



## Department-Approved Course Requirements: 4-Hour Fall Protection

Course Required for:

Worker Training

Purpose:

This course is an elective course that can help fulfill the requirement for an individual applying for a Site Safety Training Card. **THIS IS AN AWARENESS-LEVEL TRAINING ONLY and does not provide any other qualification or authorization outside of the Site Safety Training Card.**

Duration:

4 Hours of instructional time, excluding breaks

Class Size:

1-40 Trainees

NYC Requirement:

In order to continue to operate in the City of New York, the designated construction worker is required to complete a minimum number of hours of approved site safety training and to carry site safety identification cards as proof of completion of the training (As per New York City Local Law 196 of 2017 also known as 'LL196' or 'Local Law'). This course provides four hours towards the satisfaction of that requirement.

Facility Requirements:

The Training Facility used by the Course Provider must:

- Have sufficient room to accommodate all expected attendees and the equipment needed to perform hands-on exercises where required as part of the course.
- Make provisions for the presentation of training material in all media types (computer, projectors, video/DVD players, etc.); and
- Comply with all applicable laws, rules and regulations relating to occupancy, zoning, egress, fire detection, fire suppression, light, ventilation, cleanliness, sanitary facilities, emergency notification and evacuation procedures.

Training may be held at construction sites, provided the above requirements are met.

Instructor Requirement:

To deliver this course the instructor(s) must demonstrate that he or she is credentialed or trained in instructional methods and learning processes. The instructor(s) must also successfully demonstrate his or her ability to solve or resolve problems relating to the subject matter by possession of a recognized degree, certificate, licensure or professional standing, or by extensive knowledge, training, and experience, in the subject matter being taught. To the extent that the course instructor(s) holds, or has held, a trade license issued by the Department, it must be in good standing and not be surrendered to, suspended by or revoked by the Department.

The instructor(s) must also be authorized by the Occupational Safety and Health Administration ('OSHA') as a trainer(s) for its Construction and Outreach Program.

Curriculum Requirement:

All **topics** listed under **Course Content Outline** must be covered using the listed **Instructional Delivery Method**. The time dedicated to each outline topic should be appropriate for the course content and can vary depending on the trade or job performed by the trainee. The **Instructional Delivery Materials** used in this course must contain all current applicable NYC Construction Code references, current rules, policies and bulletins.

**Course Curriculum  
Proposal Package  
Review:**

A comprehensive review will be performed by the **Department of Buildings** to determine compliance with these Course Curriculum Requirements.

**Instruction Delivery Method**

- Media:** Lecture/Discussion, Slide Presentation, Fall Protection Equipment (harnesses, lanyards, shock-absorbing decelerators, rope grabs etc.) Case Studies
- Handouts:** Slides, references and handbook
- Guided Learning:** Trainees will learn how to on their own calculate fall distances for various types of fall arrest devices and decide on proper anchorage points.

**Course Content Outline**

1. Introduction
  - a. Instructor introduces topic and describes their qualifications and relevant experience for training this module.
  - b. Establish that all trainees can hear and fully understand you i.e. 'raise your hand if you fully understand me' or 'clap your hands if you fully understand me'
  - c. State basic classroom rules, bearings and decorum
    - i. Inform trainees of duration or training and breaks (if any)
    - ii. Remind trainees about limiting distractions (phone use, texting, sidebar conversations)
    - iii. Emergency procedures (location and means of egress, exits or other contingencies)
    - iv. Location of restrooms
  - d. Training Objectives and Expectations:
    - i. Trainees will become generally familiar terms associated with falls in construction
    - ii. Trainees will be able to recognize avoid and prevent falls hazards from causing harm.
    - iii. Trainees should become aware of regulatory safety requirements associated with falls, including OSHA's Subpart M.
    - iv. Trainees will learn how to make informed decisions when working from heights
2. Illustrate statistics of fatal falls as the most common cause of death in construction
3. Provide illustrated cases of falls in New York City (use this portion of the training to appeal emotionally to trainees' sense of empathy and sympathy)
4. Explain the Competent Person's Responsibilities
5. Describe the 3 types of Fall Hazards
  - a. Falls to below (leading cause to death in construction)
  - b. Falls to the same level (trips and slips)
  - c. Struck-by falling objects
6. Explain the nature of gravity and how weight is relative and depends (is a product of) on acceleration of and mass. This explanation must be designed in terms trainees can understand.
  - a. Force = Mass x Acceleration

- b. Tension force
  - c. Angle force
7. Describe in detail the Components, Specifications and Regulatory Requirements of fall controls. Note some topics below; though not directly in fall protection OSHA Subpart M, must be addressed due to inherent fall hazards i.e. ladders, stairs and scaffolds.
- a. Guardrails Systems (5 feet as per NYC requirements)
  - b. Nets (horizontal and vertical)
  - c. Controlled Access Zones
    - i. Masonry Overhead Bricklaying
  - d. Limited Access Zones
  - e. Controlled Decking Zones (Steel Erection)
  - f. Hole Covers
  - g. Accessibility (vertical movement i.e. breaks in elevation height)
  - h. Stairs and ladders
  - i. Scaffold use
    - i. Suspended
    - ii. Supported
    - iii. Mobile Scaffolds (Scissor lifts)
    - iv. Aerial Lifts
  - j. Monitoring Systems
  - k. Warning Line Systems
  - l. Hoist Areas
  - m. Unguarded Machinery
8. Stuck-by and fall-to-the-same level controls
- a. Housekeeping
  - b. Storage prohibitions (unenclosed perimeters, shafts etc.)
  - c. Hardhats
  - d. Tethering of tools
  - e. Vertical Nets
  - f. Sidewalk Sheds
9. Protection from falling objects
10. Describe in detail the Components, Specifications and Regulatory Requirements, with trainee interactions (calculations, tabletop scenarios, decision-tree) the different types of fall protections systems.
- a. Personal Fall Arrest Systems
  - b. Fall arrest with self-retracting lanyards
  - c. Fall restraint systems
  - d. Positioning systems
  - e. Horizontal life lines
  - f. Vertical life lines
  - g. Fall Protection in Excavation
11. Explain components of a prompt rescue plan

12. Exercise calculation fall distances

13. Resources:

- a. <https://www.osha.gov/SLTC/fallprotection/construction.html>
- b. Worker's Rights (See OSHA: <https://www.osha.gov/Publications/OSHA3146.pdf>)
- c. OSHA Regional Map: <https://www.osha.gov/html/RAmap.html>

14. Debriefing (Informal evaluation)

- a. Guided by instructor, trainees, in a class discussion talk about the course's content and means of delivery and provide verbal feedback to the instructor.
- b. Instructor takes notes (either committing them to writing during discussion or ascribing them later into noted-comments).
- c. Instructor applies lessons learned from debriefing to future trainings.

15. Written (Multiple Choice and fall calculations for) Assessment