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## SECTION HEADING

### WELD 1190: Welding Principles

#### Description

Welding Principles provides the student with details of welding and cutting processes, terminology, joint design, related areas of shop math, measurement, and reading technical drawings.

#### Credits

3

#### Prerequisite

None

#### Corequisite

None

#### Topics to be Covered

1. Welding Safety
2. Physics of Welding
3. Welding joints and positions
4. Weld terminology
5. Oxy-fuel gas cutting equipment and supplies
6. Plasma Arc cutting equipment and supplies
7. Shielded Metal Arc Welding equipment and supplies
8. Gas Metal Arc Welding equipment and supplies
9. Gas Tungsten Arc Welding equipment and supplies
10. Shop Math
11. Technical drawings and sketches

#### Learning Outcomes

1. Recognize a safe work environment and the need for personal safety.
2. Describe welding terms and definitions.
3. Describe welding processes, equipment, and supplies required.
4. Apply shop math to welding.
5. Read and interpret welding drawings and sketches.
6. Demonstrate use of various measurement tools used in welding industry.

#### Credit Details

Lecture: 1

Lab: 2

OJT: 0

MnTC Goal Area(s): None