<table>
<thead>
<tr>
<th><strong>Course Number</strong></th>
<th><strong>PLAP 1318 Plumbing Apprenticeship IX</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit Value</strong></td>
<td>4.0 (1.5 Theory and 2.5 Lab)</td>
</tr>
<tr>
<td><strong>Catalog Course Description</strong></td>
<td>This course begins examining the principles and practices of metal fabrication including layout, design, and support techniques. Students are exposed to basic weld pipe, weld fittings, weld symbols, offsets, supports, and screwed pipe. Related math calculations and cutting techniques are utilized to prepare students for entry into pipe fitting related fields. Students will then be introduced to Cutting, Beveling &amp; Safety Protocols by exploring protocols and procedures for safety of cutting with various methods, including oxy fuel gas cutting, plasma cutting, chop saws, and portable band saws. The course will also address jobsite safety and hazardous substances. Methods of grinding, beveling, cutting, gouging will be explored. Weld joints, types &amp; designs will be studied. Pre-requisites: None</td>
</tr>
</tbody>
</table>
| **Student Learning Outcomes/Objectives/Competencies of the Course** | Student Learning Outcomes:  
  • The student will show competency in following safety protocol  
  • The student will properly read and identify various weld symbols and layout drawing types  
  • The student can properly measure and layout basic projects following blueprints  
  • The student can identify weld fittings and types of pipe  
  • The student can identify supports  
  • The student will show competency when using various cutting techniques  
  • The student will be able to identify weld joints, types and designs in various applications  
  • The student will demonstrate jobsite safety with regard to cutting, arc welding, and hazardous substances |
| **College-Wide Student Learning Outcomes** | College Wide Student Learning Outcomes:  
  Communication  
  Critical Thought |