# DANVILLE AREA COMMUNITY COLLEGE

**COURSE NUMBER:** WELD280

**COURSE TITLE:** MIG Welding

**DIVISION:** Technology

# SEMESTER CREDIT HOURS: 4

**PREREQUISITES:** None

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

# COURSE DESCRIPTION:

All aspects of MIG welding are covered including set up and adjustment of

equipment. Shielded gas systems and shielded gases will be discussed. Practice on the vertical and overhead positions on mild steel, stainless and aluminum. Students should become proficient with the MIG process.

# COURSE OBJECTIVES / GOALS:

1. Develop a complete awareness of safety. All students MUST pass the safety test to continue the course.

1. To become proficient in the skills, procedures, and principals of MIG welding with emphasis on horizontal, vertical, and overhead welding.
2. Student will learn how to set up and adjust the MIG equipment.
3. Student will be given demonstrations in the welding of various joints in all positions.
4. Student will learn various meter settings and wire speeds which best suit his/her particular technique.
5. Student will learn the characteristics of constant voltage machines.
6. Student will learn the types of controls, adjustments, and gasses and how to use them for any particular job the student is performing.
7. To become more proficient in determining which type of joint will do the best job at the lowest cost.

# TOPICAL OUTLINE:

* Perform safety inspections of equipment and accessories.
* Make adjustments to equipment and accessories.
* Set-up for flux core arc welding operations on plain carbon steel.
* Operate flux cored arc welding equipment.
* Make fillet welds, all positions, on plain carbon steel using MIG or GMAW welding process.
* Make groove welds, all positions, on plain carbon steel using MIG or GMAW welding process.

# WEEKLY ACTIVITIES:

* Wednesday and Thursday are set up for lectures and reviews of test materials and welding in la b.
* 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 Jeffus Welding gloves, welding helmet

# 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.