COURSE SYLLABUS

Introduction to Layout and Fabrication

WLDG 1417
Number

2 - 6 - 4
Lecture - Lab - Credit

NONE
Prerequisite

This syllabus has been reviewed and is current on the date indicated.

Prepared By                      Date
______________________________  ________________
Jim Reed                        8/17/2015

Reviewed By

______________________________  ________________
Brian Hahn                      8/28/2015

Division Director               Date
I. Instructor Information

Name: Jim Reed

Phone: (940) 887-9559

Campus Office: Northside Administration Office

email: jimc.reed@esc9.net

Office Hours: 8:00a.m.-3:30p.m. Monday thru Friday

Advisement Hours: 8:00a.m.-3:30p.m. Monday thru Friday

Director: Brian Hahn

Director email: brian.hahn@tstc.edu

II. Class Times, Location

Date/Time: Lecture: M/T/W/TH/F 9:50am-10:40am
           Lab:     M/T/W/TH/F 11:30am-12:30pm

Classroom: Building: Agricultural Science Building

Lab:         Building: Agricultural Science Building

Start Date: 8/31/2015   End Date: 8/21/15

III. Program Outcomes

A. Welding technology graduates will demonstrate competency in using hand and power tools that shows safe working practices.

B. Successful welding technology graduates will demonstrate competency in setting up and using welding equipment to perform welds in all positions using various welding processes.

C. Welding technology graduates will demonstrate proficiency in the setup and use of oxy-fuel and plasma cutting processes.

D. The welding technology graduate will demonstrate competency in using welding blueprints to fabricate a project.

IV. Course Description & Introduction

A fundamental course in layout and fabrication related to the welding industry. Major emphasis on completing projects within tolerances.

V. Learning Outcomes

The student will:

A. Identify welding symbols
B. Identify and select measuring instruments and tools for fabricating projects  
C. Recognize correct layout and fabrication terminology  
D. Identify structural shapes and materials

VI. Assessment Methods & Grading Policy
Attendance & Participation 40%  
Assignments & Tests 60%

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

VII. Textbook/Reference Materials

VIII. Additional Resources & Supplies
Clear and shaded safety glasses, welding gloves, welding helmet, clear lenses for welding helmet, chipping hammer, wire brush, mig pliers, pen/pencil, and paper. Other supplies might be needed as required.

IX. Class Participation Policy & Student Conduct
A. Attendance & Participation:
1. Students start each class with 100 points.  
2. All students are required to be in class by the scheduled start of each class period. For the first fifteen minutes that an individual is late, this total will be reduced by twenty (20) points. An additional ten (10) points will be deducted for every fifteen minute increment.  
3. Three lates will count as one absence.  
4. The instructor’s clock is the official clock for determining whether a student is late.  
5. Situations may arise during the term, (illness, family emergency, etc.) that force a student to miss a class. If such situations arise, it is the student’s responsibility to notify the instructor prior to the start of class. Failure to notify the instructor will result in a zero (0) for the day. If the student makes notification to the instructor a grade of fifty (50) will be given.  
6. If a student misses six (6) class periods, the instructor will assign an “F” for the class.  
And the student will be dropped from the class.  
7. If a student is on time to class but does not participate (stay busy welding) points will be deducted (up to fifty points) at the instructor’s discretion.  
8. This policy does not affect the right of the student to drop a course before the
mandated deadline or the right of the instructor to assign, with the approval of the department chair, an IP under the appropriate extenuating circumstances.

9. Responsibility for dropping a course lies solely with the student.

B. Assignments:
1. Weld assignments are self-paced (individual students will progress differently) but all assignments are to be turned in by the last day of class. Assignments not turned in will be given a grade of zero (0).

C. Tests:
1. Twenty points will be deducted for a missed exam. If you know you will be missing class, coordinate with the instructor ahead of time so as to take any exams prior to the absence.

D. Conduct:
1. Students are expected to behave in a manner that is respectful of others in the class, disruptive behavior will not be tolerated. You will be asked to leave and will not be allowed to make up any missed work. Continual disruption will result in permanent removal from class. Use of cell phones will not be permitted in the classroom or the shop. Cell phone usage in the classroom or shop will result in a zero (0) for the day.

X. Safety

• Campus building occupants are required to evacuate buildings when a fire alarm activates. Alarm activation or announcement requires exiting and assembling outside.

• Familiarize yourself with all exit doors of each classroom and building you may occupy while receiving instructions. The nearest door may not be the door you used when entering the building.

• Students requiring evacuation assistance should inform the instructor during the first week of class.

• In the event of evacuation, follow the faculty’s or class instructor’s instructions.

• **DO NOT** re-enter a building unless given instructions by the fire Department, Campus/Local Police, or Fire Prevention Services.

• Students will comply with all lab safety rules as follows:
  Upon entrance into the lab, students will have safety glasses on and will wear them, the entire time that they are in the lab.
  Students will use safe practices when using all equipment in the lab, including hand and power tools, and all welding and cutting equipment.
  While using or being near those using cutting, welding, grinding equipment, students will be aware of where they are directing sparks.
  Because of the inherent danger of using above stated equipment, any student
XI. Special Needs
If you have a documented disability that will impact your work in this class, please contact the ADA Coordinator, so that appropriate arrangements for your accommodations can be made. The counselor on your campus can assist you in this process. In accordance with the federal law, a student requesting accommodations must provide documentation of his/her disability to the ADA Coordinator. For more information call (325) 236-8292 or email amy.freeman@tstc.edu.

XII. Course Schedule (subject to change)
Week 1-15

<table>
<thead>
<tr>
<th>Activities and Task Worksheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate of Completion: WLT STW CER1</td>
</tr>
<tr>
<td>Course: WLDG 1417 Introduction to Layout and Fabrication</td>
</tr>
<tr>
<td><strong>Student will be able to weld angle iron to angle iron to create a 90 degree corner.</strong></td>
</tr>
<tr>
<td>90 degree corner with a miter cut 2&quot;x2&quot;x1/4&quot; angle iron.</td>
</tr>
<tr>
<td>90 degree corner Coping the ends 2&quot;x2&quot;x1/4&quot; angle iron.</td>
</tr>
<tr>
<td><strong>Student will be able to weld square tubing to square tubing creating a 90 degree corner.</strong></td>
</tr>
<tr>
<td>90 degree corner with a miter cut 1&quot; square tubing.</td>
</tr>
<tr>
<td>90 degree corner butting the ends together 1&quot; square tubing.</td>
</tr>
<tr>
<td><strong>Fabricate using the concept of a &quot;square&quot;.</strong></td>
</tr>
<tr>
<td>Make a 12&quot; cube with 1&quot; square tubing.</td>
</tr>
<tr>
<td>Right triangle with 2&quot;x2&quot;x1/4&quot; angle iron.</td>
</tr>
<tr>
<td><strong>Fabricating basic pipe fittings.</strong></td>
</tr>
</tbody>
</table>
Saddle 2" schedule 40 pipe.

<table>
<thead>
<tr>
<th>Fabricate common structural connections.</th>
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</thead>
<tbody>
<tr>
<td>Column to base plate connection W Beam to plate.</td>
</tr>
<tr>
<td>Column to column splice W Beam</td>
</tr>
<tr>
<td>Cope beam to column splice W Beam.</td>
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</tbody>
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### Education

<table>
<thead>
<tr>
<th>Name of Institution</th>
<th>Degree Earned</th>
<th>Date Earned</th>
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</thead>
<tbody>
<tr>
<td>Oklahoma State University</td>
<td>Bachelor of Science - Animal Science</td>
<td>May 1999</td>
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</table>

### Certifications

<table>
<thead>
<tr>
<th>Name of Certification</th>
<th>Date Expires Date Earned</th>
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<tbody>
<tr>
<td>AWS D9.1:2000 Code Certification</td>
<td>CURRENT NOV 2010</td>
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### Industry, Teaching or Training, and Other Experience Relevant To Course

<table>
<thead>
<tr>
<th>Description of Experience Related To Course</th>
<th>Date Ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Science Teacher - Northside ISD</td>
<td>PRESENT</td>
</tr>
<tr>
<td>Extension Assistant - Texas Cooperative Extension Service</td>
<td>Aug ’07 April 2000</td>
</tr>
</tbody>
</table>
Student Acknowledgement:

This is to acknowledge that I have received a copy of the syllabus for the course WLDG 1417 Introduction to Layout and Fabrication. I understand that it is my responsibility to read and understand the syllabus and to abide by the guidelines presented therein.

__________________________________  ________________________________
Student Printed Name    Signature

________________________  __________________________
Date