

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

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**Course Title: Sheet Metal Layout and Fabrication Lab**

**Prefix and Course Number: AIRC 126**

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**Course Learning Outcomes:**

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

- Demonstrate the ability to use sheet metal hand tools
- Demonstrate the ability to use sheet metal fabrication equipment
- Demonstrate the ability to layout commonly used duct fittings
- Fabricate a square duct fitting
- Fabricate a rectangular duct fitting
- Fabricate a duct transition fitting with three straight sides
- Fabricate a center flare duct transition fitting
- Fabricate a duct square elbow
- Fabricate a duct change elbow
- Fabricate a duct radius elbow
- Fabricate a duct clinch tee
- Fabricate a duct ogee offset
- Install fabricated duct fittings into a completed duct system

**Course Outline:**

1. Basic Sheet Metal Practices
  - a. Hand tools
  - b. Shop equipment
  - c. Layout
2. Duct Fabrication and Installation
  - a. Duct fittings
  - b. Duct fabrication
  - c. Duct installation
  - d. Duct sealing
3. Safety
  - a. Safety practices when working with sheet metal