

**Tulahoma City Schools  
High School Course Syllabus**

<b>Course</b>	<b>Welding II</b>	<b>Teacher: Jerry Green</b>
<b>Number</b>	<b>6033</b>	<b>School: Tullahoma High</b>
<b>Department</b>	<b>CTE</b>	<b>Year: 2018-2019</b>

**Course  
Description**

Welding II is designed to provide students with opportunities to effectively perform cutting and welding applications of increasingly complexity used in the advanced manufacturing industry. Proficient students will build on the knowledge and skills of the Welding I course and apply them in novel environments, while learning additional welding techniques not covered in previous courses.

**Primary  
Objectives**

- Identify and demonstrate shop safety.
- Identify and demonstrate all aspects of welding safety.
- Define the welding process, welding terminology, and history of welding.
- Identify the five basic welding joints and welding symbols.
- Demonstrate safe setup, operation, and shutdown of an oxy-fuel torch.
- Demonstrate safe setup, operation and breakdown of basic plasma arc cutting equipment.
- Explain the importance and use of ventilation.
- Explain the mechanical properties of metals and their importance in welding processes.
- Identify basics of SMAW, GMAW, FCAW, GTAW
- Demonstrate the ability to work cooperatively with others in a professional setting.
- Be aware of challenges and responsibilities in the welding production industry with an awareness of the employment opportunities and advancement possibilities.

## **Major Topics Covered by Quarter (projected schedule)**

### TOPIC

Shop / Machine Safety  
Welding Joints and Positions  
Basic Oxyacetylene Welding  
Basic Oxyacetylene Cutting  
Basic GMAW, FCAW, GTAW  
Plasma Cutting

**Note: The students will work in these areas of welding and some metal fabrication. Due to the rotational nature of the lab, the students may be involved in different activities at one time. All welding areas will be covered 1<sup>st</sup> nine weeks and the skill level will be worked on the entire semester.**

### **Method of Evaluation**

Lab Competencies  
Class/Homework  
Lab Participation  
Lab project  
Test

### **Student Expectations/ Responsibilities**

Attend class everyday  
Be respectful of the lab, the equipment and others  
Complete all assignments on time  
Participate in group activities  
A willingness to learn and challenge themselves everyday  
Clean up after themselves and put the equipment away  
Practice safe working habits  
Follow all shop and classroom rules