AMC 297 – AGRICULTURE WELDING TECHNIQUES  
Course Syllabus: Spring 2015  
Monday (web-enhanced) 1:00 – 3:50 P.M. – AG/IT 149

Instructor:  Dr. Douglas D. LaVergne  
Office Location:  AG 144  
Office Hours:  If the door is open, come in. If you need an appointment, let me know.  
University Email:  doug.lavergne@tamuc.edu

COURSE INFORMATION

Materials:  Safety Glasses (non-shaded)  
Ear Plugs  
Appropriate laboratory attire

Course Description:

Three semester hours. This course introduces oxy-fuel cutting/welding, shielded metal arc welding, and gas metal arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of SMAW and GMAW electrodes on steel plate. Upon completion, students should be able to perform fillet welds on steel with prescribed electrodes in the flat, horizontal, and overhead positions.

Course Objectives: Upon completion of this course the student will be able to:

1. Define essential terms associated with SMAW and GMAW processes.  
2. Demonstrate basic skills and knowledge required to perform weld in the flat, horizontal, and overhead positions.  
3. Apply mathematics and measurements to solve problems in agricultural systems.  
4. Demonstrate appropriate safety precautions in laboratory and field environments.  
5. Interpret technical specifications, directions, charts, tables, and drawings.  
6. Select and estimate the costs of building or repair materials for a specific project.  
7. Identify, select, and operate hand and power tools used in agricultural construction.  
8. Identify, select, and operate arc and gas welding and cutting equipment.

Grade Determination

The instructor reserves the right to modify this syllabus during the semester, if needed. The instructor also reserves the right to extend credit for alternative assignments, projects, or presentations.
Grades will be determined using the following:

<table>
<thead>
<tr>
<th></th>
<th>#</th>
<th>Possible Points</th>
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<tbody>
<tr>
<td>Online Quizzes</td>
<td>8</td>
<td>160</td>
</tr>
<tr>
<td>Attendance</td>
<td></td>
<td>140</td>
</tr>
<tr>
<td>SMAW Exam</td>
<td></td>
<td>100</td>
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<tr>
<td>GMAW Exam</td>
<td></td>
<td>100</td>
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<tr>
<td><strong>Laboratory Skill Activities/Assignments:</strong></td>
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<td></td>
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<tr>
<td>Agricultural safety lab exercise</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Cutting Torch lab</td>
<td>50</td>
<td></td>
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<tr>
<td>SMAW Pad</td>
<td>50</td>
<td></td>
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<tr>
<td>Electrode selection and polarity</td>
<td>50</td>
<td></td>
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<tr>
<td>Out of Position Joints lab</td>
<td>50</td>
<td></td>
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<tr>
<td>Final Project</td>
<td></td>
<td>200</td>
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<tr>
<td><strong>Total Points Possible</strong></td>
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<td>1000</td>
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Final Grade = \[
\frac{\text{Your total points earned}}{\text{Total Possible Points}} \times 100\%
\]

(A = 90 or above, B = 80-89, C = 70-79, D = 60-69, F = below 60)

**Technology Requirements**

AMC 297 is a hybrid class; therefore, students must have Internet access and a basic understanding of the eCollege learning platform. This instructor relies almost exclusively on e-mail when communicating with class members; therefore, student access to the Internet is a must.

**Communication and Support**

**Interaction with Instructor Statement:**

E-mail will serve as the primary method for out-of-class communication between the instructor and students. Therefore, students should check their university (myLeo) or other preferred e-mail account at least once daily. The instructor will attempt to answer each student-generated message within 48 hours of dispatch.

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Laboratory Exercise for Week #1

Review eCollege for a post regarding this assignment. The assignment is an online safety exercise in a Microsoft Word document named AMC 297 Lab Safety. This document provides a guided tutorial on safety concepts by allowing you to utilize designated web-links to answer questions and retrieve slide presentations and safety guides for specific shop equipment that you will be using this semester.

Complete each activity in the lab exercise. Print, arrange, and staple the entire document; write your name and date on each page; and bring to lab for week #2. This is your ticket to enter lab on week #2. **You cannot participate in other lab activities until you submit the completed safety exercise.** The first exam will include some questions from this lab safety exercise.

Professionalism

Students are expected to attend class and/or laboratory as scheduled. Their participation in class discussion and instructional activities should follow the basic principles of common courtesy, decency, and cooperation with peers and instructional personnel. Rude and disruptive behavior, as well as cheating, in any form, will not be tolerated. The use of tobacco products in the classroom, laboratory, or field trip sites is prohibited. Inappropriate conduct will not be tolerated. Failure to comply with instructor’s guidelines may result in suspension from class for the remainder of the day’s instruction. Repeat offenses may result in additional consequences.

Reasonable Accommodations

Requests from students with disabilities for reasonable accommodations must go through the Academic Support Committee. For more information, contact Director of Disability Services at 903/886-5835.

Academic Honesty and Integrity

Students are expected to do their own work. Assistance with written assignments, such as proofreading or editing, is encouraged as long as the final concepts and product are those drafted and authored by the student. Information or materials (including ideas, quotes, data, procedures, etc.) from sources other than the student must be given proper credit through appropriate citation. The discipline of Agricultural Education uses the APA format (5th edition) as its primary style guide for publications, including research papers and reports. Academic honesty and integrity is expected of all students. Cheating including but not limited to copying, talking to classmates during testing, using notes when prohibited by instructor, and plagiarism will not be tolerated. Penalties may include grade reduction or suspension from class, depending on the frequency and severity of the violation.

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