

Course Objectives/Course Outline
Spokane Community College

Course Title: HEQ Welding I
Prefix and Course Number: WELD 151

Course Learning Outcomes:

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

- Function safely and proficiently with an Oxy-fuel cutting and welding torch
- Cut various thicknesses of steel using an Oxy-fuel cutting torch
- Weld with SMAW in Flat, Horizontal and Vertical positions with E-7018 and E-6010
- Function safely with an air carbon arc cutting system

Course Outline:

- 1) Oxy-fuel
 - a) Safety
 - b) Set up
 - c) Cutting
 - d) Welding / Brazing
- 2) Basic SMAW
 - a) Safety
 - b) Wire Identification
 - c) Wire classification
- 3) E- 7018
 - a) T Joints
 - i) Horizontal
 - ii) Vertical
 - b) Lap joints
 - i) Horizontal
 - ii) Vertical
- 4) E-6010
 - a) T joints
 - i) Horizontal
 - ii) Vertical
- 5) Hard surfacing
- 6) Air arc
 - a) Set up
 - b) Weld removal
 - c) Weld preparation