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Industrial Education Safety (IES) 2058 Occupational Safety and Health Standards for the Construction Industry/OSHA 30 hour Construction Industry Training Program (3 Units) CSU  
[formerly Industrial Education Safety 58A]

Prerequisite: Completion of a minimum of 12 units in IES courses. Specifically: IES 1500 Occupational Health and Safety Compliance, IES 1552 Respiratory Protection for Hazardous Materials Handling and Permit Required Confined Spaces, IES 1532 Industrial Hygiene, and ENER 1503 Environmental Awareness and Compliance

Total Hours: 48 hours lecture

Catalog Description: This course is an overview of Federal and California Occupational Safety and Health Administration (OSHA) policies, procedures, standards, and general industry safety and health principles. Topics include scope and application of the Federal and California OSHA standards. Emphasis is on the hazardous routinely encountered by workers in a broad spectrum of industries. This course includes a 30-hour General Industry Outreach Training Program. It is intended to provide a variety of training to workers with some safety responsibility. Training should emphasize hazard identification, avoidance, control and prevention, not OSHA standards. Instructional time for both courses must be a minimum of 48 hours. Students successfully completing this course will receive an OSHA 30 card.

Type of Class/Course: Degree Credit

Required Text:

*Essentials of Safety: Construction Training and Reference Guide*, vol. 1 & 2 with *Trainee Workbook for Construction*. Mancomm, 2016.

Recommended Text:

*29 CFR 1926 Construction Industry Regulations*. MANCOMM ,2016.

*State of California General Industry & Electrical Safety Orders*, Mancomm, 2013.

Additional Required Materials: None

Course Objectives:

By the end of the course, a successful student will be able to:

1. identify common hazards found on construction sites,
2. apply the correct OSHA standard in 29 Code of Federal Regulations (CFR) 1926, and
3. evaluate various construction processes, materials, and equipment.

Course Scope and Content:

OSHA Standards 18 hours

- Unit I Introduction
- A. Inspections and Citations 1903
  - B. Recordkeeping 1904 and Subpart C
  - C. Cal-OSHA Equivalents and Differences

- Unit II Standards I
- A. Welding Subpart J
  - B. Fire Prevention Subpart F
  - C. Electrical Subpart K
  - D. Scaffolds Subpart L
  - E. Fall Protection Subpart M
  - F. Cal-OSHA Equivalents and Differences

- Unit III Standards II
- A. Signs and Barricades Subpart G
  - B. Ladders and Stairways Subpart X
  - C. Cranes Subpart CC
  - D. Rigging Subpart CC
  - E. Cal-OSHA Equivalents and Differences

- Unit IV Standards III
- A. Excavations Subpart P
  - B. Hand and Portable Power Tools Subpart I
  - C. Personal Protective Equipment Subpart E
  - D. Health Hazards Subpart Z
  - E. Confined Spaces Subpart AA
  - F. Cal-OSHA Equivalents and Differences

OSHA 30 for Construction Industry

- A. The topic requirements are as follows:
  1. Mandatory - 15 hours
    - a. Introduction to OSHA - 2 hours.
      1. OSHA has required training content for this module - see [Introduction to OSHA](#).
      2. Covers workers' rights, employer responsibilities and how to file a complaint. It includes helpful worker safety and health resources. It also provides a sample weekly fatality and catastrophe report, a material data safety sheet and the OSHA Log of Work-Related Injuries and Illnesses (OSHA Form 300).

3. Materials include an Instructor Guide, PowerPoint slides, student handouts, and participatory activities.
- b. Managing Safety and Health - 2 hours. May include Injury and Illness Prevention Programs, job site inspections, accident prevention programs, management commitment and employee involvement, worksite analysis, hazard prevention and control, accident investigations, how to conduct safety meetings, and supervisory communication.
- c. OSHA Focus Four Hazards - 6 hours. Because most construction fatalities are caused by fall hazards, falls must be covered for a minimum of one hour and 15 minutes. The other focus four hazards must be covered for a minimum of one-half hour each. A trainer may spend up to 10 hours on this topic.
  1. Falls (minimum one hour and 15 minutes)
  2. Electrocution
  3. Struck-By (e.g., falling objects, trucks, cranes)
  4. caught-In or Between (e.g., trench hazards, equipment)

#### Focus Four Hazards Training Requirements

All lessons for the Focus Four Hazards are required to use the following terminal (TO) and enabling (EO) objectives:

TO: Given current OSHA and industry information regarding construction worksite illnesses, injuries, and/or fatalities, the student will be able to recognize [fall, caught-in or between, struck-by, electrocution] hazards in construction.

Specifically for each of the focus four, the student will be able to:

EO 1: Identify major hazards

EO 2: Describe types of hazards

EO 3: Protect him/herself from these hazards

EO 4: Recognize employer requirements to protect workers from these hazards

Because these objectives are the expected student outcomes, trainers:

- 1) May not vary from these objectives when planning the training session; and
- 2) Must follow the participatory training model by applying effective training techniques;
- 3) Must make sure the objectives are measured by testing the student's achievement.
  - d. Personal Protective and Lifesaving Equipment - 2 hours
  - e. Health Hazards in Construction - 2 hours. May teach noise, hazard communication, and crystalline silica or any other construction health hazard.
  - f. Stairways and Ladders - 1 hour.
2. Elective - 12 hours. Must present at least 12 hours of training on the following topics. At least 6 of the following topics must be presented. The minimum length of any topic is one-half hour.
  - a. Concrete and Masonry Construction
  - b. Confined Space Entry
  - c. Cranes, Derricks, Hoists, Elevators, & Conveyors
  - d. Ergonomics
  - e. Excavations
  - f. Fire Protection and Prevention
  - g. Materials Handling, Storage, Use and Disposal

- h. Motor Vehicles, Mechanized Equipment and Marine Operations; Rollover Protective Structures and Overhead Protection; and Signs, Signals and Barricades
  - i. Powered Industrial Vehicles
  - j. Safety and Health Programs
  - k. Scaffolds
  - l. Steel Erection
  - m. Tools - Hand and Power
  - n. Welding and Cutting
3. Optional - 7 hours. Teach other construction industry hazards or policies and/or expand on the mandatory or elective topics. The minimum length of any topic is one-half hour.
- a. This will be at the discretion of the instructor, depending upon the audience, but will most likely expand on the elective topics.

**Learning Activities Required Outside of Class:**

The students in this class will spend a minimum of 6 hours per week outside of the regular class time doing the following:

1. Studying assigned text, handout materials, and class notes
2. Reviewing and preparing for quizzes and examinations
3. Reviewing case studies
4. Completing written assignments and projects

**Methods of Instruction:**

1. Lecture
2. In-class workshops
3. Test Lab
4. Demonstrations
5. Case Studies

**Methods of Evaluation:**

1. Written final exam (OSHA 30)
2. Written final exam (Construction Industry Standards)
3. Performance observation
4. Participation
5. Quizzes
6. Role Playing
7. Group Projects

**Supplemental Data:**

TOP Code:	095670: Indus Occupational Safe Health
SAM Priority Code:	C: Clearly Occupational
Distance Education:	Not Applicable

Funding Agency:	Y: Not Applicable(funds not used)
Program Status:	I: Program Applicable
Noncredit Category:	Y: Not Applicable, Credit Course
Special Class Status:	N: Course is not a special class
Basic Skills Status:	N: Course is not a basic skills course
Prior to College Level:	Y: Not applicable
Cooperative Work Experience:	N: Is not part of a cooperative work experience education program
Eligible for Credit by Exam:	NO
Eligible for Pass/No Pass:	NO
Taft College General Education:	NONE