Safety and Health Regulations

In this one-credit course students gain valuable information that serves as a foundation for further study in this area. Students learn the importance of government and industry regulations as well as individual responsibilities for performing activities from a safety perspective. Students identify common safety hazards found in the workplace and their role in minimizing and avoiding unsafe practices. Specific topics include flammable and combustible liquids, egress and fire protection, electrical safety, environmental control, machine guarding, tool safety, first aid, hazard communication, personal protective equipment, walking and working surfaces, and material handling and storage.

Career and technical student organizations are integral, cocurricular components of each career and technical education course. These organizations serve as a means to enhance classroom instruction while helping students develop leadership abilities, expand workplace-readiness skills, and broaden opportunities for personal and professional growth.

Introduction

Students will:

1. Explain the importance of Occupational Safety and Health Administration (OSHA) industry regulations and individual responsibilities in workplace safety and health practices.

2. Describe job-related, high-hazard area risk assessment techniques and the impact of accidents on industry.
   - Utilizing job safety analysis worksheets

3. Compare federal and state child labor laws regarding hours and locations where youth may work, including required permits.

4. Explain worker rights according to OSHA Safety and Health Regulations standards.

Flammable and Combustible Liquids

5. Describe characteristics of flammable and combustible liquids, including flash point, flammable limits, boiling point, vapor density, vapor pressure, ignition temperature, and specific gravity.

6. Demonstrate storage and handling procedures for flammable and combustible liquids.

7. Compare classes of fire and fire extinguishers.
   - Discussing the proper use of fire extinguishers

Means of Egress and Fire Protection

8. Develop an emergency plan, including fire protection, means of egress, exit route and exits, and special concerns for confined spaces.
Electrical Safety

9. Explain assured equipment grounding programs.

General Environmental Control

10. Interpret general environmental controls, safety color codes for marking physical hazards, and specifications for accident prevention signs and tags.

Machine Guarding

11. Explain machine guarding general requirements for industrial and construction machines and operations.

Hand and Portable Power Tools

12. Explain tool safety guidelines, including hand, power, power-actuated, and pneumatic tools.

Introduction to Industrial Hygiene and First Aid

13. Explain industrial and construction health and first aid procedures, including personal protection from body fluids; skin, rash, or dermatitis incidents; and oil, gas, and chemical spills.

Hazard Communication

14. Explain the importance of hazard communication, including signs, signals, barricades, markers, lockouts, and tags used on a job site.

15. Explain the use of Material Safety Data Sheets (MSDS).

Personal Protective Equipment

16. Explain the use of personal protective equipment, including eye, face, foot, and respirator protection.

Walking and Working Surfaces

17. Explain site-specific protection procedures and safety requirements with regard to the importance of housekeeping procedures, the use of ladders and scaffolding, rigging procedures, and hazards of floor and wall openings.
Material Handling and Storage

18. Explain the importance of safety practices for manual lifting, load lifting, and rigging procedures.