# SMAW OPEN V-GROOVE WELDS I
## Course Syllabus

<table>
<thead>
<tr>
<th>Course Number:</th>
<th>WELD-0093A</th>
<th>OH LAP Credit:</th>
<th>No</th>
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<tbody>
<tr>
<td>OCAS Code:</td>
<td>None</td>
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<tr>
<td>Course Length:</td>
<td>50 Hours</td>
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<tr>
<td>Career Cluster:</td>
<td>Manufacturing</td>
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<td>Career Pathway:</td>
<td>Welding and Metal Fabrication</td>
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<tr>
<td>Career Major(s):</td>
<td>Combination Welder</td>
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### Pre-requisite(s):
This course is an introduction to open V-groove welds and how to set up welding equipment for making an open V-groove weld. Procedures for making flat, and horizontal open V-groove welds are covered.

### Textbooks/Materials:
- Math for Welders, Marion and Nino, GoodHeart-Willcox (2001)

### Course Objectives:

**A. Demonstrate an Understanding of SMAW – Open V-Groove Welds**

1. Prepare shielded metal arc welding (SMAW) equipment for open-root V-groove welds.¹
2. Perform open-root V-groove welds in the:
   a. Flat (1G) position ¹
   b. Horizontal (2G) position ¹

**B. Pass SMAW welder performance qualification test (2G) on carbon steel.²**

¹ Welding Skills, National Center for Construction Education and Research (NCCER)
² American Welding Society, Entry Level Welder (Level I) Module 4

### Teaching Methods:
The class will primarily be taught by the lecture and demonstration method and supported by various media materials to address various learning styles. There will be question and answer sessions over material covered in lecture and media presentations. Supervised lab time is provided for students to complete required projects.
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Grading Procedures:  
1. Students are graded on theory and shop practice and performance.  
2. Each course must be passed with seventy (70%) percent or better.  
3. Grading scale: A=90-100%, B=80-89%, C=70-79%, D=60-69%, F=50-59%.

Description of Classroom, Laboratories, and Equipment:  
Tulsa Technology Center campuses are owned and operated by Tulsa Technology Center School District No. 18. All programs provide students the opportunity to work with professionally certified instructors in modern, well-equipped facilities.

Available Certifications/College Credit:  
The student may be eligible to take state, national or industry exam after completion of the program. College credit may be issued from Oklahoma State University-Okmulgee or Tulsa Community College. See program counselor for additional information.

College Credit Eligibility:  
The student must maintain a grade point average of 2.0 or better.