Welding I  
WD4.151, 9.151  

Student Assignment Schedule- Syllabus.  

Course Description: BASIC ARC / BASIC OXY-ACETYLENE WELDING SKILLS  

Welding I is an introductory course stressing safety and equipment familiarization with lab exercises for skill development in basic gas and electric arc welding. Includes technical information lectures in related subjects.  

1. Required Items furnished by the students:  
   
   Safety Glasses with side shields*  
   Leather welding gloves with long gauntlet sleeves  
   HIGH TOP Hard Top Boots (no tennis shoes)  
   Suitable clothing that is non-flammable  
   Notebook or folder with paper for taking notes  
   Optional but recommended: Ear plugs  
   
   *Note: Safety glasses are required to be worn all times in the shop, including under welding helmets, goggles, and face shields.  

2. Lectures:  
   Technical information about welding and equipment will be presented in lectures at the beginning of each class meeting.  

3. Lab Exercises:  
   Basic oxy-acetylene (gas) welding  
   Braze welding  
   Oxy-acetylene flame cutting – manual techniques  
   Basic arc welding with the shielded metal-arc welding (SMAW) process using E6010, E6011, E6013, E7018, and E7024 electrodes.  
   Introduction to MIG Short Arc with 110 volt machine with .023 wire.  

4. Grading:  
   Grading is based on:  
   Evaluation of skill competency on lab assignments (Progress cards)…. 50%  
   Quality of research evident in your Homework assignments….. 15%  
   Attendance….20%  
   Written test scores….. 15%  

   Student Grade Options Available for this course:  
   A through F Letter Grade basis  
   Pass / No Pass (P/NP) basis  
   Audit
5. **Tardies:**
   One point will be subtracted each time the student is tardy.

6. **Homework:**
   The following items must appear on each homework assignment turned in, or a reduction of credit will be given for that assignment.
   Your Name,
   Chapter #,
   Questions due (Example: Questions 1-10)

   10 points will be deducted if you fail to provide this information. All homework assignments are to be done on notebook-size (8-1/2” x 11”) paper.

7. **Breaks and Clean Up:**
   The instructor will announce break time at each class session. The student is expected to return from break on time and ready to resume work. Students returning late from break will be marked tardy.

   The instructor will announce clean-up time at the end of each class session, and then this procedure should be followed:

   - Shut down the welding equipment you are using
   - Return any tools used to the proper area
   - Return unused steel to the proper storage
   - Place welded pieces in the scrap container (cool if necessary)
   - Return welding rods over 2” in length to the proper box or tray in the storage rack
   - Sweep off table top in welding booth, and place welding stool on table.
   - Sweep floor of welding booth and aisle area and put stubs and slag in metal garbage can

   The student is free to go after completing these procedures.

8. **Safety:**
   The student is responsible to follow all safety rules and shop procedures, and to perform all tasks in a safe and conscientious manner. This includes wearing the required safety items (safety glasses, hard top boots, etc.) during the lab time.

   **NOTE:** The instructor will verbally warn the student when required safety items are not being worn in the shop, or when safety procedures are not being followed. Upon the third verbal warning, the student will be withdrawn from the course by the instructor.
Disabilities Services and Emergency Planning – Meet with Instructor Week One

If you have emergency medical information for your instructor, need special arrangements to evacuate campus, or have a documented disability, please meet with your instructor, by appointment, no later than the first week of the term, to discuss your needs. If you have a documented disability that will impact you at college and you seek accommodations, contact the Office of Disability Services (ODS) for intake and to document your disability with LBCC. Then, each term, at least two to three weeks prior to the start of classes, submit your “Request for Accommodations” form to ODS and pickup instructor letters. ODS may be reached from any LBCC campus/center by email to ODS@linnbenton.edu or by calling 917-4789. Letter pickup is available at each LBCC campus/center.
All homework is required unless the student is choosing to officially Audit the course. To officially Audit the course, the student must complete and turn in an Audit Request Form to LBCC Registration no later than the deadline for this course which is the second Friday of the term.

Students who wish to take this course on an A through F Letter Grade basis or on a Pass / No Pass basis will need to complete the following 16 Homework Assignments and turn them in by Week 7 of the term. For extenuating circumstances, students may still turn in Homework Assignments through Week 8 of the term without a reduction in credit. Any Homework Assignments turned in after Week 8 will receive zero credit. Class time is not available for students to work on completing Homework Assignments during class.

Instructions: For each of the assignments below......
1. Read the chapter.
2.List what are, in your opinion, the 10 most important things that you learned from reading the chapter. Write down the information for each of these 10 most important things word-for-word in your own handwriting on a piece of 8-1/2" X 11" paper and number them 1 through 10. Also include the page number(s) where the information is located in the chapter that you are listing. Photocopies, typewritten, or computer-printer-generated homework assignments will not receive credit. Be sure to write your name on each piece of paper turned in.
Staple into a stack in the same order as shown below and turn it in to instructor.

<table>
<thead>
<tr>
<th>Chapter Number</th>
<th>Chapter Name</th>
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<tbody>
<tr>
<td>Chapter 2</td>
<td>&quot;Introduction to Welding: Welding Safety&quot;</td>
</tr>
<tr>
<td>Chapter 4</td>
<td>&quot;OAW - Equipment&quot;</td>
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<tr>
<td>Chapter 5</td>
<td>&quot;OAW - Set Up &amp; Operation&quot;</td>
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<tr>
<td>Chapter 6</td>
<td>&quot;OAW - Flat Position&quot;</td>
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<tr>
<td>Chapter 3</td>
<td>&quot;Introduction to Welding: Joint Design and Welding Terms&quot;</td>
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<tr>
<td>Chapter 23</td>
<td>&quot;Other Welding Processes: Brazing, Braze Welding, and Soldering&quot; (refer to the Braze Welding section of chapter only)</td>
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<tr>
<td>Chapter 25</td>
<td>&quot;Other Welding Processes: Cutting Operations&quot; (refer to Oxy-Acetylene Cutting section of chapter only)</td>
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<tr>
<td>Chapter 10</td>
<td>&quot;SMAW - Striking an Arc&quot;</td>
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<td>Chapter 11</td>
<td>&quot;SMAW - Depositing A Continuous Bead&quot;</td>
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<tr>
<td>Chapter 8</td>
<td>&quot;SMAW - Equipment&quot;</td>
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<tr>
<td>Chapter 12</td>
<td>&quot;SMAW - Flat Position&quot;</td>
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<tr>
<td>Chapter 37</td>
<td>&quot;Welding Technology: Welding Metallurgy&quot;</td>
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<tr>
<td>Chapter 13</td>
<td>&quot;SMAW - Horizontal Position&quot;</td>
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<td>Chapter 9</td>
<td>&quot;SMAW - Selecting Electrodes&quot;</td>
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<td>Chapter 39</td>
<td>&quot;Welding Technology: Weldability of Carbon and Alloy Steels&quot;</td>
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<tr>
<td>Chapter 40</td>
<td>&quot;Welding Technology: Weldability of Tool Steels and Cast Irons&quot;</td>
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Written Exams: Written Mid-Term Exam and Written Final Exam.