

BULLETIN  
OF  
THE AGRICULTURAL AND MECHANICAL  
COLLEGE OF TEXAS

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Third Series, Vol. 11.

May 1, 1925.

No. 5

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**THE SUMMER SESSION**  
JUNE 8—AUGUST 29, 1925

**The College (Twelve Weeks).**

**The School of Cotton Classing (Six Weeks).**

**The Eight Weeks Course in Automobiles and Tractors.**

**The Short Course for Graduate Veterinarians (One Week).**

**The Short Course for Electric Metermen (One Week).**



**COLLEGE STATION, TEXAS**

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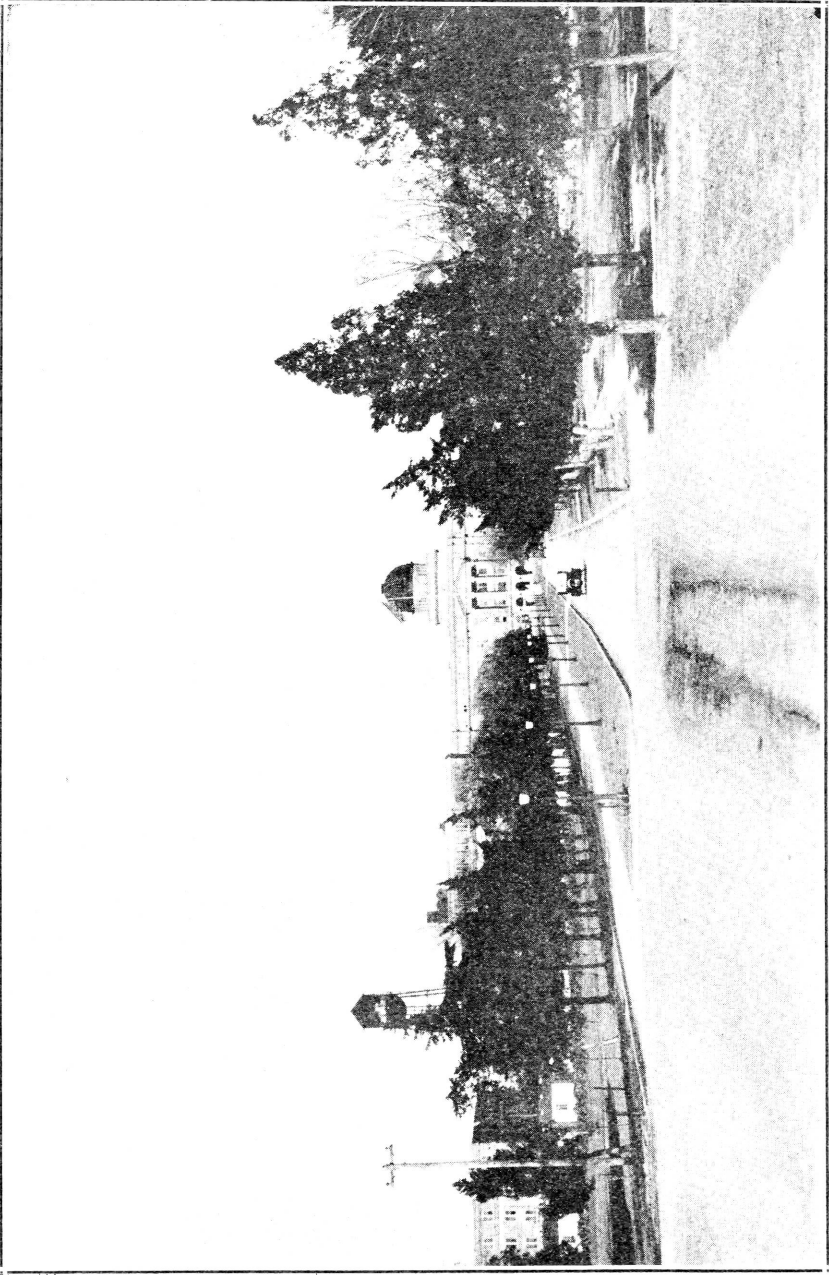
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THE ACADEMIC BUILDING

## GENERAL STATEMENT

The summer session of the Agricultural and Mechanical College of Texas has been established for the following well defined purposes:

1. To provide teachers and others who cannot attend college during the regular session an opportunity to obtain a college education.
2. To give students of the College an opportunity to shorten their college course by doing summer work.
3. To offer those qualified to pursue graduate work an opportunity for study in courses leading to the Master of Science degree.
4. To provide opportunity for professional improvement through short courses of a highly specialized character in the various trades and professions.

The summer session will begin June 8, 1925.

## CALENDAR

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### SUMMER SESSION, 1925.

- June 8, Registration Day for the College Division, the School of Cotton Classing and the Short Course for Electric Metermen.
- June 17, First Course in Automobiles and Tractors and Short Course for Graduate Veterinarians begin.
- June 24, Second Course in Automobiles and Tractors begins.
- July 4, Holiday.
- July 18, First term of the College Division and the School of Cotton Classing closes.
- July 20, Second term of the College Division opens.
- July 27, Second Annual Conference of County Superintendents and Farmers' Short Course begins.
- July 29, Summer Session ends.

# AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS

WILLIAM BENNETT BIZZELL, Ph. D., D. C. L., LL. D.,  
President.

## SUMMER SESSION, 1925.

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FACULTY OF SUMMER SESSION

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*Instructor in Mechanical Engineering*

L. K. LAURSEN  
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CLYDE FOSTER,  
*Instructor in Textile Engineering.*

MRS. S. D. WEBB,  
*Teacher, Rural Demonstration School.*

## GENERAL INFORMATION.

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### Organization.

The work of the 1925 summer session will be given in the following five divisions:

1. The College.
2. The School of Cotton Classing.
3. The Eight Weeks Course in Automobiles and Tractors.
4. The Short Course for Graduate Veterinarians.
5. The Short Course for Electric Metermen.

### Admission Requirements.

In the College Division courses will be offered subject to the same general requirements as in the regular session.

To enter the eight weeks course in automobiles and tractors the student must be sixteen or more years old, and must present a certificate from some reliable person showing that he is in good standing in his community.

There are no fixed requirements for admission to the School of Cotton Classing.

### Discipline.

Every student in the summer session is expected at all times to conform to the ordinary rules of propriety and gentlemanly conduct; to be truthful; to respect the rights of others; to be punctual and regular in attendance upon all required exercises; to apply himself diligently to his studies; and to have due regard for the preservation of College property.

For improper conduct, or failure to keep up with his studies, a student may at any time be required to withdraw from the College.

### Board and Room.

Students of the summer session will take their meals in the main dining hall. This hall is conveniently located with reference to dormitories, lecture rooms, and laboratories.

Room accommodations will be provided for summer session students in new modern fireproof dormitories. These buildings are modern in every respect, including screens for protection against mosquitoes and flies, sewage connection, electric lights and running water. These dormitories will be in direct charge of a summer session official, who will see that study hours are observed and that proper conditions for work are maintained.

The cost of room and board for the six weeks term will be \$48.00. This does not include laundry. Bed linen, pillows and towels will be furnished by the student. All beds are single.

### **Location.**

The Agricultural and Mechanical College of Texas is located at College Station on the Houston and Texas Central Railroad, and on the Fort Worth division of the International and Great Northern Railroad, ninety-two miles north of Houston. Both railroads run through the College grounds. The stations are only a short distance from the Academic building. At College Station there are express, telegraph and money order offices.

### **College Facilities.**

All the educational facilities of the College will be placed at the disposal of the students of the summer session. The College plant consists of thirty-seven brick buildings. Ten of these are used for dormitories and twenty-seven for purposes of instruction. All buildings used for instruction are well equipped with laboratories. The Horticultural gardens, Agronomy plots, and greenhouses, are conveniently located, and form a part of the outside facilities for instruction.

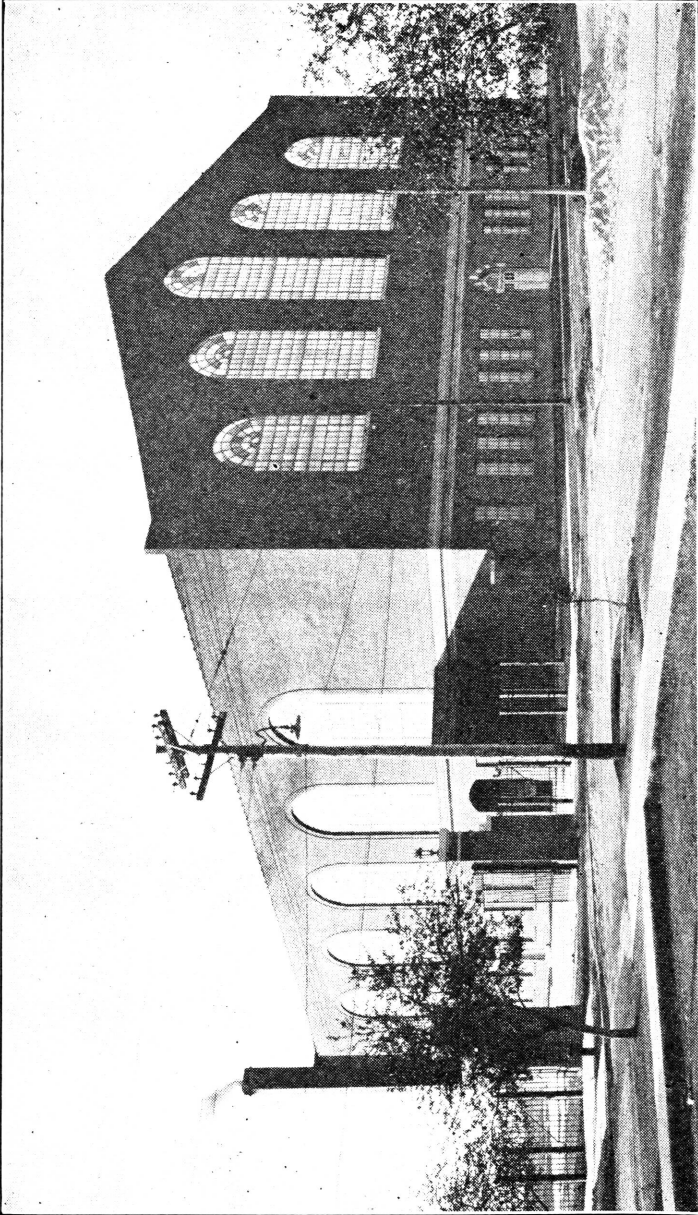
The library of the College consists of a general library and several departmental libraries. The general library is housed in the Academic building and consists of about 20,000 volumes devoted to general literature and reference work. All the leading magazines and a number of daily papers are received at the library. All College departments have well-selected technical libraries for the use of students interested in special subjects. The general library will be open during the summer session on week days from 9 a. m. until 5 p. m.

The College Exchange Store, located on the first floor of the Academic building, will carry a complete line of text-books, reference books, stationery and general supplies needed by summer session students.

The modern, well-equipped College Hospital will be kept open during the entire summer session and the College physician and nurse will be on duty to serve the needs of summer session students.

### **Rural Demonstration School.**

Without doubt the most difficult teaching job is that of conducting a one-teacher school of seven grades. The poorest teachers are usually found in such positions because the better teachers are accepted in larger schools. A one-teacher school of seven grades will be conducted on the College campus so that teachers may observe the organization, daily program, and equipment necessary. The teacher who will conduct this school is a rural school



THE NEW GYMNASIUM

teacher, but has had special training for this particular problem. Students who are preparing to teach, and teachers who want to get a new vision of the possibilities of the one-room school, will do well to attend the summer session.

### Public Lectures.

Lectures on pedagogical, sociological, and agricultural subjects will be given by the members of the teaching staff and by others invited for this purpose.

On each Sunday morning a regular Bible School will be conducted at the College and religious services will be conducted in the College Chapel by visiting ministers.

### Entertainment.

Two motion picture shows will be given each week. An open air theatre has been provided for all picture shows and other evening entertainments. The Y. M. C. A. will be open all summer and a number of social gatherings will be held in the lobby of this building. The large swimming pool in the basement of the Y. M. C. A. building will be available for the use of the summer session students during the entire session. The instructor in athletics will give lessons in swimming to those who desire them. Outdoor sports will be encouraged. The summer session is a member of a small baseball league and games are played with local teams.

### Expenses.

#### For Students in the College Division:

Incidental fee .....	\$10.00
Medical fee .....	2.50
Room and board per term of six weeks.....	48.00

#### For the Eight Weeks' Course in Automobiles and

##### Tractors:

Incidental fee .....	10.00
Medical fee .....	2.50
Room and board for term of eight weeks.....	64.00
Laboratory fee .....	50.00

#### For the School of Cotton Classing:

Laboratory fee .....	25.00
Medical fee .....	2.50
Room and board per term for six weeks.....	48.00

The expenses for the Short Course for Graduate Veterinarians are listed on page 33.

Each student in the summer session, except those in the Short Courses for Graduate Veterinarians and Electric Metermen will be required to deposit a trust fund to cover breakage of laboratory material or damage to College property. The amount

of this deposit is \$10.00 for students taking the eight weeks course in Automobiles and Tractors, and \$5.00 for all other students. The unused portion of this will be refunded by mail as soon after the close of the summer session as the fund can be checked up.

A key deposit of \$1.00 will be required of all students who room in the dormitories. This will be refunded to the student on leaving College, provided he returns his key to the Commandant's office. Students who do not room in the dormitories will not be required to pay the medical fee, nor will they be required to make a key deposit.

A student once entering the summer session for a term and having paid for that term or the balance of it, forfeits all claim to said payment in case of voluntary withdrawal from the College before the expiration of said term, except in case of sickness disqualifying him for the discharge of his duties for the rest of the term. When such sickness takes place at the College, it must be attested by the College Surgeon before the student can receive the balance of his maintenance fund. No refund on maintenance is allowed in cases where the students leave the College for the week-end only.

#### **How to Register.**

1. Report to Registration Desks in Lobby of the Academic Building, and fill out Registration card.
2. Report to the Business Manager, Room 120, first floor Academic building, and pay your fees. The Business Manager will give you a receipt, and a meal ticket.
3. Report to the Commandant, Room 101, first floor Academic building, for assignment to room.
4. Report to the Registrar, Room 212, second floor Academic building.
5. Report to the Director of the Summer Session, Room 210, second floor, for the approval of your program.
6. Report promptly to all classes, as per the official schedules.
7. If further information is needed consult the Registrar, or the Director of the Summer Session.

All official notices concerning the Summer Session will be posted on bulletin boards Nos. 5 and 6, first floor Academic building.

All inquiries relative to the Summer Session should be addressed to the Director of the Summer Session, or the Registrar College Station, Texas.

## THE COLLEGE.

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(June 8 to August 29).

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All courses in this division carry college credit and are open only to those who have had the prerequisite training. The work will be given in two terms of six weeks each. The first term will begin June 8 and will end July 18. The second term will begin July 20 and will end August 29.

The maximum amount of work a student may carry in a six weeks term is the equivalent of eight term hours, except in the case of men who have had approved teaching experience; with the consent of the Director of the Summer Session such men may carry the equivalent of nine term hours. All rules of the regular session apply to the Summer Session in the matters of prerequisites, grades, examinations and class absences. Three cases of tardiness to class will be counted as one absence.

All work in the Summer Sesssion must be taken in accordance with the published schedule.

The last day on which a student may complete his registration for work in the College Division is Wednesday of the first week of each term. All students, except those registering for the first time, who do not complete their registration on the first day of each term will be charged a fee of five dollars for late registration. For sufficient reason, students entering on the second day of each term may be excused from paying the late registration fee.

The right is reserved to withdraw any course for which less than five students register.

### COURSES OF INSTRUCTION BY DEPARTMENTS.

For a description of the courses listed below, see the College catalogue for the regular session. This catalogue may be obtained from the Registrar.

(First Term June 8 to July 18).

#### Agricultural Economics.

201S. Principles of Accounting. (3-10)<sup>1</sup> [3]<sup>2</sup>  
*M., W., F. 9:30; Daily except S., 2:30 to 5:25.*

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<sup>1</sup>The numbers enclosed in parenthesis denote clock hours per week devoted to theory and practice.

<sup>2</sup>The numbers in brackets indicate credit in term hours.

- 202S. Principles of Accounting. (3-10) [3]  
*M., W., F. 7:30; Daily except S., 10:30 to 12:25.*
- 312S. Agricultural Economics. (5-5) [3]  
*Daily except S., 11:30; M. 2:30 to 5:25, W. 2:20 to 4:25.*
- 411S. Agricultural Economics. (5-5) [3]  
*Daily except S., 11:30; M. 2:30 to 5:25, W. 2:30 to 4:25.*
- 421S. Farm Management. (5-10) [4]  
*Daily except S. 8:30 and 3:30 to 5:25.*

#### Agricultural Education.

- 308S. Educational Psychology. Daily 10:30. (6-0) [3]
- 402S. Teaching Vocational Agriculture. (6-0) [3]  
*Daily 8:30.*

#### Agricultural Engineering.

(See announcement of special course in automobiles and tors, pages 27 to 30.

#### Agronomy.

- 105S. The Fundamentals of Crop Production. (6-5) [4]  
*Daily 9:30; M. 2:30 to 5:25; S. 7:30 to 9:25.*
- 301S. Soils (6-5) [4]  
 Prerequisite: Chemistry 101, 102.  
*Daily 7:30; T. 1:30 to 4:25; Th. 1:30 to 3:25.*  
 Laboratory fee, 50 cents.

#### Animal Husbandry.

- 101S. Judging Market Types (Cattle and Sheep) (0-10) [2]  
*Daily except S. 3:30 to 5:25.*
- 102S. Judging Market Types (Horses and Swine). (0-10) [2]  
*Daily except S. 7:30 to 9:25.*
- 202S. The Breeds of Farm Animals. (5-5) [3]  
 Prerequisite: Animal Husbandry 101, 102.  
*Daily except S. 7:30; F. 10:30 to 12:25; S. 9:30 to 12:25.*

#### Biology.

- 101S. General Botany. (5-10) [4]  
*Daily except S. 8:30 and 1:30 to 3:25.*  
 Laboratory fee, 50 cents.



- 207S. General Zoology. (5-10) [4]  
*Daily except S. 11:30 and 1:30 to 3:25.*  
 Laboratory fee, \$1.00.

**Chemistry and Chemical Engineering.**

- 101S. General Inorganic Chemistry. (6-8) [4½]  
*Section 1. Daily 9:30; M., W. 1:30 to 5:25.*  
*Section 2. Daily 11:30; T., Th. 1:30 to 5:25.*  
*Section 3. Daily 8:30; M., T., W., Th. 10:30 to 12:25.*  
 Laboratory fee \$3.50.
- 206S. Organic Chemistry. (6-5) [4]  
 Prerequisite: Chemistry 101, 102.  
*Daily 9:30; F. 2:30 to 5:25; S. 10:30 to 12:25.*  
 Laboratory fee, \$2.50.

**Dairy Husbandry.**

- 101S. Judging Dairy Cattle. (0-5) [1]  
*W. 2:30 to 4:25; F. 2:30 to 5:25.*
- 202S. Dairying. (5-5) [3]  
*Daily except S. 9:30; F. 3:30 to 5:25; S. 7:30 to 10:25.*  
 Laboratory fee, 75 cents.

**Drawing.**

- 101S. Mechanical Drawing. (0-5) [1]  
*M. 1:30 to 3:25; W. 1:30 to 4:25.*
- 103S. Descriptive Geometry. (6-0) [3]  
*Daily 7:30.*
- 104S. Descriptive Geometry. (5-5) [3]  
*Daily except S. 11:30; T. 1:30 to 3:25; Th. 1:30 to 4:25.*
- 108S. Mechanical Drawing. (0-5) [1]  
 Prerequisite: Drawing 101.  
*M. 1:30 to 3:25; W. 1:30 to 4:25.*
- 201S. Mechanical Drawing. (0-5) [1]  
 Prerequisite: Drawing 101.  
*T. 1:30 to 3:25; W. 1:30 to 4:25.*
- 202S. Mechanical Drawing. (0-5) [1]  
 Prerequisite: Drawing 101.  
*M. 1:30 to 3:25; W. 1:30 to 4:25.*
- 222S. Mechanical Drawing. (0-8) [1½]  
*M., T., W., Th. 1:30 to 3:25.*

**Economics.**

- 306S. Principles of Economics. (8-0) [3]  
*Daily 8:30; F., S. 11:30.*
- 316S. Business Law. (6-0) [3]  
*Daily 9:30.*

**Electrical Engineering.**

- 201S. Electricity and Magnetism. (8-10) [6]  
 Prerequisite: Mathematics 102, 103, 104.  
*Daily 8:30; Daily, except S. 1:30 to 3:25.*  
 Laboratory fee, 75 cents.
- 307S. Electrical Machinery. (6-0) [3]  
 Prerequisite: Physics 204, Mathematics 204.  
*Daily 7:30.*

**English.**

- 103S. Rhetoric and Composition. (6-0) [3]  
*Daily 9:30.*
- 203S. English Composition. (5-0) [2]  
 Prerequisite: English 103, 104, or 105, 106.  
*Daily except S, 9:30.*
- 231S. English Literature. (6-0) [3]  
*Daily 11:30.*
- 303S. Argumentation. (5-0) [2]  
 Prerequisite: English 203, 204.  
*Daily except S. 10:30.*

**Entomology.**

- 201S. General Entomology. (5-5) [3]  
*Daily except S. 10:30; F. 1:30 to 3:25; S. 7:30 to 10:25.*  
 Laboratory fee, 75 cents.
- 202S. Economic Entomology. (5-5) [3]  
*Daily except S. 11:30; M. 2:30 to 4:25; W. 2:30 to 3:25.*  
 Laboratory fee, 50 cents.
- 304S. Apiculture (Elementary). (5-5) [3]  
*Daily except S. 8:30; T. 1:30 to 3:25; Th. 1:30 to 4:25.*  
 Laboratory fee, 50 cents.

**Genetics.**

- 301S. Genetics. (6-5) [4]  
 Prerequisite: Biology 101, 207.  
*Daily 7:30; W. 1:30 to 3:25; F. 1:30 to 4:25.*  
 Laboratory fee, 50 cents.

**History.**

- 101S. The Development of Western Europe. (6-0) [3]  
*Daily 8:30.*
- 211S. History of Constitutional Government. (6-0) [3]  
*Daily 10:30.*  
(History 211 or 212 may be offered as substitutes for history 305 or 306).
- 311S. Modern and Contemporary European History. (6-0) [3]  
*Daily 7:30.*

**Horticulture.**

- 201S. Plant Propagation and Orchardng. (5-5) [3]  
Prerequisite: Biology 101, 102.  
*Daily except S. 10:30; M. 1:30 to 3:25; W. 1:30 to 4:25.*  
Laboratory fee, 75 cents.
- 307S. Elementary Landscape Design. (5-5) [3]  
*Daily except S. 9:30; T. 1:30 to 4:25; Th. 1:30 to 3:25.*

**Industrial Education.**

- 302S. Lesson Planning. (5-5) [3]  
*Daily except S. 8:30; W. 1:30 to 4:25; F. 1:30 to 3:25.*
- 303S. Psychology Applied to Industry. (6-0) [3]  
*Daily 10:30.*
- 305S. Organization of Industrial and Related Courses. (5-5) [3]  
*Daily except S. 7:30; T. 1:30 to 4:25; Th. 1:30 to 3:25.*

**Mathematics.**

- 101S. Algebra. (6-0) [3]  
*Daily 7:30.*
- 102S. Algebra. (6-0) [3]  
*Daily 10:30.*
- 103S. Plane Trigonometry. (6-0) [3]  
*Daily 8:30.*
- 104S. Analytics. (6-0) [3]  
Prerequisite: Mathematics 101, 103.  
*Daily 9:30.*
- 203S. Calculus. (6-0) [5]  
Prerequisite: Mathematics 104.  
*Daily 10:30.*

- 204S. Calculus. (6-0) [5]  
 Prerequisite: Mathematics 104.  
*Daily 7:30.*

**Mechanical Engineering.**

- 103S. Woodshop. (0-8) [1½]  
*M., W., F. 1:30 to 4:25.*  
 Laboratory fee, \$1.50.
- 214S. Machine Shop Practice. (0-8) [1½]  
*M., W., F. 1:30 to 4:25.*  
 Laboratory fee, \$1.50.
- 309S. Machine Shop. (0-8) [1½]  
 Prerequisite: Mechanical Engineering 104.  
*M., W., F. 1:30 to 4:25.*  
 Laboratory fee, \$1.50.
- 310S. Machine Shop. (0-8) [1½]  
*T., Th. 1:30 to 5:25.*  
 Laboratory fee, \$1.50.

**Modern Languages.**

- 311S. French. (6-0) [3]  
*Daily 9:30.*
- 315S. Spanish. (6-0) [3]  
*Daily 8:30.*

**Physics.**

- 203S. General. (6-8) [4½]  
 Prerequisite: Mathematics 101, 103.  
*Daily 7:30; M., T., W., Th. 3:30 to 5:25.*  
 Laboratory fee, \$1.00.
- 204S. General. (6-8) [4½]  
 Prerequisite: Mathematics 101, 103.  
*Daily 10:30; M., T., W., Th. 3:30 to 5:25.*  
 Laboratory fee, \$1.00.

**Physical Education.**

- 311S. Athletic Coaching. (6-5) [4]  
 A course in the theory and practice of  
 athletic coaching.  
*Daily 8:30; T. 2:30 to 5:25; Th. 2:30 to 4:25.*

**Poultry Husbandry.**

- 201S. Farm Poultry. (5-5) [3]  
*Daily except S. 8:30; T. 2:30 to 5:25; Th. 3:0 to 5:25.*

- 401S. Poultry Management. (5-5) [3]  
 Prerequisite: Poultry Husbandry 201.  
*Daily except S. 10:30; M. 2:30 to 5:25; W. 3:30 to 5:25.*

#### Rural Education.

- 121S. Elementary School Methods. (6-5) [4]  
*Daily 7:30. Daily except S. 9:30.*
- 221S. Rural School Management. (6-0) [3]  
*Daily 8:30.*
- 321S. Secondary School Methods. (6-5) [4]  
*Daily 8:30. Conference hours to be arranged.*

#### Rural Sociology.

- 312S. General Sociology. (6-0) [3]  
*Daily 11:30.*
- 407S. Rural Sociology. (5-5) [3]  
*Daily except S. 9:30; T. 1:30 to 4:25 Th. 1:30 to 3:25.*

#### Textile Engineering.

- 101S. Cotton Classing. (0-5) [1]  
*Daily except S. 1:30 to 2:25.*

#### Veterinary Anatomy.

- 306S. Animal Diseases. (6-5) [4]  
*Daily 7:30; T. 1:30 to 4:25; Th. 1:30 to 3:25.*

#### Veterinary Medicine and Surgery

- 351S. Non-Infectious Diseases. (6-0) [3]  
*Daily 9:30.*
- 371S. Clinics. (0-18) [3½]  
*Daily except S. 1:30; S. 7:30.*
- 455S. Poultry Diseases. (5-0) [2]  
*Daily except S. 8:30.*

#### Graduate Courses.

For the rules and regulations governing graduate work the student is referred to the Catalogue of the regular session. The following graduate courses will be available during the first term of the 1925 Summer Session:

- Agricultural Economics 501S, Advanced Marketing Problems. (4-10) [4]
- Agricultural Economics 503S, Land Problems and Land Policies. (4-10) [4]

Agricultural Education 501S, 502S, Agricultural Education.	(4-10)	[4]
Agronomy 501S, 502S, Advanced Farm Crops.	(4-10)	[4]
Agronomy 505S, 506S, Advanced Soils.	(4-10)	[4]
Dairy Husbandry 501S, Advanced Dairy Husbandry.	(4-10)	[4]
Entomology 501S, Research Entomology.	(4-10)	[4]
Entomology 507S, Economic Entomology.	(4-10)	[4]
Genetics 501S, 502S, Advanced Plant Genetics.	(4-10)	[4]
Industrial Education 501S, 502S, Industrial Instruction.	(4-10)	[4]
Industrial Education 503S, 504S, Industrial Education Administration.	(4-10)	[4]
Poultry Husbandry 501S, 502S, Research Poultry Husbandry.	(4-10)	[4]
Rural Education 501S, 502S, Problems in Rural Education.	(4-10)	[4]
Rural Sociology, 521S, Community Building.	(4-10)	[4]
Veterinary Physiology 502S, Advanced Practical Physiology.	(4-10)	[4]

(Second Term July 20 to August 29.)

#### **Agricultural Economics.**

305S. Statistical Method.	(5-10)	[4]
<i>Daily except S. 8:30; Daily except S. 3:30 to 5:25.</i>		
401S. Marketing.	(6-0)	[3]
<i>Daily 10:30.</i>		

#### **Agricultural Education.**

202S. Psychology.	(6-0)	[3]
<i>Daily 8:30.</i>		
305S. Principles of Education.	(6-0)	[3]
<i>Daily 10:30.</i>		

#### **Agronomy.**

308S. Forage Crops.	(5-5)	[3]
<i>Daily except S. 7:30; Th. 1:30 to 3:25; S. 9:30 to 12:25.</i>		
Laboratory fee, 50 cents.		

#### **Animal Husbandry.**

303S. Animal Nutrition.	(6-5)	[4]
Prerequisite: Chemistry 206.		
<i>Daily 9:30; T. 1:30 to 4:25; Th. 1:30 to 3:25.</i>		

**Biology.**

- 102S. General Botany. (5-10) [4]  
*Daily except S. 8:30; Daily except S. 1:30 to 3:25.*  
 Laboratory fee, 50 cents.

**Chemistry and Chemical Engineering.**

- 102S. General Inorganic Chemistry. (6-8) [4½]  
*Section 1, Daily 9:30; M., W. 1:30 to 5:25.*  
*Section 2, Daily 11:30; T., Th. 1:30 to 5:25.*  
*Section 3, Daily 8:30; M., T., W., Th. 10:30 to 12:25.*  
 Laboratory fee, \$3.50.
- 309S. Agricultural Chemistry. (6-8) [4½]  
 Prerequisite: Chemistry 206.  
*Daily 9:30; M., T., W., Th. 3:30 to 5:25.*  
 Laboratory fee, \$3.00.

**Civil Engineering.**

- 204S. Analytical Mechanics. (10-0) [4]  
 Prerequisite: Mathematics 203; to be accompanied by Mathematics 204.  
*Daily except S. 8:30 to 10:25.*

**Drawing.**

- 101S. Mechanical Drawing. (0-5) [1]  
*M. 1:30 to 4:25; W. 1:30 to 3:25.*
- 103S. Descriptive Geometry. (6-0) [3]  
*Daily 9:30.*
- 104S. Descriptive Geometry. (5-5) [3]  
*Daily except S. 11:30; T. 1:30 to 4:25; Th. 1:30 to 3:25.*
- 108S. Mechanical Drawing. (0-5) [1]  
 Prerequisite: Drawing 101.  
*M. 1:30 to 4:25; W. 1:30 to 3:25.*
- 201S. Mechanical Drawing. (0-5) [1]  
 Prerequisite: Drawing 101.  
*M. 1:30 to 4:25; W. 1:30 to 3:25.*
- 202S. Mechanical Drawing. (0-5) [1]  
 Prerequisite: Drawing 101.  
*M. 1:30 to 4:25; W. 1:30 to 3:25.*
- 222S. Mechanical Drawing. (0-8) [1½]  
*M., T., W., Th. 1:30 to 3:25.*

**Economics.**

- 203S. Principles of Economics. (6-0) [3]  
*Daily 11:30.*
- 306S. Principles of Economics. (6-0) [3]  
*Daily 8:30.*
- 311S. Money and Banking. (6-0) [3]  
Prerequisite: Economics 204, 305, 306 or 403.  
*Daily 10:30.*

**Electrical Engineering.**

- 202S. Elementary Electrical Engineering. (5-10) [4]  
Prerequisite: Electrical Engineering 201; Mathematics 104.  
*Daily except S. 8:30 and 1:30 to 3:25.*  
Laboratory fee, 75 cents.
- 308S. Electrical Machinery. (5-8) [3½]  
Prerequisite: Physics 204, Mathematics 204.  
*Daily except S. 9:30; M., T., W., Th. 3:30 to 5:25.*  
Laboratory fee, \$1.00.

**English.**

- 104S. Rhetoric and Composition. (6-0) [3]  
*Daily 9:30.*
- 204S. English Composition. (5-0) [2]  
Prerequisite: English 103, 104 or 105, 106.  
*Daily except S. 9:30.*
- 232S. English Literature. (6-0) [3]  
*Daily 11:30.*
- 304S. Argumentation. (5-0) [2]  
Prerequisite: English 203, 204.  
*Daily except S. 10:30.*

**History.**

- 102S. The Development of Western Europe. (6-0) [3]  
*Daily 8:30.*
- 212S. History of Constitutional Government. (6-0) [3]  
(History 211 or 212 may be offered as substitute for History 305 or 306).  
*Daily 10:30.*
- 312S. Modern and Contemporary European History. (6-0) [3]  
*Daily 7:30.*



**Horticulture.**

- 202S. Vegetable Gardening. (5-5) [3]  
*Daily except S. 10:30; M. 2:30 to 4:25; W. 2:30 to 5:25.*  
 Laboratory fee, 75 cents.
- 303S. Principles of Fruit Production. (6-5) [4]  
 Prerequisite: Horticulture 201.  
*Daily 7:30; T. 2:30 to 4:25; Th. 2:30 to 3:25.*  
 Laboratory fee, \$1.00.

**Industrial Education.**

- 202S. Vocational Job Analysis. (6-0) [3]  
*Daily 7:30.*
- 304S. Training and Supervising Workers in  
 Industrial Plants. (6-0) [3]  
*Daily 8:30.*
- 306S. Educational and Vocational Guidance. (6-0) [3]  
*Daily 10:30.*
- 402S. Administration and Supervision of In-  
 dustrial Education. (6-0) [3]  
*Daily 9:30.*

**Mathematics.**

- 102S. Algebra. (6-0) [3]  
*Daily 7:30.*
- 104S. Analysis. (6-0) [3]  
 Prerequisite: Mathematics 101, 103.  
*Daily 10:30.*
- 204S. Calculus. (6-0) [5]  
 Prerequisite: Mathematics 104.  
*Daily 11:30.*

**Modern Languages.**

- 312S. French. (6-0) [3]  
*Daily 9:30.*
- 316S. Spanish. (6-0) [3]  
*Daily 8:30.*

**Poultry Husbandry.**

- 302S. Feeding and Brooding Poultry. (6-5) [4]  
*Daily 10:30; M. 1:30 to 3:25; W. 1:30 to 4:25.*
- 403S. Judging Poultry. (5-5) [3]  
*Daily except S. 8:30; T. 1:30 to 3:25; Th. 1:30 to 4:25.*

**Rural Education.**

- 122S. Elementary School Methods. (6-5) [4]  
*Daily 7:30; Daily except S. 9:30.*
- 222S. Rural School Management. (6-0) [3]  
*Daily 8:30.*
- 322S. Secondary School Administration. (6-5) [4]  
*Daily 8:30.- Conference hours to be arranged.*

**Rural Sociology.**

- 202S. Social Evolution. (6-0) [3]  
*Daily 7:30.*
- 410S. Leadership and Community Planning. (2-12) [3]  
 Prerequisite: Rural Sociology 407 must precede or accompany this course.  
*M., W. 10:30; M., T., W., Th. 1:30 to 4:25.*

**Veterinary Medicine and Surgery.**

- 372S. Clinics. (0-32) [6]  
*M., T., W., Th. 7:30; Daily except S. 1:30 to 5:25.*

**Graduate Courses.**

The following graduate courses will be available during the second term of the Summer Session:

- Agricultural Education 501S, 502S, Agricultural Education. (4-10) [4]
- Genetics 501S, 502S, Advanced Plant Genetics (4-10) [4]
- Industrial Education 501S, 502S, Industrial Instruction. (4-10) [4]
- Poultry Husbandry 501S, 502S, Research Poultry Husbandry. (4-10) [4]
- Rural Education 501S, 502S, Problems in Rural Education. (4-10) [4]
- Rural Sociology 505S, Social Legislation. (4-10) [4]

## EIGHT WEEK'S COURSE IN AUTOMOBILES AND TRACTORS.

(June 17 to August 11 and June 24 to August 18.)

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### GENERAL STATEMENT.

The Eight Weeks' Automobile and Tractor Course offered by the Agricultural Engineering Department of the Agricultural and Mechanical College of Texas has been established for the following well-defined purposes:

1. To provide the power farmer an opportunity to increase his knowledge of the gas engine, tractor and automobile by systematic study, thus enabling him to obtain maximum efficiency at minimum expense.

2. To give the boy or man wishing to enter the automotive industry as a manager, salesman, demonstrator or mechanic, a short course in the fundamental mechanics of that industry.

3. To afford the general public interested in automotive mechanics an opportunity to get a short course in this subject.

From all sources the demand is the same—a better understanding of the fundamentals of gas engine construction and operation. The college, in putting on this course, has tried to give these fundamentals in as near a non-technical way as possible, so the work can be readily understood by those taking the course who are not well trained in the underlying sciences.

The work is carried on in the class room as well as the shop. Our long experience in giving courses of this nature has demonstrated the value of giving some class room work as well as shop work. So the students spend from one to two hours per day in the class room hearing lectures or reciting on the work studied the night before. Five to six hours per day are spent in actual shop work where the student gets the opportunity to practice what he has been taught in class. The emphasis is laid on the practical side of the work but the "how and why" things should be done thus and so, are fully explained and demonstrated.

### Outline of Course.

The Automobile and Tractor Course is divided into eight parts of one week each and so arranged that each succeeding week carries the student further along in the study of auto-mechanics. The work of each week has been very carefully outlined and such work that is not essential has been eliminated, leaving only material of vital importance in the course. Following is given a brief outline of what is given in each week's work.

### **Metal Working Department.**

In the metal working department the making of various parts of automobiles and tractors out of iron, steel, brass, aluminum, etc., is taken up as well as the repairing of these same pieces. The making of such special tools as a mechanic may need is also considered and the student gets first-hand information by making cold chisels, punches, offset screw drivers, etc. The tempering of these tools is an important factor and the student is required to see that the tools he makes are properly tempered.

Soldering of various metals is done by the student in his laboratory work. Welding not only with the open fire is given but also with oxygen-acetylene torch.

### **Chassis Department.**

The work in the chassis department consists in getting familiar with the different parts of the chassis of automobiles and tractors, such as the wheels, springs, differential, frame, transmission, clutch, etc. The student studies the various types of these different parts and gets not only familiar with what they look like but also their repair and adjustment.

### **Gas Engine Department.**

The work in the gas engine department is for the purpose of getting the student familiar with the single cylinder gas engine such as is found on the farm. No course in auto-mechanics would be complete without having had work in this vital department. While the theory underlying the operation of these engines is the same as any other gas engine, it is essential that the student become familiar with the practical application of these theories. The work of this department takes up in detail the various methods of cooling, governing, igniting and mixing the gas as found on farm gas engines.

### **Motor Department.**

In the motor department the student is taught the construction, care, and operation of multiple cylinder engines. He not only is taught how to properly operate the multiple cylinder, but also to properly overhaul four, six, and eight cylinder engines under expert supervision. In overhauling these motors the student becomes familiar with the different parts of the motor and how they are put together, and in addition learns how to properly grind a valve; pour, scrape and fit a bearing; fit a piston with piston rings; and time valves.

### **Electrical Department.**

In the electrical department the student studies ignition, which is the principle of electricity as applied to the ignition of

the internal combustion engine. He spends two weeks in this department, the first week of which is taken up with a study of elementary electricity and its application of coils, magnetos, distributors, spark plugs; all of which are found on ignition systems autos and trucks. Special attention is given to the magneto; its operation, care, and repair. During the second week in this department the student takes up work along the same line as that given in the previous week with special emphasis being placed on the details of ignition timing. Starting and lighting systems connected to the ignition system of various standard makes are arranged on special stands which allow the student to see just the electrical part of the car.

### Tractor Department.

The work of the tractor department takes up the difference in design, methods of operation and construction, together with the care and repair of the various makes and sizes of tractors on the market today. The student gets an opportunity to operate the various tractors found in the laboratory.

### Trouble Shooting Department.

The work in the trouble shooting department gives the student an opportunity to use all the information and skill that he has gained in the previous weeks by solving motor troubles. Here the instructor puts the motor in trouble by causing to occur some irregularity which is liable to happen under ordinary conditions. It is the student's problem to discover the cause of the trouble and to remedy it. He thus becomes familiar with the troubles to be found in motors.

#### *When Courses Start.*

Courses start June 17 and 24.

#### *Who May Enter Course.*

In order to enter this course the student must be sixteen or more years old, and must present a certificate from some reliable person showing that he is in good standing in his community.

#### Cost of Course.

<i>Incidental Fee</i> .....	\$ 10.00
For sundry expenses, such as printed forms, examination books, etc.	
<i>Medical Fee</i> .....	2.50
For the services of the College Surgeon and Hospital Staff who are at the service of the student.	
<i>Maintenance Fee</i> .....	64.00
For board, fuel, laundry, light, room rent, beadstead, mattress, table and chair.	

<i>Laboratory and Instruction Fee</i> .....	50.00
For cost of instruction.	
Total.....	<u>\$126.50</u>
<i>Trust Fund</i> .....	\$ 10.00

This trust fund is required of each student as a deposit for his books and tools. It is refunded to him after the completion of the course if the books and tools are returned.

### CERTIFICATE.

If the student's work is satisfactory, he is given a certificate showing that this is the case. These certificates are granted only to those who pass and complete the course.

## THE SCHOOL OF COTTON CLASSING.

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(June 8 to July 18.)

The object of the School of Cotton Classing is to prepare young men for cotton buying and the managing of cotton warehouses, and to offer to farmers the opportunity of increasing their knowledge of the leading farm product of Texas.

A study is made of the elements which determine the commercial grades of cotton; the influence which affects the price of cotton; the system of financing the crop from the field to factory, and the relation of exchanges to the business in general. Each class is furnished with new samples for practice and the work is patterned after that of a cotton office. The samples used in the Summer School are obtained from the cotton states west of the Mississippi River and an effort is made to familiarize the student with the different characteristics of cotton grown in the southwest.

Special attention will be paid to the staple of cotton, and experts in this branch will give instruction in this subject. Many samples of various lengths of staple will be provided for students taking up this line of work.

The government standards for classing cotton, which have been adopted by all the exchanges, will be used.

The announcement giving complete details relative to the work of this division will be ready for distribution April 1, 1925, and can be secured by addressing Professor J. B. Bagley, College Station, Texas.

## COUNTY SUPERINTENDENT'S CONFERENCE.

(July 27 to 31.)

This conference is a week of intensive training for the county superintendent who is actually on the job. The sessions are in the form of round table, informal discussions of problems of supervision and administration. Every county superintendent in the State is invited to attend and take part in the discussions. Others who are interested in the problems of rural education are invited. The conference is sponsored by the Department of Rural Education.



A Group of Leaders in Rural Education at the 1924 County Superintendents' Conference



## SHORT COURSE FOR GRADUATE VETERINARIANS.

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(June 17 to 20.)

This course is planned to provide opportunities for veterinarians to become more familiar with problems which their particular line of work or kind of practice up to this time, has not presented.

Some of the newer and more dependable methods of diagnosis will be considered.

### Character of Work.

Lectures, practice periods, laboratory work and clinics will be offered in poultry diseases, practical microscopy, diseases of small animals, diseases of the reproductive organs, animal breeding feeds and feeding, medicine and surgery.

### Entertainment.

The evenings will be used for round table discussions, moving pictures of an educational and entertaining nature, and lectures. Ample facilities for bathing, playing tennis, and golf are available.

### Expenses.

The only charges for this course are for board and room. Meals will be provided for \$1.25 a day and a charge of fifty cents a day will be made for lodging.

The State Veterinary Medical Association of Texas will hold its fifteenth annual meeting at College Station, June 16 and 17.

## SHORT COURSES FOR PUBLIC UTILITY MEN.

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(June 8 to 13.)

The object of this group of courses is to give intensive instruction for those engaged in certain departments of public utility organizations. The courses are intended to supplement the practical experience of men already working with utilities but who feel the need of a better understanding of the principles underlying their work in order that they may become more efficient.

On account of the brief time available, it is expected that the student will have had some practical experience before he enters upon the course. Instruction is given in the form of lectures, demonstrations and individual laboratory work.

Four courses are offered:

1. Elementary Electric Meters.
2. Advanced Electric Meters.
3. Electric Distribution.
4. Gas Meters.

A more detailed announcement will be issued about April 1st, and may be obtained by addressing Dean F. C. Bolton, College Station, Texas.