

One Semester (1 credit)

Book: Modern Welding

Althouse, Turnquist, Bowditch, Bowditch

Course grade is determined accordingly:

Welds and project	55%
Daily Work	20%
Tests	15%
Worksheets	5%
Housekeeping	5%

Prerequisite: Successful completion of Welding IV

This advanced Welding class is designed to further the students knowledge in welding and drafting symbols associated with welding. The student will complete single pass overhead welds with GMAW, SMAW, GTAW, Plasma cut and design, draw and fabricate a project.

1. Calculate Bill of Material and Cost
 - A. Worksheets
 - B. Project

2. Weld Defect Measurement
 - A. Non Destructive
 - B. Destructive

3. Smaw – Overhead
 - A. Tee
 - B. Lap
 - C. Pipe to Flat
 - D. Edge

4. Gmaw - Overhead
 - A. Tee
 - B. Lap
 - C. Pipe to Flat
 - D. Edge

5. Fcaw – (Flux-Core Arc Weld) mig

Flat

- A. Pipe to Flat
- B. Lap
- C. Tee
- D. Corner

Horizontal

- A. Butt
- B. Lap
- C. Tee
- D. Corner

Vertical - Up/Down

- A. Butt
- B. Lap
- C. Tee
- D. Corner

6. Project

- A. Figure Cost / Bill of Materials
- B. Layout
- C. Construction

7. Metal Lathe

- A. Parts Identification
- B. Set Up
- C. Project

8. Foundry

- A. Cope & Drag
- B. Full Mold

9. Complete Portfolio