORTH,
HIS COLLEAGUES HERE RECALL
THE HIGH CHARACTER AND DISTINGUISHED CAREER

## DOCTOR ROBERT PETER,

LONG A PROFESSOR IN THIS COLLEGE.

BORN IN CORNWALL, ENGLAND, JANUARY, 1805; REMOVED TO PITTSBURG, 1821; PROFESSOR OF CHEMISTRY IN THE WESTERN UNIVERSITY OF PENNSYLVANIA, 1830-32; OF CHEMISTRY AND PHARMACY IN TRANSYLVANIA UNIVERSITY, 1832-50; MADE M. D. BY THAT UNIVERSITY, 1834; PROFESSOR OF CHEMISTRY IN THE KENTUCKY SCHOOL OF MEDICINE, LOUISVILLE, 1850-52; OF CHEMISTRY AND PHARMACY IN TRANSYLVANIA UNIVERSITY, 1852-60; CHEMIST OF THE KENTUCKY GEOLOGICAL SURVEY, AND AUTHOR OF VARIOUS REPORTS, 1854-61; PROFESSOR OF CHEMISTRY AND EXPERIMENTAL PHILOSOPHY IN KENTUCKY UNIVERSITY, 1865-78; OF CHEMISTRY IN THE STATE COLLEGE OF KENTUCKY, 1878-87; MADE PROFESSOR EMERITUS, 1887; CHEMIST OF THE SECOND GEOLOGICAL SURVEY OF KENTUCKY, 1874-03; DIED NEAR LEXINGTON, APRIL 26, 1894.

Intense devotion to physical science
and the work of the laboratory;
purity of speech and modesty of manner;
fidelity to all duties, domestic, professional and civic;
fidelity to settled conviction and principles;
above all,

his long and illustrious career in educating
so many thousands of the young, and in setting before
them a model so worthy of their imitation and remembrance;
these were the traits, this was the service
that crowned his busy life of nearly ninety years
with honor, admiration and renown.

#### THIS PAGE COMMEMORATES

## FRANÇOIS MARIE HELVETI,

SOLDIER, SCHOLAR, GENTLEMAN.

Born in Silesia about 1823;

Maj. and Lt. Col. in the Federal army, 1861-65;

Prof. of French and German in this College, 1869-94;

Died in St. Joseph's Hospital, Lexington,

April 25, 1894.

AS A PROFESSOR, HE WAS ACCOMPLISHED, ABLE
AND EFFICIENT; AS A CITIZEN, HE FULFILLED
EVERY DUTY TO HIS ADOPTED COUNTRY;
AS A MAN, HE WAS UNIVERSALLY
RESPECTED.

HIS COLLEAGUES KNOW HIS WORTH, DEPLORE
HIS LOSS, AND PAY THIS TRIBUTE
TO HIS MEMORY.

## Kentucky Agricultural Experiment Station.

#### Board of Control.

Dr. R. J. Spurr, Chairman	Favette County
Hon. R. A. Spurr	Favette County.
DAVID H. JAMES, ESQ	Favette Country
PRESIDENT J. K. PATTERSON, ExOfficio	Lexington
DIRECTOR M. A. SCOVELL, Ex. Officio, Secretary	Texington
Hon, J. T. Gathright,	Jefferson County
JUDGE ROBERT RIDDELL	Estill County.

#### Officers of the Station.

 $\begin{array}{c} {\tt MELVILLE} \ {\tt AMASA} \ {\tt SCOVELL}, \\ {\tt \it Director.} \end{array}$ 

ALFRED MEREDITH PETER, First Chemist.

HENRY ERNEST CURTIS, Second Chemist.

HARRISON GARMAN, Entomologist and Botanist.

JOSEPH SAMUEL TERRILL, Assistant Entomologist und Botanist.

CLARENCE WENTWORTH MATHEWS, Horticulturist.

ALVA THOMAS JORDAN,
Assistant Horticulturist.

THOMAS SPURR HAWKINS, Foreman of the Farm.

## Departments and Courses of Study.

The studies of the State College are distributed into seventeen Departments, each in charge of a responsible head, the heads constituting the Faculty. The Departments in chronological order are:

- I. History, Political Economy and Metaphysics.
- II. Agriculture, Horticulture and Botany.
- III. The English Language and Literature.
- IV. Military Science.
- V. Chemistry.
- VI. Mathematics and Astronomy.
- VII. The French and German Languages.
- VIII. The Greek and Latin Languages.
  - IX. The Academy.
  - X. The Normal School.
  - XI. Civil Engineering.
- XII. Zoology and Entomlogy.
- XIII. Mechanical Engineering.
- XIV. Anatomy and Physiology.
- XV. Veterinary Science.
- XVI. Geology and Palæontology.
- XVII. Physics.

## I. Department of History, Political Economy and Metaphysics,

#### PRESIDENT PATTERSON.

The course of instruction in this Department includes an outline of Ancient, Mediæval and Modern History. Attention is given to the various forms of government, their characteristic features and points of difference, to the progress of civilization, the origin and development of parliamentary government, the rights and duties of citizenship.

In the period covered, Modern History, and the History of England and the United States occupy the most prominent place.

Walker's Science of Wealth is made the basis of instruction in Political Economy. Students are, however, made familiar with the principles upon which rest the rival doctrines of Protection and Free Trade

The study of Mental and Moral Philosophy extends through one year. Sir William Hamilton is used as the basis of instruction in Metaphysics, and Janet in Morals. Concurrently with recitations from these authorities, the pupil is made familiar with the principles upon which rival systems of philosophy and morals are based and

the arguments by which they are maintained. Ancient and modern systems are thus brought under review, and the necessary data furnished upon which to ground intelligent opinions.

## II. Department of Agriculture, Horticulture and Botany.

PROFESSOR MATHEWS.

This Department occupies rooms on the lower floor of the Experiment Station Building. The main room is suitably furnished with laboratory tables, water and gas fixtures and other apparatus for class instruction.

#### Botany.

In this study the amount of instruction given varies from one to four or more terms in accordance with the requirements of the general course entered by the student. The laboratory method is the form of instruction principally used, and from the very beginning of his work the student is directed to a study of plants themselves, using the text book only in a subordinate manner, to correct his mistakes and to enlarge his field of view. In the course of the year class excursions are arranged to the Kentucky river and other localities of botanical interest for the purpose of collecting and studying plants in their native habitat.

Among the facilities for study the Department possesses a green-house (20 ft. x 50 ft.) giving an opportunity for the continuous study of living plants throughout the winter months and for experimental work in plant physiology.

Each student is also supplied, for histological study, with dissecting and compound microscopes, microtomes and other appliances from the best makers.

The herbarium contains a nearly complete representation of the flora of Kentucky, with a considerable number of foreign exchanges. It was primarily due to the efforts of Dr. Robert Peter, who made a quite extensive collection of Kentucky plants about sixty years ago, and also exchanged specimens with the prominent botanists of that day, thus forming the nucleus of the present collection, which therefore possesses considerable historical value. Constant additions are now being made to the herbarium by collecting excursions over the State, and by exchanges with other institutions.

A carefully selected library, containing the most important botanical works of reference, is constantly available to the class.

The nucleus of a botanical garden has been commenced upon the College campus, to which additions will be made as rapidly as circumstances will permit.

The text books required in botany during the first year of instruction are Gray's Lessons and Manual of Botany and Bastin's College Botany, while constant reference is made, especially in the latter part of the course, to such standard works as Sach's Physiology of Plants, De Bary's Comparative Anatomy of Phanerogams and Ferns, Strasberger's Practical Botany, Gray's Structural Botany, Goodale's Physiological Botany, Darwin's Works, Beale's Grasses, Bennett and Murray's Cryptogamic Botany, Lesquereux & James' Mosses, Underwood's Ferns, Wolle's Algæ and others.

#### Agriculture and Horticulture.

In these subjects, much of the equipment mentioned under Botany is again utilized. As in Botany, the pupils are at once directed to the study and practical manipulation of plants rather than making any text-book their main dependence.

The greenhouse is used for instruction in seed testing, seed sowing, propagation by cuttings, grafting, etc., during the winter months, while from spring to fall the various operations of open air gardening are studied, especially the less commonly understood practices of transplanting, grafting, budding, pruning, crossing, etc.

The extensive list of varieties of vegetables and fruits growing upon the Experiment Farm gives an opportunity for a comparative study of varieties, rarely if ever found upon the ordinary farm.

The student is taught to perform experiments for himself in the best manner and to test the theories of the books by actual practice.

The college campus now contains a large number of ornamental trees and shrubs, and these with numerous varieties of annual and perennial flowering plants give the pupil a good opportunity to study ornamental horticulture.

In the distinctively agricultural studies, the experiments of the farm department of the Experiment Station furnish an excellent opportunity for the study of the effects of various fertilizers, varieties of wheat, corn and other field crops, and the many problems of dairying. The numerous fine herds of cattle and horses in the surrounding country are also freely utilized for purposes of instruction.

The following books are used as works of reference:

In Horticulture, Henderson's Gardening for Profit; Greiner's How to Make the Garden Pay; Thomas,' Barry's and Downing's works upon Fruit Culture; Bailey's Nursery Book and Grape Training; together with many other special works upon grapes, peaches, apples, floriculture, landscape gardening and the best horticultural journals.

In Agriculture, Storer's Agriculture; Johnson's How Crops Grow and How Crops Feed; Stewart's and Armsby's Manuals of Dairying and Cattle Feeding; Warfield's Cattle Breeding and other special works upon horses, sheep, and swine, together with the current literature upon these subjects.

## III. Department of the English Language and Literature.

PROFESSOR SHACKLEFORD.

#### Preparatory Freshman Class.

First Term,—Rhetoric and Composition; Diction and Sentence Construction; Punctuation; Recitations and exercises on the blackboard.

Second Term.—Narrative Composition; Written Essays, read in class and corrected; Synonyms, Prosody.

#### Freshman Class.

First Term.—English Prose and Poetry; Interpretations of Masterpieces of English Prose and Poetry; Written Essays, read in class and corrected.

Second Term.—Studies in English Literature.

Each 'pupil is required to commit to memory and recite in class selections from the great English poets and prose writers, including parts of Shakespeare's Julius Cæsar and the Merchant of Venice; Bacon's Essays on Studies and Friendship; Milton's L'Allegro and Il Penseroso and extracts from Areopagitica; Bunyan's Golden City; Dryden's Alexander's Feast; Gray's Elegy; parts of Goldsmith's Deserted Village; passages from Burke's Speech on the Spirit of Liberty in the American Colonies; Burns' Cotter's Saturday Night; Wordsworth's Intimations of Immortality; Coleridge's Hymn to Mont Blanc; the closing passages of Webster's speech in reply to Hayne; Byron's Prisoner of Chillon; Shelly's Ode to the Skylark; Bryant's Thanatopsis; Emerson's Essay on Compensation; Longfellow's Keramos, Holmes' Deacon's Masterpiece; Tennyson's Ulysses; De Finibus, by Thackeray; The Vision of Sir Launfal, by Lowell.

Text-book: Swinton's Studies in English Literature.

#### Sophomore Class.

First Term.—History of English Literature; Class Reading from Bacon, Burke, Milton, Shakespeare and other great English writers.

Text-books: Shaw's Manual of English Literature and Hudson's Annotated English Classics.

Second Term.—Advanced Rhetoric; Lectures on the Elements of Criticism.

Text-books: Genung's Rhetoric; Minto's Manual of English Prose Literature.

#### Junior Class.

First Term.—The Science of Logic; Lectures on Pure Logic, in which Stoicheiology and Methodology are explained and illustrated; explanations and illustrations of the Analytics of Aristotle and the New Analytic of Sir Wm. Hamilton; exercises in Figure, Mood and Reduction; Lectures on Fallacies and the Sources of Error; Lectures on Inductive and Analogical Reasoning; Lectures on Evidence.

Text-book: Icvons' Logic.

Second Term.—Anglo-Saxon and Early English.
Text-book: Corson's Anglo-Saxon and Early English.

#### IV. Department of Military Science.

#### CAPTAIN SWIGERT.

Instruction in this Department is both practical and theoretical.

The Practical course embraces the U.S. Drill Regulation for Infantry, including the schools of the soldier, company, and battalion in close and extended order; ceremonies; so much of the Artillery Drill Regulations as per ains to the manual of the piece and mechanical manoeuvres; signalling with flag and heliograph; guard duty and minor tactics.

Theoretical instruction embraces recitations in U. S. Drill Regulations for Infantry and Artillery; instruction in the preparation of reports and returns pertaining to a company; lectures on organization and administration of the United States Army, and general principles governing in the Art of War

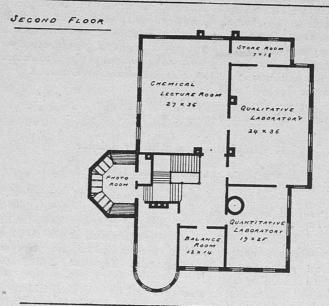
All students below the grade of senior are required to take this course unless disqualified by reason of physical disability.

#### V. Department of Chemistry.

#### PROFESSOR KASTLE.

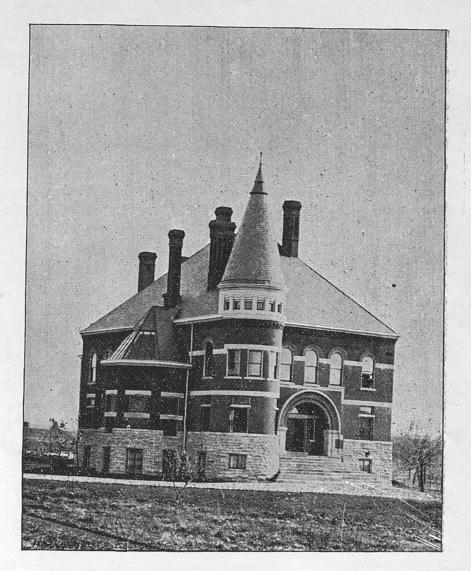
The Chemical Department dates from the establishment of the institution. For many years it was under the direction of Dr. Robert Peter, who by his labors in analytical chemistry has done more probably than any other man to develop the abundant mineral resources of the State. The Department remained in the hands of Dr. Peter until 1887, when he resigned. Dr. E. A. Von Schweinitz was then appointed to the vacancy created by the resignation of Dr. Peter. He held the position during the collegiate year 1887-1888, when he also resigned, and then the present incumbent was appointed. For many years the chemical laboratories and lecture room occupied the eastern part of the main College building. In September, 1889,

KENTUCKY AGRICULTURAL EXPERIMENT STATION BUILDING

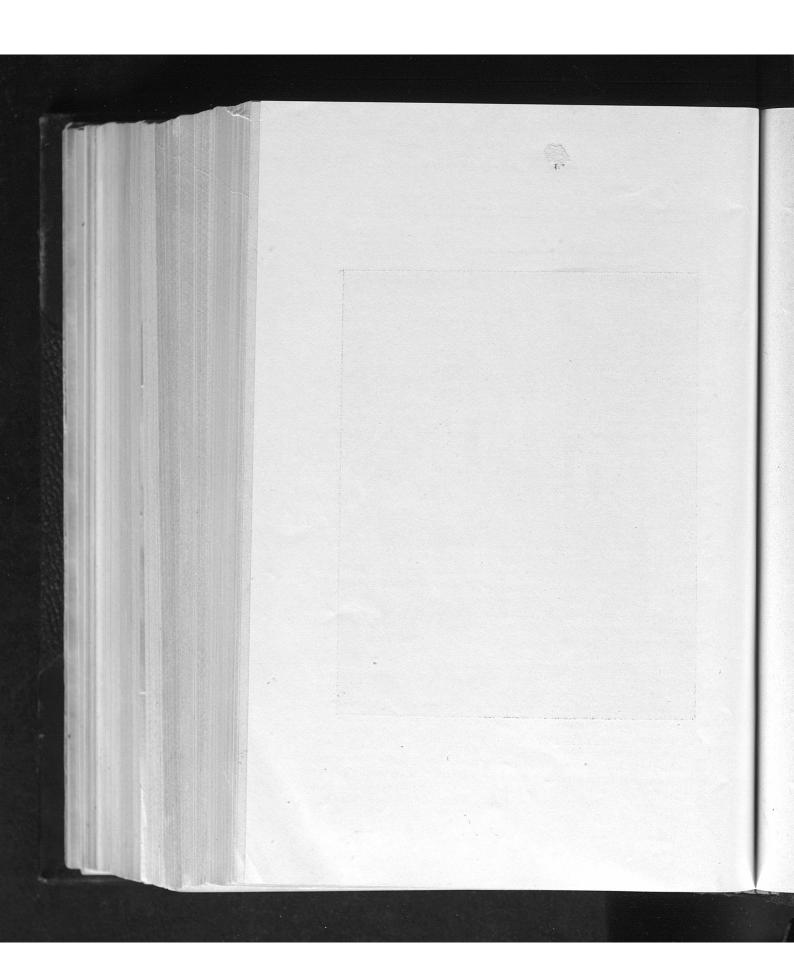


ROOMS OF CHEMICAL DEPARTMENT.

however, the Experiment Station building having been completed, the apparatus and equipment were moved from the laboratories in the main building to more suitable and beautiful rooms on the second floor of the Experiment Station building. The lecture room and the laboratories, qualitative and quantitative, of the Chemical Department are exceedingly well adapted to their purpose, and are among the best constructed and most handsomely furnished of the rooms in the College. The qualitative laboratory contains three very large working tables, each of which can easily accomodate ten students. The quantitative laboratory is also well equipped with tables, hoods, water, gas, electricity, etc., and has desk room for at least fourteen students in all. The lecture room is well lighted and heated and beautifully furnished and commodious, having a seating capacity of about seventy-five. Besides the laboratories and lecture room, there are several other small rooms on the same floor set aside for the use of the Chemical Department, an instructor's office, a balance-room and a store-room.



EXPERIMENT STATION BUILDING.



#### APPARATUS.

The Department is well equipped with the commoner forms of chemical apparatus and chemicals. In addition to these it owns several of the more expensive pieces of apparatus, such as several exceedingly delicate balances for analytical work; a grand model Bunsen & Kirchoff spectroscope; platinum apparatus; a complete outfit for electro-plating; vapor density apparatus; a glass model ice machine, etc., etc. These of course will be added to from time to time as the needs of the Department demand and the resources of the institution permit; as it is now, however, the equipment is such as to readily permit the student to obtain, at first hand, a good working knowledge of chemical science.

#### VI. Department of Mathematics and Astronomy.

#### PROFESSOR WHITE.

A thorough knowledge of Arithmetic and of Algebra through quadratic equations, as presented in Wentworth's Higher Algebra is required for admission to the Freshman class.

#### Freshman Year.

Text-books: Wentworth's Higher Algebra, Wentworth's Plane and Solid Geometry, Wentworth's Trigonometry.

The first term is devoted to the study of Geometry, Books I. to V. inclusive.

During the second term Algebra and Plane Trigonometry are studied simultaneously; the work in Algebra being chapters XXII. to XXXIV. inclusive.

#### Sophomore Year.

Text-books: Wentworth's Plane and Solid Geometry, Bowser's Analytical Geometry.

The studies of the first term are Solid Geometry and Conic Sections, the entire second term being given to Analytical Geometry.

#### Junior Year.

Text-book: Bowser's Calculus.

The study of Calculus is optional with all students except in the Mechanical and Civil Engineering Courses.

#### Senior Year.

Text-book: Young's Elements of Astronomy. The object of this class is to give to the students a knowledge, as accurate and as extensive as our time will permit, of the phenomena of the heavenly bodies and of their probable condition and history. No efforts will be spared to make the study of this branch of science highly interesting and instructive.

#### VII. Department of French and German.

#### PROFESSOR WERNICKE.

#### I. German.

#### FIRST SESSION.

First Term.—Joynes-Meissner's Grammar for Colleges, Part I., oral exercises.

Second Term.—Harris' German Composition, Parts I. and II.; Prepositions and Strong Verbs; Construction of the German Sentence; Easy reading matter.

#### SECOND SESSION.

First Term.—Schiller's Wilhelm Tell; Freytag, Aus der Zeit Friedrichs d. Grossen; Exercises in Composition continued.

Second Term.—Goethe, Hermann u. Dorothea; Lessing, Minna v. Barnhelm; Schiller, Leid v. d. Glocke; Bernhardt, Literaturgeschichte; Exercises in Conversation and Composition.

#### THIRD SESSION.

(Optional) Hedges' Course in Scientific German; selections from authors of the VI. and VII. periods of the literature.

#### II. French.

#### FIRST SESSION.

First Term.—Ahn-Henn, Book First; Oral exercises to ensure correct pronunciation.

Second Term.—Irregular verbs; pronouns; elements of syntax; Reading from Super; Preparatory French Reader.

#### SECOND SESSION.

First Term.—Voltaire, Charles XII.; review and constant exercises in grammar.

Second Term.—Syntax; Luquiens, French Prose of Popular Science; selections from modern authors.

#### THIRD SESSION.

(Optional). Modern literature; conversational exercises; Duval, Historie de la literature Française.

#### III. Spanish.

A course in Spanish may be taken as an equivalent for third year French.

### VII. Department of Greek and Latin.

PROFESSOR NEVILLE.

#### Preparatory Course.

FIRST SESSION.

Bingham's Latin Grammar; Gradatim (194 Latin stories,) or five Colloquies of Erasmus; White's Beginner's Book in Greek. Inflection and translation are taught through daily exercises on the blackboard.

#### SECOND SESSION.

Five books of Cæsar, or two books of Cæsar and twelve lives of Nepos; six books of Virgil; Exercises in writing Latin; Sallust's Catiline or Cicero De Senectute; the Beginner's Book reviewed; five books of the Anabasis, six of the Iliad.

#### Collegiate Course.

#### THIRD SESSION.

Livy books I. and XXI.; six orations of Cicero; thirty letters of Pliny; the first forty exercises of Arnold's Latin Prose Composition; selections from Herodotus; Plato's Apology and Crito; four orations of Demosthenes; Dialogues of Lucian.

#### FOURTH SESSION.

Horace, except a part of the Epodes and Satires; the second forty exercises of Arnold; Tacitus, Germania and Agricola; the III. VII. VIII. and X. Satires of Juvenal, or, instead of the VII. and VIII. an essay of Seneca; two books of Thucydides; three Greek dramas (Prometheus, Medea, Oædipus Rex).

#### IX. The Academy.

### PROFESSOR PATTERSON.

The Academy is under the immediate direction and management of a Principal and three Assiscants, all of whom are experienced professional teachers.

The pupils are subject to the same rules and regulations as the students of the College. Their attendance at the College is required only during the hours of recitation and other prescribed College exercises, such as chapel, drill, etc., the preparation of their lessons being made elsewhere.

The courses of instruction in the Academy are provided for those who enter directly from the common schools, and are intended to supply the necessary training intermediate between the course of study prescribed by the State Board of Education for the common schools and the Freshman Class of the College.

Applicants for admission to the Academy, if county appointe es

must be at least fourteen years of age, and must be provided with credentials of scholarship from the County Superintendent. They must also pass a satisfactory examination in spelling, reading, writing, arithmetic, history of the United States, English grammar and geography, in order to be admitted.

Other applicants must be at least fifteen years of age, and must have completed the common school course prescribed by the State Board of Education. They must pass a satisfactory examination in spelling, reading, writing, arithmetic to percentage, English grammar through syntax, and geography, in order to be admitted. Applicants from the city will be required to pass an examination on all the subjects embraced in the first year's Scientific course in the Academy. Those who enter at any other time than the beginning of the year will be required to pass a satisfactory examination on the work already gone over by the classes which they propose to enter.

Students matriculated in the Academy will be required to pursue one of its prescribed courses of study and will not be permitted to take any work outside of this course except on the recommendation of the Principal.

#### Entrance Examination.

For the benefit of those, other than county appointees, who desire to know the character of the examination which applicants for admission will be required to pass, the following examination papers are submitted as a sample. It is not to be understood that these are the questions on which the pupils will be examined but that they indicate the attainments necessary to enter the Academy of the College. Those who expect to enter more advanced classes will be required to pass an examination on all that the class which they propose to enter has passed over.

#### I. ARITHMETIC.

Find the greatest common divisor and the least common multiple of 899 and 961,

$$\text{Simplify } 2_{4}^{1} \! \times \! \frac{10_{4}^{8} \! - \! 4_{12}^{11}}{6_{16}^{3} \! + \! 7_{3}^{2}} \div \frac{3_{11}^{5}}{1_{2}^{2} \! \times \! 9_{11}^{1}}$$

Find the number of bushels that will fill a bin 8.5 feet long, 4.5 feet wide, 3.5 deep.

The longitude of Rome is 12° 27′ 14″ east; the longitude of Chicago is 87° 35′ west; find the difference of time between the two places.

What will be the cost of plastering the walls and ceiling of a room 27 feet 4 inches long, 20 feet wide, and 12 feet 6 inches high, at 27 cents per square yard, if 20 square yards be deducted for doors, windows and base-boards?

If a train at the rate of  $\frac{5}{13}$  of a mile per minute takes  $3\frac{1}{4}$  hours to reach a station, how long will it take at the rate of  $\frac{7}{15}$  of a mile per minute?

A and B can do a piece of work in  $2\frac{1}{2}$  days, A and C in  $3\frac{1}{3}$  days, B and C in  $4\frac{1}{4}$ . Required the time in which all these working together can do the work and in which each can do the work alone.

A farmer sowed 5 bushels, 1 peck, 1 quart of seed, and harvested from it 103 bushels, 3 pecks, 5 quarts. How much did he raise from a bushel of seed?

Reduce 9 square chains, 11.25 square rods, to the decimal of an acre.

If a bar of iron  $3\frac{1}{3}$  feet long, 3 inches wide,  $2\frac{3}{4}$  inches thick weighs 93 pounds; what will be the weight of a bar  $3\frac{2}{3}$  feet long, 4 inches wide, and  $2\frac{1}{4}$  inches thick?

#### II. ENGLISH GRAMMAR.

Give illustrations of all the parts of speech.

Define pronoun, preposition, adverb, clause and phrase.

How are the possessive cases of nouns and pronouns formed?

Define a simple sentence, a complex sentence, and give examples of each.

Analyze the following sentence and parse in full all the words in it: "The soldiers of the tenth legion, wearied by their long march, and exhausted from want of food, were unable to resist the onset of the enemy."

#### III. GEOGRAPHY.

What are the circles of the earth?

What are the meridians?

Define latitude and longitude.

What two meridians bound the hemispheres?

Define the two principal forms of government.

Bound North America and describe its political divisions.

Why is the climate of Western Europe different from that of America in similar latitudes?

Describe the mountains, principal rivers and lakes of Asia.

Describe the natural routes of commerce.

#### X. The Normal School.

#### PROFESSOR ROARK.

Although organized as a Department of the College, co-ordinate with the other departments, yet the Department of Pedagogy is, more properly, a school in itself, made so by the necessities of the Public School system of the State. Therefore, in addition to offering full work in Pedagogy (Educational Psychology and its applications in School Economy and Educational Methods), this Department

also provides academic instruction for teachers who desire to fit themselves for higher grades of work. In administering the Department the real needs and limitations of the average Public School teacher are kept constantly in view, and the elevation of the common schools of the State is the basic principle of the work.

#### XI. Department of Civil Engineering.

PROFESSOR NELSON.

This Department comprises the study of the application of Mathematics to nechanical problems.

1. Mechanics.—This course includes the study of Analytical Mechanics with especial reference to the problems arising in the design of structures and machines; Applied Mechanics, including the analytical and graphical methods of testing forces in structures of all kinds.

Text-books: Bowser's Analytical Mechanics, Merriman's Applied Mechanics.

2. Bridges and Structures.—This course includes the theory of the use of materials in framed structures and in bridges built of masonry.

Text-books: Baker's Masonry Construction, Du Boise's Strains in

Framed Structures, Johnson's Framed Structures.

3. Field Engineering.—This course includes the study of the handling of all kinds of field instruments which are provided by the College, land and railway surveying, projection of maps construction of public highways and observations as applicable to geodetic problems

Text-books: Davies' Surveying, Searle's Field Book, Johnson's Surveying, Streets and Pavements.

4. Municipal Engineering.—This course includes the study of the subjects of hydraulic engineering in its several branches, and economic handling of the problem of sewerage of cities and sewage disposal.

Text-books; Fanning's Water Supply, Waring's Sewerage and Land Drainage.

5. Mining.—This course includes the study of the methods of prospecting for ore, for its extraction, for the proper location and development of mines and of the machinery used in mining operations.

Text-book: Collin's Lectures on Mining.

6. Advanced Mechanics.—To those who desire it, and who are properly prepared, opportunity will be given for the study of the higher problems in Applied Mechanics according to the methods of the Infinitesimal Analysis.

#### XII. Department of Zoology and Entomology.

PROFESSOR GARMAN.

The Department was established on an independent footing with the beginning of the school year 1890-'91 Since then the larger of the two rooms occupied by it has been furnished as a laboratory in order that a practical knowledge of Zoology and Entomology may be given to students, and that the instruction may be more effective as a training of the powers of observation and reflection. The Laboratory is now provided with tables, each accommodating, if necessary, two persons, and is furnished with reagents for making simple tests, and for staining and otherwise treating tissues to prepare them for study with the microscopes. The equipment and apparatus consist of eighteen microscopes, such as are used in the best laboratories in this country and Europe, two microtomes, a Schanze and a Thoma, both imported from Germany for the Department, of paraffine baths of the Naples Zoological Station pattern, ten dissecting stands made for us by the Bausca & Lomb Optical Co., of Rochester, New York, dissecting trays, bell jars, and a full set of Leuckart, and Nitsche's celebrated zoological charts. Much of the illustrative material used by us is collected by us within the State, such material being considered most valuable as serving to familiarize students with objects they are likely to encounter in after life. A good collection of birds is available for analytical work, and students taking the Biological, Scientific and Agricultural courses are required to learn the use of such "keys" as Jordan's Manual of Vertebrate Animals, and to know something of the classification of birds and of the more common species. A similar collection of fishes is also available for analytical work. For the study of vertebrate anatomy, a small collection of mounted skeletons has recently been secured, including such types as the gibbon, hyena, porpoise, duckbill, bird, tartle, lizard, fish and frog. It will be added to from time to time, since it is intended to provide for a special course in Osteology. Where it is impossible to provide fresh material, alcoholic types of the different groups of animals are used, so that each student dissects and otherwise examines at least one example of every animal sub-kingdom. Types of every class of each sub-kingdom are examined in this way, where time and available material permit. We now provide examples of all the peculiar groups of salt-water animals, and by means of them are able to give a very good knowledge of the structure and relations of such forms as the squid, star-fish, sea-urchin, sea-anemone, ascidian and the like.

The entomological work is made a separate feature in this Department, partly because of the great extent of the class Insecta, but chiefly because of its economic importance—If, as is estimated by our best entomologists and statisticians, we annually lose in this country, from the depredations of injurious insects, not less than \$100-000,000 it is highly important that a knowledge of insects and their habits should be disseminated among the people, and it is especially important in a State like Kentucky, where the leading industry

is agriculture. It has been urged that the reduction of a crop to the extent of one-fourth or one-half its value by insects, should be regarded as a tax of twenty-five or fifty per cent. on its full value. Such a tax is collected year after year, often without an attempt at resistance. It is the purpose of the entomological work at the College to place in the hands of students, who expect to make farming their occupation, such means of defense against loss as are known to those who have given the matter study. The Department is especially well provided for in this direction, having the benefit of the work done at the Experiment Station, and having access to the collections, apparatus and library accumulated for Station work. The collection now contains examples of most of the injurious insects which occur in the United States, and is constantly being enlarged. The Station is well supplied with breeding cages for use in studying the habits and life-histories of insects so that students who wish to do so have an opportunity to observe for themselves the various stages presented by a developing insect, and may see them, in many cases, actually engaged in their destructive work. An insectary, which we hope soon to add to our facilities, will give us increased opportunity in this field of investigation.

#### XIII. Department of Mechanical Engineering.

PROFESSOR ANDERSON.

This Department has recently been reorganized and is now one of the most completely equipped in the College. A description of the new building is given under the head of "buildings." The equipment of the different rooms is briefly described below.

The Drawing-room contains drawing-tables, drawing-boards, curves, scales, tee-squares, and other special drawing apparatus to accommodate thirty students.

The Engine-room contains a 10-inch by 24-inch Hamilton-Corliss non-condensing engine and an 8.5 kilowatt Edison compound dynamo with amperemeter, resistance box and volt-meter so that the dynamo may be used for experimental purposes.

The Wood-shop contains twenty benches, with complete set of wood-working tools, thirteen wood turning lathes, each with complete set of turning-chisels, band sawing-machine, universal wood-worker, fret-saw, and grindstone.

The Foundry contains a thirty inch cupola furnace with a capacity of a ton of metal per hour. brass furnace, twelve complete sets of moulder's tools, twelve benches, also ladles, clamps, core-room, core-oven, pattern-rack, and the tools employed in practical foundry.

The Blacksmith-shop contains a ten-inch steel pressure blower, twelve forges, twelve anvils, three blacksmith vises, an emery grinder

and twelve complete sets of blacksmith tools for carrying on all kinds of iron and steel forging.

The Machine-shop contains six lathes, one milling-machine, one self-feed drill, one planer, one sharper, one tool-grinder, one emery grinder and twelve iron vises, and benches for vise work in metal.

The Testing-laboratory is equipped with a 100,000 pound Riehle testing-machine, a pair of Crosby indicators, a Corliss engine used exclusively for experimental work, a 51-horse power water tube boiler, a Riehle-Yale extensometer and instruments for measurement of all dimensions.

The Tool-room is supplied with a fine assortment of superior tools for work in iron, steel, brass and wood, and contains such stock and supplies as may be used in construction in the Mechanical Laboratories named above.

The Wash-room contains lockers for sixty-five students and is supplied with marble basins and closets

The Boiler-house contains a fifty-one horse power Babcock and Wilcox water-tube boiler and a Dean Bros'. No. 3, Steam-pump.

The building is heated by steam and lighted by 130 incandescent and 4 arc lamps.

### XIV. Department of Anatomy and Physiology.

PROFESSOR PRYOR.

Anatomy, Physiology and Hygiene are taught to students of the Classical, Scientific. Biological, Veterinary and Normal courses, extending throughout both terms of the Freshman year.

At the beginning of the second term a special class is organized for the benefit of Normal students. A thorough working knowledge of these branches is taught by means of lectures, demonstrations and recitations.

This Department is well provided with the apparatus necessary to illustrate the work of the student. The equipment includes papier-mache manikin, and models (Auzoux) of eye, ear, larynx, etc., skeletons, charts, microscopes, etc. Sufficient Histology is given for all practical purposes.

To those who intend to apply themselves hereafter to the study of medicine, this department offers inducements seldom obtained in other educational institutions.

Text-books: Huxley and Youmans, Martin's Human Body and Martin's Briefer Course

#### XV. Department of Veterinary Science.

PROFESSOR BENNETT.

This department is provided with a commodious and well appointed dissecting room, which was but recently completed and is equipped with the best modern apparatus.

#### XVI. Department of Geology and Palæontology,

PROFESSOR MILLER.

#### Geology and Palaeontology.

The exact time in a student's course at which the different subjects comprehended in this Department are studied varies somewhat for the different courses; but the order of succession is as follows:

(1) Physiography (2) Mineralogy (3) Palæontology (4) Advanced Geology. Besides these, in which what follows is intimately based on that which precedes, are two self-contained studies: (5) A Shorter Course in Geology and (6) Economic Geology.

#### Physiology.

First Term.—Required for Seniors in the Scientific and Classical Courses. Normal students have the option between this and (5) the Shorter Course in Geology. Elective for students in the Scientific Course.

The object of this study is to give the student a somewhat comprehensive view of the earth and its inhabitants. Facts and theories in Physics, Biology, Geography and Astronomy are enlarged upon at greater length than is usual in studies commonly included under the name of Physical Geography. Physiography is especially adapted to those preparing to teach, and to those in the Classical Depart ment, who without wishing to concern themselves much with technical details, still desire some knowledge of those broad facts and principles of science, which are essential to all wno would lay claimto being posessed of a liberal education.

Text-book: Mill's Realm of Nature.

#### Mineralogy.

First Term.—Required for Seniors in the Scientific Course. The object of this study is to render the student familiar with the composition and physical characteristics of those common minerals and rocks likely to come under his notice. as well as in the ordinary round of every day observation as in geological pursuits. The instruction involves laboratory and text-book work. Crosby's Tables for Determination and Common Minerals and Rocks are used.

#### Palaeontology.

First Term.—Required for Seniors in the Biological and Scientific courses. Lectures on the nature and zoological position of different fossil groups are given, and the student is expected to become familiar with the appearance of the fossils themselves by actual examination. Much of the work involves the use of artificial keys for determination, similar to those used in Botany and Zoology.

Special attention is paid to the fossils common in Kentucky. The

Department is well equipped in collections for this purpose. The instruction is almost entirely by lectures and laboratory work.

#### Advanced Geology.

Second Term.—Required for Senior scientific and biological students and open to others who may have elected to take the Mineralogy and Paleontology which precedes. It is meant to be the culmination for those who have availed themselves of all the opportunities for the study of Geology offered in this Department. It is to be hoped that some of these may be induced to go farther, and either in their home localities or elsewhere, make a beginning at doing original work. Kentucky, with its large areas of practically unexplored territory geologically, offers an especially fine field to young geologists in this respect.

Text-book: LeConte's Elements

#### Shorter Course in Geology.

This has been introduced in response to an especial demand from the Normal Department for a course in Geology that would be at once short and self-contained.

Text-kook: LeConte's Compend.

#### Economic Geology.

Second Term.—Required for Seniors in the Chemical Course and for Civil Engineers.

The characteristics of this study will be the minimum of the organic and the maximum of the inorganic side of Geo ogy. Some of the chief topics treated will be: Common Rock and Vein Forming Minera's; Origin of Ore Deposits; Mineral Terms and Methods; Coal, Petroleum, Natural Gas and Asphaltums; Building Stone, Cements, Clays and Ferti izers; Relation of Geology to Agriculture; Relation of Geology to Sanitaty Engineering.

Text-book: William's Applied Geology supplemented by lectures.

In addition to the above, a course of lectures on the Relation of Geology to Agriculture, is given in the series of Agricultural Lectures, which come during the winter months.

#### XVII. Department of Physics.

#### PROFESSOR PENCE.

The Department of Physics occupies two adjacent rooms on the east side, and in the basement, of the main college building. The lecture room is 18 ft. by 44 ft. and will comfortably seat fifty or more students. It has the necessary lecture table, with gas, water and drainage, and is arranged and fitted to be used at pleasure, as a dark room The laboratory is 24 ft. by 30 ft. It is well furnished with tables, water, instruments for use in experimentation; and has twenty-four spaces at the tables for individual work. This Department,

though recently organized, is now well equipped for work. The rooms are the best fitted and furnished in the building. The following shows in brief the work in Physics.

#### SOPHOMORE YEAR.

First Term.—Lectures illustrated by experiments, with recitations one hour daily. This course embraces the subjects of General Properties of Matter, Dynamics, Heat, Electricity and Magnetism, Sound and Light, and is intended to give the student a general knowledge of physical phenomena, and of physical laws, and to prepare him for the practical work which accompanies and follows the course. Text-book: Gage's Physics.

(2) Physical Laboratory, one hour daily (for engineering students). Experiments in the subjects of the lecture course. Text-book: Gage's Laboratory Manual and Note Book.

Second Term.—Physical Laboratory, one and one-half hours daily. Experiments in the subjects of the lecture course. The students in engineering do not take this term's work. Text-book: Gage's Laboratory Manual and Note Book.

#### JUNIOR YEAR.

First Term.—Physical Laboratory, one hour daily. Lectures, recitations and experiments in Heat. Text-book: Balfour Stewart's Heat.

Second Term.—Physical Laboratory, one to two hours daily. Lectures, recitations and experiments in Electricity and Magnetism. Text-book: Stewart and Gee's Practical Physics. Vol. II.—Electricity and Magnetism.

In all laboratory work each student is furnished with necessary apparatus, and must keep a systematic record of all his work, giving data and results of each experiment. The work is both qualitative and quantitative.

# Degrees.

The State College confers the degrees of-

Bachelor of Science (B. S.), Bachelor of Arts (A. B.),

Bachelor of Agriculture (B. Agr.),

Bachelor of Civil Engineering (B. C. E.),

Bachelor of Mechanical Engineering (B. M. E.),

Bachelor of Pedagogy (B. Ped.),

Master of Science (M. S.),

Master of Arts (A. M.),

Master of Agriculture (M. Agr.),

Master of Civil Engineering (C. E.),

Master of Mechanical Engineering (M. E.).

To attain the Bachelor's degree, the applicant must have been a student of the College at least one session, and he must have passed the examination on all the courses of study leading to the desired degree.

To attain the Master's degree, the applicant must have attained the Bachelor's; he must have pursued, for at least one session in this College or two sessions elsewhere, a major study selected by himself and one or two minor studies assigned him by the Faculty; and finally he must, at least thirty days before the end of the session, have satisfied the Faculty that he is duly proficient in his studies and have presented to the College an acceptable thesis on his major study or on some part thereof.

If the applicant be an alumnus of another institution of learning, he must satisfy the Faculty that he has completed a course of study for his first degree equivalent to that prescribed in this College for the same degree; and he must matriculate and study under the direction of the Faculty at least one session.

Students that complete a part of the courses in a satisfactory manner, may in attestation of the fact receive Certificates of Proficiency.

Diplomas are given to those who complete the course of study in the Business College.

# Grouping of Courses for Degrees.

# I. Courses for the Degree of B. S.,

MAJOR STUDY, MATHEMATICS.

History, Policical Economy and Metaphysics. President Patterson	
BotanyProfessor Mathews.	
The English Language and LiteratureProfessor Shacklefo	rd.
Military Science	
ChemistryProfessor Kastle.	
Mathematics and AstronomyProfessor White, De	ean
The French and German Languages Professor Wernicke	
Zoology and EntomologyProfessor Garman.	
Anatomy and Physio'ogyProfessor Pryor.	
Geology and PalæontologyProfessor Miller.	
PhysicsProfessor Pence.	

For the Degree of M. S., either Chemistry, Biology, Geology, Mathematics or Physics may be selected as major study, and minor studies will be assigned from Biology, Chemistry, Geology, Mathematics, Physics, English History, Political Economy, Metaphysics, French and Germau.

TIME TABLE OF COURSES FOR THE DEGREE OF B. S. (Maj. Math.)

	Afternoon.			Botanical Laboratory.	Physical Laboratory.	Chemical .Laboratory.	Zoological Laboratory.		
(	Fifth Hour.	Drill.	Drill.	Drill.	Drill.		-		
	Fourth Hour.	Physiology.	Physiology. Physiology.		Chemistry.	German.	German.		Astronomy.
	Third Hour.	Drawing.	Algebra.	Physics.	Botany,	French.	French.	Mental Philosophy.	Logic.
	Second Hour.	Plane Geom.	Plane Trlgo.	German.	German.	English.	English.	History.	History. Politic Economy.
	First Hour.	English. English. Solid Geom. Analytic		Analytic Geom.	Zoology.		Mineralogy. Paleontology.	Geology.	
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## II. Courses for the Degree of B. S.,

### MAJOR STUDY, CHEMISTRY.

History, Political Economy and Metaphysics	President Patterson.
Botany	
The English Language and Literature	.Professor Shackleford.
Military Science	.Captain Swigert.
Chemistry	.Professor Kastle.
Mathematics	Professor White, Dean.
The French and German Languages	Professor Wernicke.
Zoology and Entomology	. Professor Garman.
Physiology	Professor Pryor.
Geology	.Professor Miller,
Physics	Professor Pence.

For the degree of M. S., either Chemistry, Biology, Geology, Mathematics, or Physics may be selected as major study; and minors will be assigned from Biology, Chemistry, Geology, Mathematics, Physics, English Literature, History, Political Economy, Mental Science French and German.

TIME TABLE OF COURSES FOR THE DEGREE OF B. S. (Maj. Chem.)

2:30 to 4 P. M.			Botany.	Physical Laboratory.	Chemical Laboratory	Chemical Laborato y.	Chemical Laboratory.	Chemical Thesis.
Fifth Hour.	Military Science.	Military Science.	Military Science.	Military Science.				
Fourth Hour.	Physiology.	Physiology.		Chemistry.	German.	German.	General Chemical Reading.	Economic Geology.
Third Hour,	French,	Algebra.	Physics.	Botany.	Calculus.	French	Mental Philosophy.	Logie.
Second Hour.	Geometry.	Trigonometry.	German.	German,	Zoology.	Theoretical Chemistry.	History.	Political Economy.
First Hour.	English.	English.	Solid Geometry.	Analytical Geometry.	Zoology.	Zoology.		7
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#### Course in Chemistry.

The Chemical Course has lately been established with the view to preparing the student for life work in the Science of Chemistry, and also with the view to fitting him for the study of medicine and kindred professions. To the accomplishment of this purpose the following course of study, extending over four years, has been adopted.

#### Studies Required.

The first year is devoted to the study of English, Mathematics, Algebra, Plane Geometry and Trigonometry, French and Physiology. The second to Mathematics, Solid and Analytical Geometry, German, Chemistry. Botany and Physics.

The third year to Chemistry, theoretical and laboratory practice, Zoology, Geology, French and German, and Calculus.

The fourth year to Chemistry—advanced general reading, laboratory practice and original investigation, Economic Geology, History and Political Economy, Mental Philosophy and Logic.

#### The Training in Chemistry Proper.

The study in Chemistry proper, as outlined in the above, is sufficient in its scope to bring the student in close contact with the great fundamental truths of the Science, and to make him enthusiastic and capable in his profession

The course in General Chemistry, extending through the second five months of the second year, consists of lectures, laboratory work and recitations five times weekly on the non-metals and their compounds and the simpler laws of chemical change. The lectures are abundantly illustrated by suitable and instructive experiments; the laboratory work is carefully directed and the student receives every possible encouragement to do excellent work.

In the third year the study of Chemistry is resumed with laboratory work and Theoretical Chemistry. The study of Theoretical Chemistry, consisting of lectures, recitations and readings five times weekly during the second half year is intended to acquaint the student with the greatest generalizations and theories of modern chemistry and their historical development. In this connection fifty lectures will be delivered upon the following general topics: Ten upon the Atomic Theory, its development, and the methods at present used in the determination of atomic weights; fifteen upon the Compounds of Carbon, Isomerism and Structural Formulæ; ten upon the History of Chemistry; five upon the Periodic Law; five upon the Spectroscope, Spectrum Analysis, and the Chemistry of the Heavenly Bodies; five upon the more important current chemical investigations.

By way of supplementing the work of the lecturer, students pursuing this course will be required to do a certain, rather liberal, amount of general reading upon the matter treated of in the lectures

or upon such other topics as may be assigned by the instructor. For this purpose the nucleus of a chemical library has been formed, which may be freely consulted by any or all students in the College, and the leading chemical journals of this and other countries, will there be kept on file. The broadening influences of such a course can scarcely be overestimated, and students who complete it satisfactorily will find themselves, in some measure at least, abreast of the highest and best chemical thought of our time.

The laboratory work, during the first term of the third year, is devoted to the study of the metals, and their more important compounds, and qualitative analysis. This work is intended to supplement the work of the first year upon the non-metals. and also to familiarize the student more fully with the commoner methods of chemical manipulation and practice. The laboratory work of the first term will be followed up during the second with laboratory work in quantitative analysis, by means of which the student learns the value of precise and accurate work, and the constancy and definite character of chemical reactions. The chemical work of the last year will consist of such special work as the student may elect to pursue, together with the preparation of a thesis embodying the results of this special work. The object of such an arrangement is to perfect him in that particular branch of the science for which he shows a liking or a particular talent. In this connection it may be well to state that facilities are offered for special work along the following lines: Pure Chemistry, Organic Chemistry, Agricultural Chemistry, general analytical work, and special analytical work on fertilizers, iron and steel and fuels.

## Chemistry Required in Other Courses.

Instruction in chemistry in other courses of study, such as the Scientific, Classical, etc., is designed to meet their special needs in this direction.

In the Classical Course, the study of this science extends over five months, five times weekly, and is intended simply to introduce the student to the subject by way of general education.

In the Scientific Course the work extends over ten months. A portion of this time is devoted to the study of the metals and qualitative analysis by means of laboratory work. In the course of Mechanical Engineering the instruction is adapted as completely as possible to the need of the students in this department. Instruction in chemistry in this course extends over a period of ten months; five of which are devoted to the study of the non-metals and their compounds; five to the chemistry of the metals with special reference to the properties which render them useful to the mechanician; and also with reference to their mode of occurrence in nature and the methods of obtaining them from their ores.

For students in Civil Engineering a similar course has been provided, extending over ten months. The first five of these are devoted to the study of Elementary Chemistry, and the last five to the study of those substances used as building material: metals, alloys, and mineral substances which are used in construction.

For the benefit of students of Agriculture a special course in Agricultural Chemistry has been arranged, the general aim of which is to acquaint the student with the chemistry of those elements which enter into the composition of plants, and which are essential to their life and growth. A study of the composition of the soil, air and water, and their several relations to the plant as sources of plantfood, forms a large and important part of this work. Also the chemistry of tillage, irrigation and rotation, and the composition and value of commercial fertilizers and manures.

For students in Biology also, instruction in Chemistry is adapted as fully as possible to their needs. Instruction in this branch extends over ten months, five times weekly. The first half of this time is devoted to the study of Elementary Chemistry, this is followed by laboratory work in the afternoon upon those elements which are regarded as essential to living things, animal and vegetable. Chemistry also forms an important branch of study in the Veterinary Course. It extends over ten months and includes Elementary Chemistry together with such special study as the Director of this course may see fit to assign.

# III. Courses For the Degree of B. S.,

# MAJOR STUDY, BIOLOGY.

History, Political Economy and Metaphysics. President	Patterson.
Botany Professor	Mathews
The English Language and Literature Professor	Shackleford
Military Science Captain S	Swigert.
Chemistry	Kastle.
Mathematics	White, Dean.
Zoology and EntomologyProfessor	Wernicke.
PhysiologyProfessor	Prvor
Geology and Palæontology Professor	Miller.
PhysicsProfessor	Pence.

For the degree of M. S., either Chemistry, Biology, Geology, Mathematics or Physics may be selected as major study; and minors will be assigned from Biology, Chemistry, Geology, Mathematics, Physics, English Literature, History, Political Economy, Mental Science, French and German.

TIME TABLE OF COURSES FOR THE DEGREE OF B. S. (Maj. Biol.)

Afternoon.			Chemistry, Laboratory.	Botany.	4,5	Physics, Laboratory.	\	Thesis in Zoology or Botany.
Fourth Hour,   Fifth Hour.	Drill.	Drill.	Drill.	Drill.	Botany.	Botany.	<u></u>	
Fourth Hour.	Physiology.	Physiology.	Botany.	Chemistry.	Botany.	Botany.	German.	German.
Third Hour.	Algebra.	Drawing.	Botany,	Osteology.	French.	French.	Physics.	Logic.
Second Hour.	Plane Geometry	Plane Trigonometry.	Zoology.	Zoology.	German.	German	History.	Political Economy.
First Hour.	English.	English.	Zoology.	Zoology.	Mineralogy, Palæontology.	Geology.	Embryology.	Entomology.
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## Course in Biology.

The Course in Biology is designed for those who prefer an education with a foundation in the natural sciences. It is adapted especially to meet the wants of students who are looking toward a career as specialists in Biology, as teachers of natural science, and for those who intend to study medicine after completing college work. Two years of Zoology and Embryology, one term of Entomology, two years of Botany, one year of Anatomy and Physiology one year of Chemistry, one year of Geology, and one term of Physics, give character to the course. The other branches are offered as in one way or another accessory to the training and knowledge which these studies give. In the sciences of this course laboratory work is made prominent. Field work is done when the nature of the subject permits. Textbook and lecture are employed chiefly to elaborate the subjects and for fixing and explaining facts acquired.

#### Zoology.

During the Sophomore year two hours each day are given fo the study of this branch. The "type method" is employed each student being provided with written directions for the examination and dissection of examples of the chief groups of the animal kingdom. The study of these types constitutes the basis of the work in this line. During the year students are expected to acquire also an acquaintance with Systematic Zoology by the used of analytical keys and prepared specimens of birds and fishes. In the first term of the Junior year one hour each day is again given to Zoology, attention being confined to vertebrates. The work of this term serves as a preparation for the Embryology, which is studied during the first term of the Senior year. The Zoological Laboratory is now provided with the best of microscopes, microtomes, paraffine baths, and other appliances for practical work.

#### Entomology.

Special work in this branch of Zoology is provided for in the latter part of the Sophomore year. The sublect is taught by the use of types, which are dissected and examined with the aid of the microscope.

### Botany.

For two years the student devotes two hours per day to the various divisions of this subject, with the option of an aditional term for original investigation as the basis of a graduating thesis.

The work begins in the second term of the Freshman year in January, and is at first almost identical with that assigned to students in other courses; beginning with a study of seeds, their germination and development, followed by a critical study of the structure of a

typical mature plant and its most important modifications. This work is accompanied throughout by drawings and written descriptions of the various forms studied, thus constantly testing and developing the accuracy of the pupil's observative and descriptive powers.

As soon as the out-door plants begin to blossom the work is largely transferred to the field, and the remainder of the term is occupied mainly with the collection and analysis of the local flora

In the second term, beginning the Sophomore year, the work of collecting is continued and is accompanied by a careful study of the more difficult orders, such as Compositæ, gramineæ, and Cyperaceæ-

During the term topics for special study are assigned to each student, the results being presented to the class in the form of a short paper for criticism and inquiry. These topics include a wide range of subjects, such as a study of some special group of plants, some plants of economic value, subjects in plant physiology, etc.

The third term is occupied mainly with work in microscopy, including Histology and a study of the best known groups of the lower cryptogams.

During the fourth term the work of the student is assigned with reference to his individual tastes and requirements, and is intended to be a continuation of some subjects commenced in the earlier parts of his course, such as Plant Physiology, Systematic Botany Histology, Officinal Plants or Cryptogamic Botany.

#### Anatomy and Physiology.

The facilities provided for the study of Anatomy and Physiology are excellent. This department is well supplied with models, charts, skeletons, microscopes, etc.

To those having in view a professional career, and especially those contemplating the study of medicine and surgery, the instruction received in these branches will be of great value. Taken in connection with the other subjects, which with it make up the Biological course, a good foundation is laid for students intending to devote themselves hereafter to the study of medicine.

Hygiene and preventive medicine are taking such high rank, that it becomes the duty of all to make themselves familiar with physiological anatomy and the essentials of physiology.

# Courses for the Degree of A. B.,

# MAJOR STUDIES, GREEK AND LATIN.

History, Political Economy and Metaphysics.	President Patterson
The English Language and Literature	Professor Shackleford.
Military Science	.Captain Swigert.
Chemistry	Professor Kastle.
Mathematics and Astronomy	.Professor White.
The French and German Languages	Professor Wernicke.
The Greek and Latin Languages	Professor Neville, Dean.
	Asst. Prof. Blanton.
Physiology	.Professor Pryor.
Physiography	Professor Miller.

For the degree of A. M. either Greek, Latin, English, History. Mental Science, French or German, may be selected as major study; and minors will be assigned from Greek, Latin, English, Mathematics, History, Mental Science, Political Economy, French and German.

TIME TABLE OF COURSES FOR THE DEGREE OF A R

	Afternoon.							Physiograph	
E OF A. B.	Fifth Hour.	Drill.	Drill.	Drill.	Drill.			1	
THE DEUKEE OF A. B.	Fourth Hour.	Latin.	Latin.		Chemistry.	Greek or German.	Greek or German	A7.	Astronomy
L OF COURSES	Third Hour.	Physiology.	Algebra.	Greek.	Greek.	French,	French.	Mental Philosophy.	Logic.
1001	Second Hour.	English. Greek or German	Greek or German	Plane Geometry.	Plane Trigonometry.	English.	English.	History.	Political Economy.
	First Hour.	English.	Erglish.	Latin.	Latin.	Solid Geometry.	Analytical Geometry.	French.	French.
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# Courses for the Degree of B. Ped.,

# MAJOR STUDY, PEDAGOGY.

History, Political Economy and Metaphysic	es. President Patterson.
Botany and Horticulture	Professor Mathews.
The English Language and Literature	
Military Science	Captain Swigert.
Chemistry	Professor Kastle.
Mathematics and Astronomy	Professor White.
The Greek and Latin Languages	Professor Neville.
Pedagogy	
	Assist. Prof. Newman.
Zoology and Entomology	Professor Garman.
Anatomy and Physiology	Professor Pryor.
Geology and Palæontology	Professor Miller.
Physics	Professor Pence.

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Afternoon.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Botanical Laboratory.	Physical Laboratory.	Chemical Laboratory.	Zoological Laboratory.		
Fifth Hour.	Drill.	Drill.	Drill.	Drill.				
Fourth Hour,	Physiology.	Physiology.		Chemistry.			School Economy Methods.	School Economy, History of Education.
Third Hour.	Drawing.	Algebra.	Physics.	Botany.	Horace,	Educational Psychology.	Men <sup>†</sup> al Philosophy.	Logic, Astronomy, Moral Philosophy.
Second Hour.	Plane Geometry	Plane Trigonometry.	Virgil.	Cicero.			History.	History and Political Economy.
First Hour.	English Literature.	English Literature.	Solid Geometry.	Analytical Geometry.	Zoology.	Tacitus. Juvenal.	Mineralogy, Palæontology.	Geology.
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TIME TABLE OF COURSES FOR THE STATE DIPLOTA:

At other Hours.	Forensics.	Forensics, Pedagogy.		Forensics.	Forensics.	Forensics. Pedagogy.		Forensics Pedagogy.
Fifth Hour.	Drill.	Drill.	CATE.	Drill.	Drill.	Drill.	CATE.	Drill.
Fourth Hour.	Physics.	Latin.	COUNTY CERTIFIC	U. S. History.	Civios.	U. S. History.	STATE CERTIFI	Algebra.
Third Hour.	Psychology,	Advanced Algebra.	URSES FOR THE	Civies or Orthography.	Geography or Physiology.	Geography or Physiology.	OURSES FOR THI	Psychology.
Second Hour.	Plane Geometry.	Advanced Arithmetic	TIME TABLE OF COURSES FOR THE COUNTY CERTIFICATE.	Geography or Composition.	Higher Arithmetic or Grammar.	Higher Arithme- tic or Composition.	TIME TABLE OF COURSES FOR THE STATE CERTIFICATE.	Higher Arith- metic.
First Hour.	Latin.	English Litera- ture.	ľ	Arithmetic or Grammar.	Arithmetic or Composition.	Ky. History, or Grammar.		English Litera- ture.
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## Courses in Pedagogy.

The teacher must be possessed of three things in addition to an upright and sterling character and a healthy body. These three things are: (1) An adequate knowledge of what he proposes to teach; (2) skill in teaching—knowledge of how to teach; (3) some broad and liberal culture wherewith to illuminate his work and increase its value. These three things it is the business of the Teacher's Training School to give.

1. An adequate knowledge of the branches to be taught.—The giving of this knowledge is academic work, primarily. But this academic instruction should be given with the fact constantly in view that "The student will teach as he is taught, rather than as he is taught to teach." The instruction in Arithmetic, Physiology, Grammar, etc., is designed to illustrate to the teacher-pupils in the various classes the latest and best methods of teaching these subjects.

2. Skill in teaching—the knowledge how to teach.—This can be acquired best by successful practice, but there is a science as well as an art of teaching. Teaching must not be wholly empirical. There are fundamental principles upon which all true teaching rests, and the purpose here is to fix these principles in the minds of the pupils. It is the carrying out of these principles, their successful and practical application, that lifts the work of the teacher to the dignity of a profession. It is the direct inculcation of these principles and the practical drill in their application that distinguish the Teacher's Training School from all other schools. The Teacher's Training School should work in the faith that teaching is the highest profession, and the atmosphere of such a school should be filled with the professional spirit.

Since the principles of the science of education rest on the activities and processes of the growing mind, special attention is given to Educational Psychology. A study of this subject is followed by a thorough drill in School Management and the most rational and effective Educational Methods. The principles of management and methods are constantly presented in their relations to the principles of Psychology. Finally, the student is introduced to the history of his profession abroad and at home. The professional course proper, then, consists of Educational Psychology, Management in Education, Method in Education and the History of Education

3. Some broad and liberal culture.—He who knows only the subjects he has to teach and something of how to teach them is not yet a teacher. He must know as much more as he can; must have some knowledge of subjects higher than the branches he will be called on to teach, and different from them. Human knowledge is so interrelated that otherwise he cannot have the copiousness of illustration necessary to make the simplest and commonest facts as clear as they

should be. The relations of facts must be taught—hence the growing need of liberal culture, a widened horizon, for the teacher.

The courses offered in this department are believed to be such as will meet the requirements above set forth, and also satisfy the practical needs of the educational system of the State.

The Professional Course leading to the degree of B. Ped. (Bachelor of Pedagogy), is intended to cultivate the professional spirit, to give a general education, and to fully equip those who complete it for teaching successfully in any grade of public school, or in any academy or college.

The Preparatory Course is identical with the work of the Academy and fits the student to enter the full Professional Course of the Normal Department.

The State Diploma Course is arranged to enable those teachers who have the age and experience required by the school law, and who already hold a State certificate, or are otherwise properly qualified for taking the course, to prepare by one year's work to pass successfully the examination for State Diploma.

The State Certificate Course is open to those who have the legal qualifications of age and experience, and who hold first class, or high grade second class, county certificates, or are otherwise prepared to undertake the work of this course. The aim is to fit such students to take successfully the examination for State certificate. The time required is five months, beginning in mid-winter.

The County Certificate Course is designed to prepare teachers for the county schools of the State. Preparations for properly passing the county examination may be made in one year or in five months, according to the previous preparation of the matriculate. By far the larger number of those who take this course enter it after the Holidays. The second term is divided into two terms of ten weeks each, and thus teachers can review all the common branches during the second half year.

It will be seen upon reference to the schedules, pp. 44, 45, that Drill work in Forensics, *i. e.*, in essay writing, speaking and debating, is required in all the normal courses. Ability to express fluently and correctly is of the utmost value to the teacher, and can be gained only by constant practice. The Forensic Drills will occur once a week, with special exercises once or twice each term.

The Pedagogy Drill will occur daily during the last quarter of each year, and is intended to give valuable training in the Science of Teaching.

# IV. Courses for the Degree of B. C. E.,

## MAJOR STUDY, CIVIL ENGINEERING.

The English Language and LiteratureProfessor Shackleford	
and discount of the contract o	
Military ScienceCaptain Swigert.	
Chemistry Professor Kastle	
Mathematics and AstronomyProfessor White.	
Civil EngineeringProfessor Nelson Dea	n
Mechanical EngineeringProfessor Anderson.	
PhysicsProfessor Pence.	

For the degree of C. E. either Railways, Structures, Regimen of Streams, Canals and Water Power, Municipal or Mining Engineering, Sanitation, Topographical, Geodetic and Hydrographical Surveys, or Architectural Engineering may be seelected as major study; and minors will be assigned from Mathematics, Astronomy, Mechanical Engineering, Geology, Chemistry, Physics, Political Economy, English, French and German.

TIME TABLE OF COURSES FOR THE DEGREE OF B. C. E.

Afternoon.	Fieldwork Draughting.	Fieldwork Draughting.	Fieldwork Draughting.	Fieldwork Draughting	· Smin Smin	Structural Draughting	Architectural Draughting.	Designing Structures.	Thesis.
Fifth Hour.	Drill,	Drill.	Deill.	Drill.					
Fourth Hour.	Draughting.	Topographical Drawing.	Physical Laboratory.	Chemistry.		Advanced Surveying.	Analytical Mechanics	Sanitary Engin- eering.	Astronomy.
Third. Hour.	Draughting.	Plane Surveying.	Physics.	Structural Designs.		Calculus.	Economic Geology	Hydraul. Engin- eering. Architecture.	Geodesy Least Squares.
Second Hour.	Plane Geometry.	Plane Trigonometry.	Railway Location.	Descriptive Geometry.		Graphical Statics.	Strength of Materials.	History.	Political Economy.
First Hour.	English.	English.	Solid Geometrry, Algebra.	Analytical Geometry.	Railwaye	Other High- ways.	Electricity, Magnetism.	Bridges and Structures.	Stereotomy Mining.
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## . Courses in Civil Engineering.

This course comprises primarily, the study of the subjects necessary to fit students for the practice of this profession in any of its branches; and secondarily, the study, so far as is possible, of such other subjects as belong to a liberal education.

Applicants for this Degree are required to pass a satisfactory examination on all the subjects comprised in the course; to attend all of the classes in at least the Junior and Senior years, and to comply with the other rules of the College.

The course of study occupies four years. Students are not admitted to advance classes unless they show, after proper examination, that they are amply prepared for this privilege.

The theory of Engineering Work is taught by text-books and lectures, and the practical application of the theory is exemplified by practical work in the field and draughting-room, and by the study of model structures.

The work in the draughting-room consists of the making of maps, according to actual surveys and after topographical methods. Railway appliances are studied from the most approved designs, and working drawings are made of these. When the design of structures, such as bridges, roofs, roundhouses, etc., is under consideration, detailed drawings are made, so that students may learn the best methods followed in actual practice. Through the kindness of such bridge builders as the King Bridge Co., the Edge-Moor Bridge Co., the Phoenix Bridge Co., and the Union Bridge Co , specimen drawings of structures erected by them, are furnished for study.

The subjects of Chemistry and Geology are taught with especial reference to their economic value to the practical engineer.

The work of a civil engineer may properly be the charge of the building and handling of railways, both steam and electric; highways of all kinds; bridges and all other structures; surveying in the simple branches of land measurement and in the higher work of geodetic and map surveys, including surveys by astronomical observations; Municipal Engineering in all of its important branches, and the location and economic opening of mines. This course of study is designed to prepare its graduates for the proper handling of all such work.

In addition to the purely technical subjects with which a civil engineer must be familiar, the course provides for the study of English Literature, History and Political Economy.

The practical knowledge of materials used in structures is provided for by a course of work in the Mechanical Laboratory in connection with the study of the theory of working in wood, iron and steel.

Practical use of the instruments belonging to this profession is taught by work in the field, including land surveying, railrway location, triangulation and observation with the solar transit for latitude,

time and true mer dian. Methods for finding longitude and latitude are practiced. This practical work includes the use of Compass, Transit, with solar attachment, Level, Plane Table, Aneroid Barometer and other instruments, all of which are furnished by the College.

To those who desire it and who are properly prepared, opportunity will be offered for the study of advanced classes in any of the subjects forming a part of this course. To Post-Graduates such an opportunity offers a means for extended study of the application of the Infinitesimal Analysis to problems in mechanics.

## Courses for the Degree of B. M. E.,

## MAJOR STUDY, MECHANICAL ENGINEERING.

History and Political Economy	.President Patterson.
The English Language and Literature.	.Professor Shackleford.
Military Science	
Chemistry	Professor Kastle.
Mathematics	Professor White.
Mechanical Engineering	Professor Anderson, Dean.
	Assistant Professor Wells.
Shopwork and Drawing	Instructor Johnson.
Physics	Professor Pence.

For the degree of M. E. either Steam Engineering, Electrical Engineering, Chemical Engineering, Experimental Engineering, or Machine Designing may be selected as major study; and minor studies will be assigned from Steam Engineering, Electrical Engineering, Chemical Engineering, Experimental Engineering, Machine Designing, Mechanical Laboratory Work, Mathematics, Physics, Chemistry, Mental Science, Political Science, English and Modern Languages.

# TIME TABLE OF COURSES FOR THE DEGREE OF B. M. E.

2:45-5 P. M.	Shop Work in Wood, Bench and Lathe.	Partern Making Foundry.	Iron and Steel Forging.	Vise Work in Metal. Machine Work.	Chemical Laboratory, Machine Design.	Advanced Work in Physical Laboratory, Machine Design.	Valve and Engine Designing.	Thesis Work.	
Fifth Hour,	Military Science.	Military Science.	Military Science.	Willitary Science,	Machine Design.	Machine Design.	Theory and Practice of Photography.	Experimental Work; Engine, Boiler, Belt and Materials of Construction Tests.	
Fourth Hour.	Wood Working Tools, Mechanical Drawing.	Theory of Pattern Making and Foundry Practice.	Physical Laboratory.	Chemistry.	Machine Desigo.	Analytical Mechanics.	Valve Gearing.	Engine, Boiler, Belt and Materials of Construction Tests.	
Third Hour.	Mechanical Drawing.	Mechanical Drawing.	Physics.	Elementary Designing.	Calculus.	Metallurgy.	Steam Boilers. Transmission of Power,	Dynamometers and Messurement of Power. Dynamo Electric Machinery.	
Second Hour.	Plane Geometry.	Plane Trigonometry.	Mechanical Drawing.	Descriptive Geometry.	Kinematics.	Strength of Materials,	History.	History and Political Economy.	
First Hour.	English.	English.	Solid Geometry, Algebra.	Analytical Geometry.	Heat	Magnetism. and Electricity.	Thermodyna- mics.	Engine Design.	
	tst Term.	2d Term.	tst Term.	2d Term.	1st Term,	2d Term,	lst Term.	2d. Term,	
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## Course in Mechanical Engineering.

The training given in this course, both practical and theoretical, is intended to prepare young men for positions of responsibility and trust in mechanical engineering work. The practical work extends over a period of two years and includes the most important principles and operations in bench work in wood, wood-turning, pattern-making, foundry work, iron and steel forging, and hand and machine work in metal.

The theoretical work during the first two years consists of a thorough training in English, Chemistry, Mathematics, Physics and Drawing, and during the last two years, the fundamental principles of boiler, machine and engine design are taken up. By a careful solution of practical problems, the student becomes familiar with the process carried on by the operators and designers of successful machine plants.

The course in Mechanical Engineering involves three separate lines of work:

1 Steam engineering, the object of which is to give that training necessary to fit men to be operators and designers of steam machinery.

2. Chemical engineering, intended especially to give the knowledge requisite for the successful operation of iron and steel plants and the analysis of iron, steel, coals and refractory substances.

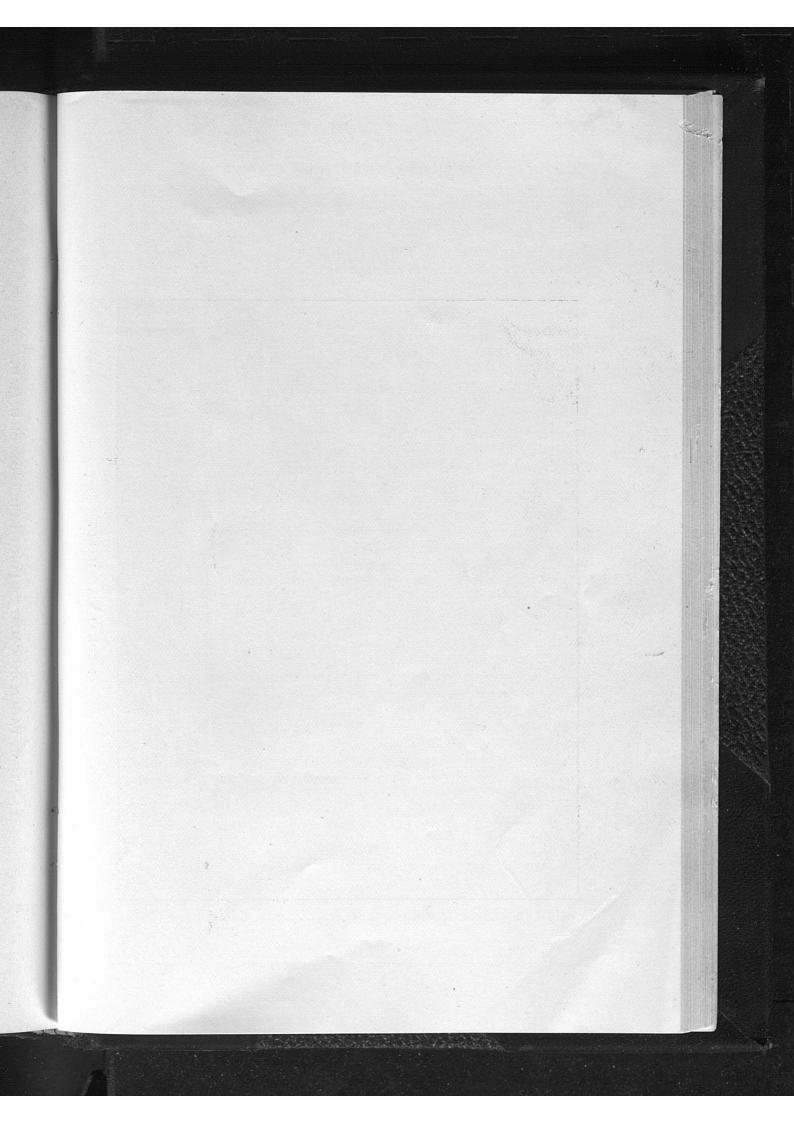
3. Electrical engineering, in which the theory, design, building and operation of dynamos and motors are predominant.

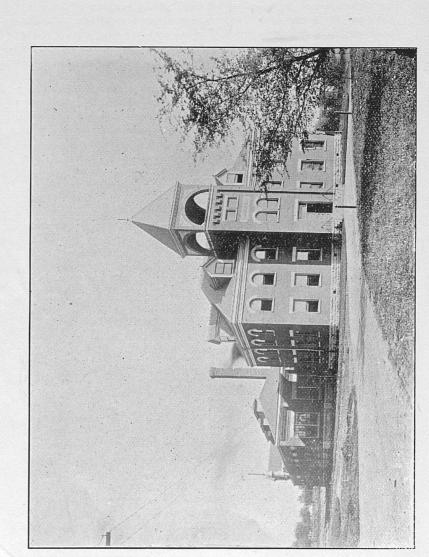
During the Freshman and Sophomore years the work for all students in the Mechanical Engineering Course is identical, but during the Junior and Senior years a student is granted the privilege of electing one of the three lines of work indicated above.

The course of study in Mechanical Engineering extending over a period of four years leads to the Degree B. M. E. (Bachelor of Mechanical Engineering). The advanced Degree of Mechanical Engineer may be obtained by resident students in one year after taking the degree of B. M. E from the State College of Kentucky or any other institution of equal requirements, they having successfully carried on work laid down, passed a satisfactory examination, and presented an acceptable thesis. The advanced degree may also be taken in three years after obtaining the Degree of B. M. E., provided the student has been engaged during the period of three years in practical engineering work, passes a satisfactory examination at the College and presents an acceptable thesis.

#### Freshman Year.

Technical Instruction—Twenty-six weeks, three hours per week. (a). Recitations on the forms of wood-working tools, and the cutting and





MECHANICAL HALL.

peculiarities of timber. (b). Lectures on the operation of the various forms of wood-working machinery. (c). Lectures on pattern making, molding and casting.

Mechanical Drawing—Twenty-six weeks, six hours a week, and ten weeks, ten hours a week. This drawing includes free-hand sketches, drawing from copies and model, using parts of machines in the Mechan-

ical Laboratories as models.

Shopwork—Thirty-six weeks, twelve hours a week. (a). Bench work in wood, including exercises in the following operations: Planing, sawing, rabbeting, plowing, notching, splicing, mortising, tenoning, dovetailing, framing, paneling, and the general use of carpenter's tools. (b). Wood turning, involving the various principles of lathe-work in wood. (c). Pattern-making, which gives the student discipline in the construction of patterns for foundry work. (d). Foundry work, including the various operatious of molding, core making, and the melting of iron and brass.

English—Thirty-six weeks, five hours per week.

Algebra—Twelve weeks, five hours per week.

Geometry—Seventeen weeks, five hours per week.

Trigonometry—Nineteen weeks, five hours per week.

#### Sophomore Year.

Technical Instruction.—Sixteen weeks, one hour per week. (a). Lectures on the handling of iron and steel in forging, and the methods of tempering and annealing steel. (b). Lectures on modern machine-shop practice.

Mechanical Drawing.—Sixteen weeks, four hours per week; thirty-six weeks, five hours per week. (a). Drawing the parts of machines and complete machines to scale. (b). Exercises in tinting and

shading.

Shopwork.—Thirty six weeks, twelve hours per week. (a). Exercises in iron and steel forging. (b). Exercises in vise-work in metal. (c). General machine work, including screw-cutting, drilling, planing and the milling of iron, brass and steel.

Descriptive Geometry.-Nineteen weeks five hours per week.

Physics.—Seventeen weeks, ten hours per week.

Solid Geometry. - Seventeen weeks, five hours per week.

Analytical Geometry.-Nineteen weeks, five hours per week.

Chemistry.—Nineteen weeks, five hours per week.

## Junior Year.

Kinematics.—Seventeen weeks, five hours per week. Under this head are studied the velocity ratios in various motions, construction of gears cams, quick return motions, straight line motions, epicyclic trains, parallel motions, and the manner of designing trains of mechanism.

Mechanical Drawing, Thirty-six weeks, six hours per week. The work done during the year consists in the design of machines to do certain specific work, at d the making of detail drawings of machines used in actual construction in the laboratories.

Metalurgy. Twelve weeks, six hours per week. The above includes the study of fuels and refractory substances, and the process employed in puddling iron and making steel.

Chemical Laboratory.—Seventeen weeks, six hours per week.

Analytical Mechanics.—Nineteen weeks, five hours per week.

Strength of Materials.—Nineteen weeks, five hours per week.

Strength of Materials — Nineteen weeks, five hours per week. Heat — Seventeen weeks, five hours per week.

Physical Laboratory —Seventeen weeks, six hours per week. Chemistry.—Twenty-four weeks, five hours per week.

Magnetism and Electricity. -Nineteen weeks, five hours per week.

#### Senior Year.

Thermodynamics.—Twenty-six weeks, six hours per week. This work consists of a study of the laws of thermodynamics thermal capacities, and the application of thermodynamics to the steam engine.

Steam Boilers.—Seventeen weeks, five hours per week. A study of the various commercial steam boilers, consumption of fuel, incrustation, determining the horse power of boilers, boiler tests, the design of boilers for efficiency and economy, and the methods of power transmission.

Valve Gearing.—Seventeen weeks, five hours per week. The study of various forms of standard engine valves and methods of designing.

Mechanical Drawing.—Seventeen weeks, ten hours per week. This consists in working out practical designs of boilers and steam engine valves.

Engine and Mactine Design.—Fifteen weeks, five hours per week. A study of the modern methods of designing engines and machines for strength as well as motion.

Experimental Engineering.—Fifteen weeks, ten hours per week Includes a study of the steam engine indicator, making engine, boiler, belt, and materials for construction tests.

Political Economy.—Fifteen weeks, five hours per week.

Theory and Practice of Photography.—Seventeen weeks, five hoursper week.

Dynamo-Electric Machinery.—Nineteen weeks, five hours per week. History.—Twenty weeks, five hours per week.

Dynamometers and Measurement of Power.—Twelve weeks, five hoursper week.

Thesis Work.—Nineteen weeks, twelve hours per week.

Every student, before he attains the degree of B. M. E., must present a satisfactory thesis on some new design of a machine, or an original investigation.

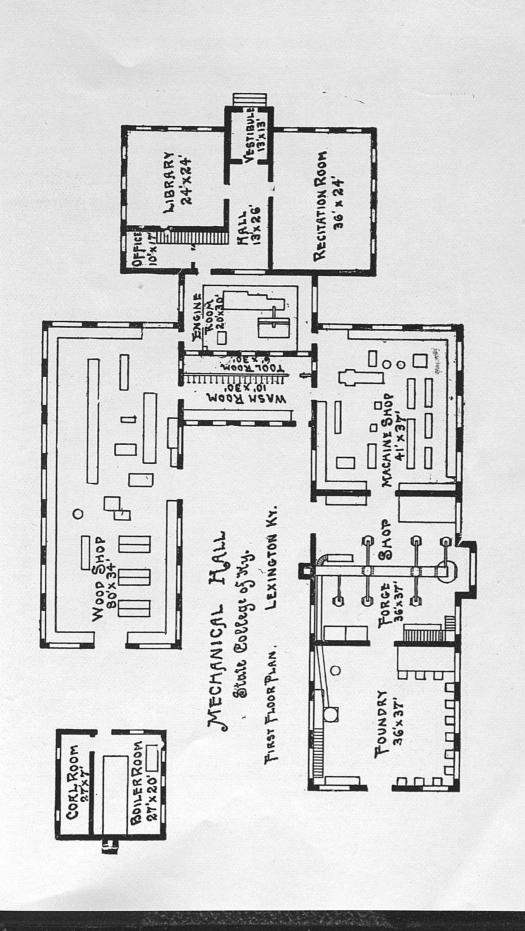
The greater part of the second term of the Senior Year is given to the preparing of this thesis. The subjects for theses are assigned to students by the Professor of Mechanical Engineering, and the completed theses are kept on file with the college records, that they may serve as a reference for future investigators.

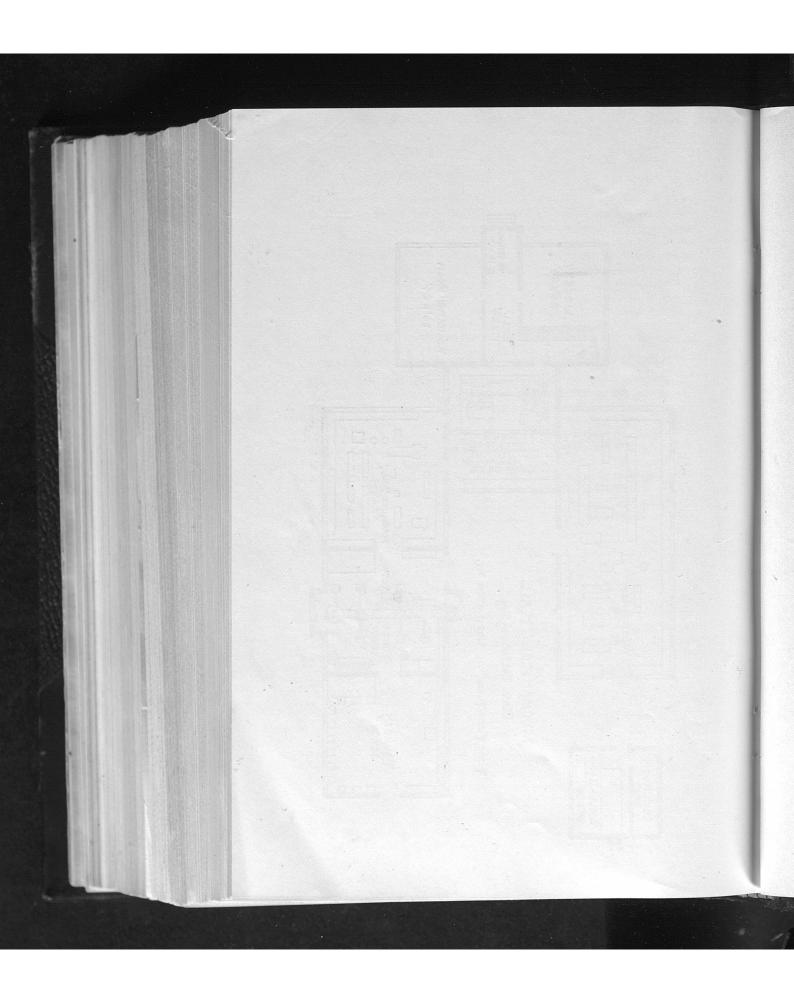
# III. Courses for the Degree of B. Agr.,

MAJOR STUDIES, AGRICULTURE, HORTICULTURE AND BOTANY.

History, Political Economy and Metaphysics. President Patterson.  Agriculture, Horticulture and Botany Professor Mathews.
The English Language and LiteratureProfessor Shackleford.
Military Science
ChemistryProfessor Kastle.
Mathematics and AstronomyProfessor White.
The French and German LanguagesProfessor Wernicke.
Zoology and EntomologyProfessor Garman.
Anatomy and Physiology Professor Pryor.
Geology and Palæontology Professor Miller.
PhysicsProfessor Pence.

For the degree of M. Agr., either Agricultural Chemistry, Horticulture, Entomology, Economic Botany or Veterinary Science, may be selected as major study; and minors will be assigned from Agricultural Chemistry, Horticulture, Entomology, Zoology, Geology, Botany and Veterinary Science.





TIME TABLE OF COURSES FOR THE DEGREE OF B. Agr.

Afternoon.			Botanical Laboratory.	Wood Work, Forging, &c.	Chemical Laboratory.	(a) Horticulture	Horticulture.	
Fifth Hour.	Drill.	Drill. $(a)$	Drill.	Drill. $(b)$			•	
Fourth Hour.	Physiology.	Physiology.	$\begin{array}{c c} (b) \\ \hline \text{Botany.} \end{array}$	Chemistry.	Botany.	Stock Breeding, Feeding, Dairy-ing. $(b)$		Thesis.
Third Hour.	Drawing.	Algebra.	Physics.	Botany. $(u)$	French.	French.	$\begin{array}{c c} (b) \\ \text{Veterinary} \\ \text{Science.} \end{array}$	(b) Veterinary Science.
Second Hour.	Plane Geometry.	Plane Trigonometry.	Zoology.	(a) Zoology.	Botany.	Botany.	Soils, Draining,   Fertilizers.	Political Economy.
First Hour.	English Literature.	$\begin{array}{c} (b) \\ \text{English} \\ \text{L terature} \end{array}$	(a) Zoology.	Zoology.	$\begin{array}{c} (b, \\ \text{Agricultural} \\ \text{Chemistry} \end{array}$	Entomology.	Mineralogy. Palæontology.	Geology.
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Students who can not take the regular course are advised to take a two years' course, the studies of the first year being those marked (a) in the above table, those of the second year being marked (b).

#### Course in Agriculture.

The distinctive feature of the Agricultural Course is the instruction in those branches of study which bear the most direct and practical relation to agricultural pursuits. It includes as subjects of primary importance the study of General and Agricultural Chemistry, General Zoology and Entomology, Botany, Horticulture, Geology General Agriculture, Veterinary Science, Woodwork and Forging.

In addition to these subjects the student devotes considerable time to the general work of other departments, including a year each in English and Mathematics, courses in Drawing, French, Physiology, Physics, Political Economy and Logic.

#### Agriculture.

The subject is taught by means of text-books and lectures, using as illustration the work of the farm, garden and greenhouse, all of which are fully equipped and in active operation. The first term is devoted to the subject of Soils, their origin, character and cultivation, Draining and Irrigation, Fertilizers, Farm Economy, etc. The second term is occupied with the subject of Breeds of Stock, Principles of Breeding and Feeding, and Milk, including its production and manufacture into the various dairy products.

For the study of Stock Breeding and kindred subjects, the location of the College is exceptionably favorable, being situated in the center of the far-famed Blue Grass region of Kentucky, with its numerous herds of high bred cattle and horses. In the entire work of this course material aid is rendered the student by the important experiments of the State Experiment Station, which are at all times available for observation and study.

#### Horticulture

The work in this Department begins in January of the Junior year and extends through two terms or an entire calendar year.

The time allotted to the subject is divided between lectures, recitations and actual practice in horticultural operations, special prominence being given to the latter feature of the course.

In the lectures are discussed the principles underlying horticultural practices; the propagation of plants; the physiological considerations upon which are based the operations of budding, grafting, pruning, training, &c.; greenhouses; their construction, heating and management, and vegetable, fruit and landscape gardening. In connection with the lectures, the work in the greenhouses, and upon the College and experimental grounds, is freely used for illustrative purposes, and occasional visits are made to the greenhouses, nurseries, market and fruit gardens, and the canning factory, all of which are well represented in or near Lexington.

The Department of Horticulture of the Experiment Station now has a large variety of orchard and small fruits growing upon the College farm, and the new and improved varieties are each year added as they are introduced. An extensive list of vegetables is also grown each year, and these with the experiments constantly in progress are always available for purposes of instruction.

In the practical part of his studies, the pupil is not only taught the best methods of doing his work, but is encouraged to seek for the principles which make such methods best.

He performs for himself the various operations of seed testing and seed sowing; propagating by cutting, layering, division, etc.; budding grafting, crossing, hybridizing, and other forms of horticultural practice.

In order to make this work of the greatest value to the student, he is required throughout the course to make accurate observations and careful notes upon his progress and the results of all these processes.

#### Botany.

This subject is studied for three terms of the course, the instruction taking the form mainly of guidance of the student in laboratory and field work, and it is the constant effort of the instructor to make the work as interesting and practical as possible. It begins in September of the Sophomore year with a study of the common seeds of the garden. These are sown by the student and the plantlet is carefully studied, and drawings are made in all stages of its development. The work is continued with a study of buds, roots and stems with their modifications, and the structure of all parts of the mature plant. The next term beginning in January, is devoted almost wholly to Economic Botany, including the study of common weeds and grasses; the most important plants used as food, medicine, or in the arts; and forestry.

The third term, beginning in September of the Junior year, is occupied with the subjects of Vegetable Histology and Cryptogamic Botany, especially the fungi injurious to field and garden crops. Each student is supplied with a compound microscope and other necessary appliances of histological study. While engaged with fungus diseases of plants, special attention is given to the practical methods of combating them.

#### Zoology.

Two hours are given each day during the Sophomore year to the study of Zoology, laboratory work, recitation and lecture, alternating according to the requirements of the class. Typical examples of each sub-kingdom of invertebrate animals are studied in the laboratory, practice in dissection, comparison, description and sketching

being given, together with a working knowledge of the compound microscope. Systematic Zoology is taught at the close of the year by the use of analytical keys and prepared specimens of birds and fishes.

#### Economic Entomology.

In en'omology the student is required to make careful examination and dissection of examples of the more important orders of insects, his knowledge of structure and classification being made as far as possible practical in character. With this knowledge as a foundation, he is expected to familiarize himself with the stages of the common insects, by a study of living and prepared specimens, until he can recognize them at sight when met in the field or garden. Brief accounts of the life-histories of the more injurious species are supplied each student to be used in connection with laboratory and field work. During the term a small collection of insects is prepared and classified by each pupil. The term's work is completed by instruction in methods of preparing and using insecticides.

#### Chemistry.

In order to meet the needs of the students in agriculture, the following course in chemistry has been arranged. During the second term of the Sophomore year the course consists of lectures and recitations, five hours weekly, upon the chemistry of the non-metals, together with such portions of chemical theory as are absolutely necessary for a thorough understanling of the work in hand.

The laboratory work during the first term of the Junior year may be regarded as a continuation of the work indicated above, and is intended in the first place, to familiarize the students with the general principles of chemical manipulation, and the use of the simple forms of chemical apparatus; secondly, to give him a fairly accurate knowledge at first hand, of the occurrence, preparation, properties, and uses of the more common metallic elements and compounds. In this connection instruction is given in the methods employed in the separation and recognition of such elements and compounds as pertain directly to plant nutrition and growth. The laboratory work is followed by a special course in Agricultural Chemistry proper. This consists of lectures and recitations five hours weekly throughout the second term of the Junior year. Its general aim is to thoroughly acquaint the student with the composition of the soil, the atmosphere and water, and their relations to the plant as sources of plant food.

The chemistry of tillage, irrigation and rotation is fully discussed, together with the methods employed is determining the composition and value of commercial fertilizers and manures.

#### Veterinary Science.

Agricultural students are required to take Veterinary Anatomy five hours a week during the Senior year. Students in this Department may attend the Clinic, should they desire to do so.

The Department is amply equipped with instruments, apparatus, etc., for the performance of all operations and the treatment of all diseases. The Library also cantains a choice collection of Veterinary works, which will be open to Agricultural students at all times.

#### Wood Working and Forging.

The course in Shopwork is intended to give young men such a training in the use of carpenter's bench tools, and in iron and steel forging, that they will be able to make any ordinary repairs about a farm, in either iron or wood.

#### Student Labor.

Students holding certificates as county appointees have the privilege of working for pay upon the College farm and gardens during the afternoons and Saturdays, when such labor does not interfere with instruction in class room and field. In the opportunities for compensated labor upon the grounds, preference will be given the students of the Agricultural Course, and their hours for study will be so arranged as to aid them as far as practicable in their efforts for self-support. It cannot be expected, however, that the average student, having only unskilled labor to offer, will be able to pay the entire expenses of his college course by this means. The maximum compensation for ordinary labor is eight cents per hour; for skilled labor, ten cents, may, by special contract, be paid.

#### Special Course in Agriculture.

(Two years, not leading to a degree).

It is believed that there is a considerable number of farmers' sons who, on account of lack of time or means, would hesitate to undertake a full college course of four years, who would yet be glad of an opportunity to gain the benefits of a two year's course Candidates for this course must be at least eighteen years of age. While it is believed that an earnest and somewhat mature student can spend two such years very profitably, every young man entering the course is urged to begin the full course of four years if there is any possibility of completing it.

It is often the case that a student earnestly desiring a thorough education will discover some means of finishing a complete course when at first it seemed impracticable.

#### A Special Course of Agricultural Lectures.

All male students are required to attend during part of one school year a course of lectures upon subjects bearing upon Agriculture. The course is intended as a means of disseminating a knowledge of and arousing an interest in Agriculture as an art, and is also designed to meet the wants of students who can remain at the College but a short time and wish while here to get as much instruction in the line of Agriculture as possible. The course begins in January and terminates in March, a lecture being delivered on Monday, Wednesday and Friday of each week. During the past year the course consisted of thirty lectures on the following subjects; Agricultural, Chemistry, Dairying, Economic Entomology, Farm Animals, Fertilizers, Horticulture, Geology as related to Agriculture, Plant Life on the farm.

# Courses for the Certificate in Veterinary Science.

History, Political Economy and Metaphysic	es.President Patterson.
Horticulture and Botany	Professor Mathews.
The English Language and Literature	Professor Shackleford.
Chemistry	Professor Kastle.
Zoology and Entomology	Professor Garman.
Anatomy and Physiology	Professor Pryor.
Veterinary Science	Professor Bennett.

TIME TABLE OF COURSES FOR THE CERTIFICATE IN V. S.

Afternoon.	Laboratory.	Labora'ory.	Laboratory.	Laboratory.
Fifth Hour.	Drill.	Drill.	Clinic.	Clinic.
Fourth Hour.	Physiology,	Physiology.	Pathology.	Pathology.
Third Hour.	Chemistry.	Chemistry.	Horse Shoeing.	Materia Medica.
First Hour. Second Hour.	Anatomy.	Anatomy.	Surgery,	Obstetrics.
First Hour.	English.	English.	Zoology	Zoology.
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### Course in Veterinary Science.

The course in Veterinary Medicine has been arranged to extend through two years, during which time thorough instruction is given in all the more important branches of this science. During the first. year students take up the study of anatomy and physiology of the domesticated animals. Instruction in these branches is given by means of lectures, recitations and laboratory work. In the laboratory students are required to spend as much time as possible preparing specimens and dissecting. First year students are also required to take Chemistry, Botany and Histology. The first of these three is taught by means of lectures, recitations and laboratory work, special attention being given to chemistry in its relations to medicine. Botany is taught during the second term of the first year. Histology is taught throughout the course by means of lectures and laboratory work. Students are required to work with the microscope and become thoroughly familiar with the structure of the various tissues and organs found in the animal body. During the second year the student takes up the more advanced branches relating to Veterinary Science, such as Pathology, Therapeutics Obstetrics, Horse-shoeing, Surgical diseases and operations, Materia Medica, Stock Breeding, the care of animals, etc. The first two branches are taught by means of lectures. Pathological specimens are shown as the occasion demands. Obstetrics is taught by means of lectures, recitations and demonstrations. Horse shoeing is taught by means of lectures and practical work. The various diseases of the feet are discussed, also faulty formations, and the best form of shoe and treatment to remedy these defects. Surgical diseases and operations, as a branch of veterinary medicine, are taught by means of lectures and illustrations. Instruction is given in preparing and securing animals for operations, in the use of instruments, the treatment of wounds, fractures, luxations, etc. Materia Medica is taught by lectures. During the course of instruction, the various articles of Materia Medica are shown and their actions and uses fully discussed. Stock breeding is taught by means of lectures, students having unsurpassed advantages in this branch owing to the great number of famous stock farms in the immediate vicinity of the school. During the course of study, lectures are also given upon the diseases of the dog, their causes, prevention and treatment. Throughout the entire course in Veterinary Medicine, students are required to attend the clinic which is held daily. Students who complete this course satisfactorily receive the Certificate of Proficiency in Veterinary Science.

#### Text-Books.

Anatomy—Chauveau, Strangeway, Leisering's Anatomical Plates. Practice-Robertson, Williams, Steele, Gresswell, Friedberger and Froehner Surgery.—Williams, Fleming. Shoeing .- Fleming, Hartmann.

Obstetrics.—Fleming, Harms.

Bacteriology.—Fraenkel.

Materia Medica.-Dun, Froehner. Histology.-Schaefer.

Exterior of Horse.-Gunther, Goubaux and Barrier.

## The Academy.

#### Faculty.

W. K. PATTERSON, Principal. J. LEWIS LOGAN, A. B., Assistant. J. MORTON DAVIS, A. B., B. S., Assistant. V. E. MUNCY, Assistant.

## I. Scientific, Agricultural and Engineering Course.

FIRST YEAR.—Arithmetic through percentage, Robinson's Higher; Algebra, Wentworth's Higher to chapter XI.; Political and Descriptive Geography, Butler's Complete; History of the United States, Eggleston's; English Grammar, Patterson's Advanced.

SECOND YEAR.—Arithmetic completed, Robinson's Higher; Al gebra, Wentworth's Higher to chapter XXII.; Elementary Physics Gage's; Physical Geography, Maury's; General History, Anderson's; Rhetoric, Williams'; Synonyms, Graham's; Shopwork.

#### II. Classical and Normal Course.

FIRST YEAR.—Latin Grammar, McCabe's Bingham's; Scudder's Gradatim; White's Beginner's Greek Book; Arithmetic through percentage; Robinson's Higher; Algebra, Wentworth's Higher to chap ter XI.; Political and Descriptive Geography, Butler's Complete; English Grammar, Patterson's Advanced.

SECOND YEAR.—Latin Grammar continued; Cæsar (Kelsey's); Virgil and Latin Exercises; Greek Grammar continued; Xenophon's Anabasis (Kelsey's); Homer's Iliad; Arithmetic completed, Robinson's Higher; Algebra, Wentworth's Higher to chapter XXII.; Elementary Physics, Gage's; Rhetoric, Williams'; Synonyms, Graham's.

TIME TABLE OF COURSES IN THE ACADEMY. == Scientific, Agricultural and Engineering.

	Fifth Hour. 8 A. M. to 1 P. M.			*Shop Work.	*Shop Work.
	Fifth Hour.	Drill.	Drill.	Drill.	Drill.
)	Fourth Hour.	Algebra.	Algebra.	Arithmetic.	Physics.
	Third Hour.	Arithmetic.	Arithmetic.	Physical Geography.	History.
	Second Hour.	Geography.	History.	Algebra,	Algebra.
	First Hour.	English Grammar	English Grammar	Rhetoric.	Rhetoric, Synonyms.
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Classical and Normal.

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Drill.	Drill.	Drill.	Drill.	.y.
Algebra.	Algebra.	Physics.	Arithmetic.	†For Classical students only.
Arithmet.c.	Arithmetic.	Cæsar.	Virgil.	
Latin Grammar.	Latin Grammar.	Algebra.	Algebra.	ineering students only.
English Grammar Latin Grammar.	English Grammar Latin Grammar.	†Greek Grammar, Rhetoric.	†Greek Grammar, Rhetoric, Synonyms.	0.0
	XE.	ZEVER.		*For

# Business Department.

(Lexington Business College.)

#### Faculty.

C. C. CALHOUN, Principal.

J. H. McCALL, Assistant in Book-Keeping.

B. B. JONES,

Business Manager and Assistant in Book-Keeping.

MISS MAY E. MILLIKAN, FRANK A. GROSECLOSE, Assistants in Phonography.

> W. J. ROSS, ROSS SPRAGUE, Assistants in Telegraphy.

H. F. SPENCER, Assistant in Penmanship.

#### Courses in Commercial Department.

This Department is self-sustaining, depending upon its tuition fees for its maintenance; but the College has made arrangements with Prof. Calhoun to give instruction without extra charge to all matriculates of the State College who desire to add Book-keeping to the other courses of study provided by the College.

Those students who matriculate in the Commercial, Short-hand and Telegraphy Department will pay the fees charged by that Department for its several courses of study. All such students may have access to any of the classes in any of the other Departments of the College upon payment of two-thirds of the fees charged by the College; and conversely all matriculates of the College may have access to the classes in Phonography, Type-writing, Telegraphy and Penmanship in the Commercial, Short-hand and Telegraphy Department upon payment of two-thirds of the regular fees charged by that Department.

All the matriculates of this Department are subject to the regulations of the College.

Prof. Calhoun, with his corps of efficient teachers, who have had practical experience in their lines of work, is able to give the very best training in theory and practice.

A very handsome building has recently been completed for this Department, in which the student has facilities for theory and practice second to none.

The importance of a thorough course of training for those who intend to apply themselves to business pursuits can not be over-estimated. Practice alone does not suffice. The physician who betakes himself to the healing art without a previous knowledge of anatomy and physiology, and the surveyor who attempts to compute areas and determine boundaries without a knowledge of Trigonometry, are on a par with the merely practical book-keeper. A rational art of book-keeping must be based upon a knowledge of the principles which make book-keeping possible. To provide the pupil with an adequate knowledge of scientific principles as well as of their application to the keeping of accounts, is the object of the Department, whose announcement is now made.

Phonography and Type-writing are included in this Department. The constantly increasing demand for short-hand in reporting speeches, sermons and the proceedings of public deliberative bodies, in recording evidence in court, and in the correspondence of bnsiness firms, is one of the most marked characteristics of the day. The effectiveness of Phonography has been largely increased by the type-writer, which greatly lessens the labor of transcribing the short-hand notes of the reporter. For these indiscensable auxiliaries of a good commercial education, this Department is prepared to provide every facility required.

The numerous demands for telegraph operators have rendered it necessary that telegraphy should be added to this Department, and accordingly it has been well equipped with all modern telegraph instruments of the best make. The students, are drilled in handling telegraph business, both railroad and commercial. We have all the standard forms in use on all the best railroads, and the students' daily practice is such as to familiarize them with all the duties of a telegraph operator or agent.

This Department is also provided with a main line of nearly two miles in length, over which considerable practical work is done.

The Department has every facility necessary for giving a thorough and practical training.

#### Lectures on Commercial Law.

A special course on commercial law has been arranged for, and will be delivered on Saturdays. This course of lectures alone is worth the price of a scholarship to any young man or woman. The lectures are free to students of all departments of the State College who pursue the studies recommended by the lecturer. Others, not pupils of the State College, can have the benefit of them by the payment of five dollars for the entire course.

#### Diplomas.

All who complete the entire course of study are entitled to and receive a full course diploma signed by the President of the State College and the Governor of the Commonwealth.

#### Fees

A complete course involving actual practice and embracing Commercial Law, Penmanship and Book-keeping (merchant's, partnership, compound company, commission, joint stock, banking, lumber, cotton and mining), \$55.

A complete course in Short-hand, Spelling, Penmanship and Punctuation, \$45.

A course in Type-writing, \$10.

A complete course in Penmanship, \$4 per month.

A complete course in Telegraphy, Commerc al and Railroad Book-keeping, Penmanship, Spelling, Arithmetic and Commercial Law, \$55.

For further information in regard to this Department send for special catalogue, or address C. C. Calhoun, Box 810, Lexington, Ky.

# Regulations.

## Traveling Expenses of Students.

By the terms of the recent legislation upon the Agricultural and Mechanical College of Kentucky, a county appointee is entitled to have his traveling expenses from home to the College and return paid by the College, on the following conditions:

1st. He must be appointed according to law, a copy of which is in

the hands of each County Superintendent of Schools.

2d. He must travel from home to the College by the shortest, least expensive and most expeditious route, and take receipts for all necessary expenses of travel, depositing the same upon arrival with the President of the College.

3d. He must present himself for matriculation within one week after the beginning of the fall term of the collegiate year.

4th. He must bring a certificate of good moral character, signed by two or more well known and responsible citizens of his county.

5th. He must pass creditably the entrance examination required for admission.

6th. He must remain a student of the College for ten consecutive months or one collegiate year.

7th. He must maintain during the collegiate year such class standing as will enable him to pass the final examinations at the end of the year.

8th. He must maintain a good character and maintain such class standing as the regulations require.

If at the end of the collegiate year the foregoing conditions have been complied with, the President of the College shall certify the fact to the Treasurer of the College, who upon said certificates as vouchers, shall pay to the appointee the amount shown by the receipts aforesaid, and in addition thereto the sum for discharging the necessary expenses to be incurred in returning home.

#### College Expenses.

The necessary expenses of a student while at College need not exceed the following estimates. As a rule the less pocket money allowed by parents or guardians, the better it is for thepupil. When supplies of pocket money are kept short, the opportunity for contracting vicious habits is correspondingly diminished. Students should not be allowed by their parents to create any debts. All

moneys intended for the use of the students should be deposited with the Commandant.

For a county appointee occupying a room in the dormitory and boarding in the common mess, the necessary expenses are as follows:

Tuition free	.\$000.00
Matriculation free	
Room rent free	. 000.00
Use of furniture in room	
Washing, about	. 10.00
Uniform	
Board, 38 weeks, at \$2.25 per week	. 85.00
Books, about	. 8.00
Total	.\$125.00

Each room must be provided by each occupant thereof, at his own expense, with a good mattress, three comforts or blankets, one pillow, three pillow-slips, four sheets, looking-glass, blacking brush, hair-brush, clothes-broom or brush. Some of these articles may be brought from home by the student.

For students who are not supplied with appointments from the Legislative Representative Districts of the Commonwealth, and who board in private families, the necessary expenses will be as follows:

Tuition fee	\$15.00
Matriculation fee	5.00
Board and lodging, 38 weeks, at \$3.50 to \$4 per week	
Washing	
Books and stationery	

Total.....\$173.00 to \$182.00

Those who occupy rooms in the dormitory pay \$6.50 each (yearly) for the use of a room and its furniture. A standing deposit of \$5 is required from each student, which deposit is refunded when his connection with the College is terminated, less the amount which may be assessed against him for the damages done to the buildings, furniture or premises. All damages, injuries, defacements, etc., which rooms and furniture in the dormitory sustain during occupancy will be charged to the occupants thereof. All injuries, damages, defacements, etc., which the halls and dining-room sustain will, unless specifically traced, be charged to the occupants of the respective sections collectively.

#### Boarding.

For the accommodation of students sent as beneficiaries of Legislative Representative Districts of the State, rooms for one hundred and forty students are provided in the dormitories. To these, good substantial board is furnished at \$2.25 per week, payable weekly in advance; but no student under seventeen years of age will be permitted to room in the dormitories, unless all of his classes shall be in the regular collegiate courses. Good boarding with fuel, lights and furnished room, can be obtained in private families at rates varying from \$3.50 to \$4 per week.

The students who board in the dormitories are, for business purposes, organized at the beginning of the collegiate year under a Chairman and Secretary of their own choice, whose successors are elected on the first Tuesday of each term and who serve for one term. At the business meeting held on Tuesday night of each week, the weekly dues, \$2.25, are paid. The boarding department is managed by a Board consisting of the President of the College, the Commandant, a Treasurer, who is a member of the Faculty, and into whose hands all the weekly dues are placed when collected, a Steward, a Chairman and a Secretary selected by the students. It will thus be seen that the boarding department has no official connection with the College authorities. The College, as such, does not board the students, and is in no sense responsible for any debts created by the boarding department. Two members of the Faculty, in their individual capacity, assist in the management of its funds.

No provision is made for women in the dormitories.

#### Beneficiaries.

Each Legislative Representative District is allowed to send, on competitive examination, one properly prepared student each year, to this College, free of charge for tuition.

Beneficiaries are appointed on competitive examination. A Board of Examiners is appointed for this purpose by the County Superintendent of common schools. The results of examination are reported to the Superintendent, who, from the data thus furnished, selects the appointee. Examinations are made upon subjects transmitted to the County Superintendent by the Faculty of the College. One appointment is made each year.

Appointments are made by the County Superintendent between the first day of June and the first day of August of each year. Appointments when made should be immediately certified to the President of the College.

Appointments for the College proper, viz: the Agricultural, Mechanical Engineering, Civil Engineering, Scientific, Classical and

Veterinary courses are all valid for the term of years necessary to complete the course of study in which the appointee matriculates. This includes the course in the Academy.

It follows from the above that a county which makes its appointments regularly according to law will have for the session of 1893-4 one appointee in the College, for the session of 1894-5 two appointees, for the session of 1895-6 three appointees, for the session of 1896-7 four appointees. When the first appointee completes his course, or ceases to be a student, another appointee takes his place. When the quota of a county is full it will have at least four appointees in regular attendance.

Each appointee is required to pass an entrance examination at the College on the subjects comprising all that is embraced in Arithmetic, English Grammar, Geography and United States' History, in the Common School Course.

All persons are eligible between the ages of fourteen and twenty-four who have completed the Common School Course—preference being given to young men or women whose means are limited, to aid whom the provision is especially intended.

Any person not an appointee may enter the College on payment of fees, but no one who is not an appointee receives traveling expenses or is exempt from payment of fees.

#### Appointees to the Normal Course.

The law makes provision for the appointment of four teachers, or persons preparing to teach, each year. Appointments may be made and certified to the President of the College between the first day of July and the thirty-first of December of each year.

Appointments to the Normal School are tenable for one year.

Applicants for appointment are examined by a Board of Examiners appointed by the County Superintendent on subjects transmitted by the Faculty, viz: upon Arithmetic, English Grammar, United States History and Geography. They should not be less than seventeen years of age. They are also required to pass an entrance examination at the College. They must likewise bring certificates of good moral character.

Matriculates in the Normal Department will be required to sign an obligation to teach in the Common Schools of Kentucky for as many months as they receive free tuition

#### Student Labor.

The work necessary for carrying on the agricultural and horticultural operations of the College is done by the students, and is paid for at rates varying from six to ten cents per hour. Its design is two-

fold: to put in practice the instruction received in the class-room, and to assist students who are in need of money. The experience of this College is that of Agricultural Colleges generally—that compensated labor is not remunerative to the College.

The College assumes no obligation to furnish students an opportunity to

labor for compensation.

Students are paid monthly for the service rendered, and apply the

money as they see proper.

No student, however, should come to this College expecting to maintain himself exclusively by compensated labor. At least seventy-five dollars per annum, exclusive of his earnings while here, should be at the command of every student who wishes to avail himself of the advantages of the system of compensated labor.

#### Certificates of Character.

All applicants for admission into any class of the College or Academy must bring satisfactory testimonials of good moral character.

#### The Monitress.

The young women who attend the College have assigned for their exclusive use a large and well appointed study-room. Here, while they are not engaged in the class-rooms or in the chapel, they are under the constant and strict supervision of the Monitress, Mrs. Blackburn, who has been long connected with the College and is well qualified for her duties.

# Military Department

CAPT. S. M. SWIGERT, 2D CAVALRY, U. S. A., Commandant.

#### Cadet Battalion.

#### Infantry.

LIEUT. AND ADJT., T. R. DEAN.
LIEUT. AND QR. MASTER, J. W. CARNAHAN.
SERGT. MAJ., M. E. HOUSTON.

#### A COMPANY.

Capt., J. W. Moore.
1st Lieut., J. T. Geary.
2d Lieut., G. M. Asher.
1st Sergt., R. E. Warren.
Sergt., W. J. Cahill,
Sergt., J. T. McCawley.
Sergt., J. C. Frazier.
Sergt., J. T. Haley.
Corp., H. N. Davis.
Corp., S. R. Allen.
Corp., H. S. Beardsley.

Corp., B. W. Duck.

#### B COMPANY.

Capt., L. Powell.

1st Lieut., H. C. Anderson.
2d Lieut., J. D. Turner.

1st Sergt., M. T. Kirk.

Sergt., W. A. Duncan.

Sergt., W. H. Davis.

Sergt., W. H. Scherffius.

Corp., M. L. Conley.

Corp., T. G. Roach.

Corp., T. W Schultz.

Corp., C. Reich.

#### Artillery.

Capt., J. I. Lyle. 1st Lieut., H. B. Roberts. 1st Sergt., G. M. Morgan. Sergt., G. F. Blessing. Corp., S. C. DeBow.

In charge of Signal Department, J. C. Coyle. In charge of Field Music, G. W. Muir.

# Graduated June 6, 1895.

MARY LYONS ATKINS, B. S. JOHN IRVIN BRYAN, B. M. E. HENRY SKILLMAN BUSH, B. S. MARY LE GRAND DIDLAKE, B. S. JOSEPH MILTON DOWNING, B. M. E. JOHN VICK FAULKNER, B. C. E. LUCY STUART FITZHUGH, A. B. NETTIE BELLE FOSTER, B. S. ELIZABETH WHITTINGTON KING, A. B. THOMAS STONE LEWIS, A. B. JAMES ASA MCCONATHY, B. S. MARY CATHERINE MCCOUGHLIFFE, B. S. PAUL INGOLD MURRILL, B. S. ROBERTA NEWMAN, B. S. NELLIE ANNA REYNOLDS, B. S. RICHARD CHARLES STOLL, A. B. RUFUS LEE WEAVER, B. S. JOHN WEBB WILLMOTT, A. B. JOHN JOSEPH WOODS, A B.

#### Granted a Certificate.

ROBERT LEE COWHERD, in Mechanical Engineering.

WILLIAM JOSEPH FOLEY, in Veterinary Science.

# Undergraduates.

Alt. 1 Cuith Edison Class 2 Towington
Alford, Smith EdisonClass. 3Lexington.
Allen, William RaymondClass. 3Lexington.
Amburgy, CullenNormPine Top.
Appleton, Ethelbert HerrSci 1Lexington.
Arnold, Henry BascomNorm
Arnold, William BenjaminNormOwingsville.
Armstrong, Myrtie BelleNorm. 2Lexington.
Anderson, Henry Clay Mecn. Eng. 2 Seven Guns.
Andrews, F. EMech. EngLexington.
Asher, George MattMech. Eng. 2Wasiota.
Atkins, Antoinette Thornton Sci. 2Lexington.
Atkins, Bertie AlleneSci. 3Lexington.
Atkins, Mary Lyons Sci. 4 Lexington.
Baker, HarveyAcad. Class. 1Limaburgh.
Bailey, John C. Breckinridge.Acad. Class. 2Dixon.
Bannister, John KirtleySci. 2Sherman.
Barber, Lanus SpurgeonSci. 4 Lexington.
Bartlett, William YoungAcad. Class. 1 Madisonville.
Beardsley, Harry SheddSci. 2Kansas City, Mo.
Beatty, Beverly Perry NormPigeon Roost.
Beazley, Luther BranhamAcad. Sci. 2 Hyattsville.
Bell Emma Scott Sci. 2Lexington.
Berry, ListonAcad. Class. 1Sturgis.
Blackford, Denny BurnsClass. 1Keene.
Blackford, MettaSci. 1Lexington.
Blessing, George Frederick. Mech. Eng. 2 Carrollton.
Bonnyman, James JosephCiv. Eng. 1 Lexington
Bosworth, Benjamin Thomas.Sci. 1Fort Spring.
Brand, Leslie
Brock, George GreenClass.1Bush.
Brock, Lafayette Breckinridge Sci. 1Lexington.
Brodie, Thomas Lawrence Acad. Civ. Eng. 2. Church Hill.
Bronaugh, William LoganClass. 1Lexington.
Bryan, John IrvinMech. Eng. 4Lexington.
Bryan, Volney HewittAcad. Class. 2Lexington.
Buffington, Richard Lyell Mech. Eng. 2 Huntington, W. Va.
Bullock, Frederick Dabney. Sci. 1Lexington.
Bullock, J. H Mech. Eng Lexington.
Bullock, Samuel ArchibaldMech. Eng. 3Lexington.
Burton, Thomas CreedNorm. 1Whalen.

Bush, George Lewis Mech. Eng. 1Lexington.
Bush, Henry SkillmanSci. 4Lexington.
Bush, Jessie May Norm Waco.
Bush, Tillie Wells
Butner, Ellen Eliza
Butner, Lillie CatherineNormWildie.
Butner, Carrie ElizabethNorm Wildie.
Caddell, William Jasper Norm Holly Hill.
Caddell, George Harlan Norm Holly Hill.
Caden, Alice Beatrice Chem. Spec Lexington.
Cahill, John JosephAcad. Agr. 1 Lexington.
Cahill, William James David. Mech. Eng. 1 Lexington.
Caldwell, RhodaBallard.
Campbell, Thomas LutherClass. 1
Campbell, Walter GilbertAcad Class. 1Flat Lick.
Canter, Henry MarshallAcad. Class. 1Lynnville.
Carnahan, Joshua GordonNormManchester.
Carnahan, James William Class. 3 Manchester
Carey, George Burgess Mech. Eng. 3Louisa.
Carpenter, William Thomas . Mech. Eng. 1 Lexington.
Carroll, Mary JosephNorm. 2Lexington.
Case, Daniel Morris Mech. Eng. 3 Lexington.
Case, John BurrusSci. Spec Lexington.
Cassell, Anna BelleAcad. Sci. 2Lexington.
Cassidy, ElizabethSci. 2Lexington.
Chapman, Napoleon Bonaparte, Norm Louisa.
Chappell, James KeeneAcad. Norm. 1Centre Point.
Chonning, Marion LeeNormAvenstoke.
Christian, BirdieNormWalnut Hill.
Clarke, Mary EvaSci. 2 Lexington.
Cole, Marshall BurtonAcad. Vet. 1Lexington.
Collier, William Henry Mech. Eng. 1 Hooktown.
Conley, Martin LeslieMech. Eng. 1Louisa.
Cooley, FrankCiv. Eng. 1Williamsburg.
Cooper, Franklin KellyAcad. Class 1Beech Grove.
Copland, Alexander CAcad. Civ. Eng. 2 Lexington.
Copland, George Forbes Mech. Eng. 1 Lexington,
Copley, Samuel NewberryAcad. Sci. 1 Inez.
Cornett, Charles GeorgeNormBush.
Cowherd, Marion GeorgeAcad. Sci. 1 Campbellsville.
Cowherd, Robert Lee Mech. Eng. 4 Campbellsville.
Coyle, John CaldwellNorm. 1Canton.
Creek, Elizabeth WillsNormLexington.
Curtis, ClintieNormGreendale.
Curtis, Corinne Lyle Acad. Sci. 2 Greendale.

Curtis, Hester	.Norm	Piqua.
> Dale, Samantha Buford	.Norm	Judy.
Darling, Mamie Steele	Norm	Carrollton.
David, Clara	Sci. 1	Lexington.
Davidson, Harry Adolph	Civ. Eng. 2	Louisville.
Davis, Forrest William	Acad. Class. 2	Lexington.
Davis, Horace Newton	.Civ. Eng. 2	Lexington.
Davis, John Wilson	Norm	Marrow Bone.
Davis, Walter Hendricks	Acad. Class. 2	Lexington.
Davis, William Tilden	Acad. Class. 2	Lexington.
Dawson, Elbert Edwin	Norm	Owingsville.
DeBow, Samuel Carruthers	Mech. Eng. 2	Hickman.
Dean, Thomas Rowland	Class. 3	.Little Hickman.
Denny, Massie Leavell	. Acad. Sci. 1	Lexington.
>Denny, Van Hamilton	.Class. 1	Lexington.
Didlake, Mary LeGrand	Sci. 4	Lexington,
Dillon, German Polk	.Norm	.Edmonton.
Dodds, Winnie Allie	.Norm	Hickman.
Douglas, Frankie Belle	Norm. 1	. Lexington.
Downing, Joseph Milton	.Mech. Eng. 4	Lexington.
>Duck, Alice	Sci. 3	.Lexington.
Duck, Berkley Wilson	.Mech Eng. 2	.Lexington.
Dudley, Benjamin William	. Acad. Class. 2	.Lexington.
Duncan, William Adolphus	Mech. Eng. 2.	.Franklin.
Dunlap, John Jennings	.Class. 3	.Independence.
Durham, John Hayes	.Acad. Sci. 2	Artemus.
Easley, Thomas Hunt	.Acad. Mech Eng	Black Walnut, Va.
Edwards, Eva Dale	.Norm	.Mason.
Elwell, John William	. Acad. Sci. 1	. Allison, Iowa.
Evans, Janie Belle	. Norm	.Panola.
Ewing, Matthew Orlando	.Norm	.Green Grove.
Falconer, John Rutherford	.Class. 4	Fort Spring.
Fairchild, Jackson Dillon	.Acad. Class. 2	Lexington.
Fairchild, Margaret	.Acad. Norm. 1.	Lexington.
Faris, Samuel Reed	.Mech. Eng. 1	.Lexington.
Farley, Frank Preston	.Class. 1	Flat Lick.
Faulkner, John Vick	.Civ. Eng. 4	Hampton.
Fitzhugh, James Smith	.Acad. Norm2.	.Sulphur Spring.
Fitzhugh, Lucy Stuart	.Class. 4	.Lexington.
Foley, John Jerome	.Acad. Sci. 2	Hanley.
Foley, William Joseph	. Vet. Sci, 4	Lexington.
Fossitt, George Lewis	Class. 2	Carntown.
Foster, Nettie Belle	.Sci. 4	Lexington.
Frazer, Joseph W. Christie.	.Sci. 3	Lexington.
Frew, James Wallace	Chem. Spec	Lexington.

Gaines, Chester ASci. 1Bullittsville.
Gano, William AndrewNormSadieville.
Gardner John AbrahamsNormLichfield.
Geary, John ThomasSci. 2Lexington.
Gibson, George William P Acad. Class. 1 Shelbyville.
Gibson, John NathanAcad. Mech. Eng. Shelbyville.
Glass, Seth Amnon
Graves, Robert LeeSci. 1Lexington.
Griffing, Emma RosettaNormLexington.
Gunn, Clara Brook
Gunn, John Tevis
Gunn, Lucien Brook Mech. Eng. 1 Lexington.
Halcomb, George WilliamMech. Eng 1Franklin.
Halcomb, Thomas Allen Acad. Mech. Eng 1Franklin.
Haley, John ThomasSci. 2Lexington.
Hallam, MortimerClass. 1Paris.
Ham, Ora Tilton
Hamilton, Henry CristMech. Eng. 1 Salt River.
Hamilton, John WilliamNorm Brandenburg.
Hamilton, Robert Browning .Class. 1Lexington.
Hamilton, Thomas SmithMech. Eng. 1Lexington.
Hammack, Davis WilliamSci. 1 Cane Creek.
Hammonds, Ida May Norm Cowen.
Hannibal, Michael AndrewAcad. Sci. 2Lexington.
Harris, Claude ElmerAcad. Sci. 1 Independence.
Harris, Columbus Iloff., Norm Boxville.
Harrison, Kate AliceNormLexington.
Harrison, John ChristianAcad. Sci. 1Lexington.
Harting, William ArthurCiv. Eng. 2Lexington.
Haydon, Alexander GunnAcad.Mech.Eng.2 Keene.
Head, Lee Ira
Henrickson, Mary JaneNormLexington.
Henry, Edward JosephSci. SpecFort Spring.
Hicks, Arthur LeeNorm. 2Danleytown.
Hill, Mathew EdgarAcad. Class. 2Lexington.
Hipsher, LouisaNorm Loradale.
Holoch, William GustaveNorm Carntown.
Hostetter, Jacob HenryAcad. Sci. 2Lexington.
Houston, Mark Elliot Mech. Eng. 2 Taylorsville.
Huddleston, James TaylorNorm Water View.
Humphrey, Ambrose Wesley Sci. 1 Middleburg.
Hunt, Rosa
Hutsell, Helen Rosa Norm. Lexington.
Ingrim, VergneAcad. SciVanceburg.
Jenkins, John KingAcad. Mech Eng.2. Henderson.
, B

T. I. Brank Askanin	Wet Coi 1	Louise
Johnson, Frank Asberry	Name	Ctanton
Johnson, Ishmael	.Norm	Juanton,
Johnson, John Bockover	Sc1. 1	Clinton
Johnson, William Piatt	Norm	Maria
Johnson, Jack Stubblefield	.Class. 1	Muir.
Johnston, John Pelham	Acad Mech. Eng 1	Lexington.
Jolly, James Brady	Norm. 1	Germantown.
Jones, Adams Baughman	Chem. Spec	Matr. Ky Univ
Jones, William Marion	Norm	.Barbourville.
Justice, Edwin Bascom	Norm	.Sip.
Kelly, Thomas Conway	Mech. Eng. 2	Georgetown.
Kemper, Charles Madison	Acad. Sci. 2	Marksburg.
Kerrick, Felix	.Ciass. 3	.Calhoun.
Kidd, Asa Steele	Acad. Sci. 1	Kiddville.
King, Arthur Paxon	Acad Mech Eng 2	.Corydon.
King, Elizabeth Whittington	Class. 4	Lexington.
King, James Floyd	Acad Mech. Eng.1	Frost.
King, Margaret Isadora	Class. 1	Lexington.
King, Thomas Edward	Norm	Cynthiana.
Kirk, Millard Tevis	Sci. 1	Inez.
Knox, Melvin Lawrence	Norm.	See.
Kreiner, John Henry	.Class 1	Paris.
Land, Hamilton Headley	Acad Sci. 2	Lexington.
Lassiter, William Albert	Norm. 1	Hise.
Lavin, Sallie Ambrosia	Acad. Sci. 2	Walnut Hill.
Lewis, Herbert Price	Norm	CollegeHill.
Lewis, Thomas Stone		
Linthicum, Mollie Lavinia		
Literal, James Milton		
Loevenhart, Arthur Solomon		
Loevenhart, Edgar Charles		
Lucas, Ida West	.Class. 1	Lexington.
Lyle, Cornelius Railey	Acad. Sci. 1	Lexington.
Lyle, Ernest Thornton	. Acad. Sci. 1	Lexington.
Lyle, Joel Irvin	Mech, Eng. 3	Lexington.
Lynch, Anne Catherine	.Norm	Chilesburg.
Lyne, Frank Farra	Acad. Class. 2.	Brannon.
Mannin, John Harper	.Civ. Eng. 2	Hebron.
Marshall, Ann	.Norm,	.Corinth.
Marshall, John James	.Norm	Corinth.
Martin, Pierce	.Norm	Humphrey.
Mathers, Taylor	. Acad. Civ. Eng. 1	.Carlisie.
Matthews, Ethel	.Sci. 1	Lexington.
Mattingly, Hilda Ellen	.Norm	. woodland.
McCain, Linn Hemingway	.Acad. Sci. 2	.Beatora.

McCann, Mary ElizabethSci. SpecMuir.
McCauliffe, Mary Catherine Sci. 4Lexington.
McCawley, James Taylor Acad. Sci. 2 Morganfield
McConathy, James Asa. Sci 4 Kirkleyington
Versailles
Webanell, Harry PryorAcad. Sci. 1 Warsaw
McDowell, Edward Campbell, Mech. Eng. 3 Cynthiana
McElroy, Courtney WattsCiv. Eng. 1 Morganfield
McGovern, AnnieNorm. Lexington
McGovern, Hugh EdwardAcad. Sci. 2 Lexington.
McGovern, Mary Ellen Norm. 1 Lexington.
Metcalf, Lettie PickettNormBrooksville.
Middleton, LaviniaNorm
Miller, Minnie BladesAcad. Sci. 2Lexington.
Minter, Florence EllenNormSouth Fork.
Moffett, William Owen Norm
Moffitt William AlvieNormSedalia.
Moore, Joseph Womack Civ. Eng. 2. Lexington
Morgan, George MatthewSci. 2 Lexington.
Morrow, Joseph
Muir, George WallaceSci. 1Lexington.
Mulligan, Lewis HoustonVet. SpecLexington.
Murrill, Paul Ingold Sci. 4 Hickory, N. C.
Myers James DonnanNormLexington.
Nash, George PughAcad. Sci. 1 Fort Spring.
Neal, Lillian Bemass Norm Leathers' Store
Neal, Nanci LeeNorm Leathers' Store
Nelson, Robert
Newman, RobertaSci. 4Muir.
Nichols, Ellis WilliamNormGreenup.
Nichols, Mary LarkSci 1Lexington.
Noon, Nellie
Northington, MamieNormWickliffe.
Nuttall, John Price Acad. Sci. 1 New Castle.
Oldham, Marie ChenaultAcad. Class. 2Lexington.
Orman, HenryMech. Eng. 3Danville.
Orton, William Francis Norm Slaughter's.
Paris, John BartleyNormFord's Ferry.
Phelps, Com. Vanderbilt NormStowers.
Philpott, PeterNorm Bryson.
Pope, Robert E. LeeClass. 1Barbourville.
Posey, Lallie Sullivent Norm. 1 Henderson.
Powell, Luke
Rankin, Adam IsaacAcad. Norm. 1Rankin.
Ray, Samuel B. DouglasNormTompkinsville.

Reese, Asbury StamperAcad.Mech.Eng.1.Hopkinsviile.
Reid, Annie
Reid, George ThomasSci. SpecLexington.
Reich, CharlesAcad. Sci. 1Louisville.
Reynolds, Nellie AnnaSci. 4Lexington.
Rice, Henry ClayNormPineville.
Richmond, Carrie FrancisNormLexington.
Risk, William TheodoreAcad. Class. 1Midway.
Roach, Thomas GideonNorm 1Fulton.
Roberts, GeorgeNormBurnside.
Roberts, Hilery BryanSci. 1Payne's Depot.
Roberts, William RankinAcad. Sci. 2Brannon.
Rogers BessieNormNewtown.
*Royster, Clementine Bruce.Norm
Sadler, Francis Everett Acad. Class 2 Hawsville.
Salyer. Elza
Sasser, William HenrySci. 1London.
*Saunders, Charles Edward. Acad. Mech. Eng. Lexington.
Scherffius William Henry Acad. Sci. 2 Lynnville.
Scholtz, Thoodore WalterAcad.Mech Eng.2.Louisville.
Scott, Henry M. SkillmanClass 1Lexington.
Scott, John
Scott, Nellie Dumont Acad. Sci. 1Lexington.
Searcy, Iula
Shacklett, Wade HamptonNormPeckinpaugh.
Shacklett, wade HamptonNorm Lexington
Short, John Cleves Class. 1 Lexington.
Sharon, George
Sharon, John AlbertNormMt. Auburn.
Shaw, Henry PleasantsChem. SpecMatr. Ky. Univ.
Sigler, Philip ThomasBoxville.
Simrall, James O. Harrison. Class. 2Lexington.
Simpson, Eugene ErwinAcad. Class 2Lexington.
Slade, D. D
Smedley, Albert Fort Spring.
Smiley, Lewis Newman Acad. Norm. 1 Bakerton.
Smith, Sidney AllenClass. 1Lexington.
Smith, Nancy Sci. 3 Cynthlana.
Smith, Mary MinervaNormHarlan C. H.
Smith, W. W
Spears, Robert CaveAcad Class. 2Spears.
Spencer, Margaret CassellAcad. Sci. 2Lexington.
Stackhouse, Carrie Ellis Acad. Sci. 1 Lexington.
Stackhouse, Thomas Calhoun. Acad. Sci. 1 Lexington.
Staples, James HenryAcad. Sci. 1Lexington.
*Deceased.

Stevens, BertieNormLexington.
Stevens, Edna EarlSci. 1Walnut Hill.
Stevens, JessieSci. 1Walnut Hill.
Stiltz, Fred GodfreyAcad. Sci. 2Lexington.
Stoll, John GeorgeAcad. class. 2Lexington.
Stoll, Richard CharlesClass. 4Lexington.
Stone, William HumphreySci. 1Taylorsville.
Strauss, Charles Lewis Mech. Eng. 1 Lexington.
Yaylor, Mary WebbNormLaGrange.
Terrell, Hulett Smith Vet. 1 Ithaca N Y
Terry, Lila BeatriceNorm, 1Paris.
Trigg, John Henry Sci. 3 New Columbus
Trosper, Henderson Taylor. Class. 1 London.
Troup, Emma Blanche Norm. 1 Lexington.
Turner, Job Darbin Norm. 2 Minnie
vanmeter, R. CSci. 1Green Co.
van Osdell, James ArthurAcad, Class, 1Lexington.
Vaughn, FrederickNormFlat Gap.
Walker, Edward Craig Acad. Class. 2 Anthoston.
Walker, William Sebastian Mech. Eng. 1 Memphis, Tenn.
Waller, Gibson Acad. Sci. 1 Morganfield
Walsh, Robert Christie Acad Class. 2 Lexington.
Walter, Luther Mason Norm. 2 Blaine.
Ward, Edward HenryClass. SpecLexington.
Waring, Edward TaylorNormLynn.
Warner, Evan TaylorAcad Mech Eng 1.Lexington.
Warner, Hattie HockerSciLexington.
Warner, Kate Monroe Acad. Sci. 1 Lexington.
Warner, Logie Hocker Sci. 2 Lexington.
Warnick, Sue BassettNormLexington.
Warren, LizzieSci. 2Lexington.
Warren, Richard Evans Acad. Class. 2 Donerail.
Watkins, John McMurtry Acad Mech Eng 1. Lexington.
Weaver, Rufus LeeSci. 4Frazier.
Webb, William SnyderAcad. Sci. 1 Greendale.
West, Kate FrostSci. 1Franklin.
White, Martha Ripperdan Sci. 2 Lexington.
Wilhoite, Walter MonroeAcad. Sci. 1 Newberg.
Williams, Robert Lee Norm Golden Pond.
Willmott, John WebbClass. 4Lexington.
Wilson, Aquilla PayneNormSt. Helens.
Wilson, James HardinNormCollege Hill.
Withers, RaymondNormSylvan Dell.
>Wood, John HenrySci. SpecRussell's Cave.
Woods, John JosephClass. 4Cynthiana.

Woods, William MichaelNorm	Cynthiana
Woods, John Wesley Class. 3	Webbville
Wooton, William BeverleyNorm	

## Names of Students Classified.

#### Seniors.

Mary Lyon Atkins John Irvin Bryan Robert Lee Cowherd Joseph Milton Downing John Vick Faulkner William Joseph Foley Elizabeth Whittington King Mary Catherine McCauliffe Paul Ingold Murrill Nellie Anna Reynolds Rufus Lee Weaver John Joseph Woods

Smith Edison Alford Bertie Allene Atkins James William Carnahan Daniel Morris Case Alice Duck Joseph Whitney Christie Frazer Edward Campbell McDowell Luke Powell John Henry Trigg

John Rutherford Falconer Lucy Stuart Fitzhugh Nettie Belle Foster Thomas Stone Lewis James Asa McConathy Roberta Newman Richard Charles Stoll John Webb Willmott

Lanus Spurgeon Barber Henry Skillman Bush

Mary LeGrand Didlake

#### Juniors.

William Raymond Allen Samuel Archibald Bullock George Burgess Carey Thomas Roland Dean John Jennings Dunlap Joel Irvin Lyle Henry Orman Nancy Smith John Wesley Woods

#### Sophomores.

Myrtie Belle Armstrong George Matt Asher John Kirtley Bannister Emma Scott Bell Leslie Brand Mary Joseph Carroll Mary Eva Clarke

Henry Clay Anderson Antoinette Thornton Atkins Harry Shedd Beardsley George Frederick Blessing Richard Lyall Buffington Elizabeth Cassidy Harry Adolph Davidson

Horace Newton Davis
Berkley Wilson Duck
George Lewis Fossitt
Clara Brook Gunn
William Arthur Harting
Mark Elliot Houston
John Harper Mannin
George Matthew Morgan
John Scott
James O. Harrison Simrall
Job Darbin Turner
Lizzie Warren

Samuel Carruthers DeBow William Adolphus Duncan John Thomas Geary John Thomas Haley Arthur Lee Hicks Thomas Conway Kelly Joseph Womack Moore Nellie Noon Lula Searcy Albert Smedley Logie Hocker Warner Martha Ripperdan White

#### Freshmen.

Ethelbert Herr Appleton Metta Blackford Benjamin Thomas Bosworth Lafayette Breckinridge Brock Fred Dabney Bullock George Lewis Bush Thomas Luther Campbell William Henry Collier Frank Cooley John Caldwell Coyle Van Hamilton Denny Samuel Reed Faris Chester Arthur Gaines John Tevis Gunn George William Halcomb Henry Crisp Hamilton Thomas Smith Hamilton Kate Alice Harrison Helen Rosa Hutsell John Bockover Johnson James Brady Jolly Millard Tevis Kirk William Albert Lassiter Edgar Charles Loevenhart Ethel Matthews Courtney Watts McElroy George Wallace Muir Marylark Nichols Lallie Sullivent Posey Carrie Frances Richmond Hilery Bryan Roberts

Denny Burns Blackford James Joseph Bonnyman George Green Brock William Logan Bronaugh Thomas Creed Burton William James David Cahill William Thomas Carpenter Martin Leslie Conley George Forbes Copland Clara David Frankie Belle Douglas Frank Preston Farley Robert Lee Graves Lucian Brook Gunn Mortimer Hallam Robert Browning Hamilton David William Hammack Ambrose Wesley Humphrey Frank Asberry Johnson Jack Stubblefield Johnson. Margaret Isadora King John Henry Kreiner Arthur Solomon Loevenhart Ida West Lucas John McConnell Mary Ellen McGovern Robert Nelson Robert E. Lee Pope Samuel Bransford Douglas Ray. Thomas Gideon Roach William Henry Sasser

Henry Martyn Skillman Scott Sidney Allen Smith Jessie Stevens Charles Louis Strauss Lila Beatrice Terry Emma Blanche Troup William Sebastian Walker Kate Frost West John Cleves Short
Edna Earl Stevens
William Humphrey Stone
Hulet Smith Terrell
Henderson Taylor Trosper
Rollin Cyrus Van Meter
Luther Mason Walter
William Michael Woods

#### Special.

Frank Ernest Andrews\*
Alice Beatrice Caden
James Wallace Frew
Thomas Edward King
Lettie Pickett Metcalfe
George Thomas Reid
Henry Pleasants Shaw\*
John Henry Wood

Jones Adams Baughman \*
John Burrus Case
Edward Joseph Henry
Mary Elizabeth McCann
Lewis Houston Mulligan
W. W. Smith
Edward Henry Ward

#### Postgraduate.

#### Hattie Hocker Warner

#### Normal Students.

Cullen Amburgy William Benjamin Arnold Jessie May Bush Ellen Eliza Butner Lillie Catherine Butner William Jasper Caddell Joshua Gordon Carnahan Marion Lee Chowning Charles George Cornett Clintie Curtis Samantha Buford Dale John Wilson Davis German Polk Dillon Eva Dale Edwards Matthew Orlando Ewing John Abrahams Gardner Emma Rosetta Griffing Ida May Hammonds Lee Ira Head Louisa Hipsher James Taylor Huddleston

Henry Bascom Arnold Beverly Perry Beatty Tillie Wells Bush Carrie Elizabeth Butner George Harlan Caddell Rhoda Caldwell Napoleon Bonaparte Chapman Birdie Christian Elizabeth Wills Creek Hester Curtis Mamie Steele Darling Elbert Edwin Dawson Winnie Allie Dodds Janie Belle Evans William Andrew Gano Seth Amnon Glass John William Hamilton Columbus Iloff Harris Mary Jane Hendrickson William Gustave Holloch Rosa Hunt

<sup>\*</sup>Matriculates of Kentucky University.

Ishmael Johnson William Marion Jones Melvin Lawrence Knox Mollie Lavinia Linthicum Anna Catherine Lynch John James Marshall Hilda Mattingly Lavinia Middleton William Owen Moffett Joseph Morrow Lillian Bemass Neal Ellis William Nichols William Francis Orton Commodore Vanderbilt Phelps Henry Clay Rice Bessie Rogers Elza Salyer George Sharon Philip Thomas Sigler Birdie Stevens Frederick Vaughn Sue Bassett Warnock Aquilla Payne Wilson Raymond Withers

William Piatt Johnson Edwin Bascon Justice Herbert Price Lewis James Milton Literal Ann Marshall Pierce Martin Annie McGovern Florence Ellen Minter William Alvie Moffitt James Dennan Myers Nanci Lee Neal Mamie Northington John Bartley Paris Peter Philpott George Roberts -Clementine Bruce Royster\* Wade Hampton Shacklett John Albert Sharon Mary Minerva Smith Mary Webb Taylor Edward Taylor Waring Robert Lee Williams James Hardin Wilson William Beverley Wootton

# Students of the Academy:

#### First Year.

Baker, Harvey Canter, Henry Marshall Cole Marshall Burton Copley, Samuel Newberry Denny, Massie Leavell Elwell, John William Gibson, George William Perceval Gibson, John Nathan Halcomb, Thomas Allen Harris, Claude Elmer Ingrim Vergne Kidd, Asa Steel Lyle, Cornelius Railey McDanell, Harry Pryor Nash, George Pugh Rankin, Adam Isaac Reid, Annie

Cahill, John Joseph Chappell, James Keene Cooper, Franklin Kelly Cowherd, Marvin George Easley, Thomas Hunt Fairchild, Margaret Ham, Ora Tilton. Harrison, John Christian Johnston, John Pelham King, James Floyd Lyle, Ernest Mathers, Taylor Nuttall, John Price Reese, Asbury Stamper Reich, Charles

<sup>\*</sup>Deceased.

Risk, William Theodore Slade, D. D Stackhouse, Carrie Ellis Staples, James Henry Waller, Gip Warner, Evan Taylor Webb, William Snyder Scott, Nellie Dumont Smiley, Lewis Newman Stackhouse, Thomas Calhoun Van Osdel, James Arthur Warner, Kate Monroe Watkins, James McMurtry Wilhoite, Walter Monroe

#### Second Year.

Bailey, John C. Breckinridge Beazley, Luther Branham Brodie, Thomas Lawrence Campbell, Walter Gilbert Copland, Alexander Chisholm Davis, Forest William Dudley, Benjamin William Fairchild, Jackson Dillon Foley, John Jerome Haydon, Alexander Gunn Hostetter, Jacob Henry Kemper, Charles Madison Land, Hamilton Headley Lyne, Frank Farra McCawley, James Taylor Miller, Minnie Blades Roberts, William Rankin Saunders, Charles Edward Scholtz, Theodore Walter Spears, Robert Cave Stilz, Frederick Godfrey Walker, Edward Craig Warren, Richard Evans

Bartlett, William Young Berry, Liston Bryan, Volney Hewitt Cassell, Anna Belle Curtis, Corinne Lyle Davis, Walter Hendricks Davis, William Tilden Durham, John Hayes Fitzhugh, James Smith Hannibal, Michael Andrew Hill, Mathew Edgar Jenkins, John King King, Arthur Paxon Lavin, Sallie Ambrosia McCain, Linn Hemingway McGovern, Hugh Edward Oldham Marie Chenault Sadler, Francis Everett Scherffius, William Henry Simpson, Eugene Erwin Spencer, Margaret Cassell Stoll, John George Walsh, Robert Christie

# Students of the Business College.

>Adams. George Hawes	Pine Bluff, Ark.
Allen, S. H	Lexington.
Allen, W. H	.Lexington.
V Arbuckle, Luther L	.Cromwell.
Armstrong, Julia	.Lexington.
✓Arnold, Glendy Burke	.Frankfort.

Bacon Franklin	
Bacon, Franklin	Lexington.
Ballard, Elijah Franklin	. Ballardsville.
Bailey, Charles K	.Cynthiana.
Baker, Cal	Lexington.
Baker, Katie M	Lexington.
Baker, John R	.Lexington.
Barr, Robert M	.Lexington.
Barlow, John Allison.	.Jacksonville.
Beal, William Henry	.Lagarto, Tex.
Beasley Fannie	.Lexington.
Beasley, Letcher	.Lexington.
Bell, John Lambert	Lexington.
Bell, Mary Watson	Lexington.
V Bentley, Nannie Duvall	Lexington.
Beverly, Frank Camillus	Big Stone Gan Va
Boone, Robert E	Hedges.
Boswell, Malcolm Temple	Leesburg.
-Broyles, Lena Leslie	Lexington.
Brent, Allie Lee	Walnut Hill, Va.
Brown, Frank Human	Hamilton, N. C.
Brown, M. H	Lexington
Buckwalter, John Cassell	Winchester.
Burke, Dorothy W	Versailles.
Bush, Lewis Hampton	Winchester.
Bullock, Sallie A	Lexington.
Calhoun, Lelia Zerilda	Owensboro.
-Call, William Henry	Mockville, N. C.
Carder, Judson J	Hawesville.
Carpenter, George L	Milledgeville.
Cardwell, John Cornelius	Earles.
Cassell, W. H. Jr	Lexington.
Cavens, Sallie	Lexington.
-Chowning, George L	Shelbyville.
-Clark, Frank	Bryan, Tex.
-Clark, Julia	Lexington.
-Clary, Henry Duke	Shannon.
Clugston, Leslie	Lexington.
-Cobb, Samuel R	Lexington.
- Collier Alfred	Balance.
Collins, Harold Helm	Donerail.
Coons, Annie	Lexington.
Conway, Margaret Bell	Winchester.
Cox, Walter Chilton	West Liberty.
Crabtree, Robert Rowan	Lexington.
Crawford, Frank	Rob Roy, Ind
	Troj, Ind.

Crouch, Archie	Poplar Grove.
Crudup, Thomas H	Kittrell, N. C.
Cull, William Elmer	Lexington.
Curran, Thomas B	
- Dangerfield, Bessie Parker	
Darnaby, Luella	Lexington.
-Darnaby, Mary	Lexington.
-Davidson, Hallie May	
Davis, William R	Nicholasville.
Day. G. B	.Dundee.
Delaney. Olie B	Hedges.
Demaree, William Yocum	
Dineen, Tim J	
Donlan, Maggie Cecilia	Lexington.
Embry, Jacob	
Erwin, D. M	
Folger, Frank	
-Falkner, James Butler	
Farmer, Lillian Myrtle	Lexington.
-Fieber, Caroline Virginia	Cincinnati. O.
Fischer, Margaret E	
-Foley. John Jerome	
Forward, Edwin Joseph	St. Augustine, Fla.
Frank, Carl Schurz	. Williamstown.
-Frost, Clara Ernestine	
-Frost, Henry Alvis	
Frost Schdday D	
-Funk, John D	. Nicholasville.
Gaines, Foster B	
Galloway, Robert Lee	
Gay, Lizzie G	Lexington.
-Gibbons, Mamie	Lexington.
Gibson, P. B.	
Golden, Mildred	
-Grady, Belfield C	Lexington.
-Gratz, Mrs. H. H	Lexington.
-Graves, Mrs. Addie E	Lexington.
Green, Mrs. Manora	
Greenwood, Harry M	Lexington.
Groseclose, George Gose	
Grow, Samuel Everett	
Gunn, Thomas	Lexington.
Haggard, Annie Mayme	
Hair, Sallie R	
Harman, John Daniel	Lexington.

-Harris, Charies Morgan	Versailles
Hayes, F. M.	Lexington
-Hedrick, Ivelia.	Farmer's
- Herd, Andrew Tiffin.	Levington
-Hersperger, Hubert E.	Nicholasville
-Hiatt, Hugh R	Tenerator
Hillenmeyer, Mrs. H.F.	Lancaster.
Hisle, Clay	Lexing ton.
Hisle, Edward	Lexington.
Hisle, Lee	Lexington.
-Hornbrook, Sallie Adams	Lexington.
Howell, William Boyle	Lexington.
Hudson, Ernest	Laminon, N. C.
Hudson, Silas J.	Lexington.
-Hughes, Edwin	. New Columbus.
Hughes Elmer C	Lexington.
Hughes, Elmer C	. New Columbus
Hughes, Gustavus Lycurgus	.Kuttawa.
Hutchinson, Hattie	Lexington.
Hutchinson, Mattie D	Lexington.
Hutchinson, Henry Judd	Summerville, S. C.
Jameson, Ora B	Stamping Ground
Johnson, Cave	Clarksville, Tenn
Johnson, Frank Ashbury	.Louisa.
Jones, Hattie D	Lexington.
Jones, Thurlow Weed	Stanford.
Juett, Carl Hendrix	Georgetown.
Keller, Thekla	Lexington.
Kidd, Sallie M	Lexington.
King, B. E	Frost.
Kinsman, Daisy Jenett	.Cannon City, Col.
Klein, A. F.	Lexington.
Klein, L. A	Lexington.
Klein, J. M	Lexington.
AKlein, R	Lexington.
-Klinkinbeard, E. K. S	Winchester.
-Kroesing, Lillie	Lexington.
Lancaster, Albert C	Lexington.
Lancaster, James.	Corinth.
Latham, Charles Francis	Donerail.
Lear, Joseph M	Nicholasville.
Lear, Samuel Boone	Nicholasville.
Long, Edward James	Bristow, Ia.
Lutes, Keene	Pine Grove.
Lynch, Mary C	Lexington.
Lyttle, Mamie	Lexington.

Mack, John	Dundee.
-Malone, James M	New Canton, Tenn.
Malnoe, Armoud Joseph	Paris, France.
Mathews, Robert	Lexington.
Maupin, Herman Harp	Lexington.
Maxwell, Mamie	Lexington.
McClanahan, George	Berlin.
-McClintock, Samuel Sweney	Lexington.
McFarlin, John William,	Franklin.
-McKee, Earle Sinclair	Valdosta, Ga.
McKenney, Annie	Lexington.
McNamara, John R	Forrest.
McVey, Horace C	Lexington.
Megee, Leslie Robert	Lexington.
- Meyers, Charles	Lexington.
- Mefford, Noel Clifton	.Donerail.
-Miller. Annie	Lexington.
-Mitchell, Margaret A	Richmond.
Minor, Hugh	Eastham, Va.
Moore, Bennett Franklin	Wilson, N. C.
-Moore, Blanch Lorena	Lexington.
Moore, Clarence David	Kittrell, N. C.
Moore, D. B	Harrodsburg.
Morrow, Wilson Boyd	Somerset.
Mullen, Edwin Ernest	Lexington.
Mumford, Sallie B	New Orleans, La.
Murphy, Lizzie	Lexington.
Murphy, Hizzie  Montgomery, Ida	Lexington.
- Murray, Joseph Hoeing	Lexington.
Myers, Benjamin	Carlisle.
Nelson, Thomas R	Lexington.
Nolan, James Edward	Lexington.
Northeutt, R. L	Williamstown.
Northeutt, W. A	Williamstown.
Nightingale, Samuel W	Dovlestown, Pa.
-Nutter, Lena C	Newtown.
O'Conner, Mary	Lexington.
Overton, William Dabney	Frankfort.
Parks, Mina	Lexington.
Parks, J. M	Lexington.
Patrick, William Riley	Williamsburg.
Patterson, Samuel	Ft. Springs.
Patterson, Thomas C	.Ft. Springs.
Payne, Margaret Howard	Lexington
Payne, Margaret Howard	Lexington.
- raxion, Amanda Capherine	

Powers Tehr All	Ragino O
Towers, John Amert	Toighton Mr.
villam	O1
2, 30 tol, William G	Ouncil
realikin, Adam Isaac	Donlein
Ransdell William Whorton	Dondloton
Liccu, Alvin	Concomi
Rhein, Marcella.	Concord.
-Richardson, Darby	Lexington.
Tion, Henrietta	T arrivates
Riley, Dexter W	Lexington.
Ringold, Samuel	Beriin.
Rodegap, Gracie	Frankfort.
Rogers Charles LaFayette	Lexington.
Ross, Robert C	London.
Rupard, Rosa	Maynew.
Saddler, Francis Everett	Winchester.
Sebree, Owen C	Hawesville.
-Shedd. Harry	New Columbus.
Shedd, Harry Shedd, William Burchard.	Lexington.
Shelby. Thomas Hart	Lexington.
Shelby, Thomas Hart	Lexington.
Shoemaker, Finnell M	.Falmouth.
Short, Laura Estella	.Parksville.
Short, William Ambrose Dudley	.Lexington.
Shropshire, Rosseau	.Georgetown.
Sims, Lawrence Byron	Umatilla, Fla.
Sloan. Isaac Guthrie.	.Lexington.
Smith, Mattie Lee	Lexington.
Sously, Edwin	.Lexington.
Spears Thomas Grand II	.Flemingsburg.
DDGals, I IIIIIIIAS I FOM WALL	일반
Stanley, Charley.	Lexington.
To war of warrance Agnes	Chambana
Survers, Jerome Ernest	Walnut Uill
Stone, Albert H.	T arrive out and
- Strode, William Hall	Lavington
- Surossman, William Henry. Jr	Mt Stanling
Sturm, Joseph M	Demonolie Ala
-Swango, John Morton	Frankfort
Tariton, Mrs. Charles Anderson	Lovington
I nompson, George Edward	Columbus Mo
- Illisworth, Leonard Ruben	Canadian Toy
Turner, Charles Foushee	Lexington
Turner, John W	New Columbus
Umstead, Charles Admiral	Lexington.

Vandiver, John Green	.Faubush.
Vicroy, Charles	.Maysville.
Vicroy, William	. Maysville.
-Wallace, Willie	.Golden Pond.
Walker, Robert B	.Lexington.
Walker, Samuel Pierce	. Lexington.
Walker, William Ruel	
Ward, Charles F	.Lexington.
-Warren, Garler	.Lexington.
Warren, Gillois	.Mills.
West, Georgia B	.Lexington.
Wheeler, Inez	.Lexington.
-Whittington, Clarence	Valdosta, Ga.
Wiggins, C. P	Piqua.
Williams, Calvert	Lexington.
-Williams, Irvine Ansel	
-Williams, Jesse C	. Fort Ogden, Fla.
-Williamson, Elmar	Lexington.
Williamson, Raymond	
Wilson, Arthur	
Wilson, Fred L	Lexington.
Wilson, Isaac M	Winchester.
Wilson, James Alexander	Hickory, N. C.
-Wolverton, Artie	
-Womack, Clay W	. West Liberty.
-Woolfork, John H	. Lexington.
Wooton, Shirely	Manchester.
Yates, Ray W	
-Yarborough, Bennie Green	. Franklinton, N. C.
-Young, John Ellisworth	

# Calendar for 1895=96.

# 1895.

Entrance Examinations First Term begins	beginMonday, Sept. 9.
Thanksgiving	Wednesday, Sept. 11.
Board of Trustees most	1 nursday, Nov. 21
Christmas Holidays begin	Tuesday, Dec. 10. Friday, Dec. 20
J- segin	riday, Dec. 20

# 1896.

College Duties resumed
College Duties resumed
Patterson Society Operation of Burday Saturday, Feb. 22.
Final Examinations begins to the Contest Thursday, March 26
Union Literary Society F-1 11 Wednesday, May 13
Patterson Society Exhibition Friday, May 22.
Board of Trustees meet Friday, May 29.
Class Day Tuesday, June 2.
Alumni meet. Wednesday, June 3.
Alumni Banquet. Wednesday, June 3.
Alumni Banquet
Thursday June 4

## College Directory.

Anderson, F. Paul. Aubrey, Thomas Bennett, S. E. Blackburn, Mrs. Lucy B. 30 Woodland Ave. Blanton, R. L. Curtis, H. E. Davis, J. M. Dicker, Jos. Garman, H. Hawkins, T. S. Hodges, Miss Mary. Johnson, J. R. Kastle, J. H. Logan, J. L. Mathews, C. W. Miller, A. M. Milligan, R. A. Muncy, V. E. Murray, James. Neville, J. H. Nelson J. P. Newman, J. W. Patterson, J. K. Patterson, W. K. Peek, Geo. T. Pence, M. L. Peter, A. M. Pryor, J. W. Roark, R. N. Scovell, M. A. Shackleford, John. Shelby, Miss A. M. Swigert, S. M. Terrill, J. S. Wells, J H.

Wernicke, Paul.

White, J. G.

RESIDENCE. 69 Ky. Avenue. 243 S. Limestone St. 154 S. Limestone St. 50 W. 2nd St. 126 S. Upper St. 122 S. Limestone St. 26 Va. Ave. 424 S. Limestone St. 55 Winnie St. 231 E. High St. Old Dormitory. 1W High St. 97 S Broadway. 410 S. Limestone St. 124 S. Broadway. 492 S, Limestone. 116 E. Maxwell St. 428 S. Limestone St. 218 W. Main St. 124 S Broadway. 28 Va. Ave. 108 Marino St. 171 Rose St. 203 N. Broadway. 420 S. Limestone St. Experiment Farm. 71 Woodland Ave. 71 Ashland Ave. Cottage on Campus 172 W. Maxwell St. 107 E. Maxwell St. 107 E. Maxwell St. 140. E. Maxwell St.

COLLEGE QUARTERS. 1st Floor Mechanical Hall. College Boiler Room. Veterinary Clinic Building. No. 14, 1st Floor Main Building. No 13, 1st Floor Main Building. Chem Lab , 1st Fl 'Sta. Bld'g. No. 1, Basement Main Building. Mechanical Hall. 1st Fl. and Basement Sta. Bld'g. Experiment Farm. No 10, 1st Floor Main Building. Mechanical Hall. 2d Floor Station Building. No. 2 Basement Main Building. Basement Station Building. No. 16, 2d Floor Main Building. Mechanical Hall. No. 10, 1st Floor Main Building. College Conservatory. No. 21, 3d Floor Main Building. Cor. Rose and Maxwell. 2d Floor Mechanical Hall. No. 8 1st Floor Main Building. Brick Dwlg. on Campus. No. 12 1st Floor Main Building. Brick Dwlg. on Campus. No. 17, 2d Floor Main Building. Mechanical Hall. Nos. 5 and 7 Basem'nt Main Bld'g Chemical Lab., 1st Fl. Sta. Bldg. No. 9, 1st Floor Main Building. No. 11, 1st Floor Main Building. Office, 1st Fl. Station Building. No 19, 2d Floor Main Building. Office 1st Floor Station Building. 1st Floor Station Building.

1st Floor Mechanical Hall.

No. 20, 2d Floor Main Building.

No. 15, 1st Floor Main Building.