

**FUNDAMENTALS OF AGRICULTURAL ENGINEERING (AGEG 1413)**

Department of Agriculture, Nutrition & Human Ecology		College of Agriculture and Human Sciences	
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		Prairie View, TX 77446	
Office Hours:	TBA		
Virtual Office Hours:	TBA		
Course Location:	Juvenile Justice Building: Rm # 336		
Class Meeting Days & Times:	TTH 5:00 – 6:50 PM		
Course Abbreviation and Number:	AGEG 1413		
Catalog Description:	Introduction to the major areas of applying engineering principles to solving problems in agriculture. Emphasis will be given to problem solving skills, farming techniques, tool identification, land measurement methods and skills. Will include introduction to the use of emerging technologies in agricultural engineering.		
Prerequisites:	Working knowledge of the number system and basic mathematics.		
Co-requisites:	None		
Required Text:	Introduction to Agricultural Engineering Technology. 3 <sup>rd</sup> Edition (H. L. Field; and J. B. Solie.)		
References:	Engineering Applications in Agriculture (W. Bowers, B. A. Jones, Jr. and E. F. Olver.)		
Access to Learning Resources:	PVAMU Library: phone: (936) 261-1500; web: <a href="http://www.tamu.edu/pvamu/library/">http://www.tamu.edu/pvamu/library/</a> University Bookstore: phone: (936) 261-1990; web: <a href="https://www.bkstr.com/Home/10001-10734-1?demoKey=d">https://www.bkstr.com/Home/10001-10734-1?demoKey=d</a>		
Course Goals or Overview:			
	At the end of the course students should be able to solve problems utilizing the basic concepts of agricultural engineering in the following broad areas:  i) Basic Problem Solving Skills ii) Elementary Surveying/ Basic Soil and Water Management Techniques; iii) Basic Shop Skills including Shop Safety;		

	iv) Farm Structures and Environment; v) Farm Power and Machinery; vi) Economic Aspects of Agricultural Engineering.			
<b>Course Objectives/Accrediting Body Learning Outcomes:</b> KR 4.2.a: Expected Learning Outcome: Students are able to apply basic problem-solving techniques to agricultural problems and issues. KR 4.2.b: Expected Learning Outcome: Students are able to develop outcome measures, use informatics principles and technology to collect and analyze data for assessment and evaluate data to use in decision-making. SK5.1c: Expected learning Outcome: Students are able to understand and explain principles of agricultural mechanics and farm mechanization				
<b>At the end of this course, the student will</b>				
		Alignment with Academic Program		Alignment with Core Curriculum
1	Have a basic knowledge of standard form of estimating answers. Basic problem solving skills.	Program Core	T,R	1,2,3
2	Understand the concepts of land measurements including surveying.	Program Core	T	1,2,3
3	Have knowledge of farm water systems.	Program Core	R	1,2,4,
4	Understand concepts of Work, Power, Horsepower and torque	Program Core	T	1,2,3,4
5	Understand Internal Combustion engines and Power applications.	Program Core	T	1,2,3
6	Have basic knowledge of Economic considerations in agricultural engineering.	Program Core	T	1,2,3,4

Code Key T = Taught  
R = Reinforced  
I = Integrated

## Course Grading Procedures and Evaluation:

Two Tests	10 %
Pop Quizzes (Several)	10
Mid-Term Examination	20
HW Assignments	30
Final Examination	30

**Total possible points      100 %**

(Bonus: Attendance & Participation. **10** extra points!)

## Grade

<b>A</b>	<b>90 – 100%</b>
<b>B</b>	<b>80 - 89</b>
<b>C</b>	<b>70 - 79</b>
<b>D</b>	<b>60 - 69</b>
<b>F</b>	<b>0 - 59</b>

### Submission of Assignments:

Assignments are expected to be submitted on time.

### Formatting Documents:

Microsoft Word is the standard word processing tool used at PVAMU. If you are using other word processors, be sure to use the “save as” tool and save the document in either the Microsoft Word, Rich-Text, or plain text format.

**Exercises** – written assignments designed to supplement and reinforce course material

**Class Attendance** – daily attendance is required and absenteeism is strongly discouraged. **VII. ATTENDANCE AND PARTICIPATION POLICY**

Prairie View A&M University requires regular class attendance. Attending all classes supports full academic development of each learner whether classes are taught with the instructor physically present or via distance learning technologies such as interactive video. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of “F”. Absences are accumulated beginning with the first day of class during the semester. The university's attendance policy is provided below.

### Excused Absences

Absences due to illness, attendance at university approved activities, and family or other emergencies constitute excused absences and must be supported by documentation presented to the instructor prior to or immediately upon the student's return to class. Students are always responsible for all oral and written examinations as well as all assignments (e.g., projects, papers, reports).

### Excessive Absences

Accumulation of one week of unexcused absences (for the number of clock hours equivalent to the credit for the course) constitutes excessive absenteeism. The instructor is not required to accept assignments as part of the course requirement when the student's absence is unexcused.

**Absences on Religious Holy Days**

In accordance with Texas Education Code, Section 51.925, subchapter (Z), a student may be absent from classes for the observance of a religious holy day and will be permitted to take missed examinations and complete missed assignments provided the student has notified the instructor of the planned absence in writing and receipt of the notice has been acknowledged by the instructor in writing. "A religious holy day means a holy day observed by a religion whose place of worship is exempt from property taxation under the Texas Tax Code, Section 11.20."

**Exam Policy**

Written tests designed to measure knowledge of presented course material

Exams should be taken as scheduled. No makeup examinations will be allowed except under documented emergencies (See Student Handbook).

## University Rules and Procedures

**Disability statement (See Student Handbook):**

Students with disabilities, including learning disabilities, who wish to request accommodations in class should register with the Services for Students with Disabilities (SSD) early in the semester so that appropriate arrangements may be made. In accordance with federal laws, a student requesting special accommodations must provide documentation of their disability to the SSD coordinator.

**Academic misconduct (See Student Handbook):**

You are expected to practice academic honesty in every aspect of this course and all other courses. Make sure you are familiar with your Student Handbook, especially the section on academic misconduct. Students who engage in academic misconduct are subject to university disciplinary procedures.

**Forms of academic dishonesty:**

1. Cheating: deception in which a student misrepresents that he/she has mastered information on an academic exercise that he/she has not mastered; giving or receiving aid unauthorized by the instructor on assignments or examinations.
2. Academic misconduct: tampering with grades or taking part in obtaining or distributing any part of a scheduled test.
3. Fabrication: use of invented information or falsified research.
4. Plagiarism: unacknowledged quotation and/or paraphrase of someone else's words, ideas, or data as one's own in work submitted for credit. Failure to identify information or essays from the Internet and submitting them as one's own work also constitutes plagiarism.

**Nonacademic misconduct (See Student Handbook)**

The university respects the rights of instructors to teach and students to learn. Maintenance of these rights requires campus conditions that do not impede their exercise. Campus behavior that interferes with either (1) the instructor's ability to conduct the class, (2) the inability of other students to profit from the instructional program, or (3) campus behavior that interferes with the rights of others will not be tolerated. An individual engaging in such disruptive behavior may be subject to disciplinary action. Such incidents will be adjudicated by the Dean of Students under nonacademic procedures.

**Sexual misconduct (See Student Handbook):**

Sexual harassment of students and employers at Prairie View A&M University is unacceptable and will not be tolerated. Any member of the university community violating this policy will be subject to disciplinary action.

**Attendance Policy:**

Prairie View A&M University requires regular class attendance. Excessive absences will result in lowered grades. Excessive absenteeism, whether excused or unexcused, may result in a student's course grade being reduced or in assignment of a grade of "F". Absences are accumulated beginning with the first day of class.

**Student Academic Appeals Process**

Authority and responsibility for assigning grades to students rests with the faculty. However, in those instances where students believe that miscommunication, errors, or unfairness of any kind may have adversely affected the instructor's assessment of their academic performance, the student has a right to appeal by the procedure listed in the Undergraduate Catalog and by doing so within thirty days of receiving the grade or experiencing any other problematic academic event that prompted the complaint.

Generally, student complaints about grades or other class related performance assessments can be addressed by the instructor of record and the student. The student must put in writing the nature of the complaint before meeting with the instructor of record, preferably during his/her office hours, to present the grievance and any supporting documentation that the grade or outcome of a class related concern should have been different. (Note: This document will provide the basis for any further actions if the student and instructor cannot reach agreement. No consideration by the Program Director for Architecture or the Dean for the School of Architecture will be given without the student having presented their grievance in writing to include the reasons for the appeal and the specific remedy sought to the matter.) When that cannot be achieved, the student may have his/her complaint addressed by the procedure outlined in the PVAMU Undergraduate Catalog 2007-2009. Faculty, other classroom professionals, and students' rights are to be protected and their human dignity respected. Grading and other class related complaints are to be filed in writing initially within thirty days following the alleged precipitating action on which the complaint is based. Except where extenuating circumstances render it unreasonable, the outcome of a complaint that reaches the level of department/division head (i.e., Dean of Architecture) will be reviewed within thirty days and a written notification of outcome will be provided to the student. Where a complaint must be reviewed at each level, the entire process should be completed within ninety days of receipt of the complaint.

**ADA STATEMENT**

Students with disabilities who believe they may need special assistance for this class are encouraged to contact the Office of Disabilities Services at (936) 857-2693/2694 as soon as possible. Once you receive a letter of adjustment from the office, kindly make an appointment with me to discuss appropriate adjustments for this class.

**ACADEMIC HONESTY POLICY**

Prairie View A&M University is dedicated to a high standard of academic integrity among its faculty and students. In becoming part of the Prairie View A&M University academic community, students are responsible for honesty and independent effort. Disciplinary action will be taken

against any student who alone or with others engages in any act of fraud or deceit. Scholastic dishonesty will not be tolerated and will be pursued to the fullest extent allowed by university regulation. I support the university's policies on sexual harassment and equal opportunity for all people. You should acquaint yourself with your protections and responsibilities under these policies.

Academic freedom is the privilege to discuss and debate with discretion any subject matter directly related to the curricula during a scheduled period of instruction. This is a precious freedom that must be guarded. Each of us must temper our comments with good judgment to avoid remarks that might be harmful to others or might be construed as being irresponsible. Discretion and common courtesy are to be your guidelines in this regard.

#### **UNIVERSITY POLICY on ACADEMIC HONESTY**

Course credit, degrees, and certificates are to be earned by students and may not be obtained through acts of dishonesty. Students are prohibited from participation in acts of academic dishonesty including tampering with records or falsifying admissions or other information. Disciplinary action will be taken against any student who alone or with others engages in any act of academic fraud or deceit. The university's policy on academic dishonesty is stated below:

"It is the responsibility of students and faculty members to maintain academic integrity at the university by refusing to participate in or tolerate academic dishonesty. Each instance of academic dishonesty should be reported to the department in which the student has declared a major so that it can become a part of the student's file; to the department head of the instructor of the course in which the alleged infraction occurred; and to the Office for Academic Affairs as deemed necessary."

#### **OFFENCES and DISCIPLINARY ACTIONS**

##### **Offences:**

Acquiring Information

Providing Information

Plagiarism and Dual Submissions

Conspiracy

Fabrication of Information

Misrepresentations, alterations of documents, forgery, et cetera

##### **Disciplinary Actions:**

Grade Penalty

Letter of Reprimand

Probation

Suspension

Dismissal

Expulsion

1. During regular class periods all students are expected to dress appropriately in accordance with university regulations so that no disruptions in the learning experience will occur.
2. No hats or caps will be allowed to be worn in the classroom during class sessions.
3. No food or drink is allowed in the classroom at any time.
4. Cellular telephones are to be turned off or put on silent ring tone during the class period. No "ear phone" units will be allowed. If your cell phone rings during the lecture you are subject to losing all participation point for that class period.

5. Laptops must emit no noise. Make sure your laptop is warmed up and your battery charged before class starts. Checking email, playing games, messaging and other non-class related activities are not allowed.
6. Harassment of your fellow students of any kind will not be tolerated.
7. No children, friends, family members or guests are allowed in the class without prior approval. Failure to adhere to this rule will result in a "0" for that class period.

### **CONDUCT OF THE CLASS**

Please note the following rules for the conduct of the class.

1. Class will begin at the appointed time.
2. Class is dismissed when so indicated by the instructor. Leaving the classroom before the class is dismissed without prior approval from the instructor will result in a loss of participation for that class.
3. All class members are required to keep the classroom in a clean and orderly manner to facilitate the number of students using it each day. Failure to maintain the classroom as requested by the instructor will result in a deduction in participation points for all class members for that date of instruction.

Please refer to the PVAMU Undergraduate Catalog for a full description.

### **PERSONAL CONDUCT**

Students and faculty are expected to conduct themselves in ways that support individual learning and the learning of others. To that end members of the classroom community will conduct themselves in a professional and ethical manner to achieve these objectives. Any conduct construed to interfere with the learning opportunities of members of the class may result in the removal of the student from the class for that day. Repeated inappropriate conduct will result in permanent removal from the class.

Based upon the fact that we are trying to prepare you for professional employment we will expect you to adhere to these guidelines.

## STATEMENT OF AGREEMENT

I have read the Course Syllabus for AGE 1413 for the Fall Semester 2017, including the Class Lecture and Event Schedule, and agree to abide by the conditions for the class as spelled out in this document. My signature indicates my personal commitment to meeting the course objectives and succeeding in this educational endeavor.

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Signature

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Student name (Please print neatly)

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Student ID #

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Date

**RETURN THIS PAGE FROM THE SYLLABUS TO THE INSTRUCTOR TO  
COMPLETE YOUR ENROLLMENT IN THIS COURSE.**

**RECEIVED WITH STUDENT'S SIGNATURE ENTERED INTO GRADE BOOK:**