Laborers Training School

OSHA 30 Syllabus

Time: 40 hours

Maximum Class Size: 30

Prerequisites: None

Course Description: The 40-hour OSHA Outreach Training Program provides training for workers and employers on the recognition, avoidance, abatement, and prevention of safety and health hazards in the workplace. The 40-hour program is designed for supervisors or those responsible to maintain safety in the workplace. Participants develop a deeper understanding of occupational health and safety through this comprehensive safety program. Topics addressed include: Managing safety and health, navigating the CFR, Falls, Electrocutions, Struck-by, Caught-in-between, Mechanized equipment, Health hazards in construction, PPE, Stairways and ladder, Fire protection, Scaffolds, Material handling, and Excavations, among others.

Goals/Objectives/Learning Outcome:

At the end of the class, the participant will be able to:

- Explain the purpose of the OSH Act and OSHA
- Describe the difference between a horizontal and vertical standard and give one example of each
- Given specific information to locate within the OSHA Construction Standard, find the information and list the paragraph number where found
- Describe three ways of accessing OSHA
- Describe how OSHA targets a construction inspection
- Describe the three stages of an OSHA inspection
- Describe procedures used in the opening conference, walk-around, and closing conference
- Describe six different types of violations used by OSHA and give a brief explanation of each
- Describe the concept of the “General Duty Clause”
- Describe the multi-employer policy and how citations are issued to employers
- List the general safety and health training provisions of Subpart C
- Describe the requirements for housekeeping on the jobsite
- Describe requirements for first aid and medical attention on the jobsite
- Define the term “carcinogen”
- List at least two signs of exposure to coal tar pitch and describe three ways to prevent exposure
- Describe Raynaud’s Phenomenon and list at least two ways to protect yourself from exposure
- List four methods for reducing the vibrations that can cause Raynaud’s Phenomenon
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- Determine whether hearing protection is needed in situational examples, using the formula described in this chapter to calculate exposure
- List five construction jobs that may require some form of ventilation
- List four situations in which employers are required to supply workers with personal protective equipment
- Describe at least two types of head protection and when they should be used
- List at least two areas in which employees must be trained if respirators are used on the job.
- Describe at least two different types of eye protection used, and the hazards that each type protects against
- Describe at least two different types of personal protective clothing, and give an example of when each should be worn
- List the citations the employers can receive when PPE is not used when required
- List the elements of the fire triangle and explain how each element helps a fire burn, and identify at least one source of each element in the workplace
- Describe Class A, B, C, and D fires and match the correct extinguishing media to each type of fire
- Demonstrate the requirements of a periodic fire extinguisher inspection and identify the five items that must be checked during an inspection
- List eight work practices to prevent fires on the jobsite
- Describe and demonstrate the correct use of a fire extinguisher
- Discuss the cause of highway injuries and fatalities, and list at least five ways to reduce or eliminate them
- Name the publication that contains regulations for traffic control and work zone safety
- Compare and contrast PPE requirements for daytime and nighttime roadwork
- Demonstrate the procedure for stopping, slowing, and releasing traffic with both a stop/slow paddle and a flag
- Explain the use of the three types of traffic barricades
- Describe at least two safe work practices for working around heavy equipment
- List three types of equipment that are required to have Roll-over Protective Structures (ROPS)
- List four general requirements for storage or disposal of materials
- Describe when a disposal chute is required and how it is constructed
- Discuss the importance of using safe debris disposal methods on a construction site
- Discuss the importance of ensuring that a crane is properly set up and leveled on firm ground
- Review and correctly demonstrate the appropriate hand signals for cranes
- Explain how and when cranes must be inspected
- List four OSHA rules for wire rope slings used for materials handling
- Describe three general requirements for safe rigging
- Describe the requirements of chain slings and how to identify whether they are of alloy steel
- Discuss example of crane fatalities and how you can apply information learned to prevent crane fatalities and injuries
- Describe three safety precautions for each of the following types of tools
  - Electrical
List and identify six kinds of tools mentioned in this chapter and give an example of how each is used.

Describe the procedure to follow when a powder-actuated tool misfires.

Explain the difference between a “positive” on-off switch and a “momentary contact” on-off switch.

Describe the purpose of a hot work permit program.

Describe how to store acetylene gas cylinders and regulators.

Describe how to inspect a cutting torch and hoses.

Decide the correct lens shade necessary for each of a variety of sample cutting operations.

Give three symptoms of lead exposure, and list and describe at least two ways to reduce exposure during the cutting or welding of surfaces covered with lead-based paint.

Describe the purpose of grounding an electrical system.

Demonstrate the inspection of electrical cords for physical damage. Given a variety of electrical cord, identify those that must not be used, and explain why.

Describe the operation of a ground fault circuit interrupter (GFCI).

Explain the purpose of strain relief on electrical cords and tools.

Given equipment to test, demonstrate the use of a receptacle test and a continuity tester.

Describe the requirement for working at various distances from live electrical lines, and what to do if work must be done within 10 feet of a live line.

List and describe three OSHA citations related to electrical hazards.

Describe two requirements stated in this chapter for building a safe scaffold platform.

List two exceptions to the requirement that scaffold platforms be fully planked.

Describe the overhang and overlap requirements for wooden planks used for scaffold platforms.

Explain the importance of ensuring that scaffold footings are sound and rigid.

Describe when it is necessary to tie a scaffold at regular intervals.

Calculate the minimum clearance needed to stay away from power lines.

Describe at least three situations requiring the use of personal fall arrest equipment and falling object protection.

Explain the guardrail requirement for scaffolds established by OSHA.

Describe the tie-off/fall protection requirements for working in a man lift.

List four topics in which you must be trained to work on a scaffold.

List three topics in which you must be trained to build a scaffold.

List the OSHA requirements for materials that are used to cover floor openings.

List the safety requirements that a personal fall arrest system (PFAS) must meet. Identify the anchorage, body wear, and connecting devices of a sample PFAS and demonstrate how to put it on.

List the spacing and strength requirements for guardrail system components.

Given pictures, graphics, or scenarios of guardrail systems, identify the components of the system. Identify the violation in the situation and corrective actions.
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- Explain the requirements with which a safety net system must comply when being used as fall protection
- Define the following terms: Benching, shield, competent person, slope ratio, cross braces, sloping, excavation, trench, hazardous atmosphere, uprights, sheeting, wales
- Describe three danger signs of a possible trench cave-in
- Describe two types of protection systems for excavations
- Describe the soil characteristics of type A, B, and C soil, and state the sloping requirements for each soil type
- List the OSHA requirements for access to and egress from excavations, given a set of construction scenario, determine access/egress requirements for each scenario (to within an accuracy of at least 80 percent)
- Describe at least two types of concrete construction. For each type, describe at least two hazards that may be encountered and discuss ways to reduce or eliminate them
- Define what a limited access zone is, how large the zone must be, and how long it must remain in place
- Describe three of the most commonly issued OSHA citations for noncompliance with Subpart Q
- Describe and demonstrate the correct set-up and securing of an extension ladder per the guidelines of this chapter
- Describe and demonstrate safe work practices for hoisting material up a ladder
- Given a set of scenarios involving the use of hand rails, determining whether the hand rails meet OSHA requirements, or list the violation for each scenario.
- Given a set of graphics depicting the use of a stepladder, list the violation in each graphic
- Describe and demonstrate the procedure for using a stepladder per OSHA guidelines

Standards

- 29 CFR 1926.330 General Requirements
- 29 CFR 1926 Subpart D Occupational Health and Environmental Control
- 29 CFR 1926 Subpart E Person Protective Equipment
- 29 CFR 1926 Subpart F Fire Protection and Prevention
- 29 CFR 1926 Subpart G, O, W Heavy and Highway Work Zones
- 29 CFR 1926 Subpart H, N, CC Materials Handling, Hoists & Cranes
- 29 CFR 1926 Subpart I Tools-Hand and Power
- 29 CFR 1926 Subpart J Welding and Cutting
- 29 CFR 1926 Subpart K Electrical
- 29 CFR 1926 Subpart L Scaffolds
- 29 CFR 1926 Subpart M Fall Protection
- 29 CFR 1926 Subpart P Trench and Excavation Safety
- 29 CFR 1926 Subpart Q Concrete and Masonry Construction
- 29 CFR 1926 Subpart X Stairways and Ladders
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Classroom Rules and Procedures

- All classes begin at 6:30 am and end at 3:00 pm
- Upon entering classroom, all participants must sign in and be seated by 6:30 am
- Class will consist of a combination of lecture, video, demonstration, coached group exercises, individual exercises and assessment.
- Students are required to report to class ready to work and maintain the provided PPE.

Textbooks/Readings/Materials

- LIUNA: OHSA Participant Guide
- LIUNA: OSHA Instructor Guide
- OSHA 30 Student Handout Packet

Personal Protective Equipment

- 10 pairs of gloves
- 10 pairs of Safety Glasses
- 20 pairs of Ear plugs
- 10 hard hats

Course Requirements

To receive credit for the course, participants must:

- Be present for full forty hours
- Participate in all classroom exercises
- Pass a written exam
- Pass a hands-on exam

Course Policies

- Participants must be on-time and ready to work.
- Participants must return from breaks on-time.
- Participants must participate in each exercise and assignment

Assessment and Grading

Participants will be assessed on the following:

- All written exams must be passed with a score of 80% or above.
- All hands-on exercises are graded on performance and participation. They are pass/fail and must be passed with a score of 80% or above.
Safety

Failure to maintain and use PPE may result in dismissal from the course.