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BULLETIN OF THE UNIVERSITY OF WISCONSIN
Serial No. 580: General Series, No. 403

UNIVERSITY of WISCONSIN
COLLEGE of AGRICULTURE



SHORT COURSE IN AGRICULTURE

1913-14

MADISON
Published by the University
June, 1913

CALENDAR

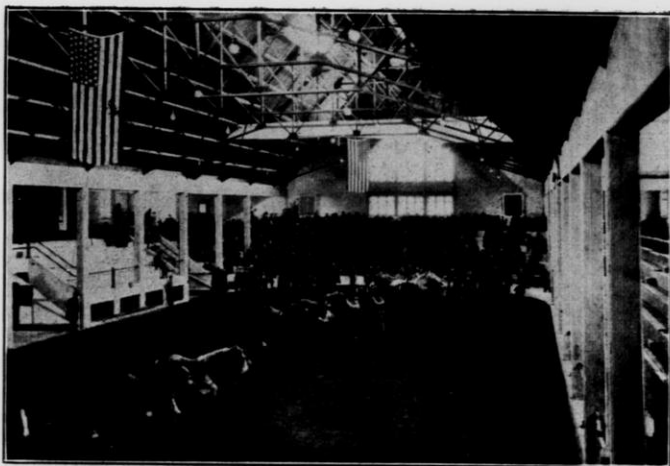
1913. Registration begins, Saturday, November 29.
Recitations begin, Monday, December 1.
Make-up examinations, December 15, 16, 17.
Christmas, holidays, December 19 (noon).
1914. Recitations resumed, January 6 (8 a. m.).
Inspection Trip, February 19-21.
Term ends March 12.
Graduation Exercises, March 12.

SHORT COURSE FACULTY

CHARLES R. VAN HISE, President of the University.
HARRY L. RUSSELL, Dean of the College of Agriculture.
DANIEL H. OTIS, In charge of Short Course.

A. S. ALEXANDER, Veterinary Science.
DR. J. C. ELSOM, Physical Education.
J. G. FULLER, Animal Husbandry.
A. L. GODDARD, Forging and Carpentry.
F. B. HADLEY, Veterinary Science.
J. G. HALPIN, Poultry Husbandry.
E. B. HART, Agricultural Chemistry.
B. H. HIBBARD, Cooperation and Marketing.
G. C. HUMPHREY, Animal Husbandry.
E. R. JONES, Soils Drainage.
C. E. LEE, Farm Dairying.
J. G. MILWARD, Horticulture.
———, Forestry.
R. A. MOORE, Agronomy.
C. A. OCOCK, Agricultural Engineering.
D. H. OTIS, Farm Management.
A. L. STONE, Agronomy.
W. E. TOTTINGHAM, Agricultural Chemistry.
W. L. BAIRD, Farm Accounting.
T. CLAVADATSCHER, Agricultural Engineering.
C. A. DAY, Farm Dairying.
O. J. DELWICHE, Animal Husbandry.
M. E. DICKSON, Poultry Husbandry.
E. W. FOX, Animal Husbandry.
E. R. FINNER, Soils.
B. M. GILE, Farm Dairying.
L. F. GRABER, Agronomy.
CARL HANSON, Soils.
C. S. HEAN, Library Practice.
J. R. HEPLER, Horticulture.
J. JOHNSON, Horticulture.
F. KLEINHEINZ, Animal Husbandry.
A. H. KUHLMAN, Animal Husbandry.
B. D. LEITH, Agronomy.
W. E. MARKEY, Animal Husbandry.
T. J. McCARTHY, Horticulture.
R. V. MORGAN, Carpentry.
RUDOLPH MUELLER, Poultry Husbandry.
A. C. OOSTERHUIS, Animal Husbandry.
H. SANDELL, Soils.
R. N. SCHUMANN, Blacksmithing.
J. L. TORMEY, Animal Husbandry.
H. W. VROMAN, Agricultural Engineering.
W. W. WEIR, Soils.
F. M. WHITE, Agricultural Engineering.
W. H. WRIGHT, Agricultural Bacteriology.
L. R. ZERBEL, Agronomy.
GEO. ZURIAN, Carpentry.

Entered as second-class matter June 10, 1898, at the Post Office at Madison Wisconsin, under the Act of July 16, 1894.



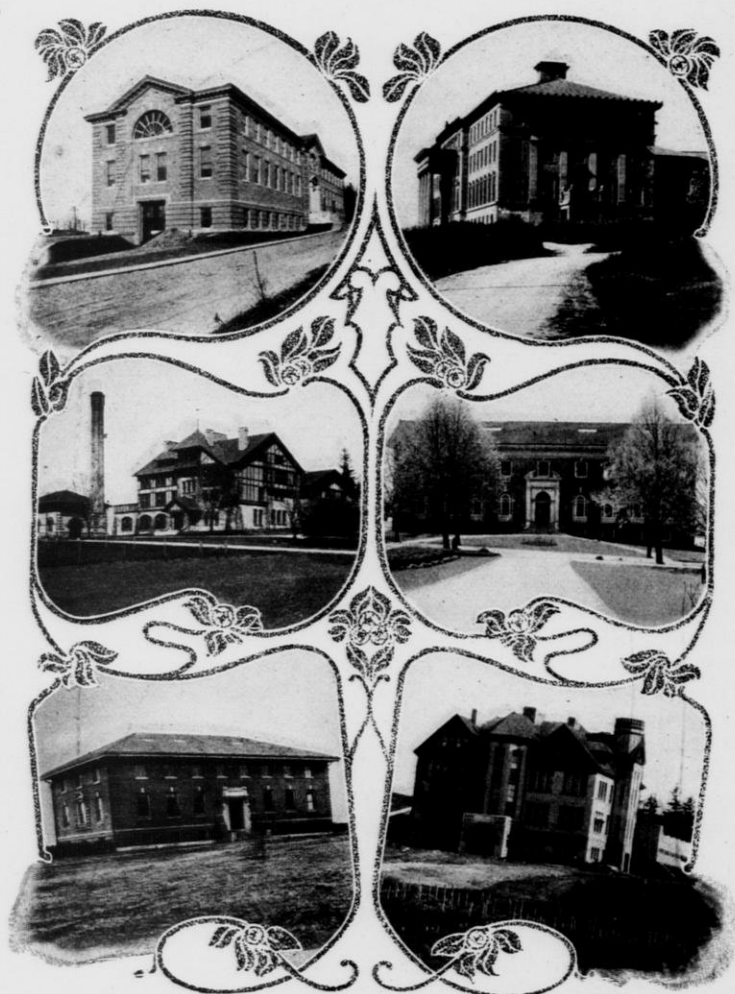
HORSE JUDGING IN THE STOCK PAVILION

OPPORTUNITIES FOR SHORT COURSE GRADUATES

The demand for well trained young men to take up responsible farm positions is much greater than the supply. The employment office of the College of Agriculture is constantly receiving requests for reliable young men. During the past year 350 applications for help were received at this College and only 151 students completed the Short Course.

The kind of positions which are open to Short Course graduates is indicated by the nature of the application, some of which are as follows: assistants on dairy farms at \$25 to \$30 per month; herdsmen and feeders, \$30 to \$50; gardeners and fruit raisers, \$25 to \$30; farm managers, \$40 to \$75; ranch foremen, \$60 to \$100; superintendents of farms, \$40 to \$100; teamsters, \$30 to \$40; tenants to operate farms on shares, poultrymen, etc.

Such positions do not attract all Short Course students as many realize that there is a much larger field with greater financial income in returning to their home farms and beginning operations in cooperation with their fathers or brothers.



SOME OF THE AGRICULTURAL COLLEGE BUILDINGS

Agric-Engineering Building
 Dairy Buildings
 Agronomy Building

Agricultural Hall
 Horticultural Building
 Soils Building

PURPOSE OF THE SHORT COURSE

The Short Course in Agriculture is designed to meet the needs of young men who desire to increase their skill and knowledge of agricultural science and practice by studying during the winter months when it is possible to leave the farm without serious inconvenience.

This College of Agriculture has had 28 years experience in planning a course of study, selecting apparatus, equipping buildings and securing instructors and has succeeded in adapting this course to the needs of the ambitious young farmers of Wisconsin.

The six principal objects of the Short Course may be summed up as follows:

1. To give the largest amount of information and training in practical agriculture in the shortest possible time without undue crowding. This enables young farmers, unable to take a longer course, to reap many of the benefits to be secured at the State's College of Agriculture.
2. To give this information at the season of the year when the work on the farm is least pressing.
3. To enable young men from various portions of the state to associate with each other and meet prominent men from this and other states, and from foreign countries.
4. To awaken the young farmer to the many interesting facts and opportunities on the farm; to remove the drudgery from farm work ;and to give him an inspiration along agricultural lines that will remain with him for life.
5. To help young men with little or no capital to secure positions where they can save money and gain valuable experience.
6. To uplift the farming interests of the state, to make better farmers, and more intelligent, useful citizens.

PLAN OF THE COURSE

The Short Course in Agriculture includes two winter terms of fourteen weeks each. Instruction is given by means of lectures, recitations, laboratory practice, demonstrations and conferences. The greatest opportunity is given for the students to

secure answers to individual questions which makes the studies practical and helpful to each student. The course of study is so arranged that students are given an idea of the fundamental sciences underlying successful agriculture in so far as time will permit. Based upon these fundamental sciences, the principles and approved practices of profitable farming are explained.

Text-books are used as an aid to understanding the lectures and laboratory exercises. In the laboratories, students are given practice in such subjects as stock and grain judging, grafting, budding and pruning fruit trees, testing seeds, laying

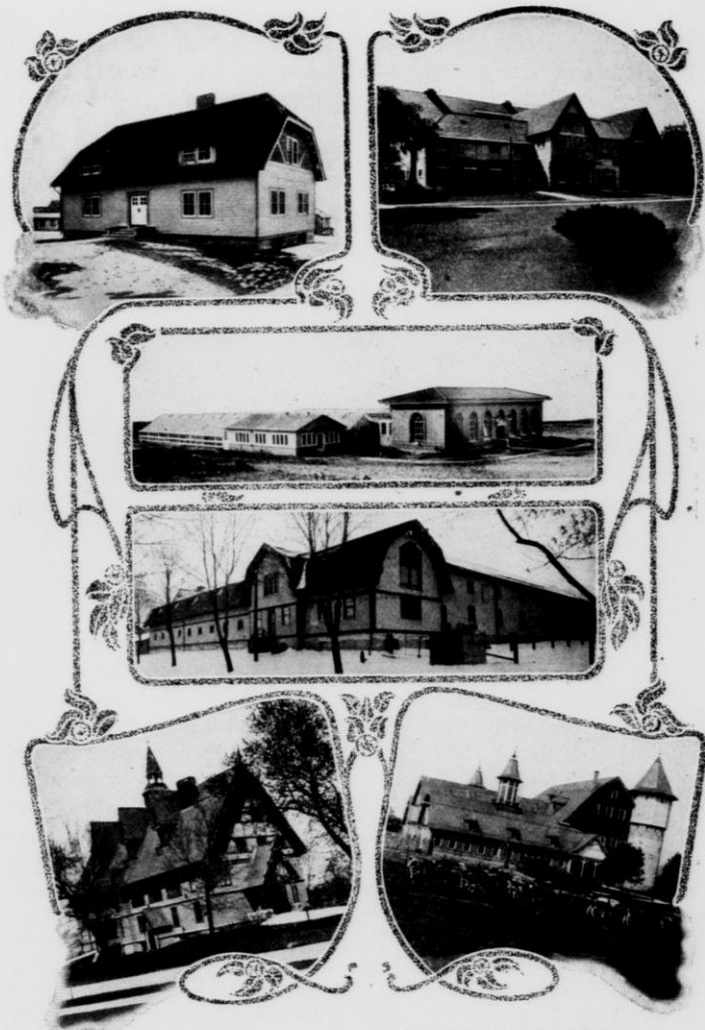


SHORT COURSE GLEE CLUB, 1913

tile drains, operating farm engines and machines, mixing rations for animals and examination of horses for soundness. Classes begin at 8 a. m. and continue throughout the day until 3:30 p. m., with a 1½ hour noon intermission from 12 to 1:30 p. m. No classes are held on Saturday afternoons.

STUDENT ACTIVITIES

The Short Course Literary Society is conducted by the students in the short course for the purpose of holding weekly meetings at which members of the Society participate in parliamentary drill, debating, and public speaking. These meetings are frequently addressed by prominent agriculturists and members of the faculty. Social features are often included and every Friday night during the short course is devoted to the Literary Society meeting. The organization is under the direction of Prof. Otis and assistants.



OTHER AGRICULTURAL COLLEGE BUILDINGS

Poultry Building

Greenhouses
Sheep Pavilion

Stock Pavilion

Horse Barn

Dairy Barn

The Short Course Band. In connection with the Society, short course students maintain a band which participates in its programs. A number of instruments are provided by the Society and the organization is under the direction of B. D. Leith.

The Short Course Glee Club has proved an interesting and helpful organization during recent years and participates largely in the meetings of the Literary Society. It is under the direction of R. W. Hills.



SHORT COURSE BAND, 1913

The Agricultural Experiment Association is an organization of former students of the College of Agriculture for the purpose of conducting field tests with grains and forage plants, the growing and dissemination of pure bred seeds, and experimental field work with all departments of agriculture in cooperation with the Experiment Station. The annual meeting of this Association occurs in January, and students of the short course are given an opportunity to attend its sessions and become members. Prof. R. A. Moore is the secretary.

SHORT COURSE CERTIFICATE

Students who complete the studies of the Short Course in a satisfactory manner will be granted Short Course certificates duly signed by the Dean of the College of Agriculture. Certificates were first granted in 1895, 16 in number. The Short Course has experienced such marked growth that in 1913 cer-

tificates were granted to 151 students. The total number of certificates granted to date, including 1913, is 1,880.

REQUIREMENTS FOR ADMISSION

Students should be at least sixteen years old and have a common school education to pursue the studies of the Short Course to the best advantage. No entrance examination is required. Experience has shown that young men at least twenty years old who have a general knowledge of farming, preferably with a year or more of experience on the farm, can get the greatest benefit from the course. The Short Course is open to both sexes.

EXPENSES

Tuition and Fees. For residents of Wisconsin; tuition, free; incidental fee, \$6.50; laboratory fee, \$5; breakage and key deposit, \$2, (unused portion returnable); total \$13.50.

Residents of other states: tuition, \$15; laboratory, \$15; incidental, \$6.50; lecture, \$10; breakage and key deposit, \$2, (unused portion returnable); total, \$48.50.

Other Expenses. Students have reported living expenses during the short course as follows: room and board, \$60 to \$75; books, suits and supplies, \$20; fees, \$13.50; miscellaneous expenses, \$5 to \$15, totals, \$100 to \$125. It is possible for any thrifty student to take the Short Course for the expenses above mentioned, although many voluntarily spend considerably more than this amount.

Students should not carry large sums of money in currency or checks, but should place their surplus money in a bank and draw upon it from time to time by check or certificate. Bring Post Office money orders instead of checks or drafts to avoid the necessary identification at the bank.

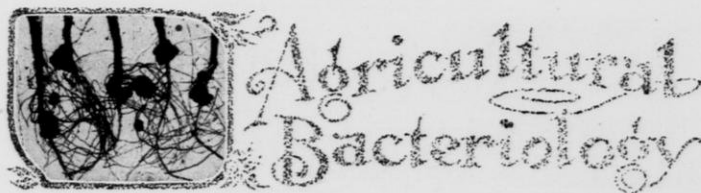
Lists of rooms and boarding places will be prepared to aid students in securing desirable accommodations. All students live in private homes, as the University has no dormitories or dining rooms for men.

Have mail addressed care of College of Agriculture, marked "Short Course."

WISCONSIN
LAND FERTILE AND FAIR



PRESENTED BY
SHORT COURSES
1912 AND 1913



W. H. WRIGHT

The course of lectures on the relation of bacteria to agriculture is given to the students in the second year of the Short Course. The lectures are supplemented by reading, and by demonstrations in the lecture room and laboratory. Attention is especially given to those phases of bacteriology which are of greatest importance from the standpoint of the farmer. The relations of the bacteria to the decomposition of organic matter and the fertility of the soil are studied, as are the relations of bacteria to the leguminous plants and to the rotting of manures.

Those transmissible diseases of animals which the stockman and breeder is certain to meet in his work are considered especially from the standpoint of prevention. The students are taught the use of the tuberculin test in order that they may apply it to their herds. The efficiency of the test as a means of diagnosis and the changes to be found in the body of the diseased animal are considered.

In dairy bacteriology especial attention is paid to the contamination of milk on the farm and its relation to the value of milk for the city market and for butter and cheese making. The distribution of disease by milk is also considered.

The relation of bacteria to health in the farm home is considered in a discussion of the protection of the farm water supply and sewage disposal. The principles concerned in the preservation of food materials, such as corn by ensiling and fruits and vegetables by canning, are considered.



Agricultural Chemistry

PROFESSOR W. E. TOTTINGHAM

This course treats, by lectures and demonstrations, of the application of chemistry to the farm. Such topics as the chemical elements contained in the air and soil and their relation to crops are discussed. Consideration is given to how the plant grows and feeds and the animal food products it yields.

Especial attention is devoted to the chemistry and conservation of manures, the relation of feeding stuffs to their composition, and to the origin, composition and purchase of commercial fertilizers. Students receive instruction concerning the composition of domestic animals at various stages of growth and the processes involved in their use of the several nutrients of feeding materials. The commercially important constituents of milk and their relation to other dairy by-products are also studied.

The aim of this course is to interpret Agricultural Chemistry in the terms of farm practice. A demonstration of the casein test is given with its application to the cheese making industry. Other demonstrations show the properties of some of the more common elements concerned in plant and animal growth. The chemical composition of common insecticides and fungicides is also discussed.



PROFESSORS B. H. HIBBARD AND D. H. OTIS; ASSISTANT W. L. BAIRD

The work given by this department is designed to improve the business ability of the farmer by teaching methods of keeping accounts and methods of managing farms.

A. Methods of Farm Bookkeeping. The aim of this course is to teach the elements of bookkeeping as applied to the farm. Methods of taking farm inventories and the keeping of cash accounts, and accounts with live stock, farm crops, etc., are considered. Milk, feeding, and labor records are also studied. Throughout the course, particular emphasis is laid upon farm arithmetic.

B. Methods of Farm Management. This course considers the farm as a unit. The aim is to show the student how the various farm operations may be organized and correlated so that the entire farm may be handled successfully and economically. Consideration is given to the location and size of the farm, and its adaptability to the raising of crops and livestock, the lay-out of the farm, the capital and equipment necessary for the various types of farming, and to the question of farm help. Trips will be taken to various farms to study their lay-out, equipment, and methods of management.

C. Cooperation in Agriculture. A sketch will be given of the most important farmers' organizations followed by an account of cooperative companies engaged in buying and selling farm produce, especially those of Wisconsin.



Agricultural Engineering

ASSISTANT PROFESSOR C. A. COCK; INSTRUCTOR F. M. WHITE; ASSISTANTS VROMAN AND T. CLAVADATSCHER

A. Farm Buildings and Machinery. This includes lectures and laboratory work in the designing of machine sheds, piggeries, small poultry houses, silos, ventilating systems, etc. The instruction in farm machinery includes laboratory work with ordinary farm implements, gas engines, plows, harrows, cultivators, planters, grain binders, etc.

B. Advanced Farm Engineering. This is an elective course for second year students which may be taken with courses in shop work and stock judging. The subjects considered are a continuation of the work begun in the first year in planning farm buildings and estimating the cost of construction. The practice with farm machinery is continued on the subjects given the previous year with laboratory work on steam and gasoline engines, exercises in pipe cutting and fitting, rope knots and splices. Lectures and laboratory work in practical cement and concrete construction.



PROFESSOR R. A. MOORE; ASSISTANT PROFESSOR STONE; INSTRUCTORS
B. D. LEITH AND L. F. GRABER; ASSISTANT L. R. ZERBEL

The work in Agronomy will include a study of the culture and management, methods of improvement, and systems of rotation for farm crops suitable for Wisconsin conditions.

A. Small Grains. Lectures on cultivation, harvesting, marketing, testing, uses, habits of growth, manufactured products, rotations, and fertilizers for the small grains. The laboratory work of this course aims to give the student a knowledge of the structure of the small grains, the points of distinction between the different varieties, and an intelligent understanding of the principles and practices of judging.

B. Forage Crops, Weeds and Seeds. Lectures and laboratory work on corn, alfalfa, clovers and other forage crops. The lectures include a discussion of the best methods and practices in sowing, handling, testing, selection and improvement of the forage crops. The laboratory work will consist in type study and judging of corn.

Lectures upon weeds in reference to their introduction, classification, dissemination, identification and eradication will be given to second year students. The purity and germination of farm seeds as related to weed introduction and the farm profit will also be discussed. Field and weed seeds will be studied under the microscope and their characteristic shapes and markings noted. The student will also be taught to identify the weeds from which the weed seeds came and to associate the weed and its seed.



PROFESSORS A. S. ALEXANDER, G. C. HUMPHREY; ASSISTANT PROFESSOR J. G. FULLER; INSTRUCTORS FRANK KLEINHINZ, A. C. OOSTERHUIS, J. L. TORMEY; ASSISTANTS O. J. DELWICHE, E. W. FOX, A. H. KUHLMAN AND W. E. MARKEY

The courses in animal husbandry given in the Short Course include live stock breeding, judging, feeding, care and management. The extensive herds and flocks of the University farm are supplemented by prize winning animals loaned by breeders of the state.

A. Breeds of Live Stock. By means of text books, lectures and lantern slide illustrations first year students are taught the origin, history, characteristics and utility of the various classes and breeds of live stock.

B. Elementary Stock Judging. A course in which first year students are taught by score card practice to distinguish between different types of breeds and to recognize their points and characteristics. The work done in this course fits the student to make comparisons and selections of animals for breeding and market purposes.

C. Feeds and Feeding. The work consists of lectures instructing the student of the first year in the fundamental principles of feeding, balancing of rations and the composition and comparative values of the most important feeding stuffs.

D. Advanced Stock Feeding. The aim of this course is to instruct the student of the second year in applying the principles of feeding to practice.

E. Breeding and Management. Second year students are taught by lectures the principles, methods and practices underlying the breeding and rearing of farm animals.

F. Advanced Stock Judging. The purpose of this course is to fit the student of the second year to act as a competent

judge of live stock. To this end advanced training is given in the classification of farm animals and competitive judging based on a standard of excellence for each breed.

G. Live Stock Practice. A course for second year students, dealing with the practical methods of feeding and management of farm animals.



ASSISTANT PROFESSOR C. E. LEE AND ASSISTANTS C. A. DAY AND
B. M. GILE

In Farm Dairying, students receive instruction in the general principles which are involved in the production and handling of milk and cream for city markets, creameries and cheese factories, and the making of butter on the farm.

A. Farm Dairying. Lectures will be given on the following subjects: composition of milk and other dairy products; the production of market milk and the handling of milk and cream for factory purposes; care and ripening of cream for farm butter-making; and marketing of dairy products, etc.

B. Farm Dairy Practice. The new Dairy Laboratory is equipped with the most approved apparatus for the testing of milk, the separation of cream and the manufacture of butter. In this laboratory students are given practical instruction in all branches of farm dairying, including the testing of milk and cream, the detection of the more common adulterants of these products and the operation of hand separators, churns, butter workers, and other appliances of the dairy.



Forestry

The work given in Forestry is designed to show the relation of forestry to agriculture. Among the subjects studied are the care of the wood lot, windbreaks, shelter belts, tree planting, selections of species for planting, and methods of propagation, planting, and protection.



Horticulture

ASSISTANT PROFESSOR J. G. MILWARD; INSTRUCTORS J. R. HEPLER,
J. JOHNSON, T. J. MCCARTHY AND ASSISTANTS

Horticultural work in the short course is designed to meet the demands of the ordinary farm. The required work of the first year gives the student a general idea of the subject. The second year enables those particularly interested to study, more in detail, horticultural methods and practices.

A. General Horticulture. The aim of this course is to give the student an understanding of the horticultural practices essential to the successful management of the home orchard and small fruit plantation. Two lectures a week will be given in which will be discussed problems of location, cultivation, fertilization, varieties, and care of the home fruit plantation.

B. Laboratory Practice. This course is designed as supplementary to Course A. It consists of laboratory work and dem-

onstration lectures on such subjects as seed and plant structures, compounding insecticides and fungicides, control of orchard and garden pests, and construction and manipulation of hot beds and cold frames. Practical work will be given in the garden house.

C. Commercial Horticulture. A lecture course which will take up more in detail the special practices in handling fruit and fruit plantations. Special problems of management and marketing will be discussed in order that the student may become fully acquainted with the details of operating a commercial plantation.

D. Advanced Laboratory Practice. A laboratory course supplementary to Course B but differing in that the student will be given greater opportunity to perform the operations himself. Also to include other laboratory work not touched upon in Course B.



LIBRARIAN C. S. HEAN

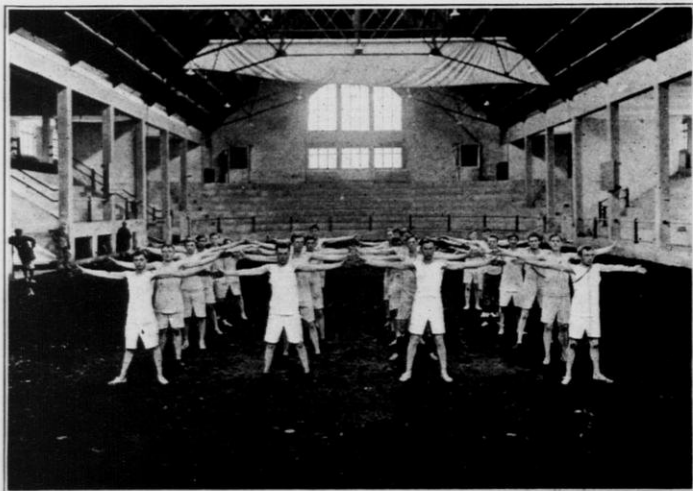
The aim of this course is to teach the student to use books, papers, and bulletins as tools. Lectures will be given on classification and other library methods, and on the literature of agriculture, including books and serial publications. These lectures will be supplemented by practical work in the use of books. Special attention will be given to the best ways in which to read and study newspapers, farm papers, bulletins, etc., methods of keeping files and records of valuable articles read, how to get government as well as state bulletins and reports, how these may be filed and indexed so as to be a ready and valuable reference for the busy farmer. Papers will be written which will call for the study of some of the best books and bulletins.

Physical Education



DR. J. C. ELSOM, EXAMINER, AND ASSISTANTS

Every Short Course student will be given a thorough physical and medical examination, and will be required to take two half-hour periods per week of developmental exercises, athletics and recreational games under capable direction. An oppor-



SHORT COURSE MEN TAKING GYMNASTIC DRILL IN THE STOCK PAVILION

tunity for voluntary exercise and for the organization of basketball and other teams and the holding of athletic contests between classes, etc., will be given. These activities are carried on in the Stock Pavilion which has been equipped with facilities for this purpose, including gymnastic and athletic

apparatus, lockers and shower baths. Lectures on hygiene and the laws of efficient living will be given by members of the Department of Physical Education.



ASSOCIATE PROFESSOR J. G. HALPIN; INSTRUCTOR M. E. DICKSON;
ASSISTANT RUDOLPH MUELLER

The Poultry department is equipped with modern poultry buildings, colony houses, a very complete line of incubators, brooders, and other poultry apparatus, such as cramming machines, bone cutters, etc. In addition, some twenty varieties of poultry furnish ample material for poultry judging. These will be used to help the student become familiar with general poultry raising. An extensive file of poultry journals and books is to be found in the Agricultural Library.

A. Poultry Raising. Lectures on the breeding, feeding and management of poultry under farm conditions with special reference to the keeping of fowls for meat and eggs. Subjects of breeding and feeding for winter egg production, poultry house construction, incubating and brooding, both natural and artificial, killing and marketing dressed poultry, etc., will be included. A brief discussion of the common poultry diseases is given.

B. Demonstration and Laboratory Work. The first third of the time will be devoted to poultry house construction, and to market poultry, including the various methods of killing and dressing market poultry, caponizing, and also the producing and marketing of eggs. The second third will include the study of the various varieties of standard bred fowl. The third will include incubation and brooding, and a few brief discussions of some of the more common poultry diseases.



SUPERINTENDENT A. L. GODDARD; INSTRUCTORS R. N. SCHUMANN, BLACKSMITHING; R. V. MORGAN, FARM CARPENTRY AND BUILDING CONSTRUCTION; ASSISTANT, GEO. ZURIAN

A. Elementary Carpentry. This work consists of instruction in the use of wood tools, how to sharpen and keep them in order, how to make and use such fixtures as the bench hook and miter box, making tool box, knife box or other articles that may be selected to illustrate various types of joints. Instruction is also given in reading the steel square and its use in building operations.

B. Elementary Forging. This course is arranged for first year students and includes instruction in the essential operations of forging, such as drawing out, upsetting, pointing, bending and welding wrought iron and mild steel, leading to the application of these operations in making useful articles such as bolts, chain links, rings, clevises of various forms, cold chisels, metal and stone drills, hammers, knives, etc. Instruction in hardening, tempering, drilling, riveting and soldering is included.

C. Advanced Carpentry. This course includes more advanced work to suit the needs of the individual student. The construction of stairs, window casings and door frames, the making of models of houses, barns, and portable pens, and framing for concrete construction are among the subjects that may be selected. Advanced instruction is given in the use of the steel square as applied to the cutting of rafters and other complex framing; wood turning may be taken in this course, if desired.

D. Advanced Forge Work. A continuation of first year work including more advanced practice. Welding steel of various grades, dressing and sharpening picks, plow shares, etc., brazing, welding, forging and tempering springs is included in practice work as time permits.



ASSISTANT PROFESSOR E. R. JONES; INSTRUCTOR W. W. WEIR; ASSISTANTS CARL HANSON AND HARVEY SANDELL

The following courses in soils include lectures supplemented by laboratory exercises which demonstrate the principles taught in the lectures.

A. Soil Fertility. Twenty-eight lectures on the principles of soil management, including the conditions affecting and means of maintaining fertility in good tilth. The chief subjects studied are the following: chemical composition of soils and the forms of material available to the plant as food; the water requirements of plants; the water holding capacity of soils, and cultivation to conserve moisture; tillage to improve tilth; the soil conditions required by the different crops and the influence of rotation on the soil.

B. Laboratory Practice and demonstrational exercises planned to aid the student to apply the principles discussed in Course A.

C. Land Drainage. Ten lectures on the theory and practice of land drainage. The economic and engineering aspects of land drainage are discussed upon the basis of Wisconsin conditions.

D. (1) Soil Fertility or (2) Land Drainage. (1) Seven two-hour laboratory studies upon the texture, tilth, water-holding capacity, and lime fertilizer requirements of soils, and the movements of capillary and gravitational water in them. Also seven two-hour conferences on the special requirements of the typical soils as well as those of particular soils reported by students.

(2) Seven two-hour exercises in the plant-house or out-of-doors with the surveyor's level, the plane-table, drain tile and tiling tools. Also seven two-hour exercises in planning drain-

age systems from topographic maps of typical areas and from sketches of particular areas furnished by students.

Students are required to elect either (1) or (2).



Veterinary Science

PROFESSOR A. S. ALEXANDER; ASSOCIATE PROFESSOR F. B. HADLEY

The information acquired in these courses will prove of great value in the breeding, judging, feeding, and general management of farm animals, and as excellent preparation for those who intend later to enter a veterinary college. As aids to the work, the department has skeletons of the horse, cow, and pig; an Azoux life-size dissectible model of a horse, containing 3,000 named parts; Azoux models of separate and diseased organs; numerous veterinary specimens and a collection of modern veterinary instruments, casting apparatus, drugs, etc.

A. Introductory Veterinary Science. In this course second-year students are instructed regarding the rudimentary anatomy and physiology of animals; also the nature, cause and symptoms of the more common diseases and means by which they may, in many instances, be prevented. It is the aim and object of the instruction to qualify each student to act as an intelligent, capable nurse of ailing animals, and to be able to recognize diseases, to give the first aid where necessary, and to properly carry out the orders of the attending veterinarian.

B. Veterinary Practice. Practical demonstrations are given; simple operations indicated, and methods employed in recognizing diseases and administering medicines are taught. Instructions are given in the examination of horses for soundness, and students are required to pass upon soundness of subjects selected for the purpose.

BOOKS REQUIRED FOR SHORT COURSE**First Year**

Beginnings in Animal Husbandry.....	Plumb
Judging Live Stock.....	Craig
Feeds and Feeding.....	Henry
Gas Engine Principles.....	Whitman
Testing Milk and its Products.....	Farrington and Woll
General Agricultural Chemistry.....	Hart and Tottingham
Cereals in America.....	Hunt
Soils and Soil Fertility.....	Whitson and Walster
Instructions for Traction and Stationary Engineers.....	Boss

Second Year.

Agricultural Bacteriology.....	Russell and Hastings
Veterinary Studies for Agricultural Students.....	Reynolds
Veterinary Lectures	Thompson
Forage and Fiber Crops.....	Hunt
Land Drainage	Jones

DISTRIBUTION OF GRADUATES AND FORMER STUDENTS

A total of 3,872 students have attended the Short Course in Agriculture since it was established in 1885. Nearly every section of the state has been represented. Of these, 476 students have come from other states and countries, many foreign lands being represented.

Graduates of the Short Course are now successful farmers in many parts of the United States and in several foreign countries. An investigation has shown that over 90% of those who have taken this course are actually engaged in some work connected with agriculture. Many former Short Course students have pursued advanced studies and are now holding prominent positions in agricultural colleges and experiment stations.

FIRST YEAR SCHEDULE

Abbreviations used: AB, Agronomy Building; ACB, Agricultural Chemistry Building; AEB, Agricultural Engineering Building; Agr. H, Agricultural Hall; DB, Dairy Building; HB, Horticultural Building; SB, Soils Building; SP, Stock Pavilion.

Hour	Sections		Agronomy A, Dec. 1—Jan. 24, Auditorium, Agr. H. Agricultural Engineering A, January 26—Feb. 16, Auditorium, Agr. H. Forestry, Feb. 17—Mar. 12, Auditorium, Agr. H.
8-9	I, II, III.	Mon. and Tues. Wed. and Thurs., Horticulture, HB. Fri. and Sat., Soils, Auditorium, Agr. H.	
9-10	Section I.	Mon. and Tues., Agricultural Engineering A, AEB. Wed. and Thurs., Agronomy A, Dec. 1—Jan. 24, Farm Bookkeeping, Jan. 26—March 12. Fri. and Sat., Horticulture B, HB.	
	Section II.	Mon. and Tues., Horticulture B. Wed. and Thurs., Agricultural Engineering A, AEB. Fri. and Sat., Agronomy A, AB, Dec. 1—Jan. 24, Farm Bookkeeping, AB, Jan. 26—Mar. 12.	
	Section III.	Mon. and Tues., Agronomy A, AB, Dec. 1—Jan. 24, Farm Bookkeeping, AB, Jan. 26—Mar. 12. Wed. and Thurs., Horticulture B, HB. Fri. and Sat., Agricultural Engineering A, AEB.	
10-11	Section I.	Mon. and Tues., Library Practice, Library, Agr. H. Wed. and Thurs., Agronomy A, AB, Dec. 1—Jan. 24, Farm Bookkeeping, AB, Jan. 26—March 12. Fri. and Sat., Soils B, SB.	
	Section II.	Mon. and Tues., Soils B, SB. Wed. and Thurs., Library Practice, Library, Agr. H. Fri. and Sat., Agronomy A, AB, Dec. 1—Jan. 24, Farm Bookkeeping, AB, Jan. 26—March 12.	
	Section III.	Mon. and Tues., Agronomy A, AB, Dec. 1—Jan. 24, Farm Bookkeeping, AB, Jan. 26—March 12. Wed. and Thurs., Soils B, SB. Fri. and Sat., Library Practice, Library, Agr. H.	
11-12	Sections I, II, III.	Mon. and Tues., Animal Husbandry A., Dec. 1—Mar. 12, Auditorium, Agr. H. Wed., Thurs., Fri., and Sat., Agricultural Chemistry Dec. 1—Jan. 24, Auditorium, ACB. Wed. and Thurs., Animal Husbandry C., Jan. 26—March 12, Auditorium, Agr. H. Fri. and Sat., Farm Dairying A., Jan. 26—March 12.	
	Section I.	Farm Dairying B, Dec. 1—Jan. 10, DB. Shop work A or C, Jan. 12—Feb. 7, Shops. Animal Husbandry B, Feb. 9—March 12, SP.	
	Section II.	Animal Husbandry B, Dec. 1—Jan. 10, SP. Farm Dairying B, Jan. 12—Feb. 7, DB. Shop Work A or C, Feb. 9—March 12, Shops.	
1:30-3:30	Section III.	Shop Work A or C, Dec. 1—Jan. 10, Animal Husbandry B, Jan. 12—Feb. 7, SP. Farm Dairying B, Feb. 9—March 12, DB.	
3:30-5:30	Gymnastic Exercises, SP.		

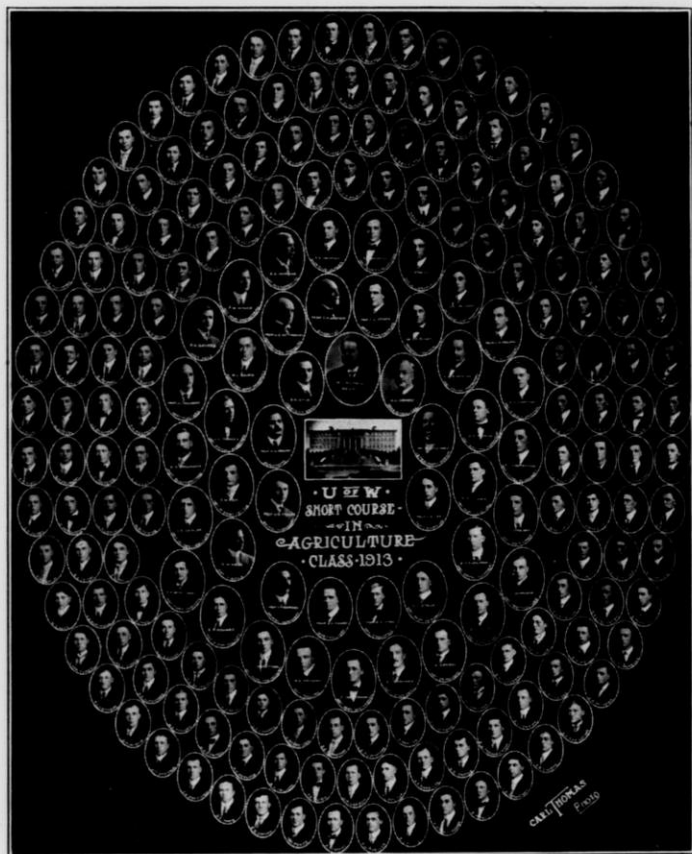
SECOND YEAR SCHEDULE

Abbreviations: AEB, Agricultural Engineering Building; Agr, Agricultural Hall; SP, Stock Pavilion.

Hour 8-9	Sections I, II and III.	Animal Husb. D. Dec. 1-Jan. 10, Room 61, Agr. H. Bact. Jan. 12-Feb. 7, Room 61, Agr. H. Farm Mg't. Feb. 3-March 12, Room 61, Agr. H.				
9-10	Sections I, II and III.	Mon., Tues., Wed.: Vet. Science, Room 61, Agr. H. Thurs., Fri., Sat., Poultry A, Dec. 1-Jan. 24, Room 61, Agr. H. Thurs., Fri., Sat., Animal Husb. E, Jan. 26-March 12, Room 61, Agr. H.				
10-12	Section I. Choose one of following:	of	{ Animal Husbandry F, SP, or Shop Work, A. B. C. or D. Shops and Poultry B and Shop Work,		Dec. 1—Feb. 7	
	Choose one of following:		{ Agricultural Engineering B, AEB. Poultry B. Shop work, A. B. C. or D. Shops.		Feb 9—March 12.	
	Section II. Choose one of following:	of	{ Animal Husbandry F, SP. (The student electing Animal Husbandry F. must continue same subject the last third of term.) Poultry B.		Dec. 1—Jan. 10.	
	Choose one of following,		{ Agricultural Engineering B, AEB. Poultry B. Shop work, A. B. C. or D. Shops		Jan. 12—Feb 7.	
Choose one of following:	of	{ Poultry B. Animal Husbandry, F, SP (only for students who had Animal Husbandry the first third of the term.) Shop Work, A. B. C. or D. Shops.		Feb. 9—March 12.		
		Section III. Choose one of following:	of	{ Agricultural Engineering B, AEB. Poultry B. Shop Work, A. B. C or D. Shops. Animal Husbandry F, SP, or Shop Work, A. B. C. or D. Shops, or Poultry B. and Shop Work.		Dec. 1—Jan 10.
Choose one of following:				Jan. 12—March 12.		
Dec. 1—19.				Jan. 6—14	Jan. 15—24.	
1:30—2:30	All sections, Agron. B.	1:30 to 3:30	Sec. I.	Agron. B. lab	Hort. D. lab.	
2:30—3:30	All sections, Hort. C.		Sec. II.	Hort. D. lab.	Agron B. lab.	
3:30—4:30	Mon., Wed., and Fri. All sections. Cooperation and Marketing, Room 61, Agr H.					
3:30—5:30	Tues. and Thurs. All sections. Gymnastics, SP.					
Hour	Jan. 26—Feb. 7	1:30 to 3:30	Feb. 9-17	Feb. 18—Feb. 27.	Feb. 28—March 12.	
1:30—2:30	All sections, Agron. B.	Sec I.	Agron B.	Soils D.	Soils D.	
2:30—3:30	All sections, Soils C.	Sec. II.	Soils D.	Agron B.	Soils D.	
		Sec. III.	Soils D.	Soils D.	Agron. B.	
3:30—4:30	Mon., Wed., and Fri. All sections. Animal Husbandry G, Room 61, Agr H.					
3:30—5:30	Tues., and Thurs. Gymnastics, SP.					

SECOND YEAR SHORT COURSE STUDENTS, 1912-1913

- Alexander, Arch S., Madison
 Allen, Jas. Wm., River Falls
 Austin, George Marden, Janesville, R. 6
 Avenell, Ruford Clarence, Linden
- Barnes, Phil H., Hancock
 Bailey, Melvin Berton, DeForest
 Bainbridge, Robson J., Livingston
 Barge, Wm. R., Grantsburg
 Bechlem, Edw. Wm., Plymouth
 Bentson, Arthur Palmer, Elroy
 Bittner, Robert, Chilton
 Bowen, Berne Lincoln, Richland Center
 Brager, George Milo, Mt. Horeb
 Brewer, Glen George, Rockbride
 Brietson, Anfin Mat, Deerfield
 Brown, Royal H., Milwaukee,
 4624 Grand Ave.
 Brunstad, Adolph G., Chippewa Falls
 Brunstad, Palmer Norris Bloomer
 Buehner, John C., Cambellsport, R. 34
 Burkhardt, Clyde James, Rhineland
 Buschmann, Louis E., Indianapolis, Ind.
 Bushnell, Ray Medley, Platteville
 Cahill, James Blain, Grand Rapids
 Cherrier, Percy B., Chippewa Falls
 Christensen, Victor, Roberts
 Clingman, Edwin Earl, Reedsburg
 Coleman, Maurice Elmer, Perry, N. Y.
 Connell, Wm. Anson, Menomonee Falls
 Cook, Earl D., Plainville
 Crosman, Arthur Willis, Lake Mills
 Cullen, Clarence J., Sinsinawa
 Curtis, Ralph Dexter, Madge
- Daly, Stewart J., Port Wing
 Dahl, Claus A., Osseo
 Danforth, Willis, Milwaukee,
 487 Cass St.
 Drunasky, George Andrew, Sun Prairie
 Dufenhorst, Arthur Edw.,
 West Allis, R. 5
 Dvorak, Henry Wenzlo, Mishicot, R. 3
- Engelhardt, Frederick A., Osceola
 Erickson, Leroy Wm., Chicago, Ill.
 Eshleman, Edwin D., Madison
 Ethun, J. L., DeForest
- Fawkes, Louis A., Wauzeka
 Fisher, Leslie, Waupun
 Fleishman, George S., Franksville
 Foth, Edwin A., Norwalk
 Frederickson, Edwin A., Necedah
- Gasser, Clarence C., Lodi
 Glocke, Arthur A., Weyauwega
 Grinde, Eugene Louis, Morrisonville
 Gupderman, Herbert, Louisburg
- Haigh, Richard, Cream
 Hamlin, H. J., Wautoma
 Hanson, Harold Eugene, DeForest
 Haseleu, Edwin E., Waterloo
 Hass, Julius August, Merrill, R. 1
 Healy, Benjamin, Cambria
 Hebert, Raymond, Chippewa Falls, R. 2
 Hein, Charles Wm., Jr., Merrimack
 Hitt, Oscar A., Alma
 Holt, Edward Lauren, Pleasant Prairie
 Holt, Frank Ellsworth, Oconomowoc
 Horter, George, Milwaukee
 Hovrud, Olin C., Mt. Horeb
 Howland, Roberts P., Chicago, Ill.
 Hult, Leslie Percival, Rockford, Ill.
- Ingels, John Errett, Waukesha
- Johnson, George R., Antigo
 Johnson, Theodore I., Blair
 Jones, Earl Foulkes, Sparta
 Jones, Everett Wm., Brandon
 Jones, Garfield, Barrington, Ill.
- Kassilke, Arthur B., Marshfield
 Kassner, Edward, Kewaunee, R. 6
 Kelpper, Walter P., Menomonee Falls
 Kennedy, Philip Henry, Nelson
 Keys, George W., Fond du Lac
 Kinservik, Thorwald, La Crosse
 Kirst, Arthur L., Tomah
 Konrad, Peter George, S. Germantown
 Kreuscher, William R., Somers
- Lane, Orie J., Hixton
 Larson, Joseph Merrel, Knapp
 Lawrence, Clifford P., Hudson, Ill.
 LeGore, Harlow P., Eau Claire
 Lentell, John Howard, Beloit
 Lerch, Fred W., Morrisonville
 Leverenz, Edwin Wm., Sheboygan
 Leverich, James Earl, Sparta
 Liddicoat, Lloyd H., Linden
 Linnane, Dan J., Reedsville
 Loesel, John, Cochrane
- Mack, John J., Antigo
 Mayo, George Leland, Eau Claire
 Meyer, Lewis M., Whitelaw
 Morner, Arvid, Ogema, R. 2
 Mueller, Herman Carl, Bonduel
- Nees, Wellington H., Mt. Horeb
 Nelson, Harvey August, Union Grove
 Neslon, Oscar Lloyd, Cambridge
 Neiman, Walter G.,
 Niemann, Fred, Madison
 Northey, Willard G., Palmyra



SHORT COURSE CLASS, GRADUATED MARCH 13, 1913

Ohman, Erick Emanuel, Glenwood City
Olson, W. H., Green Valley
Owen, George, Baraboo

Parrish, Rexford, Plymouth
Pearson, Louis, La Valle
Pease, Manford Dewitt, Cable
Peek, Walter Wm., Coloma
Pedersen, Hans M., Luck, R. 1
Peters, Ralph A., Sharon
Pierce, Marshall A., Fall Creek
Plummer, Arthur P., Oshkosh, R. 6
Pommerening, Edwin C., Oshkosh, R. 2

Powers, William C., Oshkosh,
197 Grand Ave.
Price, Ralph D., Lima, O.

Quall, Oscar P., Mildway, O.
Quien, Peter A., Scandinavia

Rasche, Arthur Louis, Milwaukee,
785 Indiana Ave.
Rector, Fred J., Fennimore
Redmond, Emmet Michael, Calvary
Reid, Herbert E., La Crosse
Ripley, Joseph William, Kewaunee, R. 6
Roach, John Melichy, Fond du Lac
Robertson, Donald, Tomah
Rockwell, Clarence E., Whitewater
Roidt, Frank M., Junction
Roscher, Edwin Dietrich, Milwaukee,
422 W. 24th St.
Roth, Louis Benjamin, Prairie du
Chien
Ruemmele, Geo. J., Hudson
Rustad, Ludwig, Black River Falls
Ryan, Peter Edward, New Richmond

Sarow, Otto, Evansville
Saubertlich, Geo., Greenville
Schafer, Otto Henry, Stillwater, Minn
Schlotthauer, F., Madison
Schlough, Roy, Wheeler
Schmidt, Arthur, DePere
Schmidt, Wm., Algoma
Seymour, J. Harold, DeSoto
Sharp, Floyd M., Cable
Sharpee, Ole A., Rio
Stear, Frederick A., Fort Atkinson

Taube, Henry E., Elkhorn
Taylor, Paul Emery, Milton
Techtman, C. W., Kewaskum
Tellock, Raymond Henry, Clintonville
Towne, Wesley W., Waupun

Ubbelohde, Frank G., Sheboygan Falls

Van Vuren, Cornelius, Ringle
Vieth, Otto R., Norwalk
Volk, Earl Swaney, Oconto Falls

Wallen, Aaron Matthew, Taylor
Warner, Raymond Earl, Windsor
Welker, Leonard, New Holstein
Wells, Ralph G., Waupun
Wethern, Floyd, Eau Claire
Wheeler, Chas. B., Reedsburg
Whiting, Earl, Cottage Grove
Wilcox Fred D., Madison, R. 4
Wilkins, Osmer Raymond, Platteville
Williams, Edward Thos., Wales
Willis, Robert James, Rewey
Wolftram, Frank W., Kilbourn

Yderstad, Thoralf, Mason

Zenz, John P., Lancaster

FIRST YEAR SHORT COURSE STUDENTS, 1912-1913

Accola, Arthur Henry, Spring Green
Accola, Irwin Eugene, Alma
Accola, Martin John, Prairie du Sac
Ahlers, Edwin F., West Bend
Albertz, Edwin Frederick, Watertown,
R. 5
Albrecht, John, Watertown, R. 6,
B. 70
Alderdice, Harry M., Madison
Aldrich, Edward F., Sheboygan
Anacker, Henry, Portage
Anderson, Forrest J., Xenia, Ill.
Anderson, Frank Oscar, Ashland, R. 1
Anderson, Horace E., Whitewater
Anderson, Joseph C., Xenia, Ill.
Armour, Mary Augusta, Kansas City,
Mo.
Atcherson, Otto C., Plainville
Auger, William O., Saxon

Bainbridge, Clayton O., Livingston
Baird, Earl, Merrimack
Barden, Reginald C., Pardeeville
Bates, Carl Albert, Rockton, Ill., R. 2
Baumann, Edwin, Merrill
Beck, Hugo M., Jefferson
Bennett, Clarence V., Platteville, R. 8
Bennett, James Glen, Beloit
Bergum, Edward, DeForest
Bernhardt, Oscar Charles, Two Rivers
R. 2
Berryman, Geo. R., Milwaukee
Biddick, Elmer, Livingston
Biddick, Johnie R., Livingston
Boerner, William M., Cedarburg
Bowers, Carleton Wade, Delavan
Bowles, Whitney, Chicago, Ill.
Brandt, Henry Fred, Medford
Brandt, Herman, Oconomowoc



FIRST YEAR SHORT COURSE CLASS, 1912-13

- Brecke, Wm. Rudolph, Stetsonville
 Brockmann, Edward A., Shawano
 Brown, Irwin Cuyler, Lodi
 Bruning, Oliver, Shermanville
 Brunker, J. Emmet, Ridgeway
 Brunquell, Herbert G., Milwaukee
 Brunnquell, Wolfram G., Milwaukee
 Bruns, Elmer, Morrisonville
 Bryan, John Waldo, Madison
 Buehler, George, Medford
 Buetsch, Albert, Medford
 Bundy, Merl F., Genoa Junction
 Burnham, Donald R., Waupaca
 Burnham, Gordon L., Milwaukee
 Bush, Wm. J., Cedarburg
 Butler, Donald, Evanston, Ill.
- Carley, Charles E., Jr., Quincy, Ill.
 Carpenter, Florence L., Menominee,
 Mich.
 Chandler, Hugh W., Madison
 Claffey, John Joe, Pewaukee
 Clark, Faith, Honesdale, Pa.
 Cleveland, Fred Seymore, Seward, Ill.
 Coddington, Clyde, N. Milwaukee
 Collinge, Fred Albert, Brandon
 Connor, Arthur, Whitehall
 Courchane, Liston, Madison
 Coxon, Benj., West Liberty, Ia.
 Cutsforth, Edward F., Westfield
- Dahl, John, Sparta, R. 3, B. 13
 Derr, Elmer A., Columbus
 Diemer, W. Ernest, Dakota, Ill.
 Dineen, Joseph A., Cedarburg
 Dittmar, Howard F., N. Milwaukee,
 R. 12
 Dixon, John Allen, Chicago, Ill.
 Downs, Benjamin I., Pickett
 Drissen, George, Kewaunee
- Einsel, Elmer D., Murfreesboro, Tenn.
 Eisenbeiss, Geo. J., Chicago, Ill.,
 858 Wrightwood Ave.
 Ellis, Sam R., Endeavor
 Enloe, Jefferson, Rewey
 Erickson, Julius T., Kilbourn
 Evans, Howard G., Eau Claire, Mich.
- Fairbank, Louis Byron, Plainfield.
 Farrow, John Laurence, Bayfield.
 Fehling, Irwin Theo., Juneau.
 Fink, Frank A., Medford R. 4.
 Frothingham, James Morgan, Chicago,
 Ill.
- Gee, V. D., Pardeeville.
 Gilbertson, John E., Blanchardville.
 Gilchrist, John, Mena, Ark.
 Goebel, Henry Nicholas, Fond du Lac
 R. 8, B. 52.
 Greeley, Frank A., Odanah.
 Green, James D., Waupaca, 323 W.
 Union St.
- Groves, John Ivan, Viroqua.
 Gunderson, Ashley O., Argyle.
- Hafs, Oscar, Genoa Jct.
 Hagestad, Wm. Arthur, Ettrick.
 Haigh, Ervin, Cream.
 Hamann, Harvey, St. Olaf, Ia.
 Hansen, Norman Jule, Sparta, R. 3.
 Hanson, Martin L., Viroqua, R. 5.
 Harkness, Harold, Luck.
 Hatz, Obert John, Prairie du Sac.
 Hegge, Albert, Galesville.
 Heitz, Walter Wm., Fort Atkinson.
 Herried, Gordon Faine, Ettrick.
 Haywood, Thomas W., Indianapolis,
 Ind.
 Hill, Charles E., Jr., Chicago, Ill.
 Hinz, Edgar, West Allis.
 Hoesly, Clarence F., New Glarus.
 Hooper, Sammy C., Palmyra.
 Hooper, Walter G., Palmyra.
 Hovland, Harold, Sparta, R. 4.
 Howard William H., Charles City, Ia.
 Hoyem, Oscar A., Eau Claire.
 Hunter, Roy D., Chicago, Ill.
 Huseboe, Henry M., Taylor.
 Husta, Arthur, New Glarus.
- Jackson, Everett G., Cuba City.
 Jackson, Van E., Valders.
 Jahnke, Ed. J., Neshkoro.
 James, Harry Thomas, Ferryville.
 Jamison, John Harvey, Appleton
 Jensen, Walter, Irma.
 Johnson, Harry S., Victory.
 Jonas, Fred, Jacksonport.
 Jones, John Edward, Cambria.
 Jorgensen, Christ, Lake Mills.
- Kahle, John, Louisburg.
 Kaufman, S. E., Berlin.
 Keefe, Walter S., Chicago, Ill.
 Ker, Alan W. W., Rockford, Ill.
 Kerr, Thomas Herbert, Kenosha.
 Kettler, Roy Fred, Platteville.
 King, Emmet Wilson, Russell, Ill.
 Kinsman, Glenn Blaine, La Valle, R. 4.
 Gemme, Walter C., Kiel, R. 2.
 Kohten, Ernest H., Barron, R. 1.
 Kozelka, John Anton, Mishicot, R. 3.
 Krause, John Ludwig, Beaver Dam, R.
 1, B. 54.
 Kreul, Herbert C., Fennimore.
 Kruse, Conrad Geo., Loganville.
 Kuhtz, Paul H., Waukesha, R. 1, B. 55.
- Laas, Percy Edward, Shawonea, Okl.
 Lantz, John G., Shelbyville, Ill.
 Lanzendorf, Alfred H., Poynette.
 Latham, Clayton W., Michigan City,
 Ind.
 Lee, Helen Cowles, Upland, Flemington,
 N. J.
 Leeman, Orville C., Leeman.

- Liddle, Wayne Gleaman, Rockton, Ill.
 Lindley, Ella M., Mastie, L. I., N. Y.
 Lindner Walter, Hayward.
 Loesel, August, Cochrane.
 Lorfeld, Alfred E., Cleveland, R. 2.
 Luebke, August, Hustisford.
 Lunham, Chester H., Deerfield, Ill.
 Luraas, Melvin O., Stoughton.
- Manley, Byrne J., Ladysmith.
 Manweiler, Wm. Louis, Westfield.
 Marsden, Lawrence W., Cambridge, R. 3.
 Matthews, Charles T., Livingston.
 Matzke, Arthur G., Forestville.
 McCoy, Everett, Sun Prairie.
 McLaughlin, Asa H., Coloma.
 McNutt, Leonard Roy, Antigo, R. 3.
 Meineke, Ervin H., Two Rivers.
 Menlemans, Mathias C., Kaukauna, R. 13.
- Miler, Louis Henry, Fond du Lac, R. 8, B. 64.
 Miritz, Erwin C., Fond du Lac.
 Morton, Helen, Lake Forest, Ill.
 Muirhead, Boyd James, Plato Center Ill.
 Melford, Boyd Wm., Knapp.
- Nelson, Bennie Cornelius, Stangelville, R. 1.
 Newbery, Wilfred T., Mica, R. 1., Wash.
 Nichols, William J., Chetek.
 Noble, Milton H., Racine.
 Notte, Edward H., Duluth Minn.
- Oeldrich, Edw., Sheboygan.
 Olson, Alfred S., Viroqua.
 Opgenorth, John E., Kewaskum.
 Orth, Joseph P., Kenosha.
 Owen, John Milton, Portage.
- Pablas, Julius, Garnavillo, Ia.
 Parks, William S., Eldorado.
 Payne, Donald M., Paw Paw, Mich.
 Pazderink, Edw., Dorchester.
 Pero, Henry, Odanah.
 Pester, John H., Whitewater.
 Petersen, Andrew, Jr., Ashland, Gen. Del.
 Petterson, Carl A., Beloit.
 Phillips, Henry R., Chicago, Ill.
 Phillips, Richard W., Jr., Chicago, Ill.
 Pierstorff, Otto L., Madison.
 Puls, Arthur O., Hartford.
- Randall, Sidney R., Hustisford.
 Rasmussen, Holden V., Rice Lake.
 Reid, Wm. H. E., La Crosse.
 Reihmer, Carol, Chicago, Ill.
 Reinking, Edmund, Chilton.
 Remington, Lake, Eau Claire.
 Rhodes, Clarence Howard, Kansasville.
 Rhodes, Frank Leslie, Kansasville.
 Riechers, Emil John, Belmont.
 Rieck, Christ J., Elkhorn.
- Roberts, Austin M., West Lima.
 Roberts, Keel Searle, Pickett.
 Roe, Edwin B., Stanley.
 Rounds Douglas P., Eau Claire.
 Runde, Lawrence H., Louisburg.
- Saed Alfred H., Blair.
 Salisbury, D. Davis, Sparta.
 Salzmann, Alvin A., Kiel, R. 2.
 Sample, Floyd W., Withee.
 Schaefer, Peter C., Stillwater, Minn., R. 9.
 Schaub, Adlai F., Cream.
 Schlafler, Max, Madison.
 Schlake, Herman, Garnavilla, Ia.
 Schmitt, Reynold A., Sun Prairie, R. 3.
 Schwab, John T., Madison.
 Schworenberg, Herman, Hartford.
 Seblon, Stanley, Westby.
 Seggelke, George H., Quincy, Ill.
 Simmons, Chas., Ripon.
 Simonson, Glenn S., Wautoma, R. 2.
 Simpson, George, Madison.
 Smith Morris Elmer, Sheridan.
 Smith, Simon J., Morrisonville.
 Smith, Stanley M., Cedarville.
 Specht, Edwin A., Manitowoc.
 Speerstra, Peter J., Whitehall.
 Spletstoeszer, R., Platteville.
 Starr, Antoine G., Odanah.
 Steege, Herbert G., Embarrass.
 Stein, Joseph N., Cleveland, R. 2.
 Stevens, Edwin M., La Crosse.
 Stoeber, Ernest J., Madison, R. 7.
 Strassman, Edward J., Milwaukee.
 Swartz, Harold F., Kenosha.
 Sweno, Harley S., Whitewater.
 Swenson, Henry, Scandinavia.
- Taylor, Joseph B., River Falls .
 Taylor, Neal D., River Falls.
 Telford, Royal Wm., Knapp.
 Tess, Chester L., East Troy.
 Thielke, Arthur H., Kiel, R. 1.
 Thompson, Hilder, River Falls.
 Tower, Ralph R., Beloit.
- Van Etta, Jas., Milton Jet.
 Van Kooy, Siewer, Milwaukee.
 Vieth, Florenz, Norwalk.
 Vosburg, Carlin B., Ft. Atkinson.
- Wagner, Joseph M., Cleveland.
 Walgenbach, John F., Fond du Lac, R. 5.
 Walker, Wesley A., Fennimore.
 Watson, Harry E., Baraboo, R. 2.
 Weeks, Edwin F., Hayton.
 Weeks, Louis G., Hayton.
 Wepner, Paul H., Ripon.
 Wheeler, Ira., Lime Ridge.
 Wick, Henry A., Mauston.
 Wierum, Thornton B., Upper Montclair, N. J.

Williams, Joseph L., Genoa Junction.
Wilson, Raymond. Abrams.
Winger, Donald G., Martell.
Witte, Oscar, Two Rivers, R. 2.
Wulff, John B., Grafton.
Yule, Earl S., Somers.

Zabradka, John J., Granton.
Zeddies, Arthur Theo., Cleveland. R. 3.
Zimmerman, Henry A., Fond du Lac.
R. 2.
Zinn, Carl Adolph., Milwaukee.
Ziehm, Julius C., Marion.



SHORT COURSE IN AGRICULTURE

Application for Admission

To the Manager of the Short Course,
University of Wisconsin, Madison.

I hereby apply for admission to the Short Course in Agriculture, for the term beginning November 29, 1913. I have had.....years experience on a farm.

If this application is accepted, I promise to conform to all the rules and regulations of the school as to payment of fees, attendance, etc.

Should I change my address before November 29, or should anything occur which will prevent my attendance, I will at once notify you, that my place can be filled by some other applicant.

Name..... Age.....

Post Office.....

County..... State.....

Dated.....

Fold here

I have been induced to take the Short Course by.....
(kindly indicate by a X what influenced you to take the Short course).

The Efforts of a Former Short Course Student.....

His name

(Give name of the former Short Course student who influenced you to take this Course).

Address

The Short Course Circular..... Influence of School Teacher.....

Announcements of Farm Papers..... Influence of County Superintendent.....

Announcements in Local Papers..... Influence of College Instructor.....

Exhibits at County or State Fair..... Influence of Some Friend.....

Other influences, and remarks.....

.....

.....

POST CARD

Place
Two-Cent
Stamp
Here

THIS SIDE IS FOR THE ADDRESS ONLY

**MANAGER OF SHORT COURSE
COLLEGE OF AGRICULTURE**

Madison,

Wis.

