

# Virginia Western Community College

## SAF 127

### Industrial Safety

#### Prerequisites

None

#### Course Description

Provides basic understanding of safety and health in an industrial situation. Includes hazardous materials, substances, conditions, activities and habits as well as the prescribed methods and equipment needed for the apprentice to protect himself/herself and others. Class attendance and completion of this course satisfies the 10-hour requirement to sit for the OSHA certification exam.

This course of "Industrial Safety" is designed to prepare the student to go into the work place with the knowledge and skills to develop safe work habits. The course material covers responsibilities of both the student and the employer, instructions on the proper regulations and laws. The student will learn how to recognize potential hazards and how to protect themselves against accidents. The material includes health and safe practices for manufacturing processes.

**Semester Credits: 2   Lecture Hours: 2   Lab/ Recitation: 0**

#### Required Materials

##### **Textbook:**

**No textbook required.**

##### **Other Required Materials:**

Students must have access to the internet.



**The following Supplementary materials are available:**

1. Safety and Health (Basic Foundation Series 719)  
By Schoolcraft Publishing (Optional)

**Course Outcomes**

- Apply standard safety procedures in an industrial environment.
- Be familiar with standard workplace hazard/warning signs and labels.
- Be familiar with standard categories of hazardous materials.
- Have a general understanding of the documentation used with hazardous materials, such as the MSDS.
- Be able to describe the different levels of danger that exist with electrical shock.
- Be able to describe several appropriate actions to take in the event of an electrical accident.
- Be able to describe the situations under which static electricity may cause damage to electrical components (ESD - electrostatic discharge).
- Be able to describe appropriate practices for handling and working with electrical components, or electrical equipment, that is sensitive to static electricity (ESD - electrostatic discharge).
- Describe a safe working environment and OSHA compliance.
- Discuss Safety Laws and their importance in the workplace.
- Explain the different types of Personal Protective Equipment and its proper use.
- Identify and discuss Hazards in the workplace.
- Explain the necessity of handling materials and chemicals safely.
- Safely use, handle, and select the proper tools for the job.
- Explain how to work safely around electricity.
- Describe the proper fire protection procedures for different classifications of fires.
- Explain safe work practices and how to keep healthy on the job.
- Explain how safety laws in the U.S. differ from other countries.

**Topical Description**

- 1 Introduction to Virginia Western Community College, VWCC Rules & Regulations, The Student Handbook, Class Schedule, College Catalog, and College Safety Video
- 2 Intro to OSHA 100
- 3 Fire Safety and Prevention 110
- 4 Bloodborne Pathogens 115



- 5 Personal Protective Equipment 120
- 6 Lock/Tagout Procedures 130
- 7 Safety for Lifting Devices 135 and Powered Industrial Truck Safety 210
- 8 Machine Guarding 140
- 9 Hand and Power Tool Safety 145
- 10 Environmental Safety Hazards 150 and Respiratory Safety 195
- 11 MSDS and Hazard Communication and 160 Confined Spaces 190
- 12 Metalworking Fluid Safety 165
- 13 Noise Reduction and Hearing Conservation 170 and Walking and Working Surfaces 180
- 14 Exam Review
- 15 Final Exam

### **Notes to Instructors**

1. The final exam is worth 15-20% of the final grade.

