

Course Objectives/Course Outline
Spokane Community College

Course Title: Welding and Fabrication Basics

Prefix and Course Number: WELD 104

Course Learning Outcomes:

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

- Understand modern welding/fabrication shop technologies, processes, and equipment
- Identify and use common welding/fabrication shop material preparation tools and equipment

Course Outline:

- I. Shop Safety
 - A. Personal Protection
 - B. Shop Hazards
 - C. Machine Hazards
 - D. Industrial Safety and Federal Law
- II. Allied equipment and processes
 - A. Oxy-fuel separating
 - B. Plasma-Arc separating
 - C. Carbon-Arc-Air separating/gouging
 - D. The “Iron-Worker”
 - E. Grinding Gear
 - F. Drilling equipment
 - G. Hand tools
- III. Welding equipment & processes
 - A. Shielded Metal Arc Welding (SMAW)
 - B. Gas Metal Arc Welding (GMAW)
 - C. Flux Cored Arc Welding (FCAW)
 - D. Gas Tungsten Arc Welding (GTAW)