Department-Approved Course Requirements: 1-Hour Risk Assessment and Accident Investigation

Course Required for: ☒ **Worker Training**

Purpose: This course is a specialized 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: 1 Hour 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 one hour 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
Handouts:	Slides, references and handbook
Guided Learning:	Trainees will discuss a mock root cause to a simple incident and challenge each other to dig deeper and deeper.

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 with the various components of an incident/accident investigation.
      ii. Trainees should able to recognize good investigatory processes and understand and distinguish root causality from other more superficial causes.

2. Define various terms associated with accident/incident investigations
   a. An accident
   b. An incident
   c. A near miss
   d. A deficient observation
   e. Direct Cause
   f. Indirect Cause
   g. Contributing Factors
   h. Root Causality
   i. Discuss the tempting but
   j. Objectivity and Subjectivity
   k. Proactive and Reactive

3. Discuss the ‘simple rule’ to good investigations ‘just keep asking ‘why’ and ‘how’ until there are no more answers. (Rule of thumb the ‘5 why technique’)

4. Describe the rationale for an effective incident/accident analysis program that includes:
   a. Clearly stated and easy to follow written procedures.

b. Clearly assigned responsibility for conducting accident investigations.
c. All accident investigators will be formally trained on accident investigation techniques and procedures.
d. Separation of the accident investigation from any potential disciplinary procedures resulting from the accident. The purpose of the accident investigation is to get at the facts, not find fault. In other words, the object of investigation is to 'fix the problem not affix blame.'
e. A written report, addressing the surface causes and root causes, with recommendations to correct hazardous conditions and work practices, and those underlying system weaknesses that 'caused' them into existence.
f. Follow-up procedures to make sure short and long-term corrective actions are completed. An annual review of accident reports to make sure root causes are being addressed and corrected, so that information about the types of accidents, locations, trends, etc., can be gathered.

5. Describe and discuss the basic steps to a typical accident/incident investigation.
   a. Step 1 – Preserve and document the scene
   b. Step 2 – Collect the facts through interviews
   c. Step 3 – Develop sequence of events
   d. Step 4 – Determine causes (direct, indirect, contributing, root causality)
   e. Step 5 – Recommend improvements
   f. Step 6 – Write the report

6. Describe what can be investigated and if they are proactive or reactive
   a. Incident Investigation (reactive)
   b. Near miss (reactive)
   c. Deficient Observation (proactive)
   d. People
   e. Equipment
   f. Materials
   g. Environment
   h. Scope of work (what was being performed)

7. Explain the process and terminology for providing recommendations through risk assessments, and describe, and provide examples of the basic principles of Job Hazard Analysis (aka Job Safety Analysis, Safe Work Plan, Risk Assessment Procedure etc.).
   a. Using the four column ANSI model for a Job Hazard Analysis (JHA) describe how to:
      i. Breakdown scope of work into smaller manageable sequential tasks
      ii. Identify as many hazards associated with tasks
      iii. Utilize the hierarchy of controls to control each associated hazards
      iv. Provide a 'Means of Implementation' for all controls into the workplace
   b. Describe the hierarchy of controls.
      i. Elimination
      ii. Substitution
      iii. Engineering
      iv. Administrate
      v. Awareness
      vi. Work practice controls
      vii. Job Rotations
      viii. Personal Protection Equipment

8. Provide actual case studies and have class investigate and determine root causality.

9. Resources:
    a. OSHA 7505 Incident Investigations (6-step model)
    b. Worker's Rights (See OSHA: **https://www.osha.gov/Publications/OSHA3146.pdf**)
    c. OSHA Regional Map: **https://www.osha.gov/html/RAmap.html**

10. 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.

11. Written (Multiple Choice) Assessment