



South Central College

## WELD 1011 Welding Safety

### Course Outcome Summary

#### Course Information

<b>Description</b>	Topics in this course include the basics of welding safety including proper equipment use and maintenance, machine guarding, bloodborne pathogens, safety and health programs, and overall welding safety. (Prerequisite: None)
<b>Total Credits</b>	1
<b>Total Hours</b>	16

#### Types of Instruction

Instruction Type	Credits/Hours
Lecture	1 / 16

#### Pre/Corequisites

None

#### Institutional Core Competencies

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. Describe machine guarding.

###### Learning Objectives

Describe at least two of the main causes of machine accidents.

List three of the requirements for safeguards.

List five machinery parts that pose hazards when unguarded or improperly guarded.

List five types of machine guards.

List three types of devices used to safeguard machines.

Describe a situation that warrants machine guarding and an appropriate method of guarding the machine or part in order to prevent injury or accident.

##### 2. Explain bloodborne pathogens.

###### Learning Objectives

List three examples of workers who are at risk of exposure to bloodborne pathogens.

List three ways exposure to bloodborne pathogens commonly occurs.

Describe five key aspects of a bloodborne pathogen exposure control plan.  
Explain how properly used Personal Protective Equipment (PPE) and appropriate housekeeping methods protect against exposure to bloodborne pathogens.  
List three steps to take if exposed to a bloodborne pathogen.

**3. Identify information about safety and health programs.**

**Learning Objectives**

Discuss the benefits of an effective safety and health program.  
Name the four elements of an effective safety and health program.  
Name three methods to prevent and control workplace hazards.

**4. Describe welding safety.**

**Learning Objectives**

Identify electrical shock hazard.  
Identify proper methods of handling hot metal.  
List dangerous conditions created by fumes and gasses.  
Identify safety equipment and clothing to prevent damage or injury from arc rays.  
List how electric and magnetic fields can affect implanted medical devices.

**5. Practice welding safety.**

**Learning Objectives**

Demonstrate safe procedures when chipping, wire brushing, and grinding.  
Demonstrate proper use of ear protection.  
Demonstrate proper handling of gas cylinders.

**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.