

**Course Objectives/Course Outline
Spokane Community College**

Course Title: HPAT Welding
Prefix and Course Number: WELD 153

Course Learning Outcomes:

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

- Function safely and proficiently with an oxy-fuel torch
- Cut various thicknesses of steel using an oxy-fuel cutting torch
- Weld with E-7018 in Flat, Horizontal and Vertical positions
- Weld with E-6010 in Flat, Horizontal and Vertical positions

Course Outline:

- 1) Oxy-fuel
 - a) Safety
 - b) Set up
 - c) Cutting
- 2) Basic SMAW
 - a) Safety
 - b) Electrode I.D.
 - c) Electrode classification
- 3) E-7018,
 - a) Flat plate
 - i) Flat
 - ii) Horizontal
 - iii) Vertical
 - b) T Joints
 - i) Horizontal
 - ii) Vertical
 - c) Lap joints
 - i) Horizontal
 - ii) Vertical
- 4) E-6010
 - a) T joints
 - i) Horizontal
 - ii) Vertical
- 5) GMAW
 - a) Intro
 - b) practice