# DANVILLE AREA COMMUNITY COLLEGE

**COURSE NUMBER:** WELD 170

**COURSE TITLE:** Gas Weldi ng

**DIVISION:** Technology

# SEMESTER CREDIT HOURS: 4

**PREREQUISITES:** None

**FACULTY:** Bob Skinner 217-443-8791 [bskinner@dacc.edu](mailto:bskinner@dacc.edu)

# COURSE DESCRIPTION:

Designed to provide an opportunity to learn skills and the fundamental knowledge in Oxy­ Acetylene welding and safety. Instruction will be given covering brazing cast iron welding and flame cutting. Emphasis will also be given to vertical weldments and the proper method of weldi ng non-ferrous metals.

# COURSE OBJECTIVES / GOALS:

1. To develop a complete awareness of safety. Student must pass safety test in order to continue the course.

1. Student must learn how to safely setup and handle Oxy-Acetylene equipment
2. To know how the various components function
3. To develop the welding skills and the manipulative techniques to control the welding process at hand.
4. To learn how to make sound welds in the flat and horizontal positions.
5. Be able to demonstrate the abilities of making vertical weld mends.
6. Oxy-Acetylene brazing and joining copper tubing.
7. To develop in the student a higher degree of self-expectation and work performance.

# TOPICAL OUTLINE:

* Perform safety inspections of equipment and accessories
* Equipment operation and adjustments
* Set-up for manual oxyfuel gas cutting operations on plain carbon steel.
* Operate manual oxyfuel gas cutting equipment.
* Perform straight cutting operations on plain carbon steel, using the manual oxyfuel gas cutting process.
* Perform bevel cutting operations on plain carbon steel, using the manual oxyfuel gas cutting process.
* Remove weld metal on plain carbon steel using weld washing techniques, with the manual oxyfuel gas cutting process.

# WEEKLY ACTIVITIES:

* Wednesday and Thursday are set up for lectures and reviews of test materials and welding in lab.
* Monday and Tuesday we test on the reviews of week before and welding in lab.

# TEXTBOOK / SPECIAL MATERIALS:

Welding Principles & Applications. 7th ed. By Larry Lefferus (Delmar Publishing ) Protective clothing, gloves, safety glasses

# EVALUATION:

Attendance

Review Test (Must be turned in on assigned date.) Lab

Final Exam

This workforce solution was funded by a grant awarded by the U.S. Department of Labor’s Employment and Training Administration. The solution was created by the grantee and does not necessarily reflect the official position of the U.S. Department of Labor. The Department of Labor makes no guarantees, warranties, or assurances of any kind, express or implied, with respect to such information, including any information on linked sites and including, but not limited to, accuracy of the information or its completeness, timelines, usefulness, adequacy, continued availability, or ownership. This solution is copyrighted by the institution that created it. Internal use, by an organization and/or personal use by an individual for non-commercial purposes, is permissible. All other uses require the prior authorization of the copyright holder.