

Revision By: G. Clarke
Reviewed by: R. Kizzar
Reviewed by: K. Bandy
Date Prepared: Sept 8, 2014
C & GE Approval: Dec. 8, 2014
Board Approved: Jan. 14, 2015
Semester effective: Spring 2016

Industrial Education Safety (IES) 1100 Basic Employee Safety for General Industry (.25 Unit)
[formerly Petroleum Technology 95T]

Prerequisite: None

Total Hours: 7.5 hours lecture

Catalog Description: This course will satisfy the minimum safety training required by most companies found in industries requiring human machine interface. There are ten topics presented that are most commonly encountered by workers. This course is offered on a Pass/No Pass basis with the option to receive a letter grade.

Type of Class/Course: Degree Credit

Textbook: None

Additional Required Materials: None

Course Objectives:

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

1. introduce basic safety concepts, skills and evaluation techniques when encountering workplace hazards,
2. how to work safely around chemicals,
3. proper selection and use of personal protective equipment, and
4. how to work safely around industrial machinery.

Course Scope and Content:

- Unit I Trenching and Excavations
- A. California Occupational and Health Administration (Cal-OSHA) Permits
 - B. Competent Person
 - C. Hazards/Soil Mechanics
 - D. Soil Testing
 - E. Sloping, Shoring, and Shielding Safeguards
- Unit II Confined Space
- A. Definitions
 - B. Hazards – Atmospheric and Mechanical
 - C. Entry Permitting
 - D. Personal Protective Equipment
 - E. Duties of Personnel
 - F. Rescue

- Unit III Energy Control – Lockout/Tagout
 - A. Definition
 - B. Types of Energy
 - C. Methods of Control
 - D. Locks and Tags
 - E. Authorized Person

- Unit IV Machine Guarding
 - A. Definitions
 - B. Point of Operation Hazards
 - C. Types and Methods of Guards

- Unit V Flammable and Combustible Materials
 - A. Definitions
 - B. Lower and Upper Flammable/Explosive Limits
 - C. Storage Requirements
 - D. Handling

- Unit VI Fire Safety
 - A. Fire Tetrahedron
 - B. Sources of Fuel
 - C. Ignition Sources
 - D. Importance of Constant Housekeeping

- Unit VII Electrical Safety
 - A. Electrical Terms
 - B. Hazards of Electricity
 - C. Effects of Electric Current

- Unit VIII Personal Protective Equipment
 - A. Where and When
 - B. Head Protection
 - C. Eye and Face Protection
 - D. Hearing Protection.
 - E. Foot Protection
 - F. Fall Protection
 - G. Respiratory Protection

- Unit IX Emergency Preparedness and Response
 - A. Emergency Action Plan (EAP)
 - B. Fire Response
 - C. Medical Emergency
 - D. Natural Disasters
 - E. Violence in the Workplace

- Unit X Hazard Communication
 - A. Employee Right to Understand
 - B. Chemical Hazards
 - C. Containers
 - D. Labels and Placards



West Kern Community College District

- E. Global Harmonized System/Safety Data Sheet (GHS/SDS)
- F. Response to Releases
- G. California Proposition 65 Notices

Lab Content:

- 1. Practical hands-on use of protective equipment

Learning Activities Outside of Class:

The students in this class will spend a minimum of 30 minutes per week outside of the regular class time doing the following:

- 1. Further review topics specific to industry employed

Methods of Instruction:

- 1. Lecture, video, PowerPoint presentations
- 2. Group work
- 3. This course may be taught without writing assignments

Methods of Evaluation:

- 1. Written final exam
- 2. This course may be taught without writing assignments

Supplemental Data:

T.O.P. Code:	095670 Industrial Occupational Safety Health
Sam Priority Code:	C: Clearly Occupational
Funding Agency:	Y: Not Applicable
Program Status:	1: Program Applicable
Noncredit Category:	Y: Not Applicable
Special Class Status:	N: Course is not a special class
Basic Skills Status:	N: Not Applicable
Prior to College Level:	Y: Not Applicable

Cooperative Work Experience:	N: Course is not a part of a cooperative education program
Eligible for Credit by Exam:	No
Eligible for Pass/No Pass:	Yes