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A farm course for farm boys. 1924

University of Wisconsin. College of Agriculture
[Madison, Wisconsin]: [University of Wisconsin], 1924

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A Farm Course for Farm Boys

SHORT COURSE CATALOG 1924-1925

COLLEGE OF AGRICULTURE, THE UNIVERSITY OF WISCONSIN

SERIAL NO. 1,269 - BULLETIN OF THE UNIVERSITY OF WISCONSIN-GENERAL SERIES NO. 1,047



Short Course Calendar 1924-25

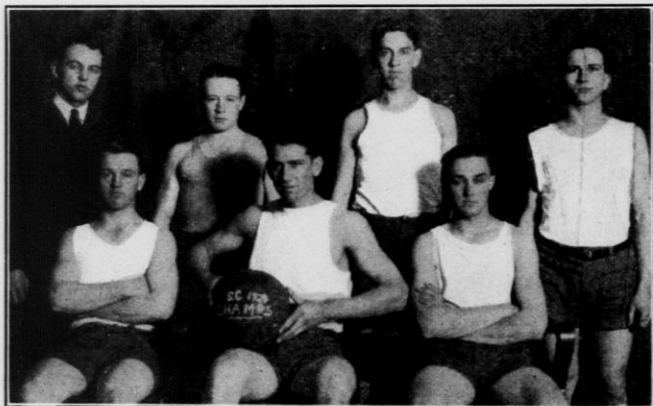
1924

Registration day	Mon.	Nov.	17
Recitations begin	Tues.	Nov.	18
Thanksgiving Day—legal holiday	Thurs.	Nov.	27
Make-up examinations	Sat.	Dec.	13
First term closes	Fri.	Dec.	19
Christmas recess begins	Sat.	Dec.	20

1925

Registration of new students	Mon.	Jan.	5
Recitations of second term begin	Tues.	Jan.	6
Make-up examinations	Sat.	Jan.	31
Second term closes	Sat.	Feb.	7
Third term begins	Mon.	Feb.	9
Livestock trip—required of second-year students	To be arranged		
Washington's Birthday—legal holiday	Mon.	Feb. (22)	23
Make-up examinations	Sat.	Mar.	7
Third term closes	Sat.	Mar.	14
Closing Day exercises	Sat.	Mar.	14

Entered as second class matter June 10, 1898, at the post office at Madison, Wisconsin, under the act of July 16, 1894.



Second Year Basket Ball Team

The Short Course in Agriculture

THE Short Course in Agriculture was established in 1885 and since that time has been an important factor in the agricultural development of the state. Among its graduates are many of Wisconsin's most successful farmers. These men recognize today the value of the course in giving tech-



*The
Dairy
Barn
Group*

nical knowledge, a broadened vision of agriculture, and an inspiration for the future. They are boosters for the course at all times.

Since it was established 6,500 students have attended the Short Course in Agriculture. Every county in the state has been represented in the course at some time. Not only has Wisconsin profited by the course, but in many parts of the United States and in several foreign countries are found successful farmers who attended the Short Course.

Equipment. The equipment of the College of Agriculture is thoroughly modern and practical. The buildings stand for the best types of farm architecture and the ideas represented in their construction can be adapted readily to the average farm. For years attention has been given to obtaining breeds of livestock that will be representative and true to type. The instruction in the short course is given by the regular members of the staff of the university, and the students have every advantage offered to the students in the other courses.

Purpose of the Short Course

The primary purpose of the Short Course is to train young men for the business of farming. That it has and is accom-

(2) **To learn the fundamental scientific facts** necessary to understand the reasons for the common farm practices, and to secure a thorough training in practical agriculture.

(3) **To study the problems involved in successful farm management**, including the cooperative buying of supplies and marketing of farm crops, the employment of labor and the organization of the farm as a business enterprise.

(4) **To find greater interests in rural life**, to realize the possibilities and opportunities of the farm as a social factor and its relations to the community and society, and to give a chance to make an intelligent study of the problems affecting the agricultural interests of the state so one may become a better farmer and a more intelligent and useful citizen.

(5) **To enable you to meet young men with agricultural interests from various sections of the state** and to form acquaintances which will last through life, and to meet and listen to lectures by men prominent in the agricultural world.



*The
Dairy
Building*

(6) **To secure training in special agricultural fields** such as tractor operation, herdsman training, cow testing, poultry raising, etc. Agriculture is becoming more specialized and the elective system of the second year and extended schedules allows qualified men to specialize.

(7) **To obtain this information at the season of the year when the work on the farm is the least pressing** and to offer the advantages of the College of Agriculture to you who are unable to complete a longer course.

(8) **To help you secure desirable positions** for which you

will be fitted by training and experience and where you may increase your store of practical farm knowledge.

Most of the young men who take the short course realize that it offers them the supreme opportunity of their lives and they are taking advantage of that opportunity, as have those who have graduated before them, to become the seedsmen, the breeders of better livestock, and above all, the home-builders of the state.

*The
Agronomy
Building*



Opportunities for Graduates

During the past year the employment bureau of the College of Agriculture has been unable to meet the rapidly increasing demand for students to work on farms in this and other states. Many of the students have returned to the home farms.

The nature of the positions which are open to Short Course students is shown by the following:

General farm laborer. The opportunity for farm positions on general farms other than the home farm, is exceptionally good. These positions pay experienced men from \$50 to \$100 a month with board.

Herdsmen, Foreman. Many enterprising and successful farmers need trained men to assume the responsibility of the management of the herds. This is a responsible position that pays from \$70 to \$85 and sometimes \$100 or more a month with board. This type of position serves as a stepping stone for something better; it frequently leads to a managerial job.

Some farmers with a large amount of business require the services of a foreman who looks after certain parts of the work of the farm under the direction of a manager.

Farm managers. The demand for men to manage farms is on the increase. The compensation offered for such positions varies according to the experience and training of the man.



"A Class of White Faces"

Share renters. Young men with some capital in addition to their training and experience may find opportunities for renting farms on a share basis. This may serve as a stepping stone to farm ownership.

Return to the home farm. Most of the students who take the Short Course find it to their advantage to return to the home farm. Many of them enter into partnership with their parents or brothers and soon become real farm managers.

Cow testing work. This type of work offers good opportunities for students, in this and other states. The work pays from \$60 to \$100 a month and includes living expenses.

Short Course Plan of Work

The Short Course consists of three terms each year of five weeks each. Students may enter at the beginning of any term. The course is so planned that a definite unit of work is completed during each five-week period, except in a few subjects of the second year and extended schedule.

The subjects of the first year schedule are required for all without high school training, but the work of the second year and extended schedule is entirely elective. This provides that the persons in the second year and extended schedule may select their own branches of study subject to rules of the

Short Course Committee as given below. A Short Course Diploma is granted upon the completion of two years' work equivalent to 32 credits. Preliminary training as explained under "Requirements for Admission" may shorten this period. Parliamentary practice and physical education are required for the first two years of work. Literary instruction is required in the first year schedule.

*The
Horticultural
Building*



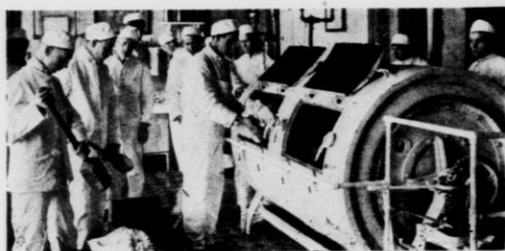
The Short Course graduate may return for his third or fourth winter and select subjects of the extended schedule which he was unable to get in former years. In this way he will get much more nearly what the collegiate student gets in his full year period of instruction.

This arrangement allows one to choose such subjects during the second year and extended schedule as will fit him for special lines of work such as herdsman, cow testers, tractor experts, seedsmen, etc., and at the same time offers a wide selection to the student wishing a general training in practical agriculture.

The course is planned for a maximum of four subjects and parliamentary practice, physical education and library. This provides for lectures, recitations, laboratory practice, and demonstrations, with definite assignments for study during free periods and evenings. In the laboratories, students are given practice in such subjects as stock and grain judging, grafting, budding and pruning fruit trees, testing seeds, laying tile drains, operating farm engines and machines, mixing rations for animals, examining horses for soundness. Classes begin at 8 A. M., continuing until 4:30 with a noon intermission from 12 to 1:30 P. M. No classes are held Saturday afternoon.

Requirements for Admission

General requirements. No entrance examination is required. Students should be at least 16 years old and should have a common school education to pursue the studies of the Short Course to the best advantage. Persons who have not completed a common school education, but who are by age and experience fitted for the work may be admitted to the course. Experience has shown that the young men at least 20 years of age who have a general knowledge of farming are able to secure the greatest benefit from the course.



*Buttermaking
at
Dairy
School*

High school graduates. Persons who are graduates of a high school or its equivalent may enter the Short Course with the privilege of selecting work from either the first or second year schedule. Credit toward a Short Course certificate will be granted for work completed in agriculture or other branches of the Short Course in secondary schools or colleges if the work is of similar grade and quality. Thirty-two credits are required for graduation but this may be reduced by credit for work done in high school or college subject to approval of the credits by the Short Course Committee. At least 16 credits of Short Course work must be completed at Madison before a certificate is granted.

Graduates of county schools of agriculture, county agricultural short courses of recognized standing, and persons from high schools who may present two or more years of agricultural instruction may enter the second year of the Short Course and receive a certificate upon the completion of 16 credits (three terms) of work. Such person shall present credits and

make schedules of courses for the three terms, at the time of registration.

A record of work from the school for which credit is to be requested together with subjects, semesters taken, standings and certificate of graduation or attendance signed by the high school principal should be sent to T. L. Bewick, Director of the Short Course, a month before you wish to enter so there will be time to pass on records and plan schedules before registration day. Do not delay in having records sent to Madison.

Regulations of Short Course

In addition to regulations given in other sections of this circular the following have been adopted by the Short Course Committee. If a subject is elected by a student it cannot be dropped unless permission is secured from the Short Course Committee.

A standing of 60 or over in every subject is required for a Short Course certificate.

Make-up examinations shall be held on the last Saturday afternoon of the term.

On the last Tuesday afternoon of the third term candidates for certificates may take examinations for the removal of any failure.

Students having more than three failures upon closing day can remove them only by repeating in class the work in which such failures were incurred.

Students not in classes between 8 and 4:30 except during noon intermission are expected to study in their rooms or in the library.

The College of Agriculture will not offer particular subjects of the second year or extended schedule unless elected by at least eight students.

The minimum amount of work during any one term is $4\frac{1}{2}$ credits and the maximum is 6 credits exclusive of physical education and parliamentary practice, unless an average standing of 85 has been obtained the preceding term.

Students must take the examinations in all courses whether or not needed for graduation.

Certificates may be given for each 16 credits of work com-

pleted by Short Course graduates who return and complete additional subjects.

In special cases where students of the Short Course meet the University entrance requirements for collegiate courses the Executive Committee will consider granting of credits for Short Course subjects in which a grade of 70 per cent has been recorded.

Satisfactory home project work may be substituted for one and one-half credits in either the first or second year schedule. This credit is granted only upon presentation of satisfactory final records as required in Boys' and Girls' Club Work of the state or its equivalent.



*Agricultural
Chemistry
Building*

EXPENSES

The expenses of the Short Course consist of general and college fees as follows:

General Expenses. The chief expenses are for room and board. The following are estimates for the year as secured from student reports for the winter of 1923-24:

Room—average price of \$3 per person per week.....	\$45 per year
Board—average of \$6.50 per week.....	\$97.50
Books—supplies, etc., and miscellaneous.....	\$20.40

The expenses for room and board depend on the requirements of the individual and his willingness to room at a distance from the college section. Two or more students taking a room or suite of rooms materially lessens the expense. Board depends on the demands of the individual. The execu-

tive office will have lists of rooms on registration day and assist students in finding desirable locations. The total expenses will vary from \$135 to \$225 per fifteen weeks.

College Fees. Students enrolling the first term pay for the entire year. Students enrolling at the beginning of the second or third term pay approximately two-thirds or one-third respectively, of the total yearly fee. The following shows the amounts paid:

Total fees for weeks for those entering the		For Residents of Wisconsin	Not Residents of Wisconsin
FIRST TERM*	Tuition		51.67
	Incidental	\$10.00	10.00
	Infirmary	2.50	2.50
	Laboratory Fee	7.50	7.50
	Laboratory deposit	2.00	2.00
	Gymnasium fee	1.50	1.50
		\$23.50	\$75.17
SECOND TERM*	Tuition		34.45
	Incidental	6.67	6.67
	Infirmary	2.00	2.00
	Laboratory fee	5.00	5.00
	Laboratory deposit	2.00	2.00
	Gymnasium fee	1.00	1.00
	\$16.67	\$51.12	
THIRD TERM*	Tuition		17.22
	Incidental	3.34	3.34
	Infirmary	1.00	1.00
	Laboratory fee	2.50	2.50
	Laboratory deposit	2.00	2.00
	Gymnasium fee50	.50
	\$9.34	\$26.56	

*Courses in blacksmithing or carpentry given in the College of Engineering carry additional fees of \$3 per term. Short course students may take these courses the second year if they wish.

Students who pay for the entire course, but who drop out at the end of the first or second term, are refunded two-thirds or one-third, respectively, of the entire fee. Students must notify the Director of the Short Course on the day of withdrawal in order to secure refund.

Students who drop out during one of the five week terms are refunded the entire fee for each whole term remaining and on the following basis for the partial term remaining accord-

ing to time of withdrawal: 75 per cent if during the first week of the term, and 50 per cent if during the second week of the term. After the second week, no refund is issued for that term.

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.

Someone will be in attendance at the registration counter to answer inquiries at any time.

Articles from Home. Students will need overalls and jacket and these may be brought from home. Rubber-soled shoes, such as tennis shoes, light sweaters or jerseys are at times needed in physical education work. Physical education is required of all. A light gymnasium suit is required and a regulation gymnasium towel may be purchased in Madison. Laundry for gymnasium suits and towels is provided by the gymnasium fee.

Books. A number of books will be needed by Short Course students. It is impossible to state in advance what books will be required and it is not advisable for prospective students to buy any textbooks until they are instructed to do so.

Medical Supervision

Special attention is given to the health of the student-body. The health of the students will be cared for by the clinical department of the School of Medicine. The students will be given a medical examination on entrance and any student feeling indisposed will be at liberty to consult the physicians in charge of the university clinic free of cost at any time. The university puts forth every effort to safeguard the health of the student-body.

The infirmary fee provides for care without extra charge in the university infirmary or hospital in case of sickness, but students requiring special care—X-ray service, major surgery, treatment of the eye, ear, and so forth, are referred to specialists at the student's expense.

Social Activities

The Literary Society is conducted every Wednesday night by the students in the Short Course. At the weekly meetings 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.

A special feature in the nature of an oratorical contest or class debate is introduced each year. Contestants from both classes enter this contest.

The Short Course Glee Club and Orchestra under faculty direction, furnishes music for Farmers' Course meetings and other meetings during the winter, as well as for the Literary Society. Be sure to bring your musical instrument if you have had some experience.

A Short Course Athletic Association is maintained which provides for team contests in basketball, indoor baseball and volley ball not only between classes but with outside or city teams. Each year a track meet is held between classes which has proven of great interest.

Short Course Y. M. C. A. The students have their own organization and are assisted by the university Y. M. C. A. A series of Sunday morning meetings and Bible study groups for the Short Course Students are held during the winter. Stu-



Short Course Glee Club

dents of this organization will meet new students if requested. Write T. L. Bewick at least a week before arrival stating time of arrival.

City Organizations. The various churches of the city have welcomed the Short Course students into their student organizations. The City Y. M. C. A. has cooperated with the director of the Short Course in providing several evenings of social activity. The Y. M. C. A. and Badger Club have welcomed the Short Course students so there are plenty of opportunities for a wide acquaintanceship among the general university students and also among the city people.



Interested in Dairying

Agricultural College Organizations. Practically all the college student organization meetings are open to Short Course students. The A. C. F. Board has held a Short Course welcome, the Country Magazine, the Poultry Club, the Grafters Club, the Saddle and Sirloin, and the Ag. Triangle meetings are open to Short Course students. These give opportunities for a touch of college spirit that gives students an idea of "The Spirit of Wisconsin."

SHORT COURSE SCHEDULE - FIRST YEAR

HOUR	FIRST TERM Nov. 17—Dec. 20	See Page	SECOND TERM Jan. 5—Feb. 7	See Page	THIRD TERM Feb. 9—March 14	See Page
8—10	Sect. 1. Farm Crops A	25	Sect. 1. Soil Fertility A	33	Sect. 1. Farm Bookkeeping A	22
	Sect. 2. Soil Fertility A	33	Sect. 2. Farm Bookkeeping A	22	Sect. 2. Farm Crops A	25
	Sect. 3. Farm Bookkeeping A	22	Sect. 3. Farm Crops A	25	Sect. 3. Soil Fertility	33
10—11	The Animal in Health A	34	Poultry Raising A	32	Farm Bacteriology	21
11—12	Farm Chemistry	22	Feeds and Feeding B	26	Fruit Growing A	29
12—1:30			INTERMISSION			
1:30—3:30	Sect. 1. Stock Judging A	26	Sect. 1. Farm Dairying A	28	Sect. 1. Gas Engines A	24
	Sect. 2. Farm Dairying A	28	Sect. 2. Gas Engines A	24	Sect. 2. Stock Judging	26
	Sect. 3. Gas Engines A	24	Sect. 3. Stock Judging A	26	Sect. 3. Farm Dairying	28
3:30—4:30 Tu	Sect. 2. Library Practice	30	Sect. 1. Library Practice	30	Sect. 3. Library Practice	30
3:30—5:30 Th.						
3:30 M—W	Physical Education	31	Physical Education	31	Physical Education	31
3:30 F	Parliamentary Practice	30	Parliamentary Practice	30	Parliamentary Practice	33

All subjects above are 1½ credit courses except Library, Physical Education and Parliamentary Practice which carry no credit.

SHORT COURSE—SECOND YEAR AND EXTENDED SCHEDULE

	FIRST TERM Nov. 17—Dec. 20	See Page	SECOND TERM Jan. 5—Feb. 7	See Page	THIRD TERM Feb. 9—March 14	See Page
8—9	Feeds and Feeding C	26	Feeds and Feeding C ×	26	Farm Management E	23
9—10	Farm Economics B Diseases of Farm Animals B	22 34	Rural Institutions D	23	Marketing C	23
8—10	Farm Insects and Control A	28	Farm Mechanics & Conveniences E	24	Livestock Management G Farm Buildings F	27 25
10—12	Dairy & Swine Judging D Farm Machinery B Plant Diseases and Control	27 24 31	Sheep, Beef and Horse Judging Farm Tractors D † Potatoes C	27 24 29	Cow Testing Associations H Farm Tractors D † Advanced Gas Engines G	27 24 25
12—1:30			INTERMISSION			
1:30—3:30	Forage Crops (1 hr) B Poultry Judging B Horticultural Practice B Land Drainage C	26 32 29 24	Marketing Poultry Products C Pure-Bred Seed Production C Bee Keeping B Cow Testing Associations H	32 26 28 27	Incubation and Brooding D Seed and Weed Control D Adv. Farm Dairying B Farm Woodlot and Grounds D	32 26 28 29
3:30—4:30	Farm Advertising	25	Farm Advertising × Live Stock Pedigrees F	25 27	Soil Management B	34
3:30—5:30 M.W.F.	Blacksmith or Carpentry ÷	33	Blacksmith or Carpentry ÷	33	Blacksmith or Carpentry ÷	33
4:30—5:30 T.T.*	Physical Education	31	Physical Education	31	Physical Education	31
4:30*	Parliamentary Practice	30	Parliamentary Practice	30	Parliamentary Practice	30

× Starts first term and cannot be elected unless first term was completed.

* Required of all. No credit.

÷ 1 credit course—all other course 1½ credits.—Students electing must pay \$3 extra fee for five weeks.

† Agricultural Engineering A—Gas engines or its equivalent must precede this course.



The Short Course Class

The Agricultural Experiment Association. The association is an organization of former students of the College of Agri-



Short Course Orchestra

culture and others who are interested in introducing improved methods and practices upon their farms. This association has been especially helpful in conducting field tests with grain and forage crops and in growing and disseminating purebred seeds.



Course Class of 1925

The annual meeting of this association occurs during the second term of the Short Course and the students are given an opportunity to attend the meetings and to become members. R. A. Moore is secretary of the association.

The Wisconsin International. The Wisconsin International put on by the Saddle and Sirloin Club is an event that shows the real mettle of the Short Course boy. The competition is keen in the show ring and a large share of the prizes are won by the Short Course boys.

Closing Day Exercises

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.

For the last ten years the certificates have been presented at the Closing Day exercises held on the last day of the course. Some prominent speaker is procured to give the address and special music is furnished for this occasion. President Jardine of Kansas State Agricultural College was secured in 1924.



Graduating Class and Faculty

SHORT COURSES AT COLLEGE OF AGRICULTURE

The Winter Dairy Course. A 12 weeks' course beginning early in November is open to persons who have at least six months' experience in a creamery or cheese factory. For circular address E. H. Farrington, Dairy Department.

The Summer Dairy Course is intended for beginners or those having little practical knowledge of creamery or dairy work. Students are admitted at any time during the spring and summer after March 1. For particulars address E. H. Farrington, Dairy Department.

Tractor Courses. Five or ten weeks during the Short Course. Write F. W. Duffee for information, Agricultural Engineering Department.

Herdsman's Courses. For information write R. S. Hulce, Animal Husbandry Department.

Nursery Salesman's Course. For information write J. G. Moore, Horticultural Department.

DEPARTMENTS OF INSTRUCTION**AGRICULTURAL BACTERIOLOGY**

ASSOCIATE PROFESSOR W. H. WRIGHT

Farm Bacteriology. This course familiarizes the student with the nature of bacteria, how they grow and reproduce and the methods of artificial cultivation in the laboratory, the relation of bacteria to the soil, the changes in the composition of the soil caused by nitrification, nitrogen fixation and inoculation of legumes. The relation of bacteria to farm water supply and sewage disposal is discussed.

The relation of bacteria to milk and its products is considered from a point of view of practical milk production and the quality of butter and cheese. The preservation of other foods is also discussed. Transmissible diseases of animals of the greatest importance to the livestock industry of the state are studied from the standpoint of prevention and control.

AGRICULTURAL CHEMISTRY

ASSOCIATE PROFESSOR TOTTINGHAM

Farm Chemistry. This course shows how the principles of chemistry operate on the farm. The subjects discussed are: The chemical elements in the air and soil and their relations to plant growth; processes of growth of crops and their relation to animal feeding; the composition of domestic animals and the processes involved in their use of the nutrients of feeding materials.

Attention is given to the composition and conservation of farm manure. The sources, composition and use of commercial fertilizers are discussed and also the chemistry of common insecticides and fungicides. Attention is given to the commercially important constituents of milk and their relation to dairy by-products.

Demonstrations are presented to show the properties of common chemical elements and compounds of plants and animals, with the aim of interpreting agricultural chemistry in the language of farm practice. Mr. Tottingham.

AGRICULTURAL ECONOMICS

PROFESSORS HIBBARD, MACKLIN; ASSOCIATE PROFESSORS McNALL, KOLB; ASSISTANT ALLIN

The work given is designed to improve the business ability of the farmer by teaching methods of keeping accounts, managing farms, selling the produce, and to point out means of improving the conditions of living in the country.

A. **Farm Bookkeeping.** Elementary principles of economics and the elements of bookkeeping as applied to the farm. Methods of taking farm inventories and the keeping of cash accounts, and accounts with livestock, farm crops, etc. Mr. Allin.

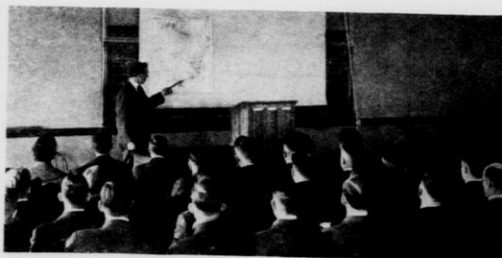
B. **Farm Economics.** This will consist of lectures and discussions with which farmers are in constant contact; how prices are made, the farmers' purchasing power, farm labor, farm credit, and farm tenancy and leases. A study will be made of farmer organizations through which it attempted to

better conditions, such as the Grange, Alliance, and Farm Bureau. Mr. Hibbard and assistant.

C. **Marketing.** Conditions and forces which determine the prices of farm products, methods of marketing, co-operative and independent types are studied, lessons to be learned by present systems. Mr. Macklin and assistant.

D. **Rural Life.** The country life movement with special reference to methods of improving the conditions of life in the farm home and in the farmer's community. Mr. Kolb and assistant.

*A Class
in
Agricultural
Economics*



E. **Farm Management.** To show the student how the various farm operations may be organized and correlated so the entire farm may be handled successfully and economically. 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 the problem of farm help. Mr. McNall.

AGRICULTURAL ENGINEERING

PROFESSOR E. R. JONES; ASSISTANT PROFESSOR DUFFEE; INSTRUCTOR FISH; ASSISTANTS ARBUTHNOT, MEACHAM

The Department of Agricultural Engineering has unusual facilities for giving practical instruction to students. Thousands of dollars' worth of tractors, engines, machinery, tools and farm-building equipment are loaned to the department by manufacturers each year for the use of students in the lecture room and laboratory.

A special tractor course of five or ten weeks is given during the second and third terms or either of these terms. Special students registered in advance by the department may enter as regular Short Course students but take all their work in Agricultural Engineering or allied subjects. For information write F. W. Duffee.

A. **Gas Engines.** Demonstrational lectures supplemented by laboratory work. Adjustments and operation of gas engines. Fuel consumption tests. Trouble finding and remedy. Mr. Duffee and assistants.

B. **Farm Machinery.** Construction and operation of the different types of farm implements such as plows, binders, corn planters, cultivators, etc. Mr. Duffee and assistants.

C. **Land Drainage.** Exercises both in and out-of-doors with the surveyor's level, plane-table, drain tile and tiling tools. Planning drainage systems for topographic maps of typical areas and from sketches of particular areas furnished by students. Superintending the installation of farm drainage systems. Mr. Jones.

D. **Farm Tractors.** Engine and tractor troubles. Practice with different types of tractors. Course A, Gas Engines, must precede or accompany this course. Mr. Duffee and assistants.



*Gas
Engines
are
Problems*

E. **Farm Mechanics and Conveniences.** A study of the conveniences of the farm home such as lighting, heating, water supply. Laboratory work will also be given such as soldering, rope tying and splicing, belt lacing, babbiting and concrete construction. Mr. Fish.

F. **Farm Buildings.** Lectures and laboratory work in the planning and arrangement of farm buildings. The lectures include a discussion of silos, concrete construction, ventilating systems. Mr. Fish and assistants.

G. **Advanced Gas Engines.** A more intensive study of gas engine principles and troubles than is given in the first year. Additional problems are considered. (Omitted in 24-25.) Mr. Duffee.

AGRICULTURAL JOURNALISM

ASSOCIATE PROFESSOR SUMNER

Farm Advertising. Salesmanship is needed on the progressive farm. The farm name, the farm letterhead, the classified advertisement, display and sales advertisements, sales letters, catalogs, and auction posters are some of the mediums which will be studied. Mr. Sumner.

AGRONOMY

PROFESSORS MOORE, GRABER; ASSOCIATE PROFESSORS LEITH, WRIGHT; ASSISTANT PROFESSOR STONE; INSTRUCTOR HOLDEN; ASSISTANT ZERBEL

The work in agronomy will include studies of the culture, management, weed control, methods of improvement, rota-



*Breeding
Wisconsin
Purebred
Grains*

tions, and best varieties of all farm crops most suitable for Wisconsin conditions.

A. **Farm Crops.** This course gives the student a thorough understanding of the best varieties of field crops for Wis-

consin conditions and how best to handle them through all phases of culture and harvest. Special emphasis is laid upon identification of varieties, both in seed and plant forms, through the application of the principles and practices of judging show samples. Mr. Wright and Mr. Leith.

B. **Forage Crops.** A series of lectures on forage crops for Wisconsin conditions. The work covers a discussion of the best methods and practices in sowing, handling, testing, selection and improvement of all the leading forage crops. Mr. Moore, Mr. Graber.

C. **Pure-bred Seed Production.** A study of types, judging, breeding and improvement of the Wisconsin grains and corn. Mr. Moore, Mr. Leith.

D. **Seed and Weed Control.** A study of the ways and means of solving a most serious problem confronting the Wisconsin farmer. How to tell when crop seeds are of good quality and free from noxious weed seeds, and what happens when impure seeds are used. Know the noxious weeds and their seeds. Mr. Stone, Mr. Holden.

ANIMAL HUSBANDRY

PROFESSORS HUMPHREY, FULLER, MORRISON; ASSOCIATE PROFESSOR HULCE; ASSISTANT PROFESSORS KLEINHEINZ AND FARGO; ASSISTANTS O. J. DELWICHE, MARSHALL, HARRIS AND CRAMER

The courses in animal husbandry given include livestock breeding, judging, pedigrees, 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. **Elementary Stock Judging.** Score card practice and textbook work in the study of market classes and breeds of livestock. Mr. Humphrey, Mr. Hulce, Mr. Fuller.

B. **Feeds and Feeding.** The study of feeding stuffs, principles of feeding and rations. Mr. Fargo.

C. **Advanced Feeds and Feeding.** A continuation of the study of feeds and feeding begun the first year with special application to practical problems.

D. **Judging Swine and Dairy Cattle.** Mr. Fargo, Mr. Hulce.

E. **Judging Beef Cattle, Sheep and Horses.** Mr. Fuller, Mr. Kleinheinz.

F. **Livestock Pedigrees.** A study of the principles of breeding farm animals as applied to livestock. Pedigrees and their interpretations will be studied with reference to the leading families. Dairy pedigrees will be emphasized. Mr. Humphrey, Mr. Hulce, Mr. Fuller.

G. **Livestock Management.** Lectures on the management and care of dairy cattle, beef cattle, sheep, swine, and horses. Animal Husbandry staff.

H. **Cow-testing Associations.** Outlines problems of the association officers and the cow-tester. A complete set of records will be computed by each student and an attempt made to fit the students for cow-testing association work. The course is equally important to the man who is operating a farm and developing a herd. Advanced Registry standards and records will also be studied. Mr. Harris, Mr. Cramer.

*Students
Studying
Farm
Insects*



ECONOMIC ENTOMOLOGY

PROFESSOR WILSON; ASSISTANT PROFESSOR FLUKE

The importance of insect control on the farm is recognized by the farmer, but his opportunities for study are limited, and the occasional information which he picks up is usually gone

from his mind before he has an opportunity to apply it.

A. **Farm Insects and Control.** A study of the more important insect pests of farm garden and orchard crops to admit of ready recognition and treatment. Principles of insect control will be studied and applied to individual insects according to the best known methods. Mr. Fluke.

B. **Beekeeping.** Practical beekeeping for those who desire to study the elementary principles of the subject. Each student will have an opportunity to familiarize himself with up-to-date methods and equipment for the handling of bees, the production of comb and extracted honey, bee diseases, their recognition and treatment. Mr. Wilson.

FARM DAIRYING

PROFESSOR FARRINGTON; INSTRUCTOR THOMSEN; ASSISTANT
MOHR

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

A. **Farm Dairying.** The dairy laboratory is equipped with the most approved apparatus for the testing of milk, the separation of cream and the manufacture of butter and other dairy products. 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, milk coolers, and other appliances of the dairy. Mr. Mohr.

B. **Advanced Farm Dairying.** A supplementary course to Dairy A. Designed for training men in the care of milking machines, the commercial handling of milk and cream on the farm, the paying of creamery and cheese factory dividends, organizing a cooperative factory and other advanced farm dairy operations. Mr. Thomsen.

HORTICULTURE

PROFESSORS MOORE, MILWARD; ASSOCIATE PROFESSOR AUST; ASSISTANT PROFESSOR BRANN; INSTRUCTOR NIGHTINGALE

The horticultural work in the Short Course is designed to give the student a knowledge of the principles and practices underlying the successful culture of horticultural plants.

A. **Fundamentals of Plant Life and Their Relation to Fruit Growing.** Structure of plants, their life processes and reproduction. The application of these principles to fruit growing practices and their relation to selection of site, planting, soil management, pruning, spraying and other farm orchard problems. Mr. Nightingale.

B. **Horticultural Practice.** An elective course designed for those desiring more detailed work in horticulture than is given in Horticulture A. Demonstration lectures and laboratory exercises on spraying, pruning, fruit identification and judging, tree planting, hotbed construction, propagation of fruit plants and small fruit culture. Mr. Moore.

C. **Potatoes.** Management of potato soils, planting problems, disease and insect control. The seed potato business and seed certification. Standard Wisconsin varieties identification and judging. Mr. Milward, Mr. Brann.



Spraying an Orchard

D. **Farm Woodlot and Grounds.** The work given is designed to show the relation of forestry to agriculture. The care of the woodlot, windbreaks, shelter belts, tree planting, selections of species for planting, and methods of propagation, planting and protection. Methods of improving home grounds. Mr. Aust.

LIBRARY

ASSISTANT PROFESSOR HEAN

Library Practice. To teach students to use books, papers, and bulletins as tools. Lectures on classification and other library methods and on the literature of agriculture, including books and serial publications. The lectures will be supplemented by practical work in the library. Attention will be given to methods of keeping files and records of valuable articles read, how to get government and state bulletins and reports, how these may be filed so as to be a ready and valuable reference for the busy farmer. Mr. Hean.



Studying in the Laboratory

PARLIAMENTARY PRACTICE

ASSOCIATE PROFESSOR BEWICK

Parliamentary Practice. A working knowledge of the rudiments of parliamentary practice is of inestimable value to every young man. This course gives practice in the organization and handling of public meetings, farmers' clubs, public speaking and debating.

First Year—Principles of parliamentary practice and debating. Mr. Bewick.

Second Year—Review parliamentary practice. Organization of farmers' clubs, public speaking. Time to be arranged. Mr. Bewick.

PHYSICAL EDUCATION

PROFESSOR LOWMAN AND ASSISTANTS

All Short Course students will be given a thorough physical and medical examination, and will be required to take two one-hour periods a week of development exercises, athletics and recreational games under capable direction. An opportunity for voluntary exercise and for the organization of basketball and other teams and the holding of athletic contests between classes, will be given. These activities are carried on in the Stock Pavilion which has been equipped with facilities for this purpose, including gymnastics and athletic apparatus, lockers and shower baths. The course is closed by an indoor track meet, with track contests between teams representing the first and second year classes.

PLANT PATHOLOGY

ASSOCIATE PROFESSOR VAUGHAN

The limiting of the yield of all farm crops by disease is a present day problem of the farmer. Their control becomes more important as our lands are farmed more intensively.

Plant Diseases and Control. The symptoms of the common and more important plant diseases of Wisconsin crops that one may recognize them on sight. Attention will be given to the diseases of field crops, grains, fruits, potatoes, and other horticultural crops. Control measures and their application will be emphasized.

Individual laboratory work aiming to give first hand acquaintance with the symptoms of the diseased plants and the characters of the parasitic fungi and bacteria causing the diseases, including methods of over-wintering, spread and control. Mr. Vaughan.

POULTRY HUSBANDRY

PROFESSOR HALPIN ; INSTRUCTOR C. LAMPMAN ; ASSISTANT O. N. JOHNSON

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 and bone cutters. In addition, some twenty-six varieties of chickens, five of geese, and three of ducks, furnish ample material for poultry judging. These will be used to help the student to become familiar with general poultry raising. Several years of careful trapnesting and pedigree hatching have developed strains of heavy laying chickens that will be used. An extensive file of poultry journals and books is to be found in the Agricultural Library.

A. Poultry Raising. Breeding and feeding for winter egg production, poultry house construction, incubating and brooding, both natural and artificial, killing and marketing dressed poultry, the common poultry diseases. Mr. Lampman.

B. Poultry Judging. The judging of poultry for exhibition and culling for egg production. Mr. Halpin, Mr. Johnson.

C. Demonstration and laboratory work in feeding for egg production, packing and marketing eggs, killing and dressing market poultry, caponizing and house construction. Mr. Lampman, Mr. Johnson.



*Incubation
Room
at
Poultry
Building*

D. Incubation and Brooding and a study of some of the common diseases of poultry. Mr. Lampman.

WORKSHOP DEPARTMENTS

SUPERINTENDENT DABNEY; INSTRUCTORS SCHUMANN, MALONE,
SULLIVAN

A. Elementary Carpentry. Instruction given in the use of wood working tools, to sharpen chisels, saws and planes and keep them in order. A choice is allowed of several articles that would be of use around the house or farm, but the articles chosen must involve the use of all tools and principles. The list includes a mitre box, saw horse, feed trough, stool, stepladder, tool tray, hammer handle, or singletree. Several types of joints are made, and elementary instruction in the use of the steel square. Mr. Sullivan.

B. Elementary Forging. Instruction in the essential operations of forging, such as drawing out, upsetting, pointing, bending and welding mild steel, leading to the applications 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, instruction in hardening, tempering, drilling, riveting and soldering. Mr. Schumann and Mr. Malone.

C. Advanced Carpentry. More advanced work to suit the needs of the individual student. The construction of stairs, window and door frames, cupboards, the making of models of houses, barns, and portable pens, silos and framing for concrete construction. Mr. Sullivan.

D. Advanced Forge Work. A continuation of first year work including more advanced practice. Mr. Schumann and Mr. Malone.

SOILS

ASSISTANT PROFESSORS RICHARDS, STEWART

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

A. Soil Fertility. The soil and its relation to crop production is considered. The subjects studied are the soil, its origin and relation to plants and animals; conditions affecting plant

growth; plant-food elements and crop needs; importance of water and tilth in agriculture; land drainage; liming; relation of manure and commercial fertilizers to crop yields and soil improvement. Mr. Stewart.

B. Soil Management. Lectures on the management of special soil, crop rotation in relation to farm management, systems of farming in relation to soil fertility, determining the needs of soils, profitable crop production, and soil erosion. Mr. Richards.

VETERINARY SCIENCE

PROFESSOR ALEXANDER

A. The Animal in Health. The principles of anatomy and physiology are taught so students become acquainted with the normal structure and functions of the animal body. Mr. Alexander.

B. The Animal in Disease. The causes, symptoms, and methods of preventing the common diseases of farm animals.



Sports on Ice

Ice boating, skating and other winter amusements are popular.

Practical demonstrations are given, to enable students to recognize diseases and unsoundness and give first aid treatment. Mr. Alexander.

POST CARD

THIS SPACE FOR THE ADDRESS ONLY

PLACE
ONE CENT
STAMP
HERE

DIRECTOR OF SHORT COURSE

College of Agriculture

Madison

Wisconsin

SHORT COURSE IN AGRICULTURE

Application for Admission

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

I hereby apply for admission to the Short Course in Agriculture for the term beginning November 17, 1924. I have had.....years experience on a farm.

Should I change my address before November 16 or should anything occur which will prevent my attendance, I will at once notify you so that my place can be filled by some other applicant.

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

Post Office..... State.....

Rural Route No.....or Street and No.....

Home County.....

Dated

ALPHABETICAL LIST OF SHORT COURSE

1923-24

Name	Home Address	Name	Home Address
Adams, Mighill W.....	Westby	Kobbervig, R.....	Mt. Horeb
Adams, Sheldon.....	Oregon	Koester, Forest R.....	Hartland
Alexander Floyd C.....	Owen	Kolb, Alden E.....	Cleveland
Andrews, Leon A.....	South Wayne	Koplin, Albert.....	Milwaukee
Aufdermauer, Joe.....	Rubicon	Krings, Clarence.....	Arkansasaw
	!	Kuehl, Orville.....	Kewaunee
Barton, Willis.....	Egerton	Kussow, W. C.....	West De Pere
Beckman, Fred A.....	Frankfort, Ill.	Larsen, Ellsworth S.....	Denmark
Beekler, Wilfred C.....	Jeffris	Lasse, Frank W.....	Twin Bluffs
Bell, R. Leonard.....	Madison	Latham, Donald L.....	Stitzer
Benedict, Roland.....	Woodworth	Lemberger, Isadore.....	Cato
Benson, Theodore.....	Cambridge	Lettner, Herbert.....	Fountain City
Bingham, Walter W.....	Lake Geneva	Lofstrom, Gustaf A.....	Grand View
Bonsack, George R.....	Onalaska	Losey, Roy L.....	Rice Lake
Boyle, William.....	Hayward	Lundt, Elmer W.....	Palmyra
Brereton, Sylvester G.....	Lodi	Lyford, Joseph H.....	Rockford, Ill.
Bright, Donald F.....	Bl. R. Falls	Lynch, Charles W.....	Tomahawk
Brown Geo. R.....	Rockford, Ill.		

*The
Wisconsin
International*



Brown, Ray G.....	Eau Claire	McDowell, Ray Curtis	Waukesha
Buss, Vernon W.....	Dresser Jet.	McDowell, Roy E.....	Waukesha
Calvert, Earl S.....	Gates Mills, O.	McVicar, Keith C.....	Salem
Campbell, Chas. A.....	Eau Claire	Martineau, Paul Leo.....	Lena
Campbell, Will.....	Barneveld	Mathews, William A.....	Medford
Cocke, Wm. A.....	Cartersville, Va.	Neier, Ed.....	Verona
Conrad, Fremont.....	West Allis	Metzig, Milton.....	Larsen
Currie, Andrew, Jr.....	Lodi	Michels, Wilfred M.....	Peebles
		Miller, Clarence F.....	Sun Prairie
Dahlke, Wm. C.....	Brandon	Miller, Floyd Roger	Paw Paw, Ill.
Dailey, Milton.....	Foxboro	Miller, Marvin.....	Menomonie
Dana, Gordon C.....	Poplar	Miller, Ora J.....	Lone Rock
DeBeyl, Felix.....	Suamico	Mills, Howard E.....	Poynette
Dins, Wilmer B.....	Brownsville	Moore, Robert F.....	Cazenovia
Doubleday, W. E.....	Janesville	Moseley, Harlan.....	Warrens
		Moser, John.....	Whitewater
			!
Enge, Carl W.....	Sauk City	Neff, Francis N.....	Muscoda
Engelhardt, Edw. C.....	Osceola	Nelson, Ward A.....	Union Grove
Erdman, Martin A.....	Wausau		
Erickson, Paul H.....	Maiden Rock	O'Keson, Emil B.....	Madison
Evenson, Norman C.....	Waupun	Oldenburg, Herbert.....	Beloit

- Faust, Peter C.....Westboro
 Feldebrugge, Clemens.....Norwalk
 Feldebrugge, John.....Norwalk
 Fitzsimmons, J. B.....Mineral Pt.
 Flasch, Leo J.....Campbellsport
 Foley, Frank.....Maiden Rock
 Fonk, Clarence P.....Union Grove
 Forck, Carl W.....Glen Haven
 Foster, Paul F.....Union Grove
 Frelich, Adolph B.....Maribel
 Friday, Edward.....Madison
 Fried, Melvin.....Fountain City
 Frisch, Ernest A.....Middleton
 Frisch, Louis F.....Middleton
 Froeba, Albert.....Loyal
- Gaarder, Kenneth T.....Holman
 Gahagan, Fay R.....Frederic
 Giese, Harold H.....Prairie du Sac
 Gilbertson, H. B.....Black R. Falls
 Gregg, R. R.....Northbrook, Ill.
 Green Rollin E.....Ojibwa
- Hacker, Roy W.....Forest Jct.
 Hale, Clarence.....Oshkosh
 Hanauska, Charles.....Milton
 Hanna, Palmer.....Verona
 Harris, Paul.....Richland Center
 Hartzell, Raymond.....Barron
 Hathaway, John A.....Madison
 Herreid, Carl O.....Blair
 Holt, David H.....Elkhorn
 Holzman, Otto.....North Freedom
 Holzman, Wm.....North Freedom
 Hopkins, Rich. C.....Morrisonville
 Hopkins, Rich. I.....Morrisonville
 Howard, Everett T.....Janesville
 Howard Russell Sage.....Augusta
 Hunt, Franklin.....Roberts
 Hurlburt, Ray W.....Bl. R. Falls
- Jaeger, Clarence.....Cleveland
 Janson, Adolf.....Sweden
 Jasperson, Wallace.....Viroqua
 Jensen, Lewis John.....Milltown
 Johnson, Erwin E.....Denmark
 Johnson, Howard A.....Milwaukee
 Jones, Tom S.....Dodgeville
 Joseph, Emil M.....Richland Center
- Kamm, H. DeH.....Jacksonville, Ill.
 Karboski, Mitchell.....Mukwanago
 Kaschube, Carl J.....Ripon
 Kastner, LaVern E.....Oconto
 Kelly, R. J.....Oconomowoc
 Kieffer, Andy M.....Mauston
 Kiekhafer, C. W.....Weyauwega
 Kirchhoff, Arnold.....Hustisford
- Opsahl, Richard P.....Cashton
 Owen, Eugene V.....Ixonia
- Pauls, Fred G.....Cazenovia
 Perry, Clifford H.....Gratiot
 Peters, Palmer.....Belleville
 Pierce, John A.....Edgerton
 Porior, Medore.....Coleman
 Pritzl, Jos. A.....Brillion
- Reineck, William J. New Holstein
 Rice, Gordon J.....Chelsea
 Richards, Lyle E.....Lodi
 Riewesthal, Alfred.....Fredonia
 Ristow, Clifford C. Black R. Falls
 Roffers, Antone H.....Ashland
 Roth, Norman J.....Mauston
 Runde Francis H.....Cuba City
- Sacarto, Walter.....Area, Ill.
 Savage, Cutler.....Union Grove
 Schaaf, Emmett C.....Spooner
 Schillinger, Paul, Naperville, Ill.
 Schink, Raymond A.....De Pere
 Schumann, Myron W. Mazomanie
 Schwabenlander, Anthony Hilbert
 Segebrecht, Roy H.....Mazomanie
 Servais, Isaac.....Luxemburg
 Shackell, Arthur C. Rockford, Ill.
 Shadeald, Archie M.....Gotham
 Siewert, William.....Arlington
 Silverthorn, Willis C.....Hayward
 Skeie, Anton L.....Etrick
 Smoke, Casimir A.....Milwaukee
 Steinfeldt, George W. Green Bay
 Stokstad, Lewis O.....Edgerton
 Stueck, Lester C.....Mishicot
 Stuhlman, Paul R.....Madison
 Stumpf, Frank.....Waunakee
- Theige, Hjalmar B.....Westby
 Triplett, Ralph W.....Watertown
- Verburg, John.....Milwaukee
 Vial, Gordon L.....La Grange, Ill.
 Vial, Paul E.....La Grange, Ill.
 Voegeli, Arthur J. Chippewa Falls
- Wahl, Max.....Madison
 Walker, Lloyd S.....Sturgeon Bay
 Walters, Kenneth.....Durand
 Warne, John.....Cambridge
 Weiner, Raymond F.....Columbus
 Westphal, Clarence R. Columbus
 Winters, Frank M.....Madison
- Young, Vilas E.....West Salem
- Zittlow, Edward W. West De Pere