

CATALOGUE

OF THE

OFFICERS AND STUDENTS

OF THE

University of Wisconsin,

FOR THE YEAR ENDING JUNE 19, 1872.

MADISON, WIS.:
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1872.

FACULTY AND INSTRUCTORS.

J. H. TWOMBLY, D. D.,

President and Professor of Mental and Moral Philosophy.

JOHN W. STERLING, Ph. D.,

Vice-President and Professor of Natural Philosophy and Astronomy.

WILLIAM F. ALLEN, A. M.,

Professor of Latin and History.

STEPHEN H. CARPENTER, LL. D.,

Professor of Logic, Rhetoric and English Literature.

ALEXANDER KERR, A. M.,

Professor of Greek Language and Literature,
and *Principal of Preparatory Department.*

JOHN B. FELLING, Ph. D.,

Professor of Modern Languages and Comparative Philology.

COL. WM. J. L. NICODEMUS, A. M., C. E.,

Professor of Military Science and Civil Engineering.

JOHN B. PARKINSON, A. M.,

Professor of Mathematics,
and *Lecturer on Civil Policy and International Law.*

JOHN E. DAVIES, A. M., M. D.,

Professor of Natural History and Chemistry.

W. W. DANIELS, M. S.,

Professor of Agriculture and Analytical Chemistry.

ROLAND IRVING, A. M., E. M.,

Professor of Geology, Mining and Metallurgy,
and *Curator of Cabinet.*

HON. L. S. DIXON, LL. D.,

Chief Justice of the Supreme Court of Wisconsin.

Professor of Law.

HON. ORSAMUS COLB, LL. D.,

Associate Justice of the Supreme Court of Wisconsin,
Professor of Law.

UNIVERSITY OF WISCONSIN.

HON. WILLIAM PENN LYON, LL. D.,
Associate Justice of the Supreme Court of Wisconsin.
Professor of Law.

HON. H. S. ORTON, LL. D.,
†Dean of Law Faculty and Professor of Law.

HON. P. L. SPOONER,
Dean of Faculty.

J. H. CARPENTER, Esq.,
Professor of Law.

WILLIAM F. VILAS, LL. B.,
Professor of Law.

R. B. ANDERSON, A. M.,
Instructor in Languages.

STEPHEN LEAHY, PH. B.,
Instructor.

THOS. D. CHRISTIE, A. B.,
Instructor.

MRS. D. E. CARSON,
Preceptress.

MISS JOSEPHINE MAGOON,
Assistant Preceptress.

MISS LIZZIE S. SPENCER, PH. B.,
Instructor.

MISS ELLA F. SAGE,
Teacher of Instrumental Music.

Teacher of Vocal Music.

Teacher of Drawing and Oil Painting.

†Resigned as Dean and Judge P. L. Spooner elected June, 1872.

I. COLLEGE OF ARTS.

The College of Arts is organized under the following section of the General Laws of 1866, Chap. CXIV :

SECTION 2. The College of Arts shall embrace courses of instruction in the mathematical, physical and natural sciences, with their application to the industrial arts, such as agriculture, mechanics and engineering, mining and metallurgy, manufactures, architecture and commerce, in such branches included in the College of Letters as shall be necessary to a proper fitness of the pupils in the scientific and practical courses for their chosen pursuits, and in military tactics ; and as soon as the income of the University will allow, in such order as the wants of the public shall seem to require, the said courses in the sciences and their application to the practical arts, shall be expanded into distinct colleges of the University, each with its own faculty and appropriate title.

The plain object of this section is to provide, not only for a general scientific education, but also for such a range of studies in the *applications of science* as to meet the wants of those who desire to fit themselves for agricultural, mechanical, commercial, or strictly scientific pursuits. The course of study is such as to provide a sound education in the elements of science, and at the same time to give great freedom in the selection of studies according to the choice of the individual student. As higher demands are made they will be met by adding to the list of elective studies, and by the enlargement of the Faculty of Arts, so as to form distinct colleges, as provided for in the act of reorganization.

The Departments of Agriculture, Mining, Metallurgy, and Engineering are branches of this college.

Those who wish to make Agriculture, Mining and Metallurgy or Engineering specialties, pursue the course of study prescribed in those Departments, but all the scientific instruction in this College is given with special reference to Agriculture and other useful arts.

DEPARTMENT OF AGRICULTURE.

1st. It is the design of the University to give in this Department to the graduates of colleges, and to others of proper age and acquirements, a thorough course of instruction directly pertaining to Agriculture, which will enable them to conduct the operations of a farm both intelligently and profitably.

This course is so arranged that the instruction in the class room can be completed in a single year by students already well acquainted with the physical sciences, while an opportunity will be given to those who desire it for extended laboratory practice, for a higher course in Botany, and for instruction in conducting experiments in Agriculture and Horticulture, thus making a full three years course of study.

2d. To give a wide range of optional studies so as to secure a three years course of instruction, that will combine thorough mental discipline with theoretical and practical knowledge of the relation of science to Agriculture.

With these ends in view, the studies have been so arranged that a student may devote his entire time to Agricultural studies, or he may take one study from this course, and such other studies as he may be able to pursue.

He can graduate when he has completed a course equivalent to that in the College of Arts.

Students in this, as in all other Departments of the University, can enter at any time on examination, can pursue such studies as they choose, and receive a certificate of attendance.

Special attention is called to the following characteristics of the course:

BOTANY.—Besides a thorough course in Structural, Physiological, and Systematic Botany, that will familiarize the student with the characteristics of the Natural orders, and their relations to each other, the course in Practical Botany will teach him the habits, extent, and relative importance of those species that are of practical interest.

PRACTICAL AGRICULTURE.—In this branch of instruction it is the design to give a thorough discussion of the most approved methods of conducting the practical operations of the farm, to give the results of well tried experiments, and the principles to be deduced from them, and to show how experiments must be conducted to make them of practical value.

To aid this department, the University farm will be used, as rapidly as it can be brought into suitable condition, for the conducting of experiments in Agriculture and Horticulture.

METEOROLOGY.—Besides the general principles of Physical Geography, and the laws of the formation and disposition of dews, frosts, etc., instruction will be given in the changes of climate produced by man, in building levees, in draining wet districts, and in the removal or planting of forests.

IN HORTICULTURE, instruction will be given in forcing plants by artificial heat, in the various methods of artificial propagation, in the economic value of small fruits and the most approved methods of producing them, and in the general principles of laying out and beautifying ornamental grounds.

CHEMISTRY.—By reference to the course, it will be seen that as soon as the student has been made thoroughly acquainted with the elements, and the general principles of chemical affinity and combination, instruction will be given him in the laboratory, where he will, with his own hands, apply the tests required to determine the composition and properties of bodies, and thus become practically familiar with the methods used in chemical investigations. It is intended to make this course sufficiently thorough to fit him to enter upon a higher course of quantitative chemical analysis, should he desire it.

It will be seen that Organic Chemistry is taught with particular reference to its economic applications.

In Agricultural Chemistry proper, the course is sufficiently extended to give the student a thorough knowledge of the relations of Chemistry to Agriculture, and its applications to the various operations of the farm.

ZOOLOGY.—The entire course of this science is given with particular reference to the demands of the farmer. And in addition to the principles of classification and history of domestic animals, it is believed that the course in Entomology will prove of great value—teaching, as it does, the habits of injurious species, and the means of destroying them or of preventing their depredations.

FORESTRY.—The instruction in Forestry will include the best methods of cultivating forest trees and the relative value of different varieties of trees for timber, for fuel, or for screens to modify the effect of severe winter winds.

INDUSTRIAL STATISTICS.—Under this head it is proposed to give an account of the industrial productions of the country and their relative commercial value.

HISTORY OF AGRICULTURAL EDUCATION will consist of a brief account of the efforts that have been made in this and other countries, to advance the interests of agriculture, by the direct application of science

In addition to the studies on agriculture, courses of lectures will yearly be given by the President, the resident Scientific Professors, and by Professors and Lecturers from abroad, who have made a special study of the various subjects relating to agriculture. By the employment of non-resi-

dent lecturers, the University will have the benefit of the scientific knowledge and practical skill of gentlemen in this and other states whose services as permanent professors could not be secured.

In the present state of agricultural education, any course of study may be regarded as an experiment. An institution, or any department of instruction in it, must be modified until it meets the wants of the people. Their wants will be learned by the demands the students make for instruction, when different courses of study are presented for their acceptance.

The foregoing course of study is believed to be one that will, in the main, meet the requirements of the agriculturalists of the state, embracing as it does, either as a distinct agricultural course, or in connection with other departments, a full educational course, such as those Agricultural Colleges that have been most successful have adopted after years of experience.

The land given by congress has been located, and when sold will afford abundant means for carrying on this department in the most liberal manner. In the mean time every effort will be made with the means now at the command of the University, to meet the wants of all students who present themselves, as well as the reasonable demands of the people.

DEPARTMENT OF MILITARY SCIENCE.

The course in Military Science is optional. Its object is to fit its graduates to perform the duties of subaltern officers in the Regular Army.

All graduates of the course receive a suitable Diploma.

Physical culture, so long neglected in the schools of this country, is now everywhere claiming the attention of educators. Cultivated intellect, in the absence of muscular energy, is inadequate to promote the welfare of society, or the happiness of its possessor. Aware of this fact, the Regents have adopted means to secure the physical training of the students, and at the same time to impart military instruction. The Military department is thoroughly organized and placed under the direction of Col. W. J. L. NICODEMUS, late of the United States Army. By action of the Board of Regents, military drill is required of all the members of the Sophomore and Freshman Classes, who must provide themselves with the prescribed uniform, on consultation with Col. NICODEMUS. This uniform is cheap, neat, and suitable for ordinary wear. It is expected that many students not connected with these classes, will join the battalion. This is earnestly recommended as furnishing a most healthful exercise. Students will be required to drill only three hours a week.

II. COLLEGE OF LETTERS.

The course pursued in this College is the usual classical course, consisting of a complete course in Classics, Mathematics, Science and Literature, and is intended to be fully equal to that pursued in the best colleges in the country. While great care is taken by the authorities of the University to furnish young men with the means of obtaining a thorough preparation for the various departments of business, those studies which enable the student to secure the treasures of ancient wisdom and bring him into sympathy with the great thinkers of past ages will receive a requisite share of the time of instructors and students.

III. FEMALE COLLEGE.

The course of study in this College is similar to that in the College of Arts, and is designed to be fully equivalent to it. To meet, as far as practicable, the tastes of young ladies, and their probable wants, arising from peculiarity of vocation, several studies are made elective. In addition to the course prescribed for this College, ladies are allowed to enter the other colleges and departments of the Institution, and the same degrees are conferred upon them as upon gentlemen for the satisfactory completion of any course of study.

Students who do not desire to graduate may enter at any time, and take any study of the term which they are prepared to prosecute to advantage.

Ladies and gentlemen recite together; but, in all departments of the Institution, ladies are allowed separate instruction, when preferred.

The Ladies' Hall, erected by the munificence of the State, and opened at the commencement of the Winter Term, is an elegant and commodious building. Its style of architecture, general finish, and arrangement, reflect great credit upon the Architect, and upon the Executive Committee under whose supervision it was erected.

It contains a chapel, teachers' rooms, recitation rooms, study and lodging rooms for about eighty students, and ample accommodations for boarding. Students' rooms are neatly carpeted and furnished with heavy furniture. Occupants will be expected to provide the earthen-ware needed in their rooms; also towels, napkins, sheets, pillow-cases, blankets and counterpanes, all of which should be plainly marked with the owners name.

Students occupying this building are under the immediate charge of the experienced and accomplished Preceptress, Mrs. D. E. CARSON. The Preceptress and her associate teachers give constant attention to the manners and general conduct of the lady pupils.

To the Fine Arts, a knowledge of which is now essential to complete culture, special attention will be given.

A very successful teacher has charge of the department of Instrumental Music, and competent teachers of Vocal Music and Oil Painting will be employed at the opening of the Fall Term.

The department of Boarding is under the direction of an experienced and efficient Matron, whose excellent character, business tact, and kind attentions to the young ladies evince peculiar fitness for her position. Ladies occupying rooms in the building are required to board with the Matron.

It is the design of the Regents and Faculty of the University to furnish young ladies with the means of securing an education as thorough and finished as can be obtained at any other institution in the country. To accomplish this object all available resources will be employed.

COLLEGE COURSES OF INSTRUCTION.

FRESHMAN YEAR.

College of Letters.

First Term.

MATHEMATICS, - - -
 LATIN—Cicero's Philippic and Verrine
 Orations (Stuart.)
 GREEK—Herodotus. (Goodwin.)

College of Arts.

HIGHER ALGEBRA. Loomis.

ENGLISH—Mulligan's Structure of the
 English Language.

*GERMAN—Comfort's Course, or
 *FRENCH—Otto's Course.

LECTURES:

OPTIONAL, - - -

Scandinavian.

Second Term.

MATHEMATICS, - - -
 LATIN—Livy.
 GREEK—Homer's Iliad.

SOLID GEOMETRY. Loomis.

ENGLISH—Mulligan finished. Craik's
 English of Shakespeare.

GERMAN or FRENCH.

LECTURES:

OPTIONAL, - - -

Scandinavian.

Third Term.

MATHEMATICS, - - -
 BOTANY, - - -
 LATIN—Livy.
 GREEK—Homer's Iliad.

PLANE TRIGONOMETRY and Applications. Loomis.
 GRAY'S MANUAL.

GERMAN or FRENCH.

LECTURES:

OPTIONAL, - - -

Scandinavian.

THEMES and Declamations throughout the year; also, Latin and Greek Composition
 in the College of Letters.

SOPHOMORE YEAR.

First Term.

MATHEMATICS, Spherical Trigonometry and Conic Sections. Loomis.
 LATIN—Horace.
 GREEK—Demosthenes.

SURVEYING AND NAVIGATION.

AGRICULTURE.—Lectures.

GERMAN or FRENCH.

LECTURES, - - -

HISTORY. (Labberton's Outlines.)

* The choice to be made for the entire course.

College of Letters.

College of Arts.

Second Term.

MATHEMATICS,	.	.	.	Analytical Geometry, Loomis.
SCIENCE,	.	.	.	Anatomy and Physiology—Zoology begun.
LATIN—Tacitus, Germanus and Agricola.				German and Anglo-Saxon, or FRENCH.
GREEK—Demosthenes.				
LECTURES,	.	.	.	History.

Third Term.

MATHEMATICS	.	.	.	Calculus, Loomis.
LATIN—Quintilian.				Zoology—completed.
GREEK—The Promethians of Aeschylus.				German or FRENCH.
LECTURES,	.	.	.	Physics and History.

JUNIOR YEAR.

First Term.

MECHANICS,	.	.	.	Snell and Lectures.
CHEMISTRY,	.	.	.	Fownes and Lectures.
RHETORIC,	.	.	.	
FRENCH—				German or FRENCH.
LECTURES,	.	.	.	English Literature.
OPTIONAL,	.	.	.	Historical Geography.

Second Term.

GENERAL PHYSICS,	.	.	.	Snell and Lectures.
HISTORY,	.	.	.	Hallam's Middle Ages.
GREEK—Gorgias of Plato.				Chemistry—Fownes and Lectures.
LECTURES,	.	.	.	English Literature.
OPTIONAL,	.	.	.	French and German.

Third Term.

ASTRONOMY,	.	.	.	White.
ENGLISH LITERATURE	.	.	.	
LATIN—Cicero's Tusculan Disputations.				ANALYTICAL CHEMISTRY.
LECTURES	.	.	.	METEOROLOGY.
OPTIONAL,	.	.	.	The Roman Constitution, French.

College of Letters.

College of Arts.

SENIOR YEAR.

First Term.

MENTAL PHILOSOPHY,	- - - - -	Haven.
POLITICAL ECONOMY,	- - - - -	Walker and Lectures.
AESTHETICS,	- - - - -	
SCIENCE OF LANGUAGE—Whitney.		DETERMINATIVE MINERALOGY.
LECTURES,	- - - - -	Mineralogy.
OPTIONAL,	- - - - -	Metallurgy. Assaying.

Second Term.

MORAL PHILOSOPHY.	- - - - -	Hopkins.
LOGIC,	- - - - -	Jevons.
GEOLOGY,	- - - - -	Dana and Lectures.
INTERNATIONAL LAW,	- - - - -	Lectures.

Third Term.

NATURAL THEOLOGY,	- - - - -	Chadbourne.
RHETORIC,	- - - - -	Day's Art of Discourse. (In- vention.)
CONSTITUTIONAL LAW,	- - - - -	Story and Lectures.
LECTURES,	- - - - -	Evidences of Christianity.
"	- - - - -	History of Civilization.
OPTIONAL,	- - - - -	Economic Geology.

FEMALE COLLEGE.

The course of studies for the Female College is the same as that of the College of Arts, with the following substitutes allowed:

In place of Surveying, Navigation, Agriculture, Analytical Geometry, and the Calculus, of the *Sophomore Year*; and in place of Chemistry and Analytical Chemistry of the *Junior Year*, Latin or Drawing may be substituted.

POST GRADUATE COURSE.

Bachelors of Art, Science and Philosophy, will be admitted to the University as candidates for the degree of Doctor of Philosophy. They must devote two years to study under the direction of the President and Faculty, and pass a satisfactory examination before the Board of Examiners appointed by the Regents

The studies are optional; but they must be selected from at least two sections, and the studies in some one section must be continued during the whole course.

The object of this course is to secure a higher grade of scholarship in Literature and Science than it seems possible to attain in the present state of our colleges, under the ordinary class-system.

COURSE OF INSTRUCTION.

SECTION I. *Philosophy and History.*

History of Philosophy.

History and Archæology.

International Law and Jurisprudence.

Critical Study of English Literature.

II. *Philology.*

Sanskrit—Anglo-Saxon.

Ancient and Modern Classic Languages.

Comparative Grammar.

Science of Language.

III. *Mathematics and Physics.*

Calculus of Variations.

Analytical Mechanics.

Dynamical Theory of Heat, Light, Etc.

Practical Astronomy and Geodesy.

SECTION IV. *Natural History.*

Botany.
Zoology.
Comparative Anatomy.

V. *Natural Sciences.*

Minerology.
Geology.
Chemical Philosophy and Analysis.

VI. *Applied Sciences.*

Mining Engineering.
Civil Engineering.
Mechanical Engineering.
Architecture.
Chemical Technology.
Metallurgy.
Economic Geology.