Basic Orientation Plus®
2010 Program Outline

Lesson 1- Introduction

- Importance of Training
- Introduction topics covered in Course
- Four Keys of Safety
  - Leadership – Knowledge - How to Recognize Hazards - Controlling Hazards
- Responsibilities of Owner, Employer, Employee
- OSHA Reporting

Lesson 2- General Rules and Emergency Response

- Plant Entry and Security
- Prohibited Items:
  - Guns – Weapons - Cell Phones - Cameras
- Instructor Discussion – State gun laws
- Controlled Substance Policy to include Medications
- Smoking Restrictions and Rules
- Job Site Maintenance
- Cleaning Chemical Spills
- Instructor Discussion – Definition of "Qualified" workers and who determines if a worker is "Qualified"
- Vehicle and Equipment Rules/Cranes/Forklifts
- Instructor Discussion – What must a worker do before starting a permit required job?
- Work Permits:
  - Safe Work - Confined Space - Hot Work - Line Breaking - Lockout/Tagout
- Confined Space
- Signs, signals, Tags, barriers, & Barricades
- Back Safety/Ergonomics
- Instructor Discussion – Who does the worker report pain or discomfort to?
- Instructor Discussion – Types of Bloodborne Pathogens and Exposures
- Bloodborne Pathogens:
  - Discussion of types - Universal Precautions - Training requirements for clean up

Lesson 3- HAZCOM (29CFR1910.1200)

- Right-To-Know Standard Requirements
- Basics of HAZCOM Standard
- Elements of HAZCOM program
- Labeling Requirements for Containers
- Definition of "Container"
- Labels- NFPA & HMIS

Lesson 3- HAZCOM (29CFR1910.1200) - Continued

- Discussion of Globally Harmonized Labeling System (GHS)
- Instructor Discussion – NFPA Label MSDS requirements
- Training Requirements for HAZCOM
- Description of Physical Hazards
- Instructor Discussion – Examples of Physical Hazards
- Description of Health Hazards
- Discussion on Lead
- Instructor Discussion – Areas of the body effected by Lead
- Discussion on Asbestos
- Discussion on Radiation
- INTERACTION – Discussion on the Segments of the MSDS.

Lesson 4- Personal Protective Equipment (29CFR1910.132-138)

- Discussion of the basics of the PPE standards
- Hazard Assessment Guidelines
- Controlling Hazards using Engineering Controls and Administrative Controls
- Instructor Discussion – Methods of Controlling Hazards
- PPE Training requirements
- Eye and Face Protection
- Head Protection:
  - Class C, G, and E hard hats
- Foot Protection
- Hand Hazards/Injuries
- Instructor Discussion – Types and Examples of Hand Hazards
- Hand Protection
- Instructor Discussion – Explain how gloves can get caught in rotating or automated machinery.
- Flame Resistant Clothing (FRC)
- Cleaning and Maintenance
- INTERACTION – Illustration on the types of PPE necessary for three different work locations – entering a gate, working in an operating unit, and working in a confined space.

Lesson 5- Respiratory Protection (29CFR1910.134)

- OSHA Requirements for Respiratory
- Controlling airborne hazards
- Respiratory Hazards

Lesson 5- Respiratory Protection (29CFR1910.134) - Continued

- Instructor Discussion – Physiological Effects of Oxygen Deprivation, and when to wear respirators
- Instructor Discussion – Types of Respiratory Hazards
- Types of Respirators
- Instructor Discussion – Define IDLH-Immediately Dangerous to Life and Health
- Air Purifying Respirators
- Types of Respirator Cartridges:
  Particulate Filters, Gas and Vapor, Combination Filters, Color-coding for Cartridges
- Air-Supplying Respirators
- Fitting a Respirator
- Instructor Discussion – Requirements for Wearing a Respirator
- Maintenance and Care of Respirators
- Training Requirements for Respiratory Protection
- INTERACTION – Picking out the Air-Supplied Respirator in a group of four Respirators.

Lesson 6- Hearing Conservation (29CFR1910.95)

- OSHA Requirements
- Areas of Focus:
  - How noise affects your hearing
  - The purpose of hearing protectors
  - The types of hearing protectors and their related advantages and disadvantages
  - How to select, fit, use and care for your hearing protection
  - Audiometric testing
- Instructor Discussion – Explanation that Audiograms are simple hearing tests to determine hearing ability
- Noise levels in everyday activities
- Instructor Discussion – Types of noises in the work areas
- Noise levels that cause hearing loss
- Instructor Discussion – Repeated exposure to 85 dBA could cause hearing loss
- Symptoms and Effects of Overexposure to Noise
- Engineering and Administrative Controls to Noise Exposure
- Standard Threshold Shift
- Instructor Discussion – Define Standard Threshold Shift (STS)
- Types of Hearing Protection
- Instructor Discussion – Proper Insertion of the Ear Plug
- Hearing Protection requirements
- Training requirements
- INTERACTIVE – Instructor will demonstrate how to properly donn or insert Ear Plugs.

Lesson 7- Electrical Safety Work Practices (29CFR1910.331-335)

- OSHA Requirements
- Definitions Qualified and Unqualified Workers
- Unsafe Work Practices
- De-energized v/s Energized Equipment
- Instructor Discussion – Shock Severity
- Training requirements for Qualified and Un-qualified workers
- Definition of Lockout and Tagout
- Energy sources that can be controlled using LOTO procedures
- Instructor Discussion – Employee Notification
- LO/TO Procedures
- Instructor Discussion – Placement of a Tag Properly
- LO/TO Guidelines
- Energized Circuits/Overhead Lines
- Instructor Discussion – Minimum Distance around Overhead Lines.
- Equipment Interlocks
- Grounding and GFCI's
- Instructor Discussion – GFCI's and Competent Person definition
- Portable Electrical Equipment
- INTERACTION – Various types of energy on a dump truck

Lesson 8- Elevated Work (29CFR1926.451 & 501)

- Definitions of Floor Hole, Floor Opening, and Wall Opening
- Safe work practices to avoid fall hazards
- Instructor Discussion – Examples of Safe work practices to avoid falls
- Fall Prevention requirements for covers, stairs, and open-sided platforms
- Ladder Safety/Types of Ladders
- Duty Ratings
- Ladder Site Selection
- Securing Ladder
- 4 to 1 Rule
- 3 Points of Contact
- Instructor Discussion – explain the "3 Points of Contact"
- Ladder Inspection Requirements
- Instructor Discussion – Safe Work Practices when using a ladder
- Introduction into Scaffolds
- Instructor Discussion – Explanation that most workers will use a scaffold of some kind at some point.
- Types of Scaffolds

Lesson 8- Elevated Work (29CFR1926.451 & 501) - Continued

- Define:
  Scaffold User - Competent Person - Qualified Person
- Instructor Discussion – Scaffold must be designed by a qualified person, and erected by a trained crew under the supervision of a competent person.
- Scaffold Safety Requirements and Duty Rating
- Instructor Discussion – Safe Work Practices for working around scaffolds
- Scaffold Access Requirements
- Fall Protection/Prevention Training Requirements
- Potential areas of Fall Hazards
- Instructor Discussion – Types of Fall Hazards
- Employee requirements for using fall protection
- Instructor Discussion – Fall protection requirements for scaffolds
- Personal and Environmental Factors for a potential fall
- Instructor Discussion – examples of personal and environmental factors for falls
- Fall Arrest Equipment/Fall Prevention Systems
- Instructor Discussion – Marker use on Fall Protection devices
- Free-fall and Deceleration distances
- Requirements for anchorage points
- Vertical and Horizontal Lifelines
- Suspension Trauma or Orthostatic Intolerance
- Instructor Discussion – Fall rescue requirements
- Positioning devices
- Fall protection device inspection requirements
- INTERACTIVE – Requirements for guardrails for scaffolds, Planking on scaffolds, and the various tags used on scaffolds.

Lesson 9- Excavation, Trenching and Shoring

- OSHA Requirements
- Definitions of Excavations, Trenches, Shoring, and Shielding
- Definition of Competent Person
- Potential Hazards
- Instructor Discussion – Hazards of Excavations
- Protective Systems
- Means of Egress
- Hazardous Atmospheres in Excavations
- Excavation Safety
- Instructor Discussion – Information required for reporting and emergency
- INTERACTIVE – placement of ladders every 25 ft of travel.

Lesson 10- Process Safety Management (29CFR1910.119)

- Introduction
- 14 Sections of PSM
- Process Hazard Analysis
- Pre-Startup Safety
- Employee Training
- Instructor Discussion – Training requirements for employees
- Contractors
- Mechanical Integrity
- Non-Routine/Hot Work Authorization
- Managing Change
- Compliance Audits
- Instructor Discussion – What is a Compliance Audit?
- INTERACTION – What are the contractor's responsibilities?

Lesson 11- Job Hazard Analysis

- Description of JHA
- Four main elements of a JSA/JHA
  The worker - The task - The tools - The work environment
- Benefits of JHA/JSA
- Instructor Discussion – Achieving a "Zero Accidents" work site
- Job Selection
- Break Job Into Steps
- Hazard Elimination or Reduction using Engineering controls or Administrative controls
- Various names for JSA/JHA's
- INTERACTION – Detailed Discussion of a JSA and the sections of a JSA.

Lesson 12 - Emergency Action Plan

- EAP requirements for various worksites
- Emergency Actions
- Emergency Evacuations
- Instructor Discussion – What actions to take during an emergency.
- Warning systems and alarms
- Accident Reporting
- INTERACTION – Emergency Evacuation actions

Lesson 13 – Fire Prevention (29CFR1910.39)

- Definition of Fire
- Elements needed for a fire to occur
- Instructor Discussion – Elements needed for a fire
- Classes of Fire and Fire Prevention methods for each
- Using a portable Fire extinguisher
- Stop, Drop, and Roll for clothing fire
- Instructor Discussion – How do we prevent fires?
- INTERACTION – Classes of fires quiz

Note:

The components of the Elevated work section of Basic Orientation Plus™ and the Basic Orientation Plus Refresher™, meet or exceed the requirements of the ISTC Scaffold User/Inspector program (09SU). Therefore, credit for the 09SU program is given to all students who successfully complete the Basic Orientation Plus™ or Basic Orientation Plus Refresher™ program.