

CUYAMACA COLLEGE
COURSE OUTLINE OF RECORD

ENVIRONMENTAL HEALTH AND SAFETY MANAGEMENT 135 – GENERAL INDUSTRY SAFETY STANDARDS

3 hours lecture, 3 units

Catalog Description

Overview of the elements which are incorporated in a comprehensive general industrial safety program. Emphasizes methods used to reduce accidents/injuries through the application of workplace health protection and safety fundamentals. Topics include protocols, safety audits, data collection and analysis techniques, interpretation of safety data, safety inspections, development and implementation of safety programs, worker education, and the essentials of Personal Protective Equipment (PPE).

Prerequisite

None

Course Content

- 1) Fundamentals of Workplace Safety
 - a. Terminology
 - b. Technical aspects
 - c. Personal protective equipment overview
- 2) Inspections and Investigations of Workplaces by Regulatory Agencies
 - a. Federal Agencies
 - b. State Agencies
 - c. Local:
 1. County
 2. City
 3. Insurance carrier
 4. Institutional
- 3) Mishap Investigation, Reporting and Recordkeeping
 - a. Types
 - b. Requirements
 - c. Investigative reports
- 4) Health and Safety Programs
 - a. Regulations and standards: occupational safety and health standards
 - b. Developing a health and safety program: components
 - c. Standard Programs
 1. Respiratory protection
 2. Asbestos control
 3. Hearing conservation and noise abatement
 4. Sight conservation
 5. Lead
 6. Ergonomics
 7. Energy control (lockout/tagout)
 8. Confined space

- 9. Blood borne pathogens
- 5) Safety Audits
 - a. Regulations and standards
 - b. Systems components
 - c. System design
 - d. Conducting
 - e. Employee education and training
- 6) Interfacing with Health and Safety Agencies
 - a. Employer rights and obligations
 - b. Agencies/Departments
 - 1. Cal/OSHA
 - 2. Insurance
 - 3. County
 - 4. City
 - 5. Corporate

Course Objectives

Students will be able to:

- 1) Identify, describe and apply California and Federal (Cal/OSHA and Fed/OSHA) safety regulations and standards relevant to general industry.
- 2) Apply California and Federal safety standards to assess worksites and recognize hazardous conditions and/or noncompliance.
- 3) Use California and Federal safety standards to evaluate situations of noncompliance and employ risk assessment strategies and principles to develop a hazard abatement plan.
- 4) Investigate occupational accidents/mishaps and identify root causes of the accident/mishap based upon California and Federal safety regulations and standards.
- 5) Evaluate job processes and identify appropriate risk management strategies (e.g., engineering controls, personal protective equipment) in order to protect worker safety.

Method of Evaluation

A grading system will be established by the instructor and implemented uniformly. Grades will be based on demonstrated proficiency in subject matter determined by multiple measurements for evaluation, one of which must be essay exams, skills demonstration or, where appropriate, the symbol system.

- 1) Quizzes and exams which measure students' ability to identify, describe and apply California and Federal general safety regulations and standards related to hazardous conditions and/or noncompliance.
- 2) Field exercises which measure students' ability to conduct a risk assessment and develop and apply a hazard abatement plan in compliance with California and Federal safety regulations and standards.
- 3) Analysis of a fact pattern describing a workplace scenario which measures students' ability to develop an appropriate written assessment and mishap summary that includes a typical accident/mishap description and identification of root causes.

Special Materials Required of Student

None

Minimum Instructional Facilities

Smart classroom

Method of Instruction

- 1) Lecture and discussion
- 2) Field trips, guest speakers
- 3) Lab exercises, projects

Out of Class Assignments

- 1) Reading assignments
- 2) Writing assignments
- 3) Projects
- 4) Reports

Texts and References

- 1) Required (representative examples):
 - a. Wilson, *OSHA 5119 Student Manual Part A and B*. Cuyamaca College, 2010 or latest edition.
 - b. Mancomm, *Cal/OSHA General Industry Safety Orders*. AM Safety, 2010 or latest edition.
- 2) Supplemental: Industrial reference books and articles

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- 1) Identify, describe and apply California and Federal safety regulations and standards relevant to general industry, assess worksites and recognize hazardous conditions.
- 2) Use California and Federal safety standards to evaluate situations of noncompliance and employ principles to develop a hazard abatement plan.
- 3) Investigate occupational accidents/mishaps and identify root causes of the accident/mishap based upon California and Federal safety regulations and standards.