

Course Outcome Summary

Standard Course

WELDING 109 – Basic Welding Fabrication

Course Information	
Division	ASET
Contact Hours	90
Theory	30
Lab Hours	60
Total Credits	4

Prerequisites: RDG 090, MATH 090 or qualifying score on accepted placement test

Course Description

Basic Welding Fabrication will introduce students to CNC Plasma Cutting, layout theory, tube bending & notching, and basic fabricating techniques. Students will construct projects using blueprints, material lists, cut lists, and written procedures. Additional topics to include: AutoCAD, welding safety, welding techniques, machine and equipment use, general lab safety, project design and fabrication, project planning. Other equipment operations to include but not limited to: HBS, VBS, Shear, Iron Worker, punching and notching, drill press, metal brake, PAC, CNCPAC, GMAW, GTAW, OFC, and various hand and power tools. Student will be able to retain their projects fabricated in class upon completion of class.

Course Outcomes

In order to evidence success in this course, students will be able to:

- 1. Demonstrate safe working habits in welding and fabrication lab environment
- 2. Develop a project following design process
- 3. Demonstrate application of layout theory
- 4. Develop working procedures for project completion
- 5. Construct lab projects from blueprints
- 6. Create a project techfolio to showcase finished project
- 7. Demonstrate ability to safely set up, operate, and shut down lab equipment
- 8. Evaluate and critique finished products (including own designs) created in lab using oral and/or written communication skills
- 9. Demonstrate importance of lab housekeeping
- 10. Perform general machine maintenance as needed (change tips, liners, nozzles, tooling, lube, etc)

Date Updated: 11/21/2017 By: Stephen Hasselbach Updated: 2/12/2020, 2/13/2020 By PC