

BULLETIN  
OF THE  
AGRICULTURAL and MECHANICAL COLLEGE OF TEXAS

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Third Series. Vol. 15                      March 1, 1929                      No. 2

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## THE SUMMER SESSION

JUNE 10—AUGUST 31, 1929

FIRST TERM—June 10—July 20

SECOND TERM—July 22—August 31

Open to Men and Women



COLLEGE STATION, TEXAS

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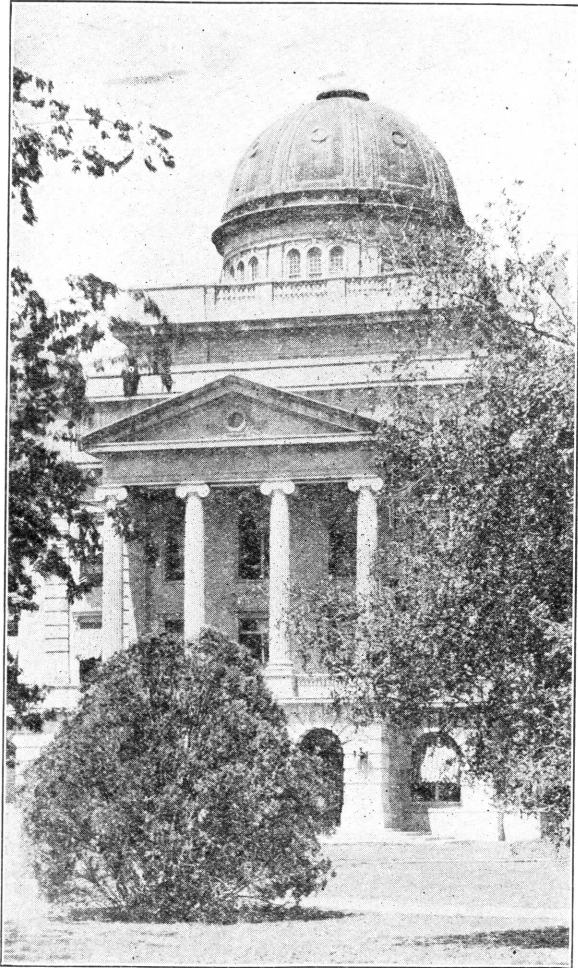
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Published monthly by the Agricultural and Mechanical College of Texas

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College Station, Texas, under the Act of August 24, 1912



ACADEMIC BUILDING

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## Calendar—1929

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### FIRST TERM

- June 10 —Monday, Registration in the following divisions:  
The College  
Summer School of Cotton  
Course for Public Utility Men  
Course for Cotton Oil Mill Operators
- June 10–29—Three-weeks' Course for Vocational Agriculture Teachers.
- June 11 —Tuesday, 7:30 a. m., Class work begins.
- June 12 —Wednesday, last day for registration in the College during the first term.
- June 14 —Friday, 8:00 p. m., Student and Faculty Reception.
- June 10–15—Short Course for Graduate Veterinarians.
- July 4 —Thursday, Independence Day—Holiday.
- July 20 —Term Examinations; Registration for Second Term.
- July 20 —Saturday, Close of First Term.

### SECOND TERM

- July 22 —Monday, Registration of new students.
- July 23 —Tuesday, 7:30 a. m., Class work begins.
- July 24 —Wednesday, last day for registration in the College during the second term.
- July 29–August 3—Farmers' Short Course.
- July 29–August 2—Fifth Annual Conference of County Superintendents.
- August 31—Term Examinations; Close of Summer Session.

## General Statement

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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 an opportunity for professional improvement through short courses of a highly specialized character in the various trades and professions.

The summer session will begin June 10, 1929.

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AGRICULTURAL and MECHANICAL COLLEGE OF TEXAS

T. O. WALTON, LL.D., *President*

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Summer Session, 1929

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**EXECUTIVE COMMITTEE OF THE SUMMER SESSION**

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CHARLES E. FRILEY, B.S., M.A., *Dean of the School of Arts and Sciences, Registrar.*

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 CHARLES PURYEAR, M.A., LL.D., *Dean of the College*  
 C. H. WINKLER, Ph.D., *Director*

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 ADRIANCE, G. W., M.S., *Professor of Horticulture.*  
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 FERN, G. H., *Assistant Professor of Industrial Education.*  
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 HUMBERT, E. P., Ph.D., *Professor of Genetics*  
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 JONES, D. C., B.A., *Professor of Mathematics.*

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KNOX, J. H., M.S., *Assistant Professor of Animal Husbandry.*  
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NEBLETTE, C. B., *Technical Assistant in Charge of Photographic Laboratory, Lecturer in Photography.*  
POWERS, J. G., *Assistant Professor of Textile Engineering.*  
PURYEAR, CHARLES, C.E., LL.D., *Dean of the College, Dean of the Graduate School, Professor of Mathematics.*  
REID, D. H., M.S., *Professor of Poultry Husbandry.*  
RICHEY, J. J., C.E., *Professor of Civil Engineering.*  
RUSSELL, DANIEL, A.B., *Professor of Rural Sociology.*  
SANDERS, I. C., M.A., *Associate Professor of Physics.*  
SHEPARDSON, C. N., M.S., *Professor of Dairy Husbandry.*  
SHERRILL, W. R., B.S., *Instructor in Agricultural Education.*  
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SMITH, H. P., M.S., *Associate Professor of Agricultural Engineering.*  
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SPAHR, E. K., M.A., *Assistant Professor of English.*  
STEWART, R. T., M.S., *Associate Professor of Agronomy.*  
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THURMOND, M. F., B.S., *Assistant Professor of Agricultural Engineering.*  
VAUGHAN, H. E., *Instructor, Summer School of Cotton.*  
WARD, R. P., B.S., *Instructor in Electrical Engineering.*  
WEINKE, O. A., B.A., *Associate Professor of Accounting and Statistics*  
WELCH, C. H., *Instructor, Summer School of Cotton.*  
WILCOX, G. B., M.S., *Professor of Rural Education.*  
WILLIAMS, D. W., M.S., *Professor of Animal Husbandry.*  
WILLIAMS, E. L., B.S., *Professor of Industrial Education.*  
WINKLER, C. H., Ph.D., *Dean of the School of Vocational Teaching, Director of the Summer Session.*

## General Information

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### ORGANIZATION

The work of the 1929 summer session will be given in the following five divisions:

1. The College, including the Graduate School and the three-weeks' Course for Vocational Teachers.
2. The Summer School of Cotton.
3. The Short Course for Graduate Veterinarians.
4. The Short Course for Public Utility Men.
5. The Short Courses for Cotton Oil Mill Operators.

### ADMISSION

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

There are no specific academic requirements for admission to the various Short Courses and the Summer School of Cotton.

**All undergraduate courses in the Summer School are open to Men and Women.**

### BOARD AND ROOM AT COLLEGE

Room accommodations will be provided for summer session students in the College dormitories. These buildings are modern fire proof structures provided with electric lights and water in all rooms. All students, except graduates, living in the dormitories take their meals in Sbisa Hall, the large College Mess Hall. Students living in private boarding houses may obtain meals at Sbisa Hall by securing a regular meal coupon book.

The cost of room and board per term of six weeks is \$48.00. This does not include laundry. Students should bring bed linen, (for single beds), pillows, and towels.

### BOARD AND LODGING IN BRYAN

The city of Bryan, in close proximity to the College Campus, affords splendid facilities for students desiring room and board. Teachers, graduate students, and others who desire to bring their families, can secure a furnished house or rooms for light housekeeping, at reasonable rates during the summer months.



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#### LOCATION

The Agricultural and Mechanical College of Texas is located at College Station on the Southern Pacific Railroad and on the Ft. Worth Division of the Missouri Pacific Railroad, ninety-four 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.

#### EQUIPMENT

The entire educational facilities of the College are available for students of the summer session. All buildings are well lighted and equipped with modern shops and laboratories. The college farms and greenhouses are conveniently located and form an important part of the instructional facilities for students in agriculture.

The general library will be open during the summer session on week days from 8 a. m. to 5 p. m.

The Exchange Store on the campus carries a complete line of text books, reference books, stationery and general supplies needed by students.

#### DEMONSTRATION SCHOOL

A Summer High School is maintained on the Campus and is available for observation and practice teaching to all teachers taking work in High School Methods. The High School courses are open to any one desiring to obtain college entrance requirements. A fee of fifteen dollars (\$15.00), will be charged for each unit or subject.

#### PUBLIC LECTURES

Lectures on educational, sociological, and agricultural subjects will be given by the members of the teaching staff and by other educators of state and national reputation.

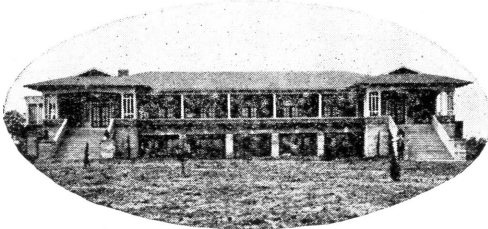
On each Sunday morning a regular Bible school will be conducted at the College and religious services will be held in the College Chapel by visiting ministers.

#### ENTERTAINMENT

Two motion picture shows will be given each week. 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" 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.

THE BRYAN COUNTRY CLUB



THE BRYAN COUNTRY CLUB

The Bryan Country Club has one of the finest, fully equipped playgrounds in Central Texas. Located midway between College and Bryan, it affords opportunity for all outdoor sports, including golf, boating and swimming. A special rate of \$11.00 is granted to summer students of the College. Cards are issued on request by Travis B. Bryan, Treasurer of the First National Bank, Bryan, Texas.

EXPENSES

For students in the College and in the Summer School of Cotton:

Matriculation fee, per term.....	\$ 5.00
Medical Service (optional), payable once only....	2.50
Room and Board per term of six weeks.....	48.00

In addition to these general expenses certain courses require a laboratory fee. Such fees are indicated in the list of courses.

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.

Refund of maintenance will be made only in case the student is required to withdraw by Faculty action or 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 Physician before the student can receive the refund of the unused portion of his maintenance fee.

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**HOW TO REGISTER**

1. Report to Registration Desks in Lobby of the Academic Building, and fill out Registration card.
2. Report to the Cashier, Room 114, first floor Academic Building, and pay your fees. The Cashier 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 209, 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.

**GRADUATE STUDENTS**

Graduate students will report to the Dean of the Graduate School, Room 202, to obtain Registration Cards.

## The College

(JUNE 10 to AUGUST 31)

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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 10 and will end July 20. The second term will begin July 22 and will end August 31.

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.

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 who do not complete their registration on the first day of each term will be charged a fee of two 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

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For a description of the courses listed below, see the College catalogue for the regular session. This catalogue may be obtained from the Registrar. Figures in parentheses indicate recitation hours per week. Figures in brackets indicate value of course in term hours.

#### FIRST TERM

(June 10 to July 20)

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#### ACCOUNTING AND STATISTICS

- 201S. Principles of Accounting. (4-8) [4]  
M., T., Th., F., 10:30 and 3:30-5:25.  
Laboratory fee, 50 cents.

- 202S. Principles of Accounting. (4-8) [4]  
 M., T., Th., F., 9:30 and 2:30-4:25.  
 Laboratory fee, 50 cents.

## AGRICULTURAL EDUCATION

- 401S. Teaching Vocational Agriculture. (6-0) [3]  
 Daily 8:30.
- 402S. Teaching Vocational Agriculture. (6-0) [3]  
 Daily 10:30.
- 501S, 502S. Advanced Methods in Agricultural  
 Education. (6-4) [4]  
 Sec. 1. Daily 7:30.  
 Sec. 2. Daily 9:30.  
 Conference hours to be arranged.
- 505S, 506S. Administration and Supervision of  
 Vocational Agriculture. (6-4) [4]  
 Sec. 1. Daily 8:30.  
 Sec. 2. Daily 10:30.  
 Conference hours to be arranged.

## AGRICULTURAL ENGINEERING

- 321S. Farm Shop. (2-8) [3]  
 M. W., 9:30; M., T., Th., F., 2:30-4:25.  
 Laboratory fee, \$1.50.
- 421S. Advanced Farm Shop. (4-8) [4]  
 M., T., Th., F., 10:30 and 2:30-4:25.  
 Laboratory fee, \$1.50.
- 424S. Terracing. (0-8) [2]  
 Sec. 1. M., W., 1:30-5:25.  
 Sec. 2. T., Th., 1:30-5:25.  
 Laboratory fee, 50 cents.

## AGRONOMY

- 105S. Fundamentals of Crop Production. (6-4) [4]  
 Daily 9:30; W., 2:30-4:25; S., 7:30-9:25.
- 301S. Soils. (6-4) [4]  
 Prerequisite: Chemistry 101, 102.  
 Daily 7:30; T., Th., 2:30-4:25.  
 Laboratory fee, 50 cents.
- 501S. Advanced Farm Crops. (4-8) [4]  
 M., T., Th., F., 8:30.  
 Conference hours to be arranged.
- 505S. Advanced Soils. (4-8) [4]  
 M., T., Th., F., 9:30.  
 Conference hours to be arranged.

- 507S. Advanced Cotton Production. (4-8) [4]  
 M., T., Th., F., 11:30.  
 Conference hours to be arranged.

## ANIMAL HUSBANDRY

- 107S. General Animal Husbandry. (4-8) [4]  
 M., T., Th., F., 7:30; M., W., 1:30-5:25.
- 416S. Live Stock Management. (6-4) [4]  
 Prerequisite: Animal Husbandry 303 or 409.  
 Daily 9:30; T., Th., 1:30-3:25.
- 501S, 502S. Advanced Animal Nutrition. (4-8) [4]  
 M., T., Th., F., 9:30.  
 Conference hours to be arranged.
- 505S. Advanced Live Stock Production. (6-4) [4]  
 Daily 7:30.  
 Conference hours to be arranged.

## BIOLOGY

- 101S. General Botany. (4-8) [4]  
 M., T., Th., F., 8:30 and 2:30-4:25.  
 Laboratory fee, 50 cents.  
 (Botany and Zoology are offered in alternate summers)
- 207S. General Zoology. (4-8) [4]  
 M., T., Th., F., 9:30 and 3:30-5:25.  
 Laboratory fee, \$1.00.

## CHEMISTRY AND CHEMICAL ENGINEERING

- 101S. General Inorganic Chemistry. (6-6) [4½]  
 Sec. 1. Daily 9:30; M., W., 1:30-4:25.  
 Sec. 2. Daily 11:30; T., Th., 1:30-4:25.  
 Laboratory fee, \$2.00.
- 102S. General Inorganic Chemistry. (Tentative) (6-6) [4½]  
 Daily 9:30; M., W., 1:30-4:25.  
 Laboratory fee, \$2.00.
- 103S. Inorganic Chemistry. (6-8) [5]  
 Daily 9:30; M., W., 1:30-5:25.  
 Laboratory fee, \$2.00.
- 206S. Organic Chemistry. (6-4) [4]  
 Prerequisite: Chemistry 101, 102.  
 Daily 11:30; W., F., 2:30-4:25.  
 Laboratory fee, \$2.50.

## CIVIL ENGINEERING

- 300S. Field Practice.  
 Prerequisite: Civil Engineering 201.  
 Daily except S., 8:30 to 5:25.  
 Laboratory fee, \$1.50.

## DAIRY HUSBANDRY

- 202S. Dairying. (4-4) [3]  
 M., T., Th., F., 7:30; W., F., 1:30-3:25.  
 Laboratory fee, 75 cents.
- 501S. Advanced Dairy Production. (4-8) [4]  
 M., T., Th., F., 10:30.  
 Conference hours to be arranged.
- 503S. Advanced Dairy Manufactures. (4-8) [4]  
 M., T., Th., F., 9:30.  
 Conference hours to be arranged.

## DRAWING

- 101S. Mechanical Drawing. (0-4) [1]  
 M., W., 1:30-4:25.
- 103S. Descriptive Geometry. (6-0) [3]  
 Daily 9:30.
- 104S. Descriptive Geometry. (4-4) [3]  
 Prerequisite: Drawing 103.  
 M., T., Th., F., 11:30; W., F., 2:30-4:25.
- 108S. Mechanical Drawing. (0-4) [1]  
 Prerequisite: Drawing 101.  
 W., F., 2:30-4:25.
- 201S. Mechanical Drawing. (0-4) [1]  
 Prerequisite: Drawing 108.  
 T., Th., 2:30-4:25.
- 202S. Mechanical Drawing. (0-4) [1]  
 Prerequisite: Drawing 201.  
 W., F., 2:30-4:25.

## ECONOMICS

- 203S. Principles of Economics. (6-0) [3]  
 Daily 8:30.
- 501S. History of Economic Doctrines. (6-4) [4]  
 Daily 11:30.  
 Conference hours to be arranged.

## ELECTRICAL ENGINEERING

- 202S. Elementary Electrical Engineering. (4-8) [4]  
 Prerequisite: Electrical Engineering 201, Mathematics 104.  
 M., T., Th., F., 8:30 and 2:30-4:25.  
 Laboratory fee, 75 cents.
- 204S. Electric Wiring and Repair. (0-12) [3]  
 Prerequisite: Electrical Engineering 201 or Physics.  
 M., T., Th., F., 1:30-4:25.  
 Laboratory fee, \$1.50.

- 301S. Direct Currents. (8-12) [7]  
 Prerequisite: Electrical Engineering 202, Mathematics 204.  
 Hours to be arranged.  
 Laboratory fee, \$1.50.
- 507S. Advanced Alternating Current Machinery. (4-8) [4]  
 M., T., Th., F., 8:30.  
 Conference hours to be arranged.

## ENGLISH

- 103S. Rhetoric and Composition. (6-0) [3]  
 Daily 9:30.
- 203S. Composition and Literature. (4-0) [2]  
 Prerequisite: English 103, 104 or 105, 106.  
 Sec. 1. M., T., Th., F., 9:30.  
 Sec. 2. M., T., Th., F., 8:30.
- 231S. English Literature. (6-0) [3]  
 Prerequisite: English 103, 104 or 105, 106.  
 Daily 11:30.
- 303S. Argumentation. (4-0) [2]  
 Prerequisite: English 203, 204.  
 M., T., Th., F., 10:30.
- 413S. Contemporary Literature. (4-0) [2]  
 Prerequisite: English 231, 232, or 203, 204.  
 M., T., Th., F., 11:30.

## ENTOMOLOGY

- 502S. Systematic Entomology. (4-8) [4]  
 M., T., Th., F., 9:30.  
 Laboratory fee, \$2.00.  
 Conference hours to be arranged.
- 507S, 508S. Economic Entomology. (4-8) [4]  
 M., T., Th., F., 11:30.  
 Laboratory fee, \$2.00.  
 Conference hours to be arranged.

## GENETICS

- 301S. Genetics. (6-4) [4]  
 Prerequisite: Biology 101, 102, 207.  
 Daily 7:30; M., W., 2:30-4:25.  
 Laboratory fee, \$1.00.
- 501S. Advanced Plant Genetics. (4-8) [4]  
 M., T., Th., F., 8:30.  
 Conference hours to be arranged.



- 503S. Advanced Animal Genetics. (4-8) [4]  
 M., T., Th., F., 10:30.  
 Conference hours to be arranged.
- 505S. Advanced Biometry. (4-8) [4]  
 M., T., Th., F., 11:30.  
 Conference hours to be arranged.

HISTORY

- 101S. The Development of Western Europe. (6-0) [3]  
 Daily 10:30.
- 215S. History of the United States. (6-0) [3]  
 Daily 9:30.
- 305S. Citizenship. (6-0) [3]  
 Daily 7:30.

HORTICULTURE

- 201S. Plant Propagation and Orchardng. (4-4) [3]  
 Prerequisite: Biology 101, 102.  
 M., T., Th., F., 7:30; T., Th., 1:30-3:25.  
 Laboratory fee, 75 cents.
- 501S. Advanced Fruit Growing. (4-8) [4]  
 Prerequisite: Horticulture 317, 318, or equivalent work.  
 Hours to be arranged.
- 507S. Horticultural Problems. (2-12) [4]  
 Hours to be arranged.

INDUSTRIAL EDUCATION

- 102S. Theory and Principles of Vocational  
 Education. (5-0) [2]  
 Daily, except S., 8:30.
- 202S. Job Analysis. (5-0) [2]  
 Daily, except S., 9:30.
- 203S. Trade Analysis. (5-0) [2]  
 Prerequisite: At least two years of trade experience.  
 Daily, except S., 8:30.
- 301S. Methods of Teaching and Class  
 Management. (5-0) [2]  
 Daily, except S., 11:30.
- 308S. A Study of Modern Industries. (6-0) [3]  
 Daily 10:30.
- 310S. Course Making. (5-0) [2]  
 Daily, except S., 10:30.
- 312S. Psychology Applied to Industry. (6-0) [3]  
 Daily 10:30.

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- 320S. Aims and Objectives of Part-Time Schools. (5-0) [2]  
Daily, except S., 9:30.
- 406S. Vocational Guidance. (5-0) [2]  
Daily, except S., 8:30.
- 505S. Philosophy of Industrial Education. (6-2) [4]  
Daily 11:30.  
Conference hours to be arranged.
- 507S. Organization and Management in Industrial Education. (6-2) [4]  
Daily 9:30.  
Conference hours to be arranged.

**MARKETING AND FINANCE**

- 302S. Marketing. (6-0) [3]  
Prerequisite: Economics 203 and 204, or Economics 403.  
Daily 10:30.
- 401S. Cooperative Marketing of Farm Products. (6-0) [3]  
Prerequisite: Marketing and Finance 302.  
Daily 8:30.

**MATHEMATICS**

- 101S. Algebra. (6-0) [3]  
Sec. 1. Daily 7:30.  
Sec. 2. Daily 9:30.
- 102S. Algebra. (6-0) [3]  
Daily 9:30.
- 103S. Plane Trigonometry. (6-0) [3]  
Sec. 1. Daily 8:30.  
Sec. 2. Daily 10:30.
- 104S. Analytics. (6-0) [3]  
Prerequisite: Mathematics 101, 103.  
Daily 10:30.
- 203S. Calculus. (6-0) [5]  
Prerequisite: Mathematics 104.  
Sec. 1. Daily 11:30.  
Sec. 2. Daily 7:30.
- 204S. Calculus. (6-0) [5]  
Prerequisite: Mathematics 104.  
Daily 8:30.

**MECHANICAL ENGINEERING**

- 207S. Kinematics. (4-4) [3]  
Prerequisite: Mathematics 104.  
M., T., Th., F., 8:30; T., Th., 2:30-4:25.

212S. Engineering Mechanics. Prerequisite: Mathematics 203. Daily 10:30.	(6-0)	[3]
309S. Machine Shop. W., F., 1:30-4:25. Laboratory fee, \$1.50.	(0-6)	[1½]
310S. Machine Shop. W., F., 1:30-4:25. Laboratory fee, \$1.50.	(0-6)	[1½]
317S. Engineering Mechanics. Daily 10:30.	(6-0)	[3]

## MODERN LANGUAGES

101S. Beginning French. Daily 7:30.	(6-0)	[3]
105S. Beginning Spanish. Daily 8:30.	(6-0)	[3]

## PHYSICS

201S. College Physics. Daily 7:30; W., F., 1:30-3:25. Laboratory fee, 50 cents.	(6-4)	[4]
203S. General Physics. Prerequisite: Mathematics 101, 103. Daily 7:30; W., F., 1:30-4:25. Laboratory fee, \$1.00.	(6-6)	[4½]
204S. General Physics. Prerequisite: Mathematics 101, 103. Daily 10:30; W., F., 1:30-4:25. Laboratory fee, \$1.00.	(6-6)	[4½]

## POULTRY HUSBANDRY

201S. Farm Poultry. M., T., Th., F., 8:30; W., F., 1:30-4:25. Laboratory fee, 50 cents.	(4-4)	[3]
501S, 502S. Research Problems. M., T., Th., F., 8:30. Conference hours to be arranged.	(4-8)	[4]
503S. Advanced Incubation and Brooding. M., T., Th., F., 10:30. Laboratory fee, \$1.00. Conference hours to be arranged.	(4-8)	[4]

## RURAL EDUCATION

221S. Rural School Methods. Daily 7:30.	(6-0)	[3]
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321S. Secondary School Methods.	(6-0)	[3]
Sec. 1. Daily 8:30.		
Sec. 2. Daily 9:30. Advanced students only.		
423S. The Junior High School.	(6-0)	[3]
Daily 10:30.		
425S. Supervised Teaching.	(2-8)	[3]
Hours to be arranged.		
501S. Problems in Rural Education.	(6-2)	[4]
Daily 8:30.		
Conference hours to be arranged.		
503S. Problems in Elementary Education.	(6-2)	[4]
Daily 10:30.		
Conference hours to be arranged.		
505S. Principles of Educational Administration.	(6-2)	[4]
Daily 11:30.		
Conference hours to be arranged.		

## RURAL SOCIOLOGY

404S. Rural Organization.	(6-0)	[3]
Daily 9:30.		
415S. Agricultural Journalism.	(4-4)	[3]
M., T., Th., F., 10:30; W., F., 1:30-3:25.		
501S. Advanced Rural Sociology.	(6-2)	[4]
Daily 8:30.		
Conference hours to be arranged.		
511S. History of Modern Social Thought.	(6-2)	[4]
Daily 11:30.		
Conference hours to be arranged.		

## 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 1929 Summer Session:

501S. Agricultural Education.	(8-0)	[4]
502S. Agricultural Education.	(8-0)	[4]
505S. Agricultural Education.	(8-0)	[4]
506S. Agricultural Education.	(8-0)	[4]
501S. Agronomy	(4-8)	[4]
505S. Agronomy.	(4-8)	[4]
507S. Agronomy.	(4-8)	[4]
501S. Animal Husbandry.	(4-8)	[4]
502S. Animal Husbandry.	(4-8)	[4]
505S. Animal Husbandry.	(4-8)	[4]
501S. Dairy Husbandry.	(4-8)	[4]

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503S.	Dairy Husbandry.	(4-8)	[4]
501S.	Economics.	(6-0)	[3]
507S.	Electrical Engineering.	(4-8)	[4]
502S.	Entomology.	(4-8)	[4]
507S.	Entomology.	(4-8)	[4]
508S.	Entomology.	(4-8)	[4]
501S.	Genetics.	(4-8)	[4]
503S.	Genetics.	(4-8)	[4]
505S.	Genetics.	(4-8)	[4]
501S.	Horticulture.	(4-8)	[4]
507S.	Horticulture.	(4-8)	[4]
505S.	Industrial Education.	(8-0)	[4]
507S.	Industrial Education.	(8-0)	[4]
501S.	Poultry Husbandry.	(4-8)	[4]
502S.	Poultry Husbandry.	(4-8)	[4]
503S.	Poultry Husbandry.	(4-8)	[4]
501S.	Rural Education.	(8-0)	[4]
505S.	Rural Education.	(8-0)	[4]
501S.	Rural Sociology.	(8-0)	[4]
511S.	Rural Sociology.	(8-0)	[4]

**SECOND TERM**  
(July 22 to August 31)

AGRONOMY

- 308S. Forage Crops. (4-4) [3]  
M., T., Th., F., 7:30; 2:30-4:25.  
Laboratory fee, 50 cents.
- 314S. Field Crops. (6-4) [4]  
Daily 9:30; T., Th., 2:30-4:25.  
Laboratory fee, 50 cents.

ANIMAL HUSBANDRY

- 303S. Animal Nutrition. (6-4) [4]  
Prerequisite: Chemistry 206.  
Daily 7:30; T., Th., 2:30-4:25.
- 409S. Animal Nutrition and Live Stock Feeding. (6-4) [4]  
Daily 9:30; M., W., 2:30-4:25.

BIOLOGY

- 102S. General Botany. (4-8) [4]  
M., T., Th., F., 8:30 and 2:30-4:25.  
Laboratory fee, 50 cents.
- 207S. General Zoology. (4-8) [4]  
M., T., Th., F., 9:30 and 3:30-5:25.  
Laboratory fee, \$1.00.

CHEMISTRY AND CHEMICAL ENGINEERING

- 102S. General Inorganic Chemistry. (6-6) [4½]  
Sec. 1. Daily 9:30; M., W., 1:30-4:25.  
Sec. 2. Daily 11:30; T., Th., 1:30-4:25.  
Laboratory fee, \$2.00.
- 104S. Inorganic Chemistry. (6-8) [5]  
Daily 9:30; M., W., 1:30-5:25.  
Laboratory fee, \$2.00.
- 309S. Agricultural Chemistry. (6-6) [4½]  
Prerequisite: Chemistry 206.  
Daily 11:30; W., F., 1:30-4:25.  
Laboratory fee, \$3.00.

CIVIL ENGINEERING

- 204S. Analytical Mechanics. (8-0) [4]  
Prerequisite: Mathematics 203; to be accompanied  
by Mathematics 204.  
Daily except S., 9:30; W., F., 10:30.

- 305S. Mechanics of Materials. (6-0) [3]  
Prerequisite: Mathematics 204; Civil Engineering 204; or equivalent.  
Daily except S., 7:30; W., 8:30.
- 311S. Hydraulics. (6-8) [4]  
Prerequisite: Civil Engineering 204.  
Daily except S., 11:30; T., 10:30.
- 340S. Framed Structures. (7-0) [3]  
Prerequisite: Mathematics 204, Civil Engineering 305.  
Daily except S., 8:30; M., F., 9:30.
- 342S. Structural Drafting. (0-13) [3]  
Prerequisite: Civil Engineering 340 or registration in that course.  
M., W., F., 10:30-12:25; T., Th., 9:30-12:25.

## DRAWING

- 101S. Mechanical Drawing. (0-4) [1]  
M., W., 1:30-4:25.
- 103S. Descriptive Geometry. (6-0) [3]  
Daily 9:30.
- 104S. Descriptive Geometry. (4-4) [3]  
Prerequisite: Drawing 103.  
M., T., Th., F., 11:30; W., F., 2:30-4:25.
- 108S. Mechanical Drawing. (0-4) [1]  
Prerequisite: Drawing 101.  
W., F., 2:30-4:25.
- 201S. Mechanical Drawing. (0-4) [1]  
Prerequisite: Drawing 108.  
T., Th., 2:30-4:25.
- 202S. Mechanical Drawing. (0-4) [1]  
Prerequisite: Drawing 201.  
W., F., 2:30-4:25.

## ECONOMICS

- 204S. Principles of Economics. (6-0) [3]  
Daily 8:30.
- 403S. Principles of Economics. (8-0) [3]  
Daily 9:30.  
Conference hours to be arranged.

## ELECTRICAL ENGINEERING

- 302S. Alternating Currents. (10-12) [8]  
Prerequisite: Electrical Engineering 301, Mathematics 204.  
Hours to be arranged.  
Laboratory fee, \$1.50.

- 308S. Electrical Machinery. (4-6) [3½]  
 Prerequisite: Electrical Engineering 307.  
 M., T., Th., F., 9:30; W., F., 1:30-4:25.  
 Laboratory fee, \$1.00.

## ENGLISH

- 104S. Rhetoric and Composition. (6-0) [3]  
 Daily 9:30.
- 204S. Composition and Literature. (4-0) [2]  
 Prerequisite: English 103, 104.  
 Sec. 1. M., T., Th., F., 9:30.  
 Sec. 2. M., T., Th., F., 8:30.
- 232S. English Literature. (6-0) [3]  
 Prerequisite: English 103, 104.  
 Daily 11:30.
- 303S. Argumentation. (4-0) [2]  
 Prerequisite: English 203, 204.  
 M., T., Th., F., 10:30.
- 414S. Contemporary Literature. (4-0) [2]  
 Prerequisite: English 413.  
 M., T., Th., F., 11:30.

## GENETICS

- 502S. Advanced Plant Genetics. (4-8) [4]  
 M., T., Th., F., 8:30.  
 Conference hours to be arranged.
- 504S. Advanced Animal Genetics. (4-8) [4]  
 M., T., Th., F., 10:30.  
 Conference hours to be arranged.
- 506S. Advanced Biometry. (4-8) [4]  
 M., T., Th., F., 11:30.  
 Conference hours to be arranged.

## HISTORY

- 102S. The Development of Western Europe. (6-0) [3]  
 Daily 10:30.
- 216S. History of the United States. (6-0) [3]  
 Daily 9:30.
- 305S. Citizenship. (6-0) [3]  
 Daily 7:30.

## MATHEMATICS

- 102S. Algebra. (6-0) [3]  
 Sec. 1. Daily 7:30.  
 Sec. 2. Daily 9:30.



- 104S. Analytics. (6-0) [3]  
 Prerequisite: Mathematics 101, 103.  
 Sec. 1. Daily 8:30.  
 Sec. 2. Daily 10:30.
- 204S. Calculus. (6-0) [5]  
 Prerequisite: Mathematics 104.  
 Sec. 1. Daily 11:30.  
 Sec. 2. Daily 7:30.

## MECHANICAL ENGINEERING

- 101S. Engineering Problems. (1-4) [1½]  
 T., 8:30; W., F., 1:30-3:25.
- 320S. Thermodynamics. (6-2) [4]  
 Prerequisite: Mechanical Engineering 319.  
 Daily 10:30.  
 Conference hours to be arranged.

## MODERN LANGUAGES

- 102S. Beginning French. (6-0) [3]  
 Daily 7:30.
- 106S. Beginning Spanish. (6-0) [3]  
 Daily 8:30.

## PHYSICS

- 202S. College Physics. (6-4) [4]  
 Daily 7:30; W., F., 1:30-3:25.  
 Laboratory fee, 50 cents.
- 204S. General Physics. (6-6) [4½]  
 Prerequisite: Physics 203.  
 Daily 10:30; W., F., 1:30-4:25.  
 Laboratory fee, \$1.00.

## POULTRY HUSBANDRY

- 304S. Poultry Essentials. (4-4) [3]  
 M., T., Th., F., 9:30; M., W., 2:30-4:25.
- 502S. Research Problems. (4-8) [4]  
 M., T., Th., F., 8:30.  
 Conference hours to be arranged.
- 504S. Advanced Incubation and Brooding. (4-8) [4]  
 M., T., Th., F., 10:30.  
 Laboratory fee, 1.00.  
 Conference hours to be arranged.

## RURAL EDUCATION

- 222S. Rural School Administration. (6-0) [3]  
 Daily 7:30.

321S. Secondary School Administration.	(6-0)	[3]
Sec. 1. Daily 8:30.		
Sec. 2. Daily 9:30. Advanced students only.		
422S. History of Education.	(6-0)	[3]
Daily 10:30.		
425S. Supervised Teaching.	(2-8)	[3]
Hours to be arranged.		
502S. Problems in Rural Education.	(6-2)	[4]
Daily 8:30.		
Conference hours to be arranged.		
504S. Development of Public School Education in Texas.	(6-2)	[4]
Daily 10:30.		
Conference hours to be arranged.		
506S. Principles of Educational Administration.	(6-2)	[4]
Daily 11:30.		
Conference hours to be arranged.		

## GRADUATE COURSES

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

502S. Genetics.	(4-8)	[4]
504S. Genetics.	(4-8)	[4]
506S. Genetics.	(4-8)	[4]
502S. Poultry Husbandry.	(4-8)	[4]
504S. Poultry Husbandry.	(4-8)	[4]
502S. Rural Education.	(8-0)	[4]
504S. Rural Education.	(8-0)	[4]
506S. Rural Education.	(8-0)	[4]

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## The Summer School of Cotton

(June 10 to July 20)

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The object of the School of Cotton 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 products 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 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.

A new feature of the school will be a course in cotton trade procedure in which the office end of the cotton business will be outlined and thoroughly drilled into students by the actual keeping of all necessary records.

A number of men prominent in the cotton world in Texas and from the Bureau of Agricultural Economics of the Department of Agriculture, Washington, D. C., will address the school on subjects that will be of special interest.

A cotton Exchange is operated during the session to give the student a better idea of the making of local prices and to familiarize him with its operation.

For announcement giving complete details relative to the work of this division, write to Professor J. B. Bagley, College Station, Texas.

## Three-Weeks' Course for Teachers of Vocational Agriculture

(June 10-29)

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In order to better serve the teacher of vocational agriculture who finds it impracticable to be away from his job six consecutive weeks a three weeks' short course has been established as a regular part of the Summer Session. The course is really a combination of the annual conference of teachers of vocational agriculture with graduate study. There will be daily conferences with members of the state supervisory staff dealing with questions concerning state policy and administration. A number of short unit courses, both graduate and undergraduate, will be available. Two half-courses, or a total of four term hours, will be the maximum college work that a short course student may carry in addition to his conference duties.



LEGETT HALL

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Through a questionnaire sent to all teachers of Vocational Agriculture the Department of Agricultural Education will determine what courses are desired by the largest number of prospective students for this course. Graduate courses for which there is the largest demand will be available to these students, regardless of lists published at this time. Special announcement of such additional courses will be made about May 15.

## Sixth Annual Conference of County Superintendents

(July 29 to August 2)

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The Texas Agricultural and Mechanical College is endeavoring to make a contribution toward the upbuilding of the Texas rural schools. Consequently the County Superintendents are invited to take advantage of the low railroad rates and inexpensive boarding and lodging rates, to spend the week at the College in making an intensive study of their work.

A printed program of the Sixth Conference will be sent to each County Superintendent. This Conference is held each year under the direction of the Department of Rural Education, Texas Agricultural and Mechanical College.

## Short Course for Graduate Veterinarians (Tentative date, June 10-15)

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, live stock sanitation, and milk and meat inspection.

### ENTERTAINMENT

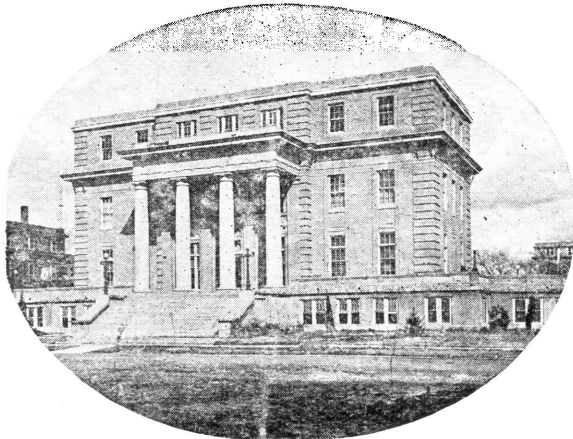
The evenings will be used for round table discussions, moving pictures, and entertainments.

### EXPENSES

No tuition will be charged. Rooms may be had for men only in a dormitory at fifty cents a day. Rooms and meals may be had at the Aggieland Inn at reasonable rates.

Good facilities for camping will be provided near the Campus. Well equipped Tourist Camps are located between College and Bryan on a macadam road.

**The State Veterinary Medical Association will hold its nineteenth annual meeting at College Station during the week of the Short Course.**



Y. M. C. A. BUILDING

## Short Course for Public Utility Men (June 10-14)

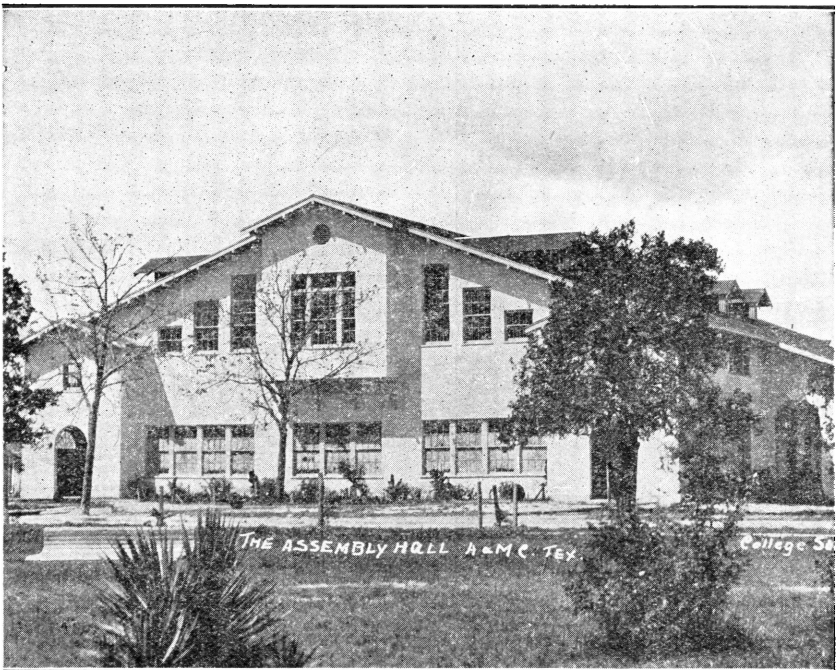
The object of this group of courses is to give intensive instruction for those engaged in certain departments of public utility organizations. The courses are intended to supplement the practical experience of men already working with utilities but who feel the need of a better understanding of the principles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

The following courses are offered:

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

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



ASSEMBLY HALL

## Cottonseed Oil Mill Operators' Course

(June 10-19)

As the Department of Chemistry and Chemical Engineering of the A. and M. College of Texas has a complete cotton seed oil mill and refining equipment for use in connection with the instructional work it was thought advisable to offer a summer short course for cotton seed oil mill operators and others interested.

The complete mill was presented to the College by the Texas Cotton Seed Crushers' Association and they are very anxious in every way to cooperate with the College in making the summer short course a success.

The course is designed primarily for men who have had some experience in oil mill operation and wish to supplement their practical knowledge with a better understanding of the theory involved. The theory will not be presented in a highly technical form, and will be amply illustrated by demonstrations, and by tests, some of which the students themselves will make in the laboratory. The student will study the operation of all the machinery and make a chemical examination of the crude material and finished products. The class rooms, laboratories, and equipment of the Department of Chemistry and Chemical Engineering will be used in giving the course.



SCIENCE HALL

A more detailed announcement will be issued about May 1st, and may be obtained by addressing Dr. C. C. Hedges, College Station, Texas.