

**Virginia Western Community College**  
**SAF 127**  
**Industrial Safety**

**Prerequisites**

None

**Corequisites****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. 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 Hours: 0****Required Materials****Textbook:**

Instructor will provide all the materials

**Software:****Other Required Materials:**[Click here to enter text.](#)**Course Outcomes**

At the completion of this course, successful students will be able to

- 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. Understand the maintenance profession and describe various approaches to the practice of maintenance.

### **Topical Description**

- Introduction to Virginia Western Community College, VWCC Rules & Regulations, The Student Handbook
- College Safety Video
- Intro to OSHA
- Fall Protection
- Welding Safety
- Fire Safety and Prevention
- Bloodborne Pathogens
- Personal Protective Equipment
- Lock/Tagout Procedures
- Safety for Lifting Devices
- Powered Industrial Truck Safety
- Machine Guarding
- Hand and Power Tool Safety
- Environmental Safety Hazards
- Respiratory Safety
- MSDS and Hazard Communication

- Confined Spaces
- Noise Reduction and Hearing Conservation
- Walking and Working Surfaces

### **Notes to Instructors**

Beginning Fall 2020, VWCC will require students to have a computer or reliable access to a computer, capable of participation in an online format. Online courses at Virginia Western require a significant amount of interaction with Canvas, the Learning Management System, and many require real-time class sessions using the Zoom web-conferencing tool. To be successful in online classes, students must have substantial access to a computer with hi-speed internet connectivity. The expected requirements are listed on the college webpage.

Attendance is mandatory (required by OSHA) to receive an OSHA-10 Card. Students who fail to attend all of the required topics can still pass the class but will not be issued an OSHA card.

[ADA Statement \(PDF\)](#)  
[Title IX Statement \(PDF\)](#)