



South Central College

# WELD 1007 Blueprint Reading for Welding

## Course Outcome Summary

### Course Information

<b>Description</b>	This course will expand on basic blueprint reading by utilizing skills and knowledge about symbols, charts, and measurements to work more closely with blueprints specific to Welding. (Prerequisite: None)
<b>Total Credits</b>	2
<b>Total Hours</b>	32

### Types of Instruction

Instruction Type	Credits/Hours
Lecture	2 / 32

### Pre/Corequisites

None

### Institutional Core Competencies

Communication - Students will be able to demonstrate appropriate and effective interactions with others to achieve their personal, academic, and professional objectives.

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

### Course Competencies

#### 1. Utilize typical measuring and scale methods utilized in prints and drawings.

##### Learning Objectives

- Identify specific types of blueprints and welding symbols.
- Interpret basic blueprints and schematics.
- Use mechanical and fabrication designs and working drawings.

#### 2. Identify the different lines, symbols, and views used on a print.

##### Learning Objectives

- Identify the different types of lines that are used in a drawing.
- Identify the American Welding Society (AWS) weld symbols used on a print.
- Practice working with one dimensional and three view prints.

**3. Use basic blueprints and sketches in regard to welding projects.**

**Learning Objectives**

Select parts necessary for welding fabrication based on content of blueprints.  
Incorporate tables and charts in calculations.

**4. Demonstrate how to figure out a bill of materials from reading a print.**

**Learning Objectives**

List the pieces needed to build the weldment.  
Assign a part number for each piece of the weldment.  
List the quantity of each piece and weight if needed.

**5. Sketch a print to scale from a weldment.**

**Learning Objectives**

Sketch a print to scale using a weldment from class.  
Use all the proper symbols in the print.  
Incorporate all components of sketching a print.

**6. Weld a weldment from a print.**

**Learning Objectives**

Utilizing a blue print from a book or student's blue print, weld that weldment to scale.  
Demonstrate proper weld size and tolerance according to the print.  
Inspect weldment against print dimensions.

**SCC Accessibility Statement**

South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

Additional information and forms can be found at: [www.southcentral.edu/disability](http://www.southcentral.edu/disability)

This material can be made available in alternative formats by contacting the Academic Support Center at 507-389-7222.