

COURSE SYLLABUS

LAST REVIEW	Fall 2022
COURSE TITLE	Safety Orientation (OSHA 10)
COURSE NUMBER	HVAC 0100
DIVISION	Career and Technical Education
DEPARTMENT	HVAC
CIP CODE	47.0201
CREDIT HOURS	1
CONTACT HOURS/WEEK	Class: 1 Lab:
PREREQUISITES	None

COURSE DESCRIPTION

This course will introduce students to the basic practices of identifying, reducing, eliminating and reporting hazards associated with their work. Upon successful completion of the course, participants will receive an OSHA 10-Hour Construction Outreach DOL course completion card. The OSHA Ten Hour Construction Outreach Training course has been reviewed and accepted by OSHA for online distribution.

PROGRAM ALIGNMENT

This course is part of a program aligned through the Kansas Board of Regents and Technical Education Authority. For more information, please visit:

https://kansasregents.org/workforce_development/program-alignment

PROGRAM LEARNING OUTCOMES

1. The student will be able to demonstrate the ability to perform HVAC procedures in a safe manner
2. The student will be able to classify the different needs of equipment and summarize a solution.
3. The student will be able to exhibit a high level of professionalism including appropriate dress, attendance, communication skills and other soft skills necessary.

TEXTBOOKS

<http://kckccbbookstore.com/>

METHODS OF INSTRUCTION

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning,

labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE

- I. Introduction to OSHA and the OSH Act.
 - A. Introduction to OSHA (Occupational Safety and Health Administration).
 - B. OSHA Requirements and Practices.
- II. 29 CFR 1910 Subpart Z-Health Hazards in Construction: Hazard Communication.
 - A. Introduction to Hazards Communication Standard
 - B. Labels, MSDSs, Symbols, Hazards, and Training
- III. Rigging: Basic
 - A. General standards
 - B. The Personnel Platform and Rigging
- IV. 1926 Subpart D-Health Hazards in Construction: Hazardous Materials
 - A. Hazardous Material
- V. FOCUS FOUR-Electrical Safety for Construction
 - A. Introduction to Electrical Hazards and Control
 - B. Electrical Hazards-Other Preventive Measures
- VI. FOCUS FOUR-Struck By and Caught in Between Hazards
 - A. Struck by Hazards
 - B. Caught in Between Hazards
- VII. FOCUS FOUR-Fall Protection-Basic
 - A. Fall Protection
 - B. Inspection and Safety Monitoring Systems
- VIII. OSHA 1926 Subpart E-Personal Protective Equipment
 - A. Protecting Employees from Workplace Hazards.
 - B. Head, Eye, Face, Hearing, Foot, Hand, and Body Protection.
 - C. Choosing Personal Protective Equipment
- IX. Hand and Power Tools-Basic
 - A. Safe Use of Hand and Power Tools
 - B. Classification of Tools
 - C. Mechanical Power-Transmission Apparatus
- X. OSHA 1926 Subpart C General Safety and Health Provisions.
 - A. General Safety and Health Provisions
 - B. Employee Medical Exposure Records, Means of Egress, and Employee Emergency Action Plans

COURSE LEARNING OUTCOMES AND COMPETENCIES

Upon successful completion of this course, the student will:

- A. Describe the purpose of OSHA.
 - 1. Explain the role of OSHA in job-site safety
 - 2. Describe the impact of accidents.

- B. Explain the 29 CFR 1910 Subpart Z for Health Hazards in construction.
 - 3. Explain the basics of construction health.
- C. Demonstrate safety procedures involving rigging: Basic.
 - 4. Describe proper rigging safety procedures.
 - 5. Demonstrate the use of hand signals.
- D. Explain the 1926 Subpart D for Health Hazards in construction: Hazardous Materials.
 - 6. Explain OSHA's current General Industry 1910 or Construction 1926 Guidelines.
 - 7. Demonstrate hazard recognition and risk assessment techniques.
- E. Demonstrate FOCUS FOUR Electrical Safety for construction.
 - 8. Demonstrate an understanding of assured equipment grounding conductor programs and the use of GFCIs.
 - 9. Explain the use of work permits and lockout/tagout procedures.
- F. Demonstrate FOCUS FOUR Struck By or Caught In Between Hazards.
 - 10. Identify the hazards of working around or on heavy equipment.
- G. Demonstrate FOCUS FOUR Fall Protection: Basic.
 - 11. Explain your company-or site-specific fall protection procedures and requirements.
 - 12. Demonstrate and explain the proper use of ladders and scaffolding.
- H. Explain OSHA 1926 Subpart E for Personal Protection Equipment.
 - 13. Explain and demonstrate the use of appropriate personal protective equipment.
 - 14. Explain and identify the various signs, signals, barricades, markers, and tags used on a job site.
 - 15. Demonstrate proper manual lifting procedures.
- I. Demonstrate the safe use of hand and power tools: Basic.
 - 16. Demonstrate and explain general hand-and power-tool safety guidelines.
- J. Describe the OSHA 1926 Subpart C for General Safety and Health provisions for workers.
 - 17. Identify the four high-hazard areas.
 - 18. Identify basic fall, electrical, fire, trenching, materials handling, and heavy equipment hazards, and explain the general safety procedures associated with them.
 - 19. Demonstrate proper housekeeping procedures.

20. Demonstrate and explain the emergency procedures for trenching accidents.

ASSESSMENT OF COURSE LEARNING OUTCOMES AND COMPETENCIES

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

COLLEGE POLICIES AND PROCEDURES

Student Handbook

<https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf>

College Catalog

<https://www.kckcc.edu/academics/catalog/index.html>

College Policies and Statements

<https://www.kckcc.edu/about/policies-statements/index.html>

Accessibility and Accommodations

<https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html>.