



## Department-Approved Course Requirements

<b>Course Title:</b>	8-Hour Rigging Worker Refresher
<b>Course Required for:</b>	<input checked="" type="checkbox"/> Worker Training
<b>Purpose:</b>	This course is a requirement for an individual – who is not employed by a licensed rigger – to continue to perform rigging or signaling work in conjunction with the hoisting or lowering of articles on the outside of a building with hoisting equipment. In lieu of completing this course, an individual may instead possess a department approved national rigging certification.
<b>Duration:</b>	8 Hours of instructional time, excluding breaks & meals
<b>Class Size:</b>	1 – 50 trainees
<b>NYC Requirement:</b>	To continue to perform rigging or signaling work in conjunction with the hoisting or lowering of articles on the outside of a building with hoisting equipment, an individual must either (i) complete this course four years following the completion of the 16-Hour Rigger Worker course & every four years thereafter, or (ii) possess a department approved national rigging certification, or (iii) be employed by a licensed rigger.
<b>Facility Requirements:</b>	<p>The Training Facility used by the Course Provider must:</p> <ul style="list-style-type: none"><li>• Have sufficient room to accommodate all expected attendees and the equipment needed to perform hands-on exercises where required as part of the course;</li><li>• Make provisions for the presentation of training material in all media types (computer, projector, video/DVD player, etc.); and</li><li>• Comply with all applicable laws, rules &amp; regulations relating to occupancy, zoning, egress, fire detection, fire suppression, light, ventilation, cleanliness, sanitary facilities, emergency notification &amp; evacuation procedures.</li></ul> <p>Training may be held at construction sites, provided the above requirements are met.</p>
<b>Instructor Requirement:</b>	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.
<b>Curriculum Requirement:</b>	All <b>topics</b> listed under <b>Course Content Outline</b> must be covered using the listed <b>Instructional Delivery Method</b> . 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 <b>Instructional Delivery Materials</b> used in this course must contain all current applicable NYC Construction Code references, current rules, policies & bulletins.

## Course Content Outline

## Instruction Delivery Method

- |   |  |
|---|--|
| <p>1. <b>Introduction to Rigging</b><br/>         Include instruction on inspection, maintenance, repair, use and installation of rigging equipment, hazards associated with rigging, the relevant sections of the building code and industry practice with regards to rigging.<br/>         The definition of rigging and the traditional uses for rigging in the construction environment, including: material hoisting, suspended scaffolds, and industrial rope access (IRA). Emphasis that this course focuses on material hoisting; additional training required for suspended scaffolds and IRA work.</p>  | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>2. <b>Crane &amp; Rigging Accidents</b><br/>         Common causes of crane and rigging accidents<br/>         Historical crane and rigging accidents in NYC and other major cities<br/>         Overview of crane and rigging incident statistics for the most current 24-month period.<br/>         Close review of two failure scenarios with emphasis on what went wrong and how the incident could have been prevented.</p>   | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>3. <b>CFR 29 OSHA 1926 Overview</b><br/>         Subparts: E (PPE-Personal Protective Equipment),<br/>         H (Material Handling, Storage),<br/>         K (Electrical),<br/>         L (Scaffolds),<br/>         M (Fall Protection),<br/>         CC (Cranes and Derricks in Construction)</p>  | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>4. <b>NYC Construction Codes Overview</b><br/>         Cover all applicable code, rules, related Department policy statements, Regulatory notices, bulletins and memos, including:<br/>         2014 Building Code, Chapter 33; Reference Standard RS 19-2</p>   | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>5. <b>NYC Department of Buildings Overview</b><br/>         Cover all applicable administrative standard operating procedures, policy procedure notices, permits/Department notifications, forms, filing and site documents, plans, inspection checklists/logs and wind and weather advisories</p>   | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>6. <b>Lifting &amp; Lowering Loads</b><br/>         Overview of general practices involved with hoisting steel, concrete buckets, rebar, masonry, curtain walls, and similar items commonly hoisted during construction.<br/>         Maneuvering and drifting loads.<br/>         Hazards of operating in a dense urban environment.<br/>         High wind hazards and effects of wind on rigging.<br/>         Operating near power lines.<br/>         Prohibition against hoisting over pedestrians, traffic &amp; adjoining buildings.<br/>         Overhead protection/safety exclusion zones during rigging.<br/>         Sidewalk sheds; barriers; flag persons; hazard signage.<br/>         Requirements for guardrails and safety netting.<br/>         Securing rigging platforms during the day and at the end of the shift.<br/>         When a licensed rigger or rigging foreman is required.<br/>         When a critical pick plan is required.</p> | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>7. <b>Ropes, Knots &amp; Hitches Overview</b><br/>         Overview of common types of ropes (wire and fiber), grades of rope, their application, and handling of ropes.<br/>         Common knots and hitches and their application.<br/>         Overview of rope strength; knot strength, and how hitches and angles impact rope strength.<br/>         Review of manufacturers' specifications &amp; limitations for ropes.</p>  | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>8. <b>Rigging Equipment Overview</b><br/>         Overview of common types of rigging equipment, their use, handling, strength, and application including: fasteners, hooks, shackles, thimbles, eyes, other connection &amp; termination of ropes, tackle blocks, slings, comealongs, pulleys, and chains.<br/>         Review of manufacturers' specifications &amp; limitations for rigging equipment.</p>  | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>9. <b>Inspection of Ropes &amp; Rigging Equipment</b><br/>         Inspection process &amp; safety checklists, including what to inspect, how to inspect, how frequently to inspect.<br/>         Identification of wear, defects, and failure signs in all rigging equipment.<br/>         Steps to take if hazard discovered.<br/>         Maintenance, repair/replacement of rigging equipment, rope, rigging equipment, etc.</p>   | <p>Hands-On Demonstration &amp; Practice</p> |
| <p>10. <b>Crane and Hoisting Machine Overview</b><br/>         Overview of common types of cranes and hoisting machines and hazards associated with, including: crush hazards, struck by objects, fall hazards, electrical hazards.<br/>         Overview of crane and hoisting machine setup, including: ground conditions, tiebacks, outrigger cribbing and placement. Note that deviation from plans not permitted.<br/>         Note that a licensed hoisting machine operator is required for most cranes and hoisting machines.</p>   | <p>Classroom Lecture/Discussion with A/V</p> |
| <p>11. <b>Signaling</b><br/>         Communication between workers &amp; supervisors while rigging: radios; hand signals; flags; etc.</p>   | <p>Hands-On Demonstration &amp; Practice</p> |
| <p>12. <b>General Principles of Fall Protection</b><br/>         Fall Clearance, Total Fall Distance Calculations, Minimizing Fall Forces, Guarding Against Falling Objects</p>   | <p>Classroom Lecture/Discussion w A/V</p>    |
| <p>13. <b>Personal Protective Equipment &amp; Fall Arrest Systems</b><br/>         Selection, Fit Test of Harness,<br/>         Inspection Procedures Donning &amp; Doffing Harness &amp; Equipment,<br/>         Care of Equipment &amp; Systems</p>   | <p>Hands-On Demonstration &amp; Practice</p> |



## Department-Approved Course Requirements

### Course Content Outline

14. General Construction Site Hazards

15. NYC DOB Unsafe Condition (311) Notification Procedure

16. NYC DOI/Buildings Integrity Training Contact Information Sheet

17. Review all Training Topics

18. Written (Multiple Choice) Assessment

### Instruction Delivery Method

Classroom Lecture/Discussion with A/V

Provide Copy to Trainee & Discuss

Provide Copy to Trainee & Discuss

Discussion with Questions & Answers

Classroom