

**Tulahoma City Schools
High School Course Syllabus**

Course	Welding I	Teacher: Jerry Green
Number	6078	School: Tullahoma High
Department	CTE	Year: 2018-2019

**Course
Description**

Welding I is designed to provide students with the skills and knowledge to effectively perform cutting and welding applications used in the advanced manufacturing industry. Proficient students will develop proficiency in fundamental safety practices in welding, interpreting drawings, creating computer aided drawings, identifying and using joint designs, efficiently laying out parts for fabrication, basic shielded metal arc welding (SMAW), mechanical and thermal properties of metals, and quality control.

**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
- 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.
- Read and interpret welding symbols, blue prints, and shop drawings

Major Topics Covered by Quarter (projected schedule)

TOPIC

Shop / Machine Safety
Welding Joints and Positions
Basic Oxyacetylene Welding
Basic Oxyacetylene Cutting
Basic SMAW
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 1st 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 their selves and put the equipment away
Practice safe working habits
Follow all shop and classroom rules