

Department:

Electrical Technology

Course Description:

This course will: explain job/site safety and precautions for job/site hazards; determine the uses of personal protective equipment (PPE); identify the safety equipment and procedures related to safe work practices and environment; identify fire prevention and protection techniques; explore Hazardous Communications (HazCom) including Material Safety Data Sheets (MSDA).

KBOR Core Competencies:

1. Explain the role of Occupational Safety and Health Administration (OSHA) in job- site safety
2. Explain OSHA’s General Duty Clause and 1926 CFR Subpart C
3. Describe the impact of accidents
4. Identify the four high hazard areas
5. Demonstrate hazard recognition and risk assessment techniques
6. Explain the basics for construction health
7. Identify basic fall, electrical, fire, trenching, materials handling, and heavy equipment hazards, and explain the general safety procedures associated with them.
8. Explain and demonstrate the use of appropriate personal protective equipment
9. Explain and identify the various signs, signals, barricades, markers, and tags used on a job site
10. Demonstrate proper housekeeping procedures
11. Demonstrate an understanding of assured equipment grounding conductor programs and the use of ground-fault circuits (GFCIs)
12. Demonstrate and explain general hand- and power-tool safety guidelines
13. Explain your company- or site-specific fall protection procedures and requirements
14. Demonstrate and explain the proper use of ladders and scaffolding
15. Explain the use of work permits and lockout/tag out procedures
16. Demonstrate and explain the emergency procedures for trenching accidents
17. Demonstrate proper manual lifting procedures
18. Identify the hazards of working around or on heavy equipment
19. Describe proper rigging safety procedures
20. Demonstrate use of hand signals

Course Content:

- A. Introduction to OSHA

- B. Material Handling
- C. Tools-Hand and Power
- D. Electrical
- E. Exit Routes, Emergency Actions Plans, and Fire Prevention
- F. Walking and Working Surfaces
- G. Flammable and Combustible Liquids
- H. Personal Protective Equipment
- I. Machine Guarding
- J. Hazard Communication
- K. Introduction to Blood borne Pathogens
- L. Safety and Health Programs

Learning Assessments:

Multiple choice assessments will be given after each unit and for the final. Students must complete each assessment with a score of 70% or higher to successfully complete the course.

Instructional Materials:

Learning materials will be provided.

Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the “Disabilities Self-Identification Form” at this link:

<https://highlandcc.edu/pages/disability-services>.

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.