

Course Description:

There are so many things you can create or repair with welding. The home & hobby welding class allows you to explore and improve your skills. Example projects you can make at home include metal artistry, auto body, a welding cart, fire pit, hand railing, go-kart, a barbecue, truck racks, yard art and much more.

This course is designed to cover basic welding skills for home use and hobby purposes. Safe use of equipment is emphasized. Students will receive basic instruction and participate in hands-on experiences using oxyfuel welding and cutting, and shielded metal arc welding (stick). Students are allowed to bring small home projects to class to work on, with instructor approval.

Prerequisites:

N/A

Curriculum Resources: books, etc.

N/A

Course Goals & Objectives:

By the end of this course, the student should be able to:

1. Recognize key safety concerns and practices, including use of PPE and welding equipment.
2. Demonstrate proper use of an Oxyfuel system to safely weld, cut and braze mild steel.
3. Recognize aspects of the Shield Metal Arc process to include identifying types of electrodes, welding current range, appropriate technique, typical welding joints and basic welding positions.
4. Demonstrate set up and usage of small PLASMA cutting system.
5. Discuss Gas Metal Arc Welding joints and basic welding positions.
6. Demonstrate modes of metal transfer used in GMAW process.
7. Demonstrate GMA welding of various joints in flat, horizontal, and down hill positions.

Teaching Philosophy:

We believe that instructors, staff, and administrators have a shared responsibility to provide: 1) innovative course design and instruction; 2) a safe, learner-centered environment; and 3) an authentic learning experience.

Evaluation Methods:

Student success is based on participation in class activities and the completion of exercises. A certificate of completion requires 100% attendance and completion of all assigned activities.

Grading Policy:

Student success is based on participation in class activities and the completion of exercises. A certificate of completion requires successful completion of all assigned work within the established time frame. Types of graded assignments will be projects, review questions, activities and assignments.

S = Satisfactory

U = Unsatisfactory

A course grade of Unsatisfactory does not qualify the course as a prerequisite to other courses.

Participants Responsibilities:

To ensure a quality and safe learning environment, students are required to follow the Student Behavior policy found online at <https://www.middeltech.com/student-services/student-handbook/>.