# WELD A116: ARC AND OXYACETYLENE WELDING PRACTICE LEVEL 2

| Item | Value |
|---|---|
| Curriculum Committee Approval Date | 11/15/2017 |
| Top Code | 095650 - Welding Technology |
| Units | 1-2 Total Units |
| Hours | 54-108 Total Hours (Lab Hours 54-108) |
| Total Outside of Class Hours | 0 |
| Course Credit Status | Credit: Degree Applicable (D) |
| Material Fee | Yes |
| Basic Skills | Not Basic Skills (N) |
| Repeatable | No |
| Grading Policy | Standard Letter (S) |

## Course Description

A second-level laboratory class to develop skills in SMAW and oxy-acetylene welding. PREREQUISITE: WELD A100 or WELD A101 or concurrent enrollment. Transfer Credit: CSU.

## Course Level Student Learning Outcome(s)

1. Weld in various positions i.e. flat, horizontal, vertical or overhead.
2. Weld SMAW in all positions.
3. Cut materials using various thermal cutting processes.

## Course Objectives

- 1. Demonstrate SMAW flat position welding
- 2. Demonstrate SMAW horizontal position welding
- 3. Demonstrate SMAW vertical position welding
- 4. Demonstrate SMAW overhead position welding
- 5. Demonstrate thermal cutting.

## Lecture Content

Shielded Metal Arc Welding Flat position Horizontal position Vertical position Overhead position Oxygen Acetylene Welding Vertical position Overhead position Thermal cutting

## Lab Content

Shielded Metal Arc Welding Flat position Horizontal position Vertical position Overhead position Oxygen Acetylene Welding Vertical position Overhead position Thermal cutting

## Method(s) of Instruction

- Lab (04)

## Instructional Techniques

Textbook reading, demonstrations, skills evaluation, and instructional critique

## Reading Assignments

Skills evaluation, demonstration, and critiques Proficiency demonstrated by psycho-motor skills Proficiency demonstrated in vocabulary and meaning

## Writing Assignments

Skills evaluation, demonstration, and critiques Proficiency demonstrated by psycho-motor skills Proficiency demonstrated in vocabulary and meaning

## Out-of-class Assignments

Skills evaluation, demonstration, and critiques Proficiency demonstrated by psycho-motor skills Proficiency demonstrated in vocabulary and meaning

## Demonstration of Critical Thinking

Project, certification plates

## Required Writing, Problem Solving, Skills Demonstration

Project, certification plates

## Eligible Disciplines

Welding: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

## Textbooks Resources

1. Required Galvery, William and Frank Marlow. Welding Essentials: Questions and Answers , 2nd ed. New York: Industrial Press, 2007

## Other Resources

1. Orange Coast College Welding Safety Test Selected handout materials to be provided and distributed by the instructor.