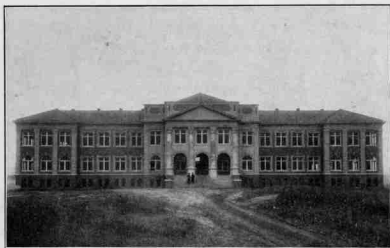


**AN EIGHT WEEKS' COURSE  
AND  
A ONE WEEK'S COURSE.**

**AGRICULTURE,  
HORTICULTURE, POULTRY AND DAIRYING.**

**AGRICULTURAL AND MECHANICAL  
COLLEGE RECORD.**

**Vol. 6. No. 3.**



**AGRICULTURAL BUILDING.**

**DECEMBER, 1907.**

**WEST RALEIGH, N. C.**

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## FACULTY

### AGRICULTURAL DEPARTMENT.

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THOMAS D. EASON, B.S.,  
*Assistant in Botany.*

## EIGHT WEEKS' COURSE IN AGRICULTURE.

BEGINS JANUARY 6, 1907.

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The Agricultural and Mechanical College offers, besides the four-year course and one-year course in agriculture, **AN EIGHT WEEKS' COURSE** and **A ONE WEEK'S COURSE**, which are held during the winter months, when the farmers are not busy.

### OBJECT.

The course designed to meet the needs of those who desire a knowledge of the **PRACTICAL SIDE OF FARMING**, dairying, and poultry-raising, but who have not time to take the regular course in College. Our experience in the institute work of this State leads us to believe that the farmers are demanding more definite knowledge of their business. Since this can be acquired more easily and at less expense at an Agricultural College than by long experience on a farm, this course is offered.

Young men who have a desire to become farm managers can partially fit themselves for such work by taking this course. The College is called upon frequently to supply farm managers, which it is unable to do because the supply is not equal to the demand. There is a chance for any bright young man who has not money enough to equip a farm of his own to better his condition by fitting himself to accept a position as farm manager.

The demand for well-trained dairymen has also far exceeded the supply, and we have several vacancies now which we are unable to fill. The most imperative demand at present is not the filling of these places, but to find men who will receive proper training, return to the farm, and there engage in putting a stop to the importation of all kinds of dairy and farm products from other States.

Instruction in this course is given in such a manner that the students learn by actual contact and experience. Practical exercises in identifying varieties of farm crops, fruits, judging farm animals, butter-making, propagation of plants, and making and applying spraying mixtures are the means employed in illustrating and fixing in the minds of the students the instruction given in the class-room.

### EQUIPMENT.

A new building devoted entirely to agriculture has been completed. This building furnishes laboratories and class-rooms for all work in agriculture. Equipment is being added constantly and the facilities for instruction will be much better this year than heretofore.

## EXPENSES.

**FOR THE EIGHT WEEKS' COURSE NO TUITION WILL BE CHARGED.** There will be a small medical fee of \$1.50. Board may be had in the mess-hall at \$2.50 per week. Students who expect to room in dormitories should come provided with covers, sheets, pillow-cases, and towels.

Students will be required to wear white suits in the dairy laboratory. These suits can be had at \$1 each.

Books, paper, etc., need not cost over two or three dollars.

**THE TOTAL EXPENSE OF THE COURSE NEED NOT EXCEED \$25** over and above railroad fare.

**FOR THE ONE WEEK'S COURSE THERE WILL BE NO FEES. THE ONLY EXPENSE WILL BE THAT OF BOARD AND LODGING.** See last page.

## ADMISSION.

**NO EXAMINATION IS REQUIRED FOR ENTRANCE TO THE EIGHT WEEKS' COURSE.** Any person over sixteen years of age may enter and enjoy the full privileges of the instruction. Since the greater part of the instruction is given in the form of lectures and laboratory work, the full time of the student is provided for. Some of the evenings will be taken up by lectures on important subjects. Meetings of the students will be held from time to time for their mutual improvement.

The lecture and laboratory work begins on Monday, January 6th, and those who expect to take the course should come on Saturday before, so that they can have their board and room arranged for and be ready for work Monday morning.

## OUTLINE OF COURSES.

The one week's course will be given as the first week of the eight weeks' course. Those who wish to go into the subjects more fully may do so in the seven weeks following. *See last page for details of one week's course.*

### GENERAL AGRICULTURE.

24 periods.

Professor Conner.

**Farm Crops.**—Conditions of germination and growth of plants; seed selection; preparation and cultivation; studies of varieties of corn, cotton, and other crops; judging corn and cotton.

**Soils.**—Study of origin, formation, and distribution of soils, their physical properties as related to tillage and fertility; laboratory practice with different types of soils.

**Farm Equipment.**—Construction of farm buildings; the silo and its use; farm machinery; principles of draft, etc.

**Fertilizers.**—Kinds for different crops; home-mixing; time and method of application; value of stable manure and leguminous crops.

The department is well equipped with various makes of farm machinery for laboratory work. A large room in the Agricultural Building is used for this purpose.



TAKING A SAMPLE OF SOIL.

**AGRICULTURAL BOTANY.***2½ periods.***Professor Stevens.**

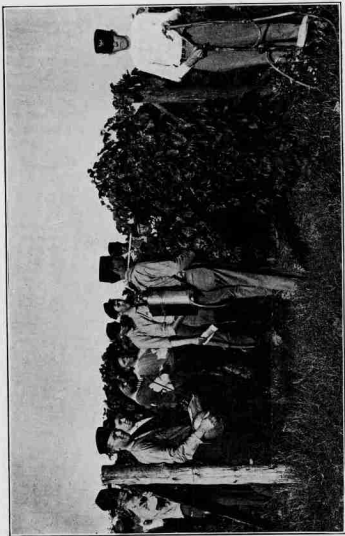
This course consists of lectures and laboratory work. Such subjects as the following will be considered: Cross-breeding of plants; The flower and its structure; Pollen and its use; Improvement of plants by seed selection; The diseases of plants, how to recognize them and how to prevent them; Bacteria in the home and on the farm, their role as disease-producers in man, domestic animals and plants, their function in the dairy, in the making of butter and cheese, in the soil, in rendering plant-food available, and in leguminous roots as nitrogen-gatherers.

**HORTICULTURE.***2½ periods.***Assistant Professor Reimer.**

The course in horticulture includes both lectures and laboratory work. It is made especially applicable to North Carolina conditions. The work includes the following subjects:

**Fruit Culture.**—This course includes a discussion of the fruit section of the State; and a discussion of the possibilities of fruit-

**TOP GRAFTING.**



A CLASS IN PLANT DISEASE.

growing in each section. This is followed by lectures on the culture of the leading fruits. These deal with the kind of soil; preparation of soils for fruits; varieties; origination of new varieties; planting; cultivation; fertilizing; pruning; harvesting, and marketing. Emphasis is laid on the home fruit garden.

**Vegetable Gardening.**—This course discusses the great trucking industry in the State, and the possibilities of the industry. This is followed by lectures on the best methods of growing the leading vegetables.

A few lectures are also given on the improvement of home grounds.

**Laboratory Work.**—This includes practices in plant propagation, as budding, grafting, top-grafting, cutting; pruning of fruit and ornamental trees; fruit-bud studies; planting trees; transplanting, and construction of cold-frames and hot-beds.

#### **FEEDS AND FEEDING AND STOCK-RAISING. *2½ periods.***

**Assistant Professor Curtis.**

Lectures on this study will consist of an elementary study of the digestive systems of the various classes of farm animals indicative of the kinds of foods adapted to their particular digestive apparatus. This will be followed by the food constituents, the kind, amount and proportions best adapted to the various classes of live-stock. The student will be required to make tables of digestibility, calculate nutritive ratios, and arrange feeding rations for the several classes of stock relative to the work which they are to perform.

An outline will also be given on the origin, history, characteristics, feed, care, and management of the most prominent breeds of live-stock.

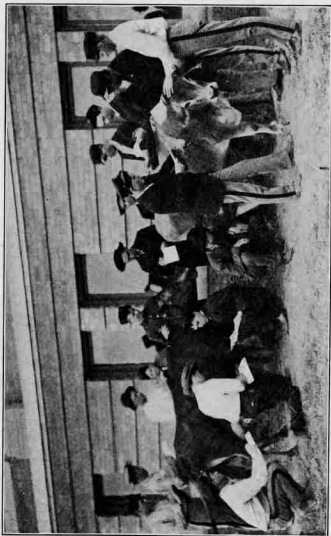
#### **BREEDS OF LIVE-STOCK AND STOCK JUDGING. *2½ periods.***

**Assistant Professor Curtis.**

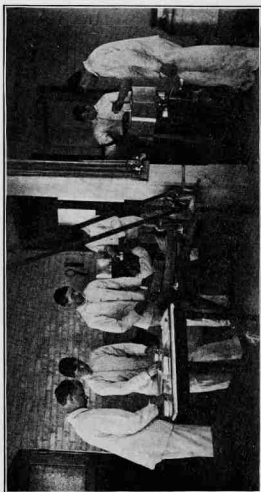
Lectures are given on this subject relating to the origin, history, and characteristics of the different breeds of dairy cattle.

The practical part of the work will be given in the judging room, where the student is required to score the animals, after which a comparative study will be taken up relative to the merits of each animal in the class.





CLASS IN LIVE-STOCK JUDGING.



BUTTER MAKING.

**DAIRY FARMING.**

Associate Professor Michels.

} Lectures, 12 periods.

} Laboratory, 2½ periods.

Lectures are given on the nature, composition, and secretion of milk, its uses and value as a food, the production and care of sanitary milk, management of dairy herd, details in the production of high-grade cream and butter, the marketing of dairy products, and their value when sold as milk, cream, butter, and cheese.

The dairy laboratory course given in connection with the farm dairy lecture course consists of twenty-four periods of two hours each and comprises every detail of dairy work, butter-making, retaining milk, pasteurizing milk and cream, making and using starters, and making tests of all sorts of dairy products, and standardizing milk and cream.

#### DAIRY EQUIPMENT.

The dairy laboratories occupy about four thousand square feet of floor space on the ground floor of the new Agricultural Building, besides the locker rooms, toilet and bath-rooms on same floor, and the dairy lecture-room on first floor, used by the dairy students.

The main dairy laboratory is 36 by 57 feet and is fitted throughout with modern equipment, suited to giving up-to-date instruction in farm dairying, retailing milk, and creamery practice. The equipment for farm dairying consists in the main of Delaval, Sharples, Empire, National, and Simplex hand separators; Swing and Barrel Hand-churns of different sizes, cream vats, hand and power butter-workers, areators and coolers, milk-testers, and other articles useful in doing farm dairy work.

#### DISEASES OF LIVE-STOCK.

*2½ periods.*

**Dr. Roberts.**

The lectures on this subject will deal principally with the care and management of live-stock with the view to the prevention of diseases, but the nature, causes, and treatment of the more common diseases and injuries will also be given attention. One period each week will be devoted to a clinic, and a practical demonstration of the tuberculin test upon the dairy herd will be given during the course.

#### ENTOMOLOGY.

*2½ periods.*

**Mr. Smith.**

This is a short course in which the more important noxious insects are studied, with special reference to methods of preventing their injuries. The various insecticides and methods of spraying are also included in this course.

#### FARM CHEMISTRY.

*2½ periods.*

**Professor Withers.**

Lectures on air, water, and chemistry of plants and animal-feeding will be given.

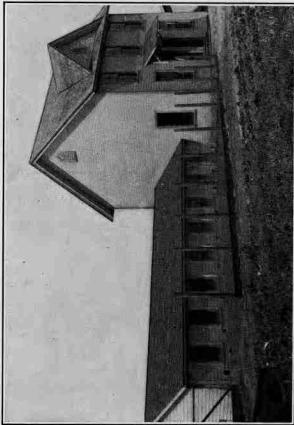
#### POULTRY-RAISING.

**Mr. Jeffrey.**

The subject of Poultry-raising will be considered from the farm standpoint and will include poultry-house construction, the breeds of fowls most suited to the farm and their breeding, feeding and management, egg-production, market poultry, including capons and caponizing, incubation and brooding, both natural and artificial.

Those wanting more poultry work than is provided in the regular course can in the last half of the course have additional work of this kind, taking care of a pen of fowls, running an incubator, raising chickens in a brooder and keeping all the records necessary in our poultry work.

The poultry department is equipped with twenty-five houses, a good incubator cellar with several different makes of incubators, a brooder house and both indoor and outdoor brooders, a feed room with steam engine and grist and bone mills. Good specimens of ten varieties of poultry best suited to farm requirements are kept, so that students can get familiar with the requirements of the different breeds.



INCUBATOR CELLAR AND BROODER HOUSE.

**DAILY SCHEDULE**  
**FOR EIGHT WEEKS' COURSE IN AGRICULTURE.**

HOUR.	SUBJECT.	DAYS OF WEEK.							
		Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.
8-10	Dairy Laboratory .....	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.
10-11	Diseases of Live-stock .....	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.
10-11	Agriculture .....	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.
11-12	Botany .....	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.
11-12	Horticulture .....	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.
12- 1	Farm Chemistry .....	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.
12- 1	Entomology .....	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.
2- 3	Feeds, Feeding and Stock-raising .....	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.
3- 4	Dairy Lectures .....	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.
3- 4	Poultry .....	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	Saturday.	Saturday.

**INDUSTRIAL EDUCATION**

IS OFFERED BY THE

**N. C. COLLEGE OF AGRICULTURE AND MECHANIC ARTS**

AS FOLLOWS:

**I. AGRICULTURE:**

1. Four-Year Course (complete education, practical and theoretical).
2. One-Year Course (mainly practical).
3. Winter Course in Agriculture and Dairying (January 6th to March 3d).
4. A One Week's Course, January 6th to 11th.

**II. ENGINEERING:**

1. Four-Year Courses in
  - (a) Electrical Engineering.
  - (b) Mechanical Engineering.
  - (c) Civil Engineering.
  - (d) Mining Engineering.
2. Two-Year Courses in
  - (a) Mechanic Arts.
  - (b) Contracting and Building.

**III. INDUSTRIAL CHEMISTRY:**

Four-Year Course.

**IV. TEXTILE INDUSTRY:**

1. Four-Year Course (complete education).
2. Two-Year Course (mainly practical).
3. Four-Year Course in Dyeing.
4. Winter Course in Carding and Spinning.
5. Winter Course in Weaving and Designing.
6. Winter Course in Dyeing.
7. Special Course.

**V. NORMAL COURSES (TWO YEARS):**

1. For Rural Teachers.
2. For City Teachers.

**VI. GRADUATE COURSES IN ALL LINES.**

For further information, address

**President GEO. T. WINSTON,  
West Raleigh.**

### ONE WEEK'S COURSE.

This course will be given from **January 6th to January 11th, inclusive.**

There will be **no fees** for this course; the only expense will be that of board and lodging. Those taking the eight weeks' course will be required to pay a small medical fee. By so doing they get free treatment and nursing in case they are sick during their stay at the College.

During this course only three subjects will be treated, namely: **Corn, Cotton, and Stock-raising.**

In studying corn and cotton much time will be given to *seed selection*. *Corn judging* will be a feature of the work with corn. Attention will be given to the best methods of preparing the seed-bed, use of fertilizers and cultivation of the crop.

Lectures on stock-raising and practical work in judging cattle, horses, sheep, and swine will be given.

By attending this course you will get something practical, which you can go home and put into use and thereby increase the profits of your farm.

During the evenings of this week special lectures will be given on other farm subjects.

Write for further information,

**C. M. CONNER,**  
Professor of Agriculture.

West Raleigh, Box 214.