LIUNA
TRAINING &
EDUCATION
FUND

Training Catalog

LiUNA!
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Training Catalog

PREFACE

LIUNA Training and Education Fund is an independently accredited developer of training programs and provider of instructor training sessions. This catalog was created to provide a brief description of our courses including prerequisites, assessment requirements, and required attire.

Courses having prerequisites may be substantiated in one of two ways:

1. Provide proof to LIUNA Training of equivalent training within the past 4 years.
2. Pass a pre-placement examination in the required subject matter.

Please note that all courses have, at a minimum, a written assessment associated with it requiring a score of 80% or greater in order for it to be successfully completed. Written assessments are either in the form of module or program exams. If the course has an additional hands-on (skill) assessment associated with it, the participant must master the skills (obtain a 100% score) in order to successfully complete the course. Some courses such as those associated with computer operation require participants to complete a number of specific tasks and develop a portfolio of completed assignments in order to be deemed successful.

All LIUNA Training courses are classified as a Construction, Environmental, Professional, Safety, or Supervisory course. Training sessions for each classification are scheduled as follows:

February – Professional and Safety

March – Environmental

April – Construction and Professional

June – Annual Instructor Conference

July - Professional

August – Environmental

September – Construction

October – Safety

Courses to be offered in a given year are selected by LIUNA Training based upon the results of the annual Instructor Training Survey completed by affiliate training funds. Different courses under the same classification are conducted simultaneously at the same or different training location.

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CONSTRUCTION TRAINING PROGRAMS

ASPHALT – BASIC

This course is designed to introduce participants to the asphalt paving industry and provide general knowledge of the asphalt worker. Topics covered include:

- Introduction to Asphalt
- Asphalt Safety
- Asphalt Calculations and Estimating
- Asphalt Placing and Paving
- Asphalt Patching and Repair
- Electronic Grade and Slope Control

Upon successful completion participants should be able to support others in delivering asphalt training. Instructors with field/training experience should not attend this session.

Prerequisites – None

Course Length – 32 hrs.

Number of Participants – 12

Assessment – Written Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

CONCRETE – ADVANCED (ACI FLATWORK FINISHER/TECHNICIAN CERTIFICATION)

The Advanced Concrete course prepares instructors to achieve certification from the American Concrete Institute (ACI) as a Concrete Flatwork Finisher or Concrete Technician. ACI's Craftsman Workbook Publication CP-10 is used to present the class material. Upon successful completion of the class participants are guided through the work experience documentation procedures and administered the ACI knowledge and performance testing components. Topics covered in this class include:

- Basic Concrete Technology
- Concrete Materials and Mix Proportioning
- Concrete Control Tests
- Proper Use of Placing and Finishing Tools
- Placing, Finishing, and Joining Slabs on Grade
- Curing and Protection of Concrete

Upon successful completion participants should be able to pass the exam to achieve Flatwork Technician and/or Flatwork Finisher certification through ACI.

Prerequisites – Participants must have successfully completed the basic concrete course or have field experience to participate in the advanced concrete course. ACI certification requirements mandate a participant have 1,500-hours of approved work experience and pass the performance assessment and written examination in order to be certified as a Flatwork Finisher. Participants without the requisite number of hours of approved work experience may be certified as a Flatwork Technician upon successful completion of the written examination. Certification for Flatwork Finisher may be applied for at a later date upon documentation of the prerequisite number of approved work hours and completion of the performance assessment.

Course Length – 24 hrs.

Number of Participants – 12

Assessment – Program Exam and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

CONCRETE – BASIC

The Basic Concrete course introduces instructors to the concrete industry and provides general knowledge of concrete placement. Topics covered include:

- Site Preparation for Concrete Placement
- Job Built Forms
- Estimating Concrete Quantities
- Concrete Placement and Consolidation
- Concrete Finishing and Curing
- Portable All-Purpose Saw

Upon successful completion participants should be able to support others in delivering concrete training. Instructors with field/training experience should not attend this session.

Prerequisites – Basic Construction Math

Course Length – 45 hrs.

Number of Participants - 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

CONSTRUCTION MATH – ADVANCED

The course expands upon the Basic Construction Math course to provide CCLs with the advanced math skills needed to perform trigonometric calculations commonly used on construction projects. Practical applications for determining missing angles, computing trigonometric functions for know angles, finding perimeters and areas, working with offsets and arcs, measuring arc lengths, and determining slopes are covered. The goal of the course is to provide the participant with math skills as they apply to Global Positioning Systems (GPS), project layout, surveying, and line and grade applications. Topics covered in this course include:

- Review of Basic Construction Math
- Angles and Their Measure
- Solving Missing Angles (using parallel and perpendicular relationships)
- Right Triangle Trigonometry
- Compute Trigonometric Functions of Given Angles
- Applications: Finding Perimeters and Areas, Working with Offsets and Arcs, Measuring Arc Lengths, Finding Slopes
- Advanced Area and Volume Applications and Calculations
- Introduction to the Math Needed for Global Positioning Systems
- Additional Applications Relating to Project Layout, Surveying, and Line & Grade Problems

Upon successful completion participants should be able to support others in delivering advanced construction math training.

Prerequisites – Basic Construction Math

Course Length – 40 hrs

Number of Participants – 15

Assessment – Module Exams

Attire – No special attire is required for this class.

CONSTRUCTION MATH – BASIC

This class introduces CCLs to the basic math skills needed to perform calculations related to distance, area, volume, angles, weight and measurement on construction projects. Participants are provided instruction and an ample opportunity to measure objects, calculate and perform basic math functions including addition, subtraction, multiplication, and division of whole and fractional numbers; measure and estimate volumes, convert fractions to decimals, (and decimals to fractions). In addition participants learn practical

applications of the Pythagorean theorem, formulas for calculating perimeters, area, volume, and the use and function of square roots. Topics covered in this course include:

- Whole Numbers (place values, addition, subtraction, multiplication, division, rounding off, and estimating)
- Fractions
- Decimals
- Conversions (fractions to decimals, vice versa)
- Percents
- Measurement (perimeter, area , volume, Pythagorean theorem, square roots)
- Angles and Triangles
- Perpendicular and Parallel Lines in a Plane
- Polygonal Regions and Their Areas
- Circles and Their Measurements
- Solids and Their Volumes

Upon successful completion participants should be able to support others in delivering basic construction math training. Instructors with good math skills may not need to attend this session.

Prerequisites – None

Course Length – 40 hrs.

Number of Participants – 15

Assessment – Module Exams

Attire – No special attire is required for this class.

GENERAL CONSTRUCTION – BASIC

This course provides participants with the prerequisite knowledge necessary for conducting general construction classes to new CCLs. Topics covered include:

- Hand Tools
- Electric Tools: Operation and Maintenance
- Small Engines: Operation and Maintenance
- Portable All-Purpose Saw
- Soil Compaction
- Pneumatic Tools Operation
- Powder-Actuated Tools

- Hoisting and Rigging Basics
- Oxyfuel Cutting

Upon successful completion participants should be able to support others in delivering general construction training. Instructors with field/training experience should not attend this session.

Prerequisites – None

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

GREEN CONSTRUCTION – BASIC

This course introduces participants to the techniques and processes and procedures associated with green construction projects. Topics covered include:

- Definitions of Green
- Green Rating Systems
- Green Construction Procedures
- Overview of Alternate Energy Sources

Upon successful completion participants should be able to support others in delivering green construction training.

Prerequisites – General Construction and/or field experience on construction projects

Course Length – 16 hrs.

Number of Participants – 20

Assessment – Module Exams

Attire – No special attire is required for this class.

HOISTING AND RIGGING - BASIC

This class introduces instructors to the basics of hoisting and rigging for construction projects. Specific topics addressed in this course include:

- Hoisting, Rigging, and Crane Safety
- Math for Hoisting and Rigging
- Rigging Hardware and Slings
- Signal Person

Upon successful completion participants should be able to support others in delivering hoisting and rigging training.

Prerequisites – Basic Construction Math

Course Length – 40 hrs.

Number of Participants - 15

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

HOISTING AND RIGGING INSTRUCTOR REFRESHER - ADVANCED

Required every 3 years, the hoisting and rigging instructor refresher course reviews the important topics and provides regulatory or standards updates to instructors. Specific topics addressed in this course include:

- Crane Safety
- Signaling
- Determining Load Weight
- Rigging Hardware and Slings
- Sling Configurations

Upon successful completion participants should be able to deliver hoisting and rigging training.

Prerequisites – Hoisting and Rigging

Course Length – 8 hrs.

Number of Participants – 20

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – No special attire is required for this class.

LINE AND GRADE – BASIC

This course introduces participants to the techniques and procedures to operate a transit and level for elevation control and structure layout. Topics covered include:

- Math for Line and Grade
- Construction Layout Instruments
- Construction Referencing Systems
- Measuring Techniques and Elevation Control

- Construction Layout Tools and Techniques
- Layout Hand Signals and Field Books

Upon successful completion participants should be able to support others in delivering line and grade training. Instructors with field/training experience should not attend this session.

Prerequisites – Basic Construction Math

Course Length – 50 hrs.

Number of Participants – 10

Assessments – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

LINE AND GRADE/GLOBAL POSITIONING SYSTEMS (GPS) – ADVANCED

This course provides participants with the theory, techniques, and procedures to perform elevation control and structure layout using a GPS system. Topics covered include:

- Latitude and Longitude
- Components of a GPS
- Principles of GPS Operation
- Differential Global Positioning System (DGPS)
- Real Time GPS Field Procedures
- Data Collection
- Configuring and Operation Mode

Upon successful completion participants should be able to assist others in delivering GPS training.

Prerequisites – Basic Construction Math and Line and Grade (Basic)

Course Length – 40 hrs.

Number of Participants – 10

Assessments – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

LINE AND GRADE/TOTAL STATION – ADVANCED

This course provides instruction on the practical application, set up, and transportation procedures for the Total Station survey system. Topics covered include:

- Parts of the Total Station
- Transporting the Total Station
- Total Station Set Up
- Distance Measuring
- Angle Measurement
- Field Procedures
- Measuring Vertical Angles
- Layout Procedures
- Using Coordinates

Upon successful completion participants should be able to provide instruction to others to operate a Total Station system.

Prerequisites – Basic Construction Math and Line and Grade (Basic)

Course Length – 40 hrs.

Number of Participants – 10

Assessments – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

MASON TENDING TECHNOLOGY I

This course introduces CCLs to the basics of mason tending. Topics covered include:

- Safety and Health for Mason Tenders
- Reinforced Masonry
- Estimating Masonry Materials
- Mortar, Admixtures, and Grout
- Stocking Masonry Materials
- The Mason Tender's Duties
- The Effects of Weather on Masonry
- Bracing Masonry Walls

Upon successful completion participants should be able to perform basic mason tending duties on construction projects.

Prerequisites – None

Course Length – 45 hrs.

Number of Participants – 12

Assessments – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

ACE Credit Recommendation – 1 semester hour in Introduction to Masonry Technology

MASON TENDING TECHNOLOGY II

This course builds upon the Mason Tending Technology I course and provides CCLs with instruction on the inspection, operation, and maintenance of rough terrain forklifts used during mason tending operations. Topics covered include:

- Masonry Saws
- Cleaning Masonry
- Plaster Tending and Mixing
- Rough Terrain Forklift Safety Basics
- Rough Terrain Forklift Inspection and Maintenance
- Operating the Rough Terrain Forklift

Upon successful completion participants should be able to clean masonry, tend plasterers, and inspect, maintain, and operate a rough terrain forklift.

Prerequisites – Mason Tending Technology I

Course Length – 32 hrs.

Number of Participants – 12

Assessments – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

ACE Credit Recommendation – 2 semester hours in Introduction to Masonry Technology

MATERIAL HOIST ATTENDANT – "BELL RINGER"

This course provides training to instructors on the roles and responsibilities of the material hoist attendant (bell ringer) and inspection, operation, and maintenance procedures for material hoists used on construction projects. Topics covered include:

- Responsibilities of the Material Hoist Attendant
- Material Hoist Operation
- Performing Load Calculations
- Assuring Load Weight Is within the Hoist Capacity
- Loading and Unloading Procedures
- Communications
- Material Hoist Maintenance

Upon successful completion participants should be able to deliver material hoist training to CCLs.

Prerequisites – None

Course Length – 8 hrs.

Number of Participants – 20

Assessments – Module Exams and Hands-on (Skills) Assessment

Attire – No special attire is required for this class.

PIPELINE – ADVANCED - OPERATOR QUALIFICATIONS

This course is designed to certify participants as Qualified Evaluators for Operator Qualification (OQ) testing/evaluation of specific covered tasks performed by pipeline workers. Based upon the U.S. Department of Transportation (DOT) Pipeline Operator Qualification requirements, the course prepares instructors to qualify CCLs in the fourteen covered tasks associated with pipeline work. Topics covered include:

- Locating Pipelines
- Line Markers
- Inspection for Damage
- Protection from Hazards
- Excavation
- Backfilling
- Plastic Pipe – Butt Fusion
- Leak Clamp and Sleeves

- Coating Maintenance
- Cathodic Protection Systems
- Mechanical Joints
- Tapping Steel and Plastic Pipes
- Tapping Cast and Ductile Iron Pipe
- Corrosion Monitoring

Upon successful completion participants should be able to evaluate CCLs in the fourteen covered tasks.

Prerequisites – Pipeline Basic (Recommended)

Course Length – 40 hrs.

Number of Participants – 16 (max) 8 (min)

Assessments – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

PIPELINE – BASIC

This course is designed to introduce participants to the processes and procedures of the pipeline industry. Topics covered include:

- Front End Pipeline Work
- Ground Surface Pipe Handling and Welding
- Pipe Handling in the Trench
- Coating Crew
- Back End Pipeline Work
- Pipeline Specialty Construction

Upon successful completion participants should be able to support others in delivering pipeline training.

Prerequisites – None

Course Length – 40 hrs.

Number of Participants – 16 (max) 8 (min)

Assessments – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

PIPING TECHNOLOGY I

This course introduces CCLs to the different types of pipelaying processes and techniques for gravity flow, pressurized pipe, polyethylene pipe fusion, and the water main tapping. Instruction also includes trench and excavation safety, utility locating, and math for pipelayers. Topics covered include:

- Math for Pipelayers
- Trench and Excavation Safety
- OSHA CFR 1926.650 (Subpart P Regulations)
- Gravity Flow Piping Systems
- Polyethylene Pipe Fusion
- Pressure Pipelaying Techniques
- Tapping Water Mains

Upon successful completion participants should be able to safely install gravity flow, pressurized and polyethylene pipe systems, and tap a live water main.

Prerequisites – Basic Construction Math

Course Length – 45 hrs.

Number of Participants – 12

Assessment – Module Exams and Hands-on (Skills) assessments

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

ACE Credit Recommendation – 3 semester hours in Construction, Construction Supervision, Industrial Technology, or Civil Engineering Technology

PRINT READING –PART 1-RESIDENTIAL CONSTRUCTION

This course is designed to introduce participants to the reading and interpreting of blueprints in general, and residential blueprints in particular. Building Trades Print Reading Part 1 by American Technical Publishers is used to present the course material. Topics covered include:

- Working Drawing Concepts
- Symbols and Abbreviations

- Floor Plans
- Elevation Views
- Sectional Views
- Detail Views
- Plot Plans
- Trade Information

Upon successful completion participants should be able to support others in residential blueprint reading training.
Prerequisites – None

Course Length – 40 hrs.

Number of Participants - 12

Assessments – Chapter Exams and Final Exam

Attire – No special attire is required for this class.

PRINT READING – PART 2-RESIDENTIAL AND LIGHT COMMERCIAL CONSTRUCTION

This course is designed to build on the material presented in the Residential Print Reading class by providing a review and introducing participants to more complex prints. Building Trades Print Reading Part 2 by American Technical Publishers is used to present the course material. Topics covered include:

- Review of Basic Print Reading Skills
- Construction Materials
- Residential Print Reading
- Light Frame Construction
- Various Light Commercial Print Reading Examples
- Project Specifications

Upon successful completion participants should be able to support others in residential and light commercial blueprint reading training.

Prerequisites – Completion of residential print reading class, or documented print reading experience

Course Length – 40 hrs.

Number of Participants – 12

Assessments – Chapter Exams and Final Exam

Attire – No special attire is required for this class.

PRINT READING – PART 3-HEAVY COMMERCIAL CONSTRUCTION

This course is designed to build on the material presented in the Residential Print Reading and Residential and Commercial Print Reading classes, and to introduce participants to more complex prints seen when working on a heavy construction job. Building Trades Print Reading Part 3 by American Technical Publishers is used to present the course material. Topics covered include:

- Types of Construction
- Specifications
- Site Work
- Structural Steel Construction
- Reinforced Concrete Construction
- Mechanical and Electrical Systems
- Finish Construction

Upon successful completion participants should be able to support others in heavy commercial construction blueprint reading training.

Prerequisites – Completion of residential and light commercial print reading class, or documented print reading experience

Course Length – 40 hrs.

Number of Participants – 12

Assessments – Chapter Exams and Final Exam

Attire – No special attire is required for this class.

SCAFFOLD BUILDER TECHNOLOGY I

This course introduces CCLs to the various types of scaffolds used on construction projects and provides instruction on their safe erection and use. Specific topics covered include:

- Scaffold User Safety
- Scaffold Building Tools and PPE
- Tube and Clamp Scaffold
- Systems Scaffold
- Building Frame Scaffold

Upon successful completion participants should be able to safely assemble different types of scaffolds in various configurations on construction projects.

Prerequisites – None

Course Length – 45 hrs.

Number of Participants – 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

ACE Credit Recommendation – 2 semester hours in Introduction to Masonry Technology

SCAFFOLD BUILDER TECHNOLOGY II

This course builds upon the Scaffold Builder Technology I course by instructing CCLs in the set up, use, and inspection of advanced types of scaffolding. Specific topics covered include:

- Non-Powered Adjustable Masonry Scaffold
- Building Powered Mast-Climbing Scaffold

Upon successful completion participants should be able to safely assemble advanced types of scaffolds in various configurations on construction projects.

Prerequisites – Scaffold Builder Technology I

Course Length – 32 hrs.

Number of Participants – 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

ACE Credit Recommendation – 1 semester hour in Construction Technology, Civil Engineering Technology, Construction Management, Safety Engineering Technology or Risk Management

RESIDENTIAL CONSTRUCTION TRAINING PROGRAM

The Residential Construction Program introduces participants to the many facets of the residential construction process and provides the core skills, knowledge, and aptitude necessary to construct homes safely and efficiently through a series of seven (7) one-week courses. This program is designed to start with an introduction to residential construction that will focus on Hand and Power Tools, Performing Basic Carpentry, and the importance of Building Materials, Plans, Specifications, and Codes in the residential construction industry. This program will also include classroom environment training as well as job-site situation hands-on activities on:

- Layout and construction of flooring systems (including sill plates, support post, floor joist, trusses/I-beams, floor decking, for homes with/without basements and one or more stories)
- Layout and construction of wall framing (including sole and top plates, trimmer and cripple studs, corners, window and doors openings, stairs, wall sheeting)
- Layout and construction of roof framing systems (including ceiling joist, trusses, rafters, bracing, roof openings, sheeting, hips and valleys, vents)
- Installing exterior windows and doors
- Installing insulation (exterior)
- Installing and taping drywall
- Installing roofing and exterior wall finishing materials (roof felt and shingles, metal roofing, wall siding, vinyl siding)
- Landscaping (drainage solutions, planting trees and shrubs, laying sod)

Upon completion of this program participants will receive a certificate of merit. Participants will also receive a certificate of merit for the completion of each of the seven individual courses.

INTRODUCTION TO RESIDENTIAL CONSTRUCTION

This course introduces instructors to the many facets of the residential construction process and provides the core skills, knowledge, and aptitude necessary to construct homes safely and efficiently. Specific topics covered include:

- Hand and Power Tools
- Performing Basic Carpentry
- Building Materials, Plans, Specifications, and Codes

Upon successful completion participants should be able to deliver this course to CCLs.

Prerequisites – None

Course Length – 40 hrs

Number of Participants – 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

RESIDENTIAL CONSTRUCTION: CONCRETE FORMING AND FLOORING SYSTEMS

This course introduces instructors to the concrete forming procedure for residential foundations and slabs on grade as well as the construction of flooring systems. Specific topics covered include:

- Concrete Forming Systems
- Residential Flooring Systems

Upon successful completion participants should be able to deliver this course to CCLs.

Prerequisites – Introduction to Residential Construction

Course Length – 32 hrs

Number of Participants – 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site

RESIDENTIAL CONSTRUCTION: INSTALLING EXTERIOR FINISHING WALLS AND ROOFS

This course introduces instructors to the process and procedures for installing exterior wall and roof finishing. Specific topics covered include:

- Vinyl Siding, Wood Siding
- Exterior Paint Preparations
- Installing Soffits, Cornices, and Fascia
- Roof Underlayment, Ventilation
- Roof Flashing (chimney, valley, and vent)
- Roof Shingling

Upon successful completion participants should be able to deliver this course to CCLs.

Prerequisites – Introduction to Residential Construction

Course Length – 45 hrs.

Number of Participants - 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

RESIDENTIAL CONSTRUCTION: INSTALLING INSULATION, VAPOR BARRIERS, DRYWALL, AND INSTALLING EXTERIOR DOORS AND WINDOWS

This course introduces instructors to the process and procedures for installing insulation, vapor barriers, drywall, exterior doors and windows. Specific topics covered include:

- Front Doors, Pre-Hung Windows
- Garage Doors, Sliding Glass Doors
- Drywall Taping and Finishing
- Installing Bat and Rigid Insulation

Upon successful completion participants should be able to deliver this course to CCLs.

Prerequisites – Introduction to Residential Construction

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

RESIDENTIAL CONSTRUCTION: LANDSCAPING

This course introduces instructors to the process and procedures for residential landscaping. Specific topics covered include:

- Drainage Systems (French drain)
- Planting Trees and Shrubs
- Grading for Drainage Away from the Residence and Laying Sod
- Laying Sod
- Mulching

Upon successful completion participants should be able to deliver this course to CCLs.

Prerequisites – None

Course Length – 30 hrs.

Number of Participants - 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

RESIDENTIAL CONSTRUCTION: ROOF FRAMING

This course introduces instructors to the process and procedures for framing roofs on residential construction projects. Specific topics covered include:

- Types of Residential Roofing Systems
- Residential Roof Framing

Upon successful completion participants should be able to deliver this course to CCLs.

Prerequisites – Introduction to Residential Construction

Course Length – 40 hrs

Number of Participants – 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site

RESIDENTIAL CONSTRUCTION: WALL FRAMING

This course introduces instructors to the process and procedures for framing interior and exterior walls on residential construction projects. Specific topics covered include:

- Wall Framing
- Framing Openings in Walls

Upon successful completion participants should be able to deliver this course to CCLs.

Prerequisites – Introduction to Residential Construction

Course Length – 40 hrs

Number of Participants – 12

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site

ENVIRONMENTAL PROGRAMS

ANTHRAX REMEDIATION

This course is required for all instructors interested in providing Anthrax Remediation training to Construction Craft Laborers. Topics covered in the course include:

- Health Effects and Characteristics of Anthrax
- Medical Testing and Treatment for Anthrax
- Personal Protective Equipment
- Decontamination
- Work Area Monitoring and Sampling
- Work Area Preparation and Remediation Techniques

Upon successful completion participants should be able to deliver anthrax remediation worker training.

Prerequisites – Participants must have successfully completed a Hazardous Waste, Asbestos Abatement, or Lead Abatement Instructor level course.

Course Length – 24 hrs.

Number of Participants – 18

Assessment – Program Exam

Attire – No special attire is required for this class.

ASBESTOS ABATEMENT

This course is required for all instructors interested in providing Asbestos Abatement training to Construction Craft Laborers. Topics covered in the course include:

- Introduction to Asbestos
- Health Effects of Asbestos
- Medical Monitoring and Surveillance
- Legal Rights of Workers and Asbestos Abatement Regulations
- Personal Protective Equipment
- Site Safety
- Negative Pressure Air Filter Systems
- Preparing the Work Area and Decontamination Unit
- Asbestos Abatement Techniques
- Air Monitoring
- Hazard Communication

Upon successful completion participants should be able to deliver asbestos abatement training. Instructors with field experience are encouraged to participate in this course.

Prerequisites – Training sites wanting to provide asbestos abatement training to their membership must be accredited through either the federal or state Environmental Protection Agency (EPA) or equivalent. Instructors of an accredited training provider must receive EPA or equivalent approval prior to instructing a course. It is highly recommended that participants successfully complete an accredited asbestos abatement worker course.

Course Length – 40 hrs.

Number of Participants – 18

Assessment – Program Exam

ACE Credit Recommendation – 2 semester hours in Industrial or Environmental Technology

Attire – No special attire is required for this class.

BASIC EMERGENCY RESPONSE AWARENESS (BERA) – BASIC

This course is designed to prepare instructors to teach workers in responding to disaster sites resulting from a terrorist act. Topics covered include:

- Emergency Preparedness
- Weapons of Mass Destruction (WMD): Health Effects and PPE
- Incident Command Systems (ICS)
- Critical Incident Stress Awareness

Upon successful completion participants should be able to support others in delivering BERA training.

Prerequisites – Participants must have successfully completed a Hazardous Waste Instructor level course.

Course Length – 8 hrs.

Number of Participants – 20

Assessment – Program Exam

Attire – No special attire is required for this class.

HAZARDOUS WASTE INSTRUCTOR

This course is mandatory for all instructors prior to teaching Hazardous Waste Worker, Operations, Limited Access, Supervisor, and Refresher courses under the NIEHS or DOE Hazardous Waste Worker Training Grant programs. Topics covered include:

- Hazardous Waste Worker Program Policies and Procedures
- Useful Teaching Tools (Demonstrations)

- Use and Application of the NIOSH Pocket Guide to Chemical Hazards
- Use and Application of the DOT Emergency Response Guidebook
- Dress Out Exercises
- Equipment Maintenance

Upon successful completion participants should be able to support others in delivering Hazardous Waste Worker training.

Prerequisites – Participants must have successfully completed an 80-hour Hazardous Waste Worker class or equivalent.

Course Length – 40 hrs.

Number of Participants – 20

Assessment – Program Exam and Hands-on (Skills) Assessment

Attire – No special attire is required for this class.

HAZARDOUS WASTE INSTRUCTOR REFRESHER

This annual course is mandatory for all instructors conducting classes under the National Institute of Environmental Health Sciences (NIEHS) and Department of Energy (DOE) grant programs. Specific topics are selected each year, which address new technologies or topics that enhance instructor knowledge and performance in the classroom. Typical topics presented in previous classes included:

- Occupational Respiratory Protection and Porta-Count Operation, Maintenance, and Troubleshooting
- Curriculum Review of Revised Modules
- Basic Chemistry
- Air Monitoring Instrumentation, Calibration, and Maintenance

Upon successful completion participants will be eligible to conduct classes, which are reimbursable under the NIEHS and DOE grant programs.

Prerequisites – Currently or previously certified and employed by/or instructing for a LIUNA Training NIEHS subgrantee.

Course Length – 16 hrs

Number of Participants – 30

Assessment – Program Exam

Attire – No special attire is required for this class.

LEAD ABATEMENT

This course is required for all instructors interested in providing lead abatement training for the residential abatement market. Additionally, the course includes numerous topics associated with industrial lead paint related activities. Topics covered in the course include:

- History of Lead and Its Uses
- Health Hazards of Lead Abatement
- Lead Regulations
- Personal Protective Equipment for Lead
- Site Safety for Lead and Asbestos
- Lead Sampling Methods
- HUD Inspection and Risk Assessment
- Residential/HUD Work Practices, Abatement Methods, and Disposal Procedures
- Lead Worker Rights

Upon successful completion participants should be able to deliver lead abatement training. Instructors with field experience are encouraged to participate in this course.

Prerequisites – Training sites wanting to provide lead abatement training to their membership must be accredited through either the federal or state Environmental Protection Agency (EPA) or equivalent. Instructors of an accredited training provider must receive EPA or equivalent approval prior to instructing a course. It is highly recommended instructors have successfully completed an accredited lead abatement worker course.

Course Length – 40

Number of Participants – 18

Assessment – Program Exam

ACE Credit Recommendation – 2 semester hours in Industrial or Environmental Technology

Attire – No special attire is required for this class.

MICROBIAL REMEDIATION

This course provides instruction on the processes and procedures to conduct microbial remediation projects. Topics covered in the course include:

- Indoor Air Pollution and Sick Building Syndrome
- Health Effects
- Work Area Sampling

- Hazard Communication
- Personal Protective Equipment
- Work Area Preparation and Remediation Techniques
- Decontamination

Upon successful completion participants should be able to deliver microbial remediation training. Instructors with field experience are encouraged to participate in this course.

Prerequisites – None

Course Length – 24 hrs.

Number of Participants - 20

Assessment – Program Exam

Attire – No special attire is required for this class.

RADIATION/NUCLEAR POWER PLANT WORKER INSTRUCTOR

This course is an introduction to the basic concepts of ionizing and non-ionizing radiation, and their hazards, control measures, and survey procedures. Emphasis is placed on the use of instruments, survey techniques, and control measures. Specific topics covered include:

- Radiation and Its Properties
- Sources of Radiation Exposure
- Health Effects Associated with Radiation Exposure
- Radiological Posting Requirements
- Personal Protective Equipment (PPE)
- Radiation Detection Instruments
- Personal Dosimetry

Upon successful completion participants should be able to support others in delivering Radiological Worker II or Nuclear Power Plant Worker courses.

Prerequisites – Participants must have successfully completed a Radiological Worker II or Nuclear Power Plant Worker course.

Course Length – 32 hrs.

Number of Participants – 18

Assessment – Program Exam and Hands-on (Skills) Assessment

Attire – No special attire is required for this class.

RADIATION/NUCLEAR POWER PLANT WORKER REFRESHER

This course reviews the concepts of ionizing and non-ionizing radiation, its? the hazards, control measures, and survey procedures. Additionally, new Department of Energy (DOE) policies and procedures are discussed. Specific topics covered include:

- Radiation and Its Properties
- Sources of Radiation Exposure
- Health Effects Associated with Radiation Exposure
- Radiological Posting Requirements
- Personal Protective Equipment (PPE)
- Radiation Detection Instruments
- Personal Dosimetry
- Revised/New DOE Policies and Procedures

Upon successful completion participants should be able to deliver Radiological Worker II or Nuclear Power Plant Worker courses.

Prerequisites – Participants must have successfully completed a Radiation/Nuclear Power Plant Worker Instructor course.

Course Length – 16 hrs.

Number of Participants – 18

Assessment – Program Exam and Hands-on (Skills) Assessment

Attire – No special attire is required for this class.

UNDERGROUND STORAGE TANK

This course provides training to instructors to educate CCLs in the processes, procedures, and regulatory requirements for the safe removal of underground storage tanks. Specific topics covered include:

- Health and Physical Hazards for Underground Storage Tank Removal
- Underground Storage Tank Regulations
- Underground Storage Tank Removal Processes and Procedures

Upon successful completion participants should be able to deliver the underground storage tank removal course to CCLs.

Prerequisites – Hazardous Waste Worker Instructor and Hoisting and Rigging

Course Length – 24 hrs.

Number of Participants – 15

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – This class includes a substantial amount of hands-on training which necessitates the wearing of appropriate work clothing and work boots. Participants are responsible for bringing these items. Other PPE will be provided on site.

PROFESSIONAL DEVELOPMENT TRAINING PROGRAMS

ADVANCED INSTRUCTIONAL TECHNIQUES

This course builds upon the principles of adult learning; activity based instruction, objective writing, lesson planning, and assessment development and implementation to provide experienced instructors with advanced techniques for training delivery. The goals of this course are for participants to be able to design and deliver objectives-driven lessons based on LIUNA Training curriculum and Instructor Skills Standards so that learning is evident to both the learner and the instructor in each stage of the learning process. Another goal is for participants to be able to plan, modify, deliver, and reflect upon LIUNA Training lessons according to learners' needs in their specific contexts. Using newly learned techniques participants prepare and deliver presentations to the class and facilitator. Presentations are assessed and documented by the facilitator and class participants. Specific topics covered include:

- Monitoring and feedback, using DAPA (Describe Analyze Plan Action) to provide feedback
- Using the ECRIF model (Encounter Clarify Remember Internalization and Fluent Use) to plan and deliver instruction
- Developing objectives using the SMARTA model (Specific Measurable Achievable Relevant Time-bound and Adjustable)
- Developing and using assessment tools
- Structured feedback and useful prompts
- Developing, analyzing, and delivering instructions

Upon successful completion participants should be able to develop lesson plans, assessment tools, and instructions for classes they instruct.

Prerequisite – New Instructor Training or equivalent

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Presentation Assessments

Attire – No special attire is required for this class.

ASSESSING YOUR TRAINEES

This course provides experienced instructors with training and guidance for using different assessment techniques to determine adult learners' previous knowledge, appraise learning, and evaluate learners' competence. Participants will develop and use various evaluation instruments to assess student performance in the classroom as well as during hands-on (skills) assessments. Specific topics covered include:

- Identifying Course and Learning Outcomes
- Developing Assessment Instruments to Measure Student Reaction to Training, Cognitive Mastery of Training Content, and Performance of Trained Behaviors
- Best Practices When Administrating Formative and Summative Assessments
- Using Continual Feedback Loops
- Measuring Central Tendency, Dispersion, and Relative Position Calculations and Interpreting Findings

Upon successful completion participants should be able to develop and use evaluation instruments to assess student performance.

Prerequisite – New Instructor Training or equivalent

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Written Examination

Attire – No special attire is required for this class.

COMPUTER SKILLS – LEVEL I

The Computer Skills Level I course is designed for the new computer user or those having little or no experience using computers. Instruction includes basic identification of computer components and how to operate a computer. Teaching progresses from basic to more advanced skills including an introduction to the Windows operating system, keyboarding skills, MS Word, and communicating using email as well as accessing the Internet. Specific topics covered include:

- Basic Computer Operation
- Keyboard Skills
- Navigating the Windows Operating System
- Using Microsoft Word
- Navigating the Internet
- Using E-mail

Upon successful completion participants should be able to boot up a computer, identify its component parts, use a keyboard and mouse, navigate Windows, create and edit a Microsoft Word document, navigate the Internet, and open/send/receive an e-mail.

Prerequisite – None

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Module Quizzes and Assignment Portfolio

Attire – No special attire is required for this class.

COMPUTER SKILLS – LEVEL II

The Computer Skills Level II course focuses on the information and skills required to competently and confidently use a computer. Specific skills addressed in this course include creating, formatting, and working with tables and graphics in an MS Word document; searching for and saving information using the Internet; developing an address book, sorting/organizing and adding attachments to e-mail; and an introduction to PowerPoint. Specific topics covered include:

- Advanced Computer Operation
- Microsoft Word
- Internet and Email
- Introduction to PowerPoint

Upon successful completion participants should be able to connect external devices/ drives to a computer, work with multiple MS Word documents and perform basic desk top publishing, conduct an Internet search, use e-mail, and create a basic PowerPoint presentation.

Prerequisite:

Introduction to Computers course or demonstrated equivalent skills through a pre-course performance assessment

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Module Quizzes and Assignment Portfolio

Attire – No special attire is required for this class.

COMPUTER SKILLS – LEVEL III

The Computer Skills Level III course is designed for those having a good understanding of computers and can demonstrate competency in using various software programs including Microsoft Word and PowerPoint. In order to be successful in this course, participants must have the ability to create Word documents and simple PowerPoint presentations. In addition, they should be able to competently and efficiently navigate the Internet and understand how to operate computer peripheral devices. Specific topics covered include:

- Advanced Microsoft Word, including:
    a. Creating/formatting tables
    b. Using and manipulating graphics
    c. Importing tables, graphics, Internet material
    d. Inserting section breaks, footnotes, headers, and footers

e. Editing a document
f. Creating a web page

- Advanced PowerPoint, including:
  a. Customizing templates and colors
  b. Importing multimedia and animation
  c. Inserting or copying external objects such as text and slides
  d. Using PowerPoint web tools
  e. Add-in programs
- Introduction to Microsoft Excel, including:
  a. Software, window objects, worksheets, and page setup
  b. Entering labels and values
  c. Using formulas and functions
  d. Manipulating cells, rows, and columns; formatting; copying; sizing; and using references
  e. Enhancing documents with borders and fill
  f. Creating charts

Upon successful completion participants should be able to develop, edit, and refine Microsoft Word documents, develop an advanced PowerPoint presentation, and create, modify, and enhance a Microsoft Excel spreadsheet.

Prerequisite – Computer Skills Level II course or demonstrated equivalent skills through a pre-course performance assessment

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Module Quizzes and Assignment Portfolio

Attire – No special attire is required for this class.

MODERN CLASSROOM CHALLENGES

This course introduces participants to proven strategies for dealing with a broad spectrum of environmental and behavioral issues faced by instructors in today's classroom. Instruction focuses on how to deal with cultural diversity, identifying learning disabilities, the handling of disruptive behavior, and how the physical classroom environment impacts learning. Specific topics covered include:

- An Introduction to Learning Disabilities (LD) and Attention Deficit Disorder (ADD)
- Strategies for Teaching and Learning

- Capitalizing on Stronger Physical Learning Styles and Mnemonics (memory aids) in the Areas of Reading, Writing, and Spelling
- Developing a Learning Plan for LD/ADD Learners

Upon successful completion participants should be able to identify and effectively handle the most commonly faced classroom management challenges.

Prerequisite – New Instructor Training or equivalent

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Written Exam and Performance Evaluations

Attire – No special attire is required for this class.

NEW INSTRUCTOR TRAINING

This course addresses the needs of the new instructor by providing participants with the fundamental skills and knowledge necessary to conduct effective adult education and training programs. Participants build their confidence and gain experience by practicing skills covered in the class while receiving feedback from the facilitator as well as their peers. Presentations are assessed and documented by the facilitator. The course is conducted over two sessions, both of which must be attended and assignments completed in order to successfully complete the training. Specific topics covered during the first session include:

- The Principles of Adult Learning
- Presentation Skills
- Instructional Techniques
- Managing the Learning Environment

The second phase requires participants to complete three homework assignments and submit them to LIUNA Training and the facilitator for review. Completing the assignments makes the participant eligible to attend a short mandatory follow-up session. Topics covered in the follow-up session cover:

- The Use and Implementation of Lesson Plans
- Teaching and Learning Objectives
- Assessment Methods and Techniques

During the follow-up session each participant presents a training topic to the class incorporating the skills, knowledge, and techniques learned throughout the course. Using the same parameters of the initial assessment, participant presentations are assessed by the facilitator. A participant is deemed to have successfully completed the course when

the results of the second presentation assessment show marked improvement over the first. Upon successful completion participants should be able to instruct their first class.

Prerequisite – None

Course Length – New Instructor Training - 40 hrs., Homework Assignments – 3+ hrs., New Instructor Training Follow-up – 16 hrs.

Number of Participants – 12

Assessment – Module Quizzes and Assignment Portfolio

Attire – No special attire is required for this class.

PUBLIC SPEAKING (FOR INSTRUCTORS)

This course is designed to provide instructors with the opportunity to gain confidence in their public speaking and refine their presentation skills. While focusing on the instructional setting, the course will examine preparation and delivery techniques, non-verbal communication, and identifying areas to improve upon through self-assessment and feedback from class participants and the facilitator. Specific topics covered include:

- Principles of Effective Speaking
- Planning Presentations
- Considering Your Audience
- Parts of a Presentation
- Reducing the Complexity of Information
- Presentation Delivery
- Involving Your Audience

Upon successful completion participants should be able to confidently deliver an effective speech to a variety of audiences.

Prerequisite – New Instructor Training or equivalent

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Final Presentation

Attire – No special attire is required for this class.

TEACHING STRATEGIES FOR THE DIVERSE CLASSROOM

This course provides participants with the skills and knowledge needed to conduct technical training classes to English language learners and how to facilitate language and content integration onto instruction. Participants are trained in methods that assist

learners in developing language skills while meeting the technical skills objectives of their classes. Specific topics covered include:

- Training a Diverse Workforce
- Planning Lessons to Accommodate Language Learners
- Engaging All Participants in Developing Language Skills While Meeting Module Objectives
- Enhancing Vocabulary Learning in Content Training
- Integrating Reading, Writing, Speaking, and Listening Skills to Assist English as a Second Language Learners (ESLLs) in Developing Communication Skills for Work
- Assessing ESLLs Fairly and Accurately

Upon successful completion participants should be able to provide job skills instruction to ESSLs.

Prerequisite – New Instructor Training or equivalent

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Performance Assessments

Attire – No special attire is required for this class.

TECHNOLOGY IN THE CLASSROOM (PROFESSIONAL)

This course provides experienced instructors with strategies for properly incorporating different teaching technologies in the classroom. Participants acquire the knowledge and skills to select appropriate technologies, integrate technology into lesson plans, correctly use different technologies, and evaluate the effectiveness of using technology in various instructional settings. Specific technologies included in this course include game-based learning applications, simulations, and presentation software. Specific topics covered include:

- Selecting Appropriate Technologies
- Integrating Technology into Lesson Planning
- Evaluating the Effectiveness of Using Teaching Technologies

Participants will leave the class with sample work, templates and game shells, and increased knowledge, skills, and appreciation for the cutting edge results of integrating appropriate technologies into their training sessions. Upon successful completion participants should be able to evaluate the effectiveness of presentations that use different technologies, select the appropriate technologies for different learning styles and situations, use different technologies to present lessons, and use different technologies to teach the same lesson.

Prerequisite – New Instructor Training or equivalent

Course Length – 40 hrs.

Number of Participants – 12

Assessment – Final Presentation

Attire – No special attire is required for this class.

VOCATIONAL ENGLISH AS A SECOND LANGUAGE (VESOL)

VESOL is an intensive four-week course that focuses on the principles and skills needed to effectively teach Construction English to adult learners. Participants are introduced to strategies for teaching English language learners in the basic vocabulary needed to succeed in training and in the work place. Participants have a unique opportunity to practice their newly learned skills with laborers, in the presence of their trainers and peers who provide feedback on their performance. The course is conducted over two sessions, both of which must be attended and assignments completed in order to successfully complete the training. Specific topics covered include:

- Language Awareness
- The Learner, the Instructor and the Teaching/Learning Context
- Planning for Effective Teaching of Adult Learners of English
- Classroom Management and Teaching Skills for Teaching Construction English to Adults
- Resources and Materials for Teaching Construction English
- Integrating Language and Content to Meet Technical Objectives and to Promote English Language Development

Upon completion of the first two-week session, participants return to their respective training funds with an assignment related to the instruction. In approximately three to four weeks, participants return for the final 2 weeks of studies. Upon successful completion of a training session, participants should be able to incorporate VESOL training techniques in their classes.

Prerequisite – New Instructor Training or equivalent

Course Length – 4 weeks

Number of Participants – 12

Assessment – Portfolio Mid-term Assessment and Final Assessment

Attire – No special attire is required for this class.

SAFETY TRAINING PROGRAMS

CONFINED SPACE ENTRY FOR CONSTRUCTION AND GENERAL INDUSTRY

This course is designed to prepare instructors to deliver confined space awareness and permit required confined space entry to CCLs. Topics covered in the course include:

- Understanding the Hazards in Confined Spaces
- Atmospheric Hazards
- Physical Hazards
- Testing for Hazardous Atmospheres
- Pre-Entry Testing Requirements
- Periodic and Continuous Monitoring Procedures
- Ventilation Methods
- Control of Hazardous Energy
- Isolating Devices
- Lock-out/Tag-out Procedures
- Permit-Required Confined Space Entry Program
- Confined Space Entry Permit Requirements

Upon successful completion of the program participants should be able to deliver confined space entry training to CCLs.

Prerequisites – Hazardous Waste Worker Instructor

Course Length – 24 hrs.

Number of Participants – 20

Assessment – Module Exams and Hands-on (Skills) Assessment

Attire – No special attire is required for this class.

HAZARD COMMUNICATION – BASIC

This course introduces participants to the requirements and program implementation of the Occupational Safety and Health Administration (OSHA) hazard communication program. Topics covered include:

- Hazard Communication Program Background and Requirements
- Chemical Lists and Labels
- Material Data Safety Sheets

Upon successful completion participants should be able to support others in delivering communication training.

Prerequisites – None

Course Length – 8 hrs.

Number of Participants – 20

Assessment – Module Exams

Attire – No special attire is required for this class.

HIGHWAY WORK ZONE SAFETY

This class is designed to provide instructors with an understanding of the hazards and operations associated with highway work zone projects. Specific topics addressed in this course include:

- Highway Work Zone Safety
- Environmental Hazards of Highway Work Zones
- Traffic Control
- Flagging Operations
- Traffic Control Supervisor

Upon successful completion participants should be able to support others in delivering highway work zone safety, flagging, traffic control, and traffic control supervisor training.

Prerequisites – None

Course Length – 24 hrs.

Number of Participants – 20

Assessment – Module Exams

Attire – No special attire is required for this class.

OSHA 500 TRAINER COURSE IN OCCUPATIONAL SAFETY AND HEALTH STANDARDS FOR THE CONSTRUCTION INDUSTRY

This course is required for instructors interested in conducting OSHA 10-and 30-hour Construction Safety and Health Outreach Training. Special emphasis is given to topics that are required in the 10-and 30-hour programs, and those that are the most hazardous, using OSHA standards as a guide. Participants are briefed on effective instructional approaches and the best use of visual aids and handouts. Topics covered include:

- OSHA Outreach Training Report Program Report Requirements
- Effective Instructional Techniques

- Introduction to OSHA
- The General Duty Clause
- Multi-Employer Work Sites
- 29 CFR Part 1926 (Construction) Subparts
- Disaster Response Worker (CPWR DVD)

Upon successful completion participants will be able to conduct OSHA 10- and 30-hour Construction Safety and Health Outreach Training classes and Disaster Response Worker (OSHA 7600) classes.

Prerequisites – Five years of construction safety experience, completion of an OSHA 510 course or equivalent knowledge of safety procedures and standards.

Course Length – 40 hrs.

Number of Participants – 18

Assessment – Program Exam

Attire – No special attire is required for this class.

OSHA 501 TRAINER COURSE IN OCCUPATIONAL SAFETY AND HEALTH STANDARDS FOR GENERAL INDUSTRY

This course is required for instructors interested in conducting OSHA 10-and 30-hour General Industry Safety and Health Outreach Training. Special emphasis is given to topics that are required in the 10-and 30-hour programs, and those that are the most hazardous, using OSHA standards as a guide. Participants are briefed on effective instructional approaches and the best use of visual aids and handouts. Topics covered include:

- OSHA Outreach Training Report Program Report Requirements
- Effective Instructional Techniques
- Introduction to OSHA
- The General Duty Clause
- 29 CFR Part 1910 (General Industry) Subparts

Prerequisites – Five years of general industry safety experience, completion of an OSHA 511 course or equivalent knowledge of safety procedures and standards.

Course Length – 32 hrs.

Number of Participants – 18

Assessment – Program Exam

Attire – No special attire is required for this class.

OSHA 502 UPDATE FOR CONSTRUCTION INDUSTRY OUTREACH TRAINERS

This course is required every 4 years for instructors having completed an OSHA 500 Trainer Course in Occupational Safety and Health Standards for the Construction Industry and wish to maintain their trainer status. Topics covered in this course include:

- OSHA Outreach Training Report Program Report Update
- OSHA Construction Standards Update
- Policy and Regulatory Changes
- Disaster Response Worker (CPWR DVD)

Upon successful completion participants will be able to continue conducting OSHA 10- and 30-hour Construction Safety and Health Outreach Training classes and Disaster Response Worker (OSHA 7600) classes.

Prerequisites – Participants must have successfully completed an OSHA 500 course no longer than 4 years prior to taking this class.

Course Length – 24 hrs.

Number of Participants – 18

Assessment – Program Exam

Attire – No special attire is required for this class.

OSHA 503 UPDATE FOR GENERAL INDUSTRY OUTREACH TRAINERS

This course is required every 4 years for instructors having completed an OSHA 501 Trainer Course in Occupational Safety and Health Standards for General Industry and wish to maintain their trainer status. Topics covered in this course include:

- OSHA Outreach Training Report Program Report Update
- OSHA Construction Standards Update
- Policy and Regulatory Changes

Prerequisites – Participants must have successfully completed an OSHA 500 course no longer than 4 years prior to taking this class.

Course Length – 24 hrs.

Number of Participants – 18

Assessment – Program Exam

Attire – No special attire is required for this class.

OSHA 5600 DISASTER SITE WORKER TRAINER COURSE

This course prepares experienced trainers to present OSHA's 16-hour Disaster Site Worker Course (OSHA 7600). Trainers for this course need to be able to apply the elements of successful adult training programs, along with specific knowledge, skills, and attitudes to awareness training about safety and health standards at natural and man-made disaster sites. Topics covered include:

- Successful Adult Training Programs
- OSHA's Role in Nationally Significant Incidents
- Air-Purifying Respirators
- Applications of Adult Learning Theory
- Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE)

Prerequisites – Participants must possess a valid current OSHA 500 certification and have successfully completed Hazardous Waste worker training.

Course Length – 32 hrs.

Number of Participants – 20

Assessment – Program Exam and Hands-on (Skills) Assessment

Attire – No special attire is required for this class.

OSHA 5602 DISASTER SITE WORKER TRAINER REFRESHER COURSE

This course is required every 4 years for instructors having completed an OSHA 5600. This course refreshes trainers to present OSHA's 16-hour Disaster Site Worker Course (OSHA 7600). Topics covered include:

- Successful Adult Training Programs
- OSHA's Role in Nationally Significant Incidents
- Air-Purifying Respirators
- Applications of Adult Learning Theory
- Chemical, Biological, Radiological, Nuclear, Explosive (CBRNE)

Prerequisites – Participants must possess a valid current OSHA 500 certification and have successfully completed Hazardous Waste worker training.

Course Length – 8 hrs.

Number of Participants – 20

Assessment – Program Exam and Hands-on (Skills) Assessment

Attire – No special attire is required for this class.

SUPERVISORY TRAINING PROGRAMS

CONSTRUCTION SUPERVISOR PROGRAM

The Construction Supervisor Program is a five-week comprehensive program designed to provide training in the skills required to become a successful and effective supervisor. The program is comprised of five (5) courses on topics including supervision and leadership, planning and scheduling, quality and productivity, safety and health, and computer skills. Upon successful completion of this program participants will have acquired the basic management skills of a job site supervisor. Participants will receive a certificate of merit for completing the program and for each of the five individual courses.

INTRODUCTION TO SUPERVISION AND COMMUNICATION FOR CONSTRUCTION SUPERVISORS

Course Length – 34 hrs.

Number of Participants –12

Prerequisites – Construction foreman and/or field experience, or referral from a contractor and/or business agent

Assessment – Written Assessments

Attire – No special attire is required for this class.

Introduction to Supervision

This section introduces participants to all of the general responsibilities of the construction supervisor. Specific topics covered include:

- Pre-Job Responsibilities
- Managing the Project
- Responsibilities of the Construction Supervisor

Upon successful completion participants should have a general understanding of the roles and responsibilities of the construction supervisor on projects.

Communication

This section focuses on the basic communication skills of how to use the basic elements of listening, implement verbal instructions, and write letters and reports. Specific topics covered include:

- Listening Skills for Supervisors
- Speaking Skills for Supervisors
- Writing for Supervisors

Upon successful completion participants should be able to demonstrate the critical skills needed to communicate effectively as a construction supervisor.

PROBLEM SOLVING, PROJECT PLANNING, AND MANAGEMENT FOR CONSTRUCTION SUPERVISORS

Course Length – 44 hrs.

Number of Participants – 12

Prerequisites – Introduction to Construction Supervision and Communication for Construction Supervisors

Assessment – Written Assessments

Attire – No special attire is required for this class.

Problem Solving for Supervisors

This section prepares participants to manage, resolve and use conflict constructively; to use real life situation as motivation methods; to avoid sexual harassment; and to become a part of the solution in the workplace. Specific topics covered include:

- Avoiding Sexual Harassment
- Dealing with Conflict
- Motivation Methods
- The Problem Solving and Decision Making Process
- Valuing Diversity and Avoiding Discrimination

Upon successful completion participants should be able to exercise problem-solving skills as a construction supervisor.

Project Planning and Management

This section introduces participants to the tasks associated with project planning, project scheduling, project procurement and management skills. Specific topics covered include:

- Project Planning for Supervisors
- Project Procurement and Management
- Project Scheduling

Upon successful completion participants should be able to plan and manage construction projects.

INTRODUCTION TO PROJECT ESTIMATING FOR CONSTRUCTION SUPERVISORS

Course Length – 40 hrs.

Number of Participants – 12

Prerequisites – Introduction to Supervision and Communication for Construction Supervisors

Assessment – Written Assessments

Attire – No special attire is required for this class.

Introduction to Estimating

This section provides an introduction to the elements of the bidding process. Participants receive instruction on the tasks a construction supervisor must perform on a daily basis to ensure that the proper materials and equipment for a construction project are available as needed. Participants also gain an understanding of the labor and equipments costs involved in the bidding process and learn how to perform a cost analysis. Specific topics covered include:

- Estimating Software
- Introduction to Project Estimating
- Labor and Equipment Costs
- Quantity Take-off and Material Pricing

Upon successful completion participants should be able to develop a project estimate of costs associated with a construction project.

SAFETY AND HEALTH FOR CONSTRUCTION SUPERVISORS

Course Length – 35 to 40 hrs.

Number of Participants – 12

Prerequisites – Introduction to Supervision and Communication for Construction Supervisors

Assessment – Written Assessments

Attire – No special attire is required for this class.

Safety and Health

This section is intended to provide supervisors with the skills necessary to effectively address safety related issues. Key responsibilities of the supervisor for integrating safety and health concepts into a job are explained. Participants learn about the role of a supervisor in complying with specific areas of the OSH Act and associated regulations.

This section also prepares participants to be more proactive in influencing others to create a safer work environment. Specific topics covered include:

- Communicating Safety and Health
- Integrating Safety and Health
- OSHA for Supervisors
- Safety Skills for Supervisors

Upon successful completion participants should be able to impart a culture which embraces safety on construction projects.

RECORD KEEPING, DOCUMENTATION AND COMPUTER SKILLS FOR CONSTRUCTION SUPERVISORS

Course Length – 42 hrs.

Number of Participants – 12

Prerequisites – Introduction to Supervision and Communication for Construction Supervisors

Assessment – Written Assessments

Attire – No special attire is required for this class.

Record Keeping

Using various examples of forms and documents used by supervisors on a construction project, this section prepares participants to run a successful project from both a financial and legal perspective. Specific topics covered include:

- Common Construction Forms
- Construction Contracts
- General Office Forms
- OSHA Record Keeping

Upon successful completion participants should be acquainted with the various forms used on construction sites.

Computer Skills

This section uses the Microsoft Office 2003 illustrated introductory edition from Cengage Learning to provide instruction in the most common uses for popular software. Specific topics covered include:

- Windows XP
- Internet Explorer
- Word 2003

- Excel 2003
- Access 2003
- Outlook 2003
- PowerPoint 2003

Upon successful completion participants should be able to create and save documents using various Microsoft Office programs.

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