

1. COURSE NAME/TITLE: Oxy-Acetylene **CUTTING AND WELDING**
2. COURSE PREFIX AND NUMBER: WELD 1100
3. COURSE LECTURE/LAB/CREDIT HOURS: CONTACT HOURS:
4. COURSE MAXIMUM ENROLLMENT:
5. COURSE FACILITY: Welding Technology Lab
6. SAFETY REQUIREMENTS: VHS tapes on safety and welding technique. Specific rules are issued to beginning students (safety) and they are expected to know the operation of equipment or they should call the instructor.

7. COURSE LAB FEE:

7a. EQUIPMENT REQUIRED: Goggles, striker, tip cleaner, hat, clear safety glasses, pliers, ear plugs.

7b. COURSE DESCRIPTION: A basic course in the oxy-acetylene process. Gases, equipment safety, basic techniques, applications, and limitations of these processes included.

7c. COURSE PREREQUISITE: None

8. COURSE GOALS:

1. A basic knowledge of the oxy-acetylene welding processes and their application in modern industry.
2. History of the oxy-acetylene process.
3. Safe shop practices and good work habits.
4. Knowledge of the production of oxygen and acetylene and their uses.

9. COURSE OBJECTIVES:

As a result of this course, the student should be able to:

1. Identify and distinguish the various gases used in the welding industry.
2. Recognize, identify, and adjust the three types of flames.
3. Properly use the oxy-acetylene torches, including assembly and safety precautions.
4. Satisfactorily prepare the edges of sheet steel, and properly make butt joints.

10a. WEEKLY OUTLINE:

Week 1	Shop orientation Tool selections Equipment usage Introduction to the process
Week 2 and 3	Oxygen and acetylene (lecture) Setup and operation of welding equipment The oxy-acetylene flame and uses
Week 4 - 6	Manipulating the torch to form a puddle (11 ga. material) Practice running puddles Getting penetration into base metal

Week 7 - 9	Elementary welding - beads - steel sheet - flat position
Week 10 - 13	Groove welds - butt joints - steel sheet - 11 ga. - all positions
Week 14	Review all welds - butt joint Review safety and equipment
Week 15	Final exam and practical

10b. LEARNING ACTIVITIES

1. The principle means of teaching used is the lecture demonstration method used on an individual basis.
2. There are periodic assigned readings for the student.
3. VHS tapes for safety and equipment usage.

11. INSTRUCTIONAL MATERIALS:

Oxy-Acetylene Handbook
Modern Welding Practices
Modern Welding

Linde Co., N.Y.
Althouse & Turnquist
Althouse-Turnquist-Bewdit

12. TYPES OF ASSESSMENTS:

- A. Daily work (visual)
- B. Mid-term practical test
- C. Final practical and written test

Course Grade Computation:	A 90-100
50% Daily work (visual)	B 80- 90
25% Mid-term practical test	C 70- 80
25% Final practical and written test	D 60- 70
	F Below 60

3. COURSE TEXT AND READINGS:

Welding Principles and Practices by Raymond Saacks. Cost \$35.00.
Located in the Delgado bookstore.