

# Worker Fall Protection Detailed Course Outline

### Chapter 1:

- Importance of Safety Training
- Hazard Assessment, Control and Elimination
- The Value of Life
- Communicating and Training
- Due diligence
- Documentation
- Competent person
- Attitude
- Culture

### **Chapter 2**

- Legislation
- Personal Protective Equipment
- Types of Fall & Why People Fall
- Dynamics of Falling
- Reaction Time
- Gravity
- Fall, Free Fall & Time vs. Distance
- Kinetic Energy
- Anchor Point Location
- Lanyard Selection
- Shock Absorbers & Arresting Forces
- Fall Clearance Calculations
- Swing Fall Hazard

## **Chapter 3**

- Fall Prevention Systems
- Control Zones
- Guardrails
- Ladders, Work Platforms and Scaffolds
- Safety Nets
- Personal Fall Arrest Systems
- Travel Restraints
- Work Positioning Systems
- Horizontal Lifeline Systems
- Vertical Lifeline Systems
- Descent Control Devices

- Working from manlifts or baskets
- Alternative fall protection procedures
- Decision Tree
- Fall Protection Planning
- Fall Protection Planning Exercise

### **Chapter 4**

- Selecting Components of Fall Protection
- Anchor Systems
- Connecting Components
- Lanyards
- Self-Retracting Devices
- Shock Absorbers
- Full Body Harness
- Pre-use Inspections, Maintenance & Storage
- Donning & Doffing Harnesses

### **Chapter 5**

- Emergency Rescue Planning
- Critical Phases of Rescue
- Suspension Trauma

### **Practical Portion**

- Every student will:
  - Participate in group(s) to create a basic fall protection plan
  - O Discuss the merits of the plan(s), alternatives
- Everybody will have opportunity to:
  - O Inspect a harness to ensure it is safe for use
  - Inspect connecting components and fall protection devices for safe use
  - Put on a harness
  - Suspend themselves off an anchor point to ensure the harness is fitted and they are hooked up correctly
  - Adjust their harness correctly
  - Apply fall protection calculations to equipment use scenarios (ex: harness & lanyard, their height)

