University Record

Vol. XIV DECEMBER, 1919 No. 3

Published quarterly by the University of Florida
Gainesville, Florida

University of Florida
College of Agriculture
GAINESVILLE

Judging a dairy cow at the State College of Agriculture

FARMERS' SHORT COURSES
JANUARY 6 to 16, 1920

Entered September 6, 1906, at the Postoffice at Gainesville, Florida, as second class mail matter, under Act of Congress, July 16, 1894

University of Florida
College of Agriculture
GAINESVILLE

BOARD OF CONTROL

J. B. HODGES, *Chairman,* Lake City.
E. L. WARTMANN, Citra.
J. B. SUTTON, Tampa.
J. T. DIAMOND, Tallahassee.
H. B. MINIUM, Jacksonville.
BRYAN MACK, *Secretary,* Tallahassee.
J. G. KELLUM, *Auditor,* Tallahassee.

OFFICERS

A. A. MURPHREE, President.
P. H. ROLFS, Dean and Director.
W. L. FLOYD, Assistant Dean.
J. E. TURLINGTON, Agronomist; in Charge Short Courses.

INSTRUCTIONAL STAFF

A. A. Murphree, President.
P. H. Rolfs, Dean and Director.
W. L. Floyd, Assistant Dean and Horticulturist.
J. E. Turlington, in charge of Short Courses; Agronomy.
C. L. Willoughby, Animal Husbandry and Dairying.
A. L. Shealy, Veterinary Science.
F. Rogers, Farm Machinery.
J. M. Scott, Animal Husbandry and Crops.
H. E. Stevens, Plant Pathology.
J. R. Watson, Entomology.
S. E. Collison, Soils.
A. P. Spencer, Citrus and Vegetable Growing.
C. K. McQuarrie, Crops.
H. G. Clayton, Citrus and Vegetable Growing.
E. W. Jenkins, Crops.
N. W. Sanborn, Poultry Husbandry.
R. C. Blake, Poultry Husbandry.
J. B. Thompson, Forage Crop Specialist.
G. L. Herrington, Boys' Club Agent.
R. W. Blacklock, Asst. Boys' Club Agent.
Miss S. L. Vinson, Editor.

Special Lecturers

H. R. Trusler, Rural Law.
Wilmon Newell, Bee Culture.
R. E. Chandler, Gas Engines.
A. H. Logan, Hog Cholera.
Wm. H. Black, Animal Feeding.
B. F. Floyd, Citrus.
Wm. Gomme, Citrus.
F. M. O'Byrne, Citrus.
Frank Stirling, Citrus.
W. W. Yothers, Citrus.
J. R. Winston, Citrus.
B. C. Riley, University Extension.
E. W. Berger, Entomology.
J. H. Montgomery, Plant Quarantine.
Miss Minnie Floyd, Poultry Husbandry.
Miss Irene Randall, Poultry.

Service men and mechanics from the companies furnishing spraying machinery and tractors for use during the Short Courses will assist in giving these courses. These companies are:

The Bean Spray Pump Company.
The Hayes Pump and Planter Company.
Fairbanks, Morse and Company.
Hardie Manufacturing Company.
The Deming Company.
The International Harvester Company.
The Avery Company.
L. B. Skinner Manufacturing Company.
The Cleveland Tractor Company.
The Moline Plow Company.
Henry Ford & Son, Inc.
Turner Motor Co.

THE FARMERS' SHORT COURSES

The purpose of the Short Courses in Agriculture is to enable men and women who do not find it possible to attend the longer courses to acquire a knowledge of some of the fundamental principles of agriculture as applied to Florida conditions. Agriculture in the State of Florida is in a transition stage from the old to the new. Her rural population is being increased annually by people from other states who are not well informed concerning agricultural conditions here. The College of Agriculture occupies a very important position in relation to these people and to the agricultural development of the state. It is pointing the way for the development of a stable agriculture, and helping the newcomer to adapt himself to the new conditions in which he is placed.

The Short Courses are planned for the busy man and woman who can spend only a short time at the College. Four separate courses have been arranged to meet the demand. These are in Animal Husbandry and General Agriculture, Poultry Husbandry, Citrus Culture and Vegetable Growing, and Tractors and General Agriculture.

An examination of the schedule of studies will show the size and nature of the programs that are being offered this year. The student is taught by lectures and by practical exercises. He is required to do things which will assist him in planning his farm work and will make him more expert in his work of stock raising, dairying, or fruit growing. On account of the extent of the courses it is impossible for anyone to take advantage of all of them during one session. The student is urged to pick the course that will be of most interest and use to him and to attend the whole of it.

THE COLLEGE OF AGRICULTURE

The College of Agriculture is one of the divisions of the University of Florida at Gainesville. The University occupies a tract of six hundred and four acres, of which one hundred and thirty-five acres are used for instructional

work by the College of Agriculture, and three hundred and seventy-nine for experimental work by the Agricultural Experiment Station. It is located in a progressive agricultural community. This, in connection with the large variety of products grown upon its own farms, affords the student an excellent opportunity for observation and study.

BUILDINGS AND EQUIPMENT

The College of Agriculture and the Agricultural Experiment Station occupy separate buildings on the University campus. The College of Agriculture building was planned particularly for instructional work. There are large, well-lighted and well-equipt laboratories for the work in soils, fertilizers, agronomy, horticulture, veterinary science, farm machinery, and dairying. There is an auditorium specially fitted for stock exhibit and judging work.

The dairy barn is large, new, and well provided with silos and modern equipment. It is one of the best in the state. There are over 57 head of cattle in the dairy herd, many of which are pure bred Jerseys. The beef herd includes the Shorthorn and Angus breeds.

The hog herd includes representatives of the Chester White, Duroc-Jersey, Poland-China, Tamworth, and Berkshire breeds. A number of feeding experiments with these are now under way.

The collection of grasses and legumes in the plant introduction garden on the Horticultural Grounds includes several hundred different species. These afford opportunity for study for those who are particularly interested.

Special equipment is being assembled for the work in Poultry Husbandry. There will be representatives of all of the chief breeds, and a complete equipment of incubators, brooders, and other appliances. There are some nice flocks in the community that will be available for observation and study.

The work of the Course in Citrus Culture will be carried on in the laboratories of the Experiment Station, which is one of the best equipt Stations in the South. The Hayes, Bean, Hardie, Deming, and other power sprayers will form

a part of the equipment of the Farm Machinery Laboratory and will be used for study and practice work.

The Avery Company, The International Harvester Company, The Cleveland Tractor Company, The Southern Moline Plow Company, The Turner Motor Company, and a number of others will supply the tractors to the Farm Machinery Department for the Course in Tractors. They will also supply charts, parts and accessories for the work, and service men to assist in the practice work.

LIBRARY FACILITIES

The Library of the Agricultural Experiment Station contains more than 2,000 volumes along agricultural and allied lines. Complete sets of the publications of the different state Agricultural Experiment Stations and of the United States Department of Agriculture are on file, as well as many of the leading American and foreign periodicals. The library is open for use of the Short Course students.

In addition, the University Library, containing more than 20,000 volumes, is available to the students. While there will be little free time on account of the full schedules, some will doubtless find opportunity to look for special information which they may desire.

NUMBER OF COURSES OFFERED

Four courses, each lasting ten days, are offered from January 6 to 16, 1920. They are in Animal Husbandry and General Agriculture, Poultry Husbandry, Citrus Culture and Vegetable Growing, and Tractors and General Agriculture. The courses are distinctly different and are planned to meet the needs of different groups of people in the State. On this account, persons are urged to register for one course only. The applications of those desiring to take parts of two courses will be granted, provided it does not cause any interference.

ADMISSION

There are no entrance examinations to the Farmers' Short Courses, but applicants should be at least 18 years

of age. The work has been planned primarily for men and women of mature age and with some farm experience.

EXPENSES

Tuition and Fees.—No tuition or other fees are charged those attending the short courses.

Rooms and Board.—Owing to the overflow of students at the University this year, the dormitories are full, but rooms can be had in private homes near the campus or in the downtown section. A list of such available rooms will be furnished the students upon their arrival; or if preferred, assignments to rooms will be made on request before arrival at Gainesville.

Hotel accommodations can be had with or without board, at reasonable prices.

Board in the University Dining Hall may be had at 85 cents per day. Single meals will be furnished at 35 cents each. There are several cafes and boarding houses in town.

Books and Clothing.—Such books, note paper, and pencils as are needed can be secured at the University Book Store at student rates. Students in the Tractor Course will find it desirable to have overalls for working around the machinery.

INSTRUCTIONS

Those coming to the University to take the Short Courses will report first to the office of the Dean in the College of Agriculture building. They will be registered here, and meal tickets provided for those who care to eat in the University dining room.

Since it will be helpful to know approximately the expected attendance upon the courses before their beginning, those proposing to attend are requested to notify the Dean, College of Agriculture, Gainesville, as soon as a decision is reached.

Registration should be made at once, specifying the course desired.

COURSE IN ANIMAL HUSBANDRY AND GENERAL AGRICULTURE

JANUARY 6 TO 16, 1920

Florida is a pioneer state. It is only recently that her general agriculture has been put on a stable basis. She is just now on the verge of a great development. The razorback hog and the tick-infested range cow can still be seen, but they are fast being replaced by the better breeds of animals. Fields of cotton are still grown, but they are becoming fewer. In the new agriculture, live stock and dairying is being made the basis. Fields of corn, velvet beans, cane, sorghum, sweet potatoes, and peanuts are taking the place of the cotton. Better fences, better homes, better credit is evident on every hand.

Every farmer must take a part in this great change from the old to the new. There is no longer any place for the razorback hog and the ticky cow; the boll weevil is making cotton growing impossible. To make the change, the farmer must have knowledge. This he may obtain by observing the work of his more progressive neighbor; by reading his agricultural papers and the bulletins of the Experiment Station; by cooperating with his County Agent and by attending the courses at the Agricultural College.

The Agricultural College forms a part of the vanguard of the agricultural development in every state. The College of Agriculture of the University of Florida is performing its part in the development of agriculture in Florida. The Short Course in Animal Husbandry and General Agriculture is planned to meet the present needs of the Florida farmer. It is arranged to give the greatest amount of useful information in the shortest amount of time.

Soils and Fertilizers.—A knowledge of these subjects is important in the new agriculture. The points of greatest importance under present conditions will be emphasized.

Farm Management.—In the old agriculture, not much management was required. Cotton followed cotton, year

after year. The stock ran free on the ranges. The matter of building up the soil was given scant consideration. With the new agriculture, farm management is all important. The farm must be organized; the fields given proper size; equipment selected; crops chosen; and work planned. These matters will be discussed in detail in this course and examples shown.

Field and Forage Crops.—The selection of crops and the methods used in growing them are important considerations. The growing of sorghum, corn, Japanese cane, legumes, sweet potatoes, peanuts, and other crops and their place in Florida agriculture will be studied.

Animal Husbandry.—The work offered in Animal Husbandry will include lectures and demonstrations dealing with the breeding, feeding, care, management, and judging of the various classes of farm animals. Examples of the best breeds of hogs and cattle will be available for study.

Dairying.—Dairy practices for use on the general farm will be given special consideration. The Babcock test for fat in milk will be taught. Farm separators, the care of milk and cream, and other topics of special interest will be discussed.

Veterinary Science.—The work in this subject will include the care and treatment of sick animals; treatment of common diseases, and minor operations. Special attention will be given to hog cholera, tuberculosis, and the foot and mouth disease. Clinics will be held and practice work given.

Farm Machinery.—Special study will be made of the implements and machinery that may be used to advantage on Florida farms. Several companies will have complete displays of machinery on hand for study and demonstration. A number of gas tractors will be available for study and practice work.

SCHEDULE OF COURSE IN ANIMAL HUSBANDRY AND GENERAL AGRICULTURE

JANUARY 6 TO 16

Tuesday, January 6

9:00—Opening Exercises.
10:00—Gas Engines, Principles and Types.
11:00—Poultry Keeping in Florida.
2:00—The Place of Animals in Agriculture.
3:00—Horses and Mules for the Farm.
4:00—Judging Horses and Mules.

Wednesday, January 7

8:00—Florida Soils, Their Nature and Uses.
9:00—Fruit on the Farm.
10:00—Breeds of Beef Cattle.
11:00—Feeding Test with Beef Cattle.
2:00—Importance of Veterinary Science in Florida.
3 to 5—Judging Beef Cattle.

Thursday, January 8

8:00—Florida Soils: How to Handle Them.
9:00—Feeding and Management of Work Animals.
10:00—Principles of Animal Breeding.
11:00—The Silo in Florida.
2:00—Common Diseases of Work Animals and Their Treatment.
3 to 5—Examination for Soundness.

Friday, January 9

8:00—Forage Grasses for Florida.
9:00—Fertilizers, Their Nature and Uses.
10:00—Breeds of Dairy Cattle.
11:00—Common Diseases of Cattle.
2:00—Building up Herds and Flocks.
3 to 5—Judging Dairy Cattle.

Saturday, January 10

8:00—Leguminous Forage Crops for Florida.
9:00—How to Buy Fertilizers.
10:00—Breeds of Swine and Sheep.
11:00—Hog Cholera and Diseases Resembling Same.
2:00—The Future of the Beef Industry.
3 to 5—Vaccination for Hog Cholera.

Monday, January 12

8:00—How to Have a Good Garden on Every Farm.
9:00—Benefits of the University Extension to the Florida Farmer.
10:00—Principles of Animal Feeding.
11:00—Preventive Measures and Hygiene.
2:00—Producing Pork and Lard for the Home.
3 to 5—Judging Swine and Sheep.

Giving instruction in the vaccination of hogs

Tuesday, January 13

8:00—The Purchase, Use and Care of Farm Machinery.
9:00—Profits to be Expected from Livestock and Crops.
10:00—Disinfection and Sanitation.
11:00—Feeding Test with Hogs.
2:00—Dairying in Florida.
3 to 5—Feeding and Handling the Dairy Cow. The Babcock Test.

Wednesday, January 14

8:00—Ways of Reducing the Expenses Between Producer and Consumer.
9:00—How to Obtain Quick Information for Your Farm Troubles.
10:00—Tuberculosis and the Tuberculin Test.
11:00—Feeding Test with Dairy Cows.
2:00—Insect Pests of Farm Crops and How to Control Them.
3:00—Controlling Bacteria in the Dairy.
4:00—Tick Eradication.

Thursday, January 15

8:00—Grain Crops for Florida and Their Utility.
9:00—Most Important Factors in Profitable Farm Organization.
10:00—Diseases and Treatment of Animals During Pregnancy and Parturition.
11:00—Contagious Abortion.
2:00—Sugar Making on the Farm.
3:00—Butter and Cream in Florida.
4:00—Butter Making.

Friday, January 16

8:00—Boys and Girls' Clubs in Florida, and What They Are Doing.
9:00—Florida's Law as It Affects the Farmer.
10:00—Parasitic Diseases.
11:00—The Plant Board and How It Helps to Control Diseases.
2:00—Bee Keeping in Florida.
3:00—City Milk Inspection.
4:00—Scoring Dairies Near University.

COURSE IN POULTRY HUSBANDRY

JANUARY 6 TO 16, 1920

The course in Poultry Husbandry should be helpful at this time. No other state in the Union is like Florida in its climate and its opportunities for profitable poultry keeping. With good markets within its borders, green grass ranges twelve months in the year, no need for closed and costly houses, and feeds to be had for the raising, it is easy to understand the demand for this second complete course in poultry production.

The farmers are increasing the size of their flocks and adopting better methods of care and feeding. The "backyard campaigns" have stimulated interest in town lot poultry keeping. The newcomers from other states are asking for help to meet their needs as they start under our blue skies and comfortable all-the-year conditions.

Florida is the size of all the New England states, with a wider range in its advantages for poultry raising. A study of these advantages will form a part of the course. Not only will the subjects be covered in formal lectures, but the round-table plan of discussion will also be followed.

Florida needs more poultry and eggs to supply present needs. This course is part of the plan to stimulate increased poultry production. There should be good poultry on every farm, in every grove and in the backyards of every town.

SCHEDULE OF COURSE IN POULTRY HUSBANDRY

JANUARY 6 TO 16, 1920

Tuesday, January 6

9:00—Opening Exercises.
10:00—Gas Engines, Principles and Types.
11:00—Poultry Keeping in Florida.
2:00—The Place of Animals in Agriculture.
3:00—Selecting of Breeding Stock.
4:00—Eighteen Months' Experience With Trapnests.

Wednesday, January 7

8:00—Florida Soils, and Their Nature and Uses.
9:00—Fruit on the Farm.
10:00—Brooding and Brooders.
11:00—The Growing of Profitable Pullets.
2:00—Importance of Veterinary Science in Florida.
3:00—Florida Feeds and Pastures.
4:00—Internal Structure of the Hen in Relation to Production.

Thursday, January 8

8:00—Florida Soils: How to Handle Them.
9:00—Feeding and Management of Work Animals.
10:00—The Farm Flock.
11:00—Breeds of Poultry. (I.)
2:00—Common Diseases of Work Animals and Their Treatment.
3:00—Forage Crops for Poultry.
4:00—Florida Bugs for Florida Hens.

Friday, January 9

8:00—Forage Grasses for Florida.
9:00—Fertilizers, Their Nature and Uses.
10:00—Houses, Equipment and Yards.
11:00—Beginners' Problems—Round Table.
2:00—Building Up Herds and Flocks.
3:00—Breeds of Poultry. (II.)
4:00—Advertising the Farm and Farm Products.

Saturday, January 10

8:00—Leguminous Forage Crops for Florida.
9:00—How to Buy Fertilizers.
10:00—The Backyard Flock.
11:00—Poultry Feeds and Feeding.
2:00—The Future of the Beef Industry.
3 to 5—Visit to Backyard Poultry Flocks.

Monday, January 12

8:00—How to Have a Good Garden on Every Farm.
9:00—Benefits of the University Extension to Florida Farmers.
10:00—Sanitation in Yards and Houses.
11:00—Management of Laying and Breeding Stock.
2:00—Producing Pork and Lard for the Home.
3:00—Marketing Poultry Products.
4:00—The Growing of Better Pullets.

Tuesday, January 13

8:00—The Purchase, Use and Care of Farm Machinery.
9:00—Profits to Be Expected from Livestock and Crops.

10:00—Poultry Parasites.
11:00—Poultry Ailments.
2:00—Dairying in Florida.
3:00—Natural and Artificial Incubation.
4:00—The Home Demonstration Work in Poultry Production.

Wednesday, January 14

8:00—Ways of Reducing the Expenses Between Producer and Consumer.
9:00—How to Obtain Quick Information for Your Farm Troubles.
10:00—Selecting the Egg Type of Hen Without Trapnests.
11:00—Grain Crops for Poultry.
2:00—Insect Pests of Farm Crops and How to Control Them.
3:00—Types of Houses for Small Flock.
4:00—Egg Circles—Preservation of Eggs.

Thursday, January 15

8:00—Grain Crops for Florida and Their Utility.
9:00—Most Important Factors in Profitable Farm Organization.
10:00—Demonstration in Judging and Candling Eggs.
11:00—Fitting, Showing and Judging Poultry.
2:00—Sugar Making on the Farm.
3:00—Cooking and Canning Poultry.
4:00—The Farm Woman's Flock.

Friday, January 16

8:00—Boys and Girls' Clubs in Florida, and What They Are Doing.
9:00—Florida Law as It Affects the Farmer.
10:00—Meeting Florida Poultry Problems.
11:00—Killing and Dressing.
2:00—Bee Keeping in Florida.
3:00—Turkeys, Ducks and Guineas.
4:00—Cooperative Plan in Placing Standard Bred Poultry.

Some of the Students who attended the Short Course in Poultry Husbandry last year

COURSE IN CITRUS CULTURE AND VEGETABLE GROWING

JANUARY 6 TO 16, 1920

The prospective citrus grower should know the characteristic of good grove soil, stock and varieties that are adapted to different locations, and the fertilizer requirements of young trees. The older growers may need information on cultivation, fertilization, and care of his trees; and aid in identifying the troublesome insects and diseases that he may apply the best methods of control at proper time and in the most effective way.

The man who grows and markets first class fruit, need have no fear of overproduction. There is no telling how soon poor quality fruit may not pay the cost of producing it. It is important to know what to do in order to produce good fruit and then have the energy and determination to do it. The Short Course will aid the grower in knowing what to do; it will be up to him to do it.

The growing of vegetables for shipment to Northern markets is an important industry in Florida. The time of growing them and the methods that investigation and experience have shown to be the most successful may be studied with profit under teachers who have given thought and attention to them.

The home garden should be an aid in reducing the high cost of living in every home. The vegetables that may be grown during the different seasons, including summer when many think there is no use to try to grow them, will be studied. The insects and diseases of vegetable crops and remedies for them are questions in which all are interested, and these will be discussed at the Short Course.

Altho the annual rainfall is great it is not well distributed thruout the year. The conservation of moisture in our light sandy soils and the use of irrigation for certain crops that are grown during the drier part of the year may make the difference between success and failure. These subjects will come in for a share on the program.

SCHEDULE IN CITRUS CULTURE AND VEGETABLE GROWING

JANUARY 6 TO 16, 1920

Tuesday, January 6

9:00—Opening Exercises.
10:00—Gas Engines, Principles and Types.
11:00—Poultry Keeping in Florida.
2:00—The Place of Animals in Agriculture.
3 to 5—Characteristics of different species of Citrus to be found on the Campus.

Wednesday, January 7

8:00—Florida Soils, Their Nature and Uses.
9:00—Fruit on the Farm.
10:00—Soils Adapted to Citrus; Preparation; Cultivation; Cover Crop.
11:00—Citrus Varieties; Stock for Different Soils; Age and Size of Trees for Planting; Pedigreed Trees.
2:00—Importance of Veterinary Science in Florida.
3 to 5—Judging Citrus Soils. Score Card Method. Orchard Plans, Laying Out.

Thursday, January 8

8:00—Florida Soils; How to Handle Them.
9:00—Feeding and Management of Work Animals.
10:00—Citrus White Flies and Their Control.
11:00—Scale Insects and Their Control.
2:00—Common Diseases of Work Animals and Their Treatment.
3 to 5—Identification of Insects to be Found on the Campus. Study of Preserved Specimens.

Friday, January 9

8:00—Forage Grasses for Florida.
9:00—Fertilizers; Their Nature and Uses.
10:00—Fertilizers for Growth and Fruit Production.
11:00—Mealy Bugs, Mites and Minor Insects of Citrus.
2:00—Building Up Herds and Flocks.
3 to 5—Spray Mixture and Spraying Machinery.

Saturday, January 10

8:00—Leguminous Forage Crops for Florida.
9:00—How to Buy Fertilizers.
10:00—Diseases of Citrus: Wither Tip, Gummosis, Foot-Rot.
11:00—Diseases of Citrus: Scaly Bark, Melanose, Stem-end Rot, Scab.
2:00—The Future of the Beef Industry.
3:00—Identification of Diseases to be Found on Campus.
4:00—Study of Preserved Specimens.

Monday, January 12

8:00—How to Have a Good Garden on Every Farm.
9:00—Benefit of the University Extension to Florida Farmers.
10:00—The Canker Fight; What Has Been Accomplished.
11:00—Nursery Ispection and What It Means to the Grower.
2:00—Producing Pork and Lard for the Home.
3 to 5—Laboratory Study of Diseases.

Tuesday, January 13

8:00—The Purchase, Use and Care of Farm Machinery.
9:00—Profits to be Expected from Livestock and Crops.
10:00—The Home Vegetable Garden.
11:00—Seed Beds, Seed Testing, Saving Seed.
2:00—Dairying in Florida.
3 to 5—Demonstration of Implements Used in Seeding and Cultivating.

Wednesday, January 14

8:00—Ways of Reducing the Expenses Between Producer and Consumer.
9:00—How to Obtain Quick Information for Your Farm Troubles.
10:00—Irrigation Methods, Manures and Fertilizers.
11:00—Preparing the Soil, Planting, and Cultivating the Crop.
2:00—Insect Pests of Farm Crops and How to Control Them.
3 to 5—Study of Types of Irrigation in Use on the Farm.

Thursday, January 15

8:00—Grain Crops for Florida and Their Utility.
9:00—Most Important Factors in Profitable Farm Organization.
10:00—Troublesome Insects of Truck Crops and Their Control.
11:00—Troublesome Diseases of Truck Crops and Their Control.
2:00—Sugar Making on the Farm.
3 to 5—Identification of Insects and Diseases to be Found on the Farm.

Friday, January 16

8:00—Boys and Girls' Clubs in Florida, and What They Are Doing.
9:00—Florida's Law as It Affects the Farmer.
10:00—Styles of Packages and Method of Shipping.
11:00—Some Aids in Deciding What is Best to Plant.
2:00—Bee Keeping in Florida.
3 to 5—Visit to Plant Board and Experiment Station.

COURSE IN TRACTORS AND GENERAL AGRICULTURE

JANUARY 6 TO 16, 1920

The use of the gas tractor in Florida is being rapidly extended, and has occasioned a demand for a short practical course in tractor operation and management. It is becoming recognized that the success of the tractor depends to a large extent upon the skill with which it is operated.

Realizing this, the College of Agriculture has arranged to cooperate with a number of manufacturers in giving this year a short course in gas tractors. The course will consist of lectures and discussions on the subject of gas and oil engines, their accessories and equipment, and the application of these to farm tractors.

Enough lectures on soils, fertilizers, crops, and animal husbandry will be included in this course to give a man valuable information on all phases of farming.

The practice work will consist of shop work, dismantling, adjusting, and repairing tractors, under the direction of experienced mechanics. Some field practice will be offered, but emphasis will be placed upon instruction planned to train the operator to detect mechanical troubles as they arise, to make competent inspection of the condition of the tractor, and to make necessary adjustments and repairs.

A number of different tractors will be available for use. Each will be in charge of an experienced service man. A collection of charts, tractor parts, and accessories will be on hand to illustrate and facilitate instruction. The engineering shops will be available for practice work in mechanics as related to the tractor. Discussions and demonstrations of tractor plows and other implements will be a feature of the course.

Besides the instructors of the College and Experiment Station, tractor and plow specialists will give lectures and aid with the practice work.

Opportunity will be given each student to do actual practice work as far as possible, some of which work will consist of the following exercises, assigned to different groups in turn:

Carburetor adjustment.
Igniter timing.
Valve timing.
Ignition troubles.
Clutch adjustment.
Gas-engine testing.
Inspection and operation of tractors.
Babbitting of bearings.
Pipe fitting.
Soldering.
Field practice with tractors, plows, and other tillage implements.
Forage practice.
Welding.
Sharpening of plow shares.

Demonstration with Tractor Plow

TENTATIVE SCHEDULE OF SHORT COURSE IN TRACTORS AND GENERAL AGRICULTURE

JANUARY 6 TO 16, 1920

Tuesday, January 6

9:00—Opening Exercises.
10:00—Gas Engine Principles and Types.
11:00—Poultry Keeping in Florida.
2:00—The Place of Animals in Agriculture.
3 to 5—Fuels.

Wednesday, January 7

8:00—Florida Soils; Their Nature and Uses.
9:00—Fruit on the Farm.
10:00—Carburetors.
11:00—Practice Work.
2:00—Importance of Veterinary Science in Florida.
3:00—Ignition.
4:00—Practice Period.

Thursday, January 8

8:00—Florida Soils: How to Handle Them.
9:00—Feeding and Management of Work Animals.
10:00—Magnetoes.
11:00—Practice Period.
2:00—Common Diseases of Work Animals and Their Treatment.
3:00—Magnetoes.
4:00—Practice Period.

Friday, January 9

8:00—Forage Grasses for Florida.
9:00—Fertilizers, Their Nature and Uses.
10:00—Governing and Cooling Apparatus.
11:00—Practice Period.
2:00—Building Up Herds and Flocks.
3:00—Lubricators and Lubrication.
4:00—Practice Period.

Saturday, January 10

8:00—Leguminous Forage Crops for Florida.
9:00—How to Buy Fertilizers.
10:00—Value of Timing and Adjustment.
11:00—Practice Period.
2:00—The Future of the Beef Industry.
3:00—Tractor Motor.
4:00—Practice Period.

Monday, January 12

8:00—How to Have a Good Garden on Every Farm.
9:00—Benefits of the University Extension to Florida Farmers.
10:00—Tractor Types, Adaptability, and Construction.
11:00—Practice Period.
2:00—Producing Pork and Lard for the Home.
3:00—Practice Period.
4:00—Practice Period.

Tuesday, January 13

8:00—The Purchase, Use and Care of Farm Machinery.
9:00—Profits to be Expected from Livestock and Crops.
10:00—Tractor Repairing.
11:00—Practice Period.
2:00—Dairying in Florida.
3:00—Tractor Repairing.
4:00—Practice Period.

Wednesday, January 14

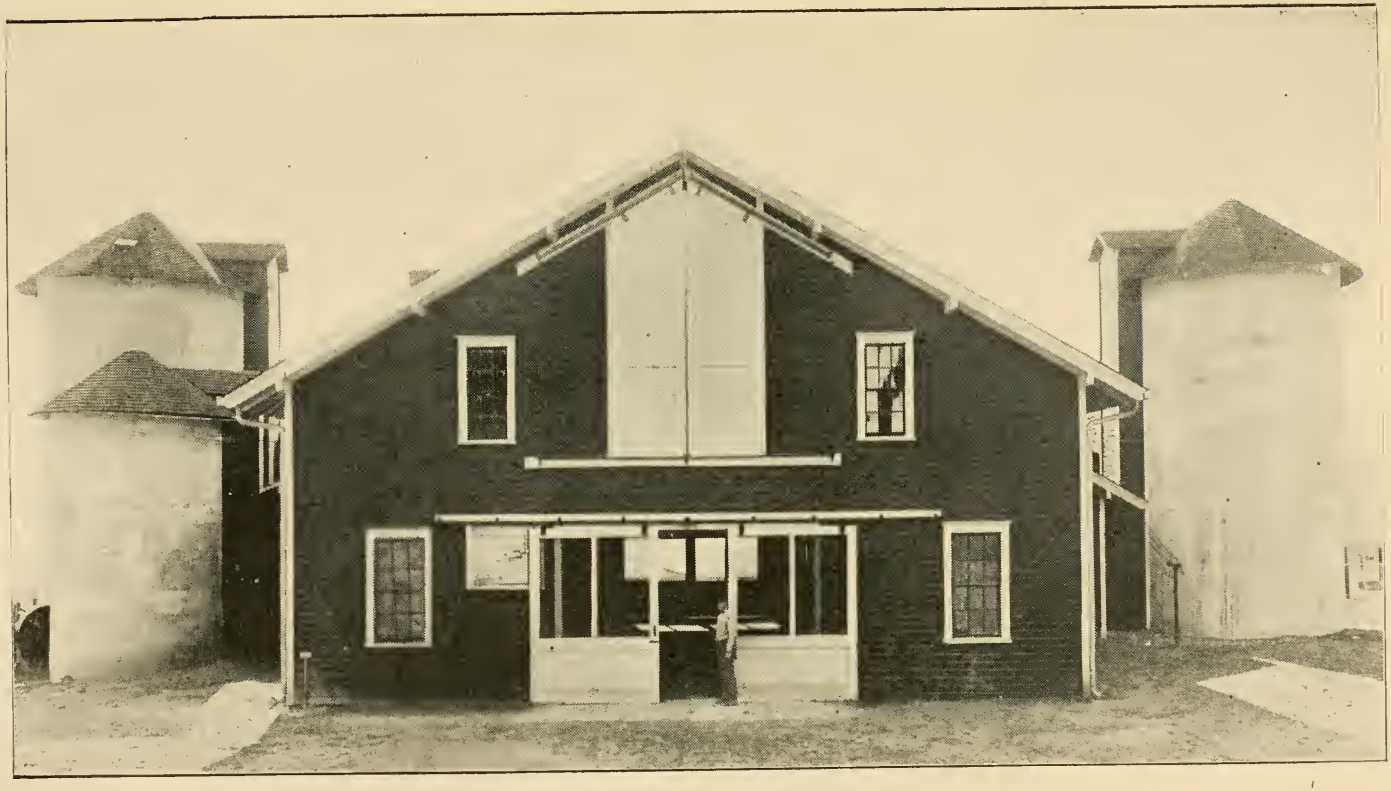
8:00—Ways of Reducing the Expenses Between Producer and Consumer.
9:00—How to Obtain Quick Information for Your Farm Troubles.
10:00—Gas Engine Troubles.
11:00—Practice Period.
2:00—Insect Pests of Farm Crops and How to Control Them.
3:00—Tractor Operation.
4:00—Practice Period.

Thursday, January 15

8:00—Grain Crops for Florida and Their Utility.
9:00—Most Important Factors in Profitable Farm Organization.
10:00—Plows and Tractor Implements.
11:00—Practice Period.
2:00—Sugar Making on the Farm.
3:00—Tractor Operation.
4:00—Practice Period.

Friday, January 16

8:00—Boys and Girls' Clubs in Florida, and What They Are Doing.
9:00—Florida's Law As It Affects the Farmer.
10:00—Tillage Methods.
11:00—Practice Period.
2:00—Bee Keeping in Florida.
3:00—Tractor Operation.
4:00—Practice Period.



Experiment Station Dairy Barn