
ATCM-1370: CONSTRUCTION TRADES SAFETY

Cuyahoga Community College

Viewing: ATCM-1370 : Construction Trades Safety

Board of Trustees:

March 2020

Academic Term:

Fall 2020

Subject Code

ATCM - Appd Indus Tech-Cement Masonry

Course Number:

1370

Title:

Construction Trades Safety

Catalog Description:

Study of safe practices on job, drug and alcohol awareness and OSHA 10 requirements for construction trades. Upon success completion of course, student will be certified in OSHA 10.

Credit Hour(s):

1

Lecture Hour(s):

1

Requisites

Prerequisite and Corequisite

Departmental approval: admission to Cement Mason's apprenticeship program.

Outcomes

Course Outcome(s):

Complete OSHA-10 Certification.

Objective(s):

1. Define OSHA.
2. Navigate and locate information on OSHA website.
3. State factors that are involved in the OSHA focus 4.
4. Discuss silica awareness and the hazards of silica exposure.
5. Match terms and definitions associated with toxic substances.
6. List toxic substances a construction individual may contact on the job, forms of toxic substances, and consequences of exposure.
7. Discuss required personal protective equipment to use when working on job site.
8. Explain safety precautions to take when working around excavations on construction sites.

Course Outcome(s):

Discuss factors that can affect performance due to drug and alcohol abuse in the construction trades.

Objective(s):

1. Take and pass drug screening before being placed with an employer.
 2. Discuss various types of drug use and abuse (recreational, prescription, etc.).
 3. Discuss the impact of alcohol dependency on work and personal life.
 4. Discuss the effects of drug and alcohol on mental health and family.
-

Methods of Evaluation:

All students will be evaluated during the first two weeks and mid-term. Progress reports will be issued per procedure. Additional course evaluations and final examination are detailed below:

1. Quizzes
2. Tests
3. Class participation
4. Group Activities.

Course Content Outline:

1. Terms and definitions associated with safety
 - a. Safety
 - b. OSHA
 - c. NIOSH
 - d. MSHA
 - e. Accident
 - f. Hazard
 - g. Carelessness
 - h. Flammable
 - i. Explosive
 - j. Combustible
 - k. Extinguisher
 - l. Pressurized
2. Reasons for safety
 - a. Responsibility to self
 - b. Responsibility to your family
 - c. Responsibility to fellow workers
 - d. Responsibility to employers
3. OSHA Focus 4: Top reasons for injury or death on job sites
 - a. Struck by
 - b. Caught in between
 - c. Electrocution
 - d. Falls
4. Consequences of use of alcohol and drugs
 - a. Tardiness and absenteeism
 - b. Neglect duty and be less productive
 - c. Safety hazard
 - d. Increase cost of insurance
5. Job safety rules
 - a. General safety
 - b. Personal safety
 - c. Equipment and tool safety
 - d. Work area safety
 - e. Flammable liquid safety
 - f. Gasoline powered equipment safety
 - g. Materials handling safety
6. Descriptions of classes of fires
 - a. Class A
 - b. Class B
 - c. Class C
 - d. Class D
7. Terms and definitions associated with toxic substances
 - a. Toxic
 - b. Absorb
 - c. Solvent
 - d. Vapor
 - e. Irritate
 - f. Contaminate

- g. Fume
- h. Mist
- 8. Toxic substances a construction individual may contact on the job
 - a. Asbestos
 - b. Acetone
 - c. Arsenic
 - d. Benzene
 - e. Cadmium
 - f. Chromates
 - g. Cobalt
 - h. Coal dust
 - i. Coal tar pitch
 - j. Chlorine
 - k. Carbon tetrachloride
 - l. Carbon monoxide
- 9. Ways toxic substances enter the body
 - a. Inhaled
 - b. Absorbed through the skin
 - c. Ingested while eating and drinking
 - d. Contracted through open cuts and sores
- 10. Consequences of exposure to toxic substances
 - a. Mild irritation
 - b. Severe damage to any or all of the body's systems
 - c. Terminal conditions or diseases
- 11. Silica awareness and hazards of exposure
 - a. Respiratory hazards
 - i. Personal
 - ii. Public
 - b. Protection
 - i. Personal
 - ii. Public
- 12. Personal Protective Equipment
 - a. Hard hats
 - b. Safety glasses
 - c. Work boots
 - d. Concrete boots
 - e. Gloves
 - f. Knee pads
 - g. Respirators

Resources Other

1. 29 CFR. 1926 OSHA Construction Industry Regulations. <https://www.osha.gov/laws-regs/regulations/standardnumber/1926> (<https://www.osha.gov/laws-regs/regulations/standardnumber/1926/>). 2019.
2. Intro to OSHA handouts
3. OSHA DVD
4. CPWR, OSHA 500, current edition, CPWR, Silver Spring, MD, 2015 · <https://www.opcmia.org/training/>
5. Concrete and Cement Masonry, Developed by the Curriculum and Instructional Materials Center for the Trade and Industrial Education Division Oklahoma Department of Career and Technology Education, 2002

Top of page

Key: 234