

# BUTTE COLLEGE

## COURSE OUTLINE

### I. CATALOG DESCRIPTION

**WLD 150 - Shop Practices for Beginning Welders**

**0.5 - 1 Unit(s)**

**Prerequisite(s):** NONE

**Recommended Prep:** Reading Level III; English Level II; Math Level II

**Transfer Status:** NT

25.5 - 51 hours Lab

This is a supervised lab experience for beginning welding students. Students will practice skills in oxyacetylene welding (OAW), oxy-fuel cutting (OFC) and shielded metal arc welding (SMAW) processes, in the flat and horizontal positions on various joint details. All welds will meet the American Welding Society (AWS) qualification standards. Students may enroll in this course up to 1 unit(s) to complete the entire curriculum of the course. Pass/No Pass Only. Open Entry/Open Exit.

### II. OBJECTIVES

Upon successful completion of this course, the student will be able to:

- A. Follow proper safety protocols when operating welding and cutting equipment.
- B. Operate OF equipment for welding and cutting in the flat position.
- C. Operate SMAW equipment to weld in the flat and horizontal positions.
- D. Operate SMAW equipment on various joint fit-ups and alignment.
- E. Demonstrate welding skills at a proficiency level appropriate for a beginning welding student.

### III. COURSE CONTENT

#### **A. Unit Titles/Suggested Time Schedule**

		Lab	
<u>Topics</u>			<u>Hours</u>
1.	Introduction and safety		1.50
2.	OAW		8.00 - 16.50
3.	OFC		8.00 - 16.50
4.	SMAW		8.00 - 16.50
Total Hours			25.5 - 51

### IV. METHODS OF INSTRUCTION

- A. Demonstrations
- B. Laboratory Experiments

### V. METHODS OF EVALUATION

- A. Class participation
- B. Practical Evaluations

### VI. EXAMPLES OF ASSIGNMENTS

- A. Reading Assignments
  1. Read the manual for the OAW equipment and describe the steps for proper setup to the instructor.
  2. Read the American Welding Society (AWS) code book for proper SMAW welding procedures and demonstrate these procedures in class.

B. Writing Assignments

1. Maintain a written log of your daily welding activities.
2. Prepare a written description of the order of operations for proper SMAW equipment setup.

C. Out-of-Class Assignments

1. Not applicable

**VII. RECOMMENDED MATERIALS OF INSTRUCTION**

Materials Other Than Textbooks:

- A. Safety equipment: safety glasses, welders hat, leather gloves, leather jacket, leather chaps, leather boots, ear plugs and proper protective clothing (no tennis shoes, tank tops, or shorts).
- B. Tools: chipping hammer, wire brush, tip cleaners, 10 in. straight jaw locking pliers, combination square, paint pen, striker, 25' tape measure, 10R and 11R vise grips, 3" x 5" memo pad and soap stone.

**Created/Revised by:** Donald Robinson

**Date:** 11/19/2012