

SAM HOUSTON STATE UNIVERSITY
COLLEGE OF ARTS AND SCIENCES
COURSE SYLLABUS
AGR 386
AGRICULTURAL STRUCTURES AND ENVIRONMENTAL CONTROL
3 CREDIT HOURS
SPRING 2008
LOCATION OF CLASS MEETING: AG MECH CENTER
CLASS TIMES: M and W 7:30 to 8:20 AM
LOCATION OF LAB MEETING: AG MECH CENTER
LAB TIME: M 12:30 TO 2:20 PM

INSTRUCTOR: Joe E. Muller, Ph.D., Associate Professor – Ag Mechanization

OFFICES: Ag Mechanics & Technology Center, Rm 100. and Thomason Bldg, Rm 309

CONTACT INFORMATION:

AMC (936) 294 4877

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Home (979) 774-1503

E-mail: jemuller@shsu.edu

OFFICE HOURS: as posted or by appointment

COURSE DESCRIPTION: Functional requirements of agricultural buildings; valuation, appraisal and estimating; structural requirements of agricultural buildings; planning and designing major service and processing buildings.

COURSE OUTLINE: Agriculture 386 is a 2-2 course, 2 hours lecture and 2 hours laboratory per week. Lecture will include technical information, procedures, discussion, and problem solving activities. Lab will include problems and hands-on activities relating to the construction of agricultural structures

COURSE OBJECTIVES: Upon completion of this course you should be able to:

1. Discuss economics and current trends of agricultural structures.
2. Discuss the planning of structures for given applications and loads.
3. Discuss building-site layout and location of specific buildings
4. Discuss site preparation, and foundations.
5. Select ingredients, calculate the amount, place, finish and cure concrete.
6. Discuss and plan various types of agricultural structures.
8. Calculate a bill-of-materials and develop a plan for an agricultural structure.
9. Perform the skills involved in stud-frame construction.
10. Discuss concrete construction and perform the related skills.
11. Discuss and select engineered wood products used in construction.
12. Discuss and select preservatives, and coatings and their use in construction.
13. Discuss and select fasteners used in construction.
15. Discuss and select insulation requirements and materials, and compute R-values.

16. Discuss and select ventilation and heating requirements.
17. Discuss alternate energy systems for structures.
18. Define common terms used in agricultural construction.
19. Select joists, beams, and columns for specific applications.
20. Discuss, select and install common roofing materials.
21. Read plans and estimate construction costs for agricultural structures.
22. Discuss environmental issues and waste management and handling for agricultural applications.
23. Discuss and plan agricultural fences and livestock containment and handling facilities.

TEXTS (required)

STRUCTURES AND ENVIRONMENT HANDBOOK
Midwest Plan Service ISU. Ames, Iowa

DEPARTMENT OF AGRICULTURAL SCIENCES ATTENDANCE POLICY:

1. Regular and punctual attendance is expected of each student in the Department of Agricultural Sciences at Sam Houston State University.
2. Each faculty member will keep a written record of student attendance. Students will be expected to sign in for class and labs to comply with new federal guidelines.
3. If a student misses four or more classes, the student's grade may be reduced by one letter grade. Additional penalties will be up to the discretion of the professor.
4. Three unexcused or unjustified tardies or early departures are considered one absence.
5. Excused absences must be documented by the student with a letter of confirmation from the sponsoring student organization, professor, doctor, etc. Exemptions will include participation in departmental activities when prior approval is attained from the Department Chair or the sponsoring professor. Excused absences and/or approved participation in departmental activities **do not negate** student's responsibility to complete any missed assignments or tests in a timely manner.

RESEARCH PAPER: 100 pts

Each student will be required to develop a research paper over a subject related to agricultural structures or environmental control. To avoid possible duplication of specific topics, **advanced approval of topics by the instructor** is required by February 6th and will be granted on a first-come first-served basis. The paper is to have five typed pages of text plus a bibliography. At least four major references are to be listed. The bibliography and any tables, charts, pictures, etc. do not count as part of the five pages of text. The paper is expected to be neat as well as mechanically and grammatically correct. Up to 5 points extra credit will be given if the Sam Houston Writing Center is utilized for assistance. The paper will be due on April 7th. A printed copy must be submitted in class and an electronic copy must be submitted thru Blackboard as a Turnitin Assignment. The system will check the paper for plagiarism and originality.

Site Plan Building Proposal: 100 pts

Each student will use text book, web references, and materials covered in lecture, field trips, and labs to develop a building site plan and building proposal. Specific details and requirements will be discussed and explained through-out the semester. Proposal will be due on April 30th.

COURSE EVALUATION:

Three regular test, quizzes and one final exam	60.0%
Lab Activities	13.3%
Research Paper	13.3%
Site Plan Building Proposal	13.3%

A = 90 – 100, B = 80 – 89, C = 70 – 79, D = 60 – 69, F = < 60

No exams or assignments will be given at alternative times unless arrangements are made with the professor before the scheduled activity occurs.

1. At the discretion of the professor, up to a 10 % penalty may be assessed for late exams or assignments. At the discretion of the professor, a 100% essay make-up exam may be given.
2. Final Exam is comprehensive.

ACADEMIC DISHONESTY:

All students are expected to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. The University and its official representatives may initiate disciplinary proceedings against a student accused of any form of academic dishonesty including, but not limited to, cheating on an examination or other academic work which is to be submitted, plagiarism, purchasing papers collusion and the abuse of resource materials. Any such action will result in failing that exam, research paper, assignment, or the entire course, and a letter of explanation placed in the student's file.

DISRUPTIVE CONDUCT:

Students will refrain from behavior in the classroom or lab that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Cellular telephones and pagers **must be turned off before** class begins. Students **are prohibited from using tobacco products**, making offensive remarks, reading non-class materials, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom or lab shall result in a directive to leave. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy.

VISITORS IN THE CLASSROOM:

Unannounced visitors to class must present a current, official SHSU identification card to be permitted in the classroom. They must not present a disruption to the class by their attendance. If the visitor is not a registered student, it is at the instructor's discretion whether or not the visitor will be allowed to remain in classroom.

AMERICANS WITH DISABILITIES ACT:

It is the policy of Same Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Disabled students may request assistance with academically related problems stemming from individual disabilities by contacting the Director of Counseling Center in the Lee Drain Annex

or by calling (936) 294-1720. If you have a disability that may adversely affect your work in this class, then I encourage you to register with the Counseling Center and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: no accommodation can be made until you register with the Counseling Center.

STUDENT ABSENCES ON RELIGIOUS HOLY DAYS POLICY:

Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first fifteen days of the semester or the first seven days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable timeframe in which the missed assignments and/or examinations are to be completed.

INSTRUCTOR EVALUATIONS:

You will be asked to complete a course/instructor evaluation form toward the end of the semester.