

CNST-1751: CONSTRUCTION SAFETY

Cuyahoga Community College

Viewing: CNST-1751 : Construction Safety

Board of Trustees:

October 2024

Academic Term:

Fall 2025

Subject Code

CNST - Construction Engineering Tech

Course Number:

1751

Title:

Construction Safety

Catalog Description:

The theories and principles of construction safety and health applied to real-world setting following the Occupational Safety and Health Administration (OSHA) curriculum for the 30-hour Outreach Training Program for construction industry safety and health. Upon completion of course materials and required attendance hours, students receive their OSHA Construction 30-hour Outreach completion cards.

Credit Hour(s):

2

Lecture Hour(s):

1

Lab Hour(s):

3

Requisites

Prerequisite and Corequisite

None.

Outcomes

Course Outcome(s):

Obtain OSHA 30 certification for the construction industry.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Explain the importance of safety in the construction industry and the role personnel play in safety and health.
2. List ways to prevent violence and reduce stress in the workplace.
3. Explain workers' compensation and OSHA compliance.
4. List and explain OSHA's construction standard (29CFR 1926) and corresponding safety practices.
5. Explain the relationship between ethics and job safety.

Course Outcome(s):

Explain how to respond to workplace hazards.

Essential Learning Outcome Mapping:

Not Applicable: No Essential Learning Outcomes mapped. This course does not require application-level assignments that demonstrate mastery in any of the Essential Learning Outcomes.

Objective(s):

1. Create a construction project safety plan.
 2. Describe job safety, and prevention and control of workplace hazards.
 3. Describe accident investigation, reporting and record keeping.
 4. Describe an emergency response plan.
 5. Define total safety management.
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Methods of Evaluation:

1. Summative quizzes
2. Assignments
3. Final exam.
4. Class participation

Course Content Outline:

1. Safety movement in the construction industry
 - a. Past and present historical trends
 - b. Environmental safety and ISO 14000
2. OSHA compliance with personal protective equipment
 - a. Fire protection
 - b. Fall protection
 - c. Electrical safety
3. Cost of accident
 - a. Accident causation
 - b. Contractor insurance rating
4. Role of construction personnel in safety & health
 - a. Back safety
 - b. OSHA subparts P through Z, and related safety practices
5. Ethics and safety
 - a. Ohio's construction safety ranking
 - b. Drug-free safety program
 - c. Worker's compensation
 - d. Stress in the workplace
 - e. Promoting safety
6. Construction safety and health: Program and policies
 - a. Job safety and hazard analysis
 - b. Accident investigation, reporting, and record keeping
 - c. Emergency response plan
 - d. Total safety management
 - e. Bloodborne pathogens

The Course Schedule is subject to change due to pedagogical needs, instructor discretion, parts of term, and unexpected events.

Resources for the Instructor

National Safety Compliance. *OSHA Construction Industry Regulations*. 7th ed. Springfield, MO, 2024.

Goetsch, David L. *Construction Safety and Health*. 2nd ed. Boston: Pearson, 2021.

J. J. Keller & Associates, Inc. *OSHA Construction Safety Handbook*. 7th ed. Neenah, WI, 2024.

Additional Resources for the Instructor

OSHA approved videos: *Personal Protection Equipment, Fire Protection, Fall Protection, Electrical Safety, Back Safety, and Violence in the Workplace.*

- Ohio DOT Highway Safety Manual. (2024). <https://www.transportation.ohio.gov/programs/highway+safety/highway-safety-manual-guidance/highway-safety-manual> ([https://www.transportation.ohio.gov/programs/highway+safety/highway-safety-manual/](https://www.transportation.ohio.gov/programs/highway+safety/highway-safety-manual-guidance/highway-safety-manual/))
- National Association of Home Builders. YouTube Channel. (2024). <https://www.youtube.com/c/NAHBTV> (<https://www.youtube.com/c/NAHBTV/>)
- National Safety Compliance. YouTube Channel. (2024). <https://www.youtube.com/c/oshasafetytraining> (<https://www.youtube.com/c/oshasafetytraining/>)
- ODOT Online Resource Library. (2024). <https://www.transportation.ohio.gov/about-us/resources> (<https://www.transportation.ohio.gov/about-us/resources/>)
- FEMA Resource Center. (2024). <https://training.fema.gov/>

Instructional Services**CTAN Number:**

Career Technical Assurance Guide CTCON002

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