

Occupational Safety and Health (OSH) 1056 Electrical Standards (1.25 Units)
[formerly Industrial Education Safety 56 and Industrial Education Safety (IES) 1056]

Prerequisite: None

Total Hours: 20 hours lecture

Catalog Description: This course is designed to provide a survey of Federal and California standards and the hazards associated with electrical installations and equipment. Topics include single- and three-phase systems, cord- and plug-connected and fixed equipment, grounding, ground fault circuit interrupters, and safety-related work practices. Emphasis is placed on electrical hazard recognition and OSHA inspection procedures. Hands-on training is provided using various types of electrical test equipment. This course is offered on a Pass/No Pass basis with the option to receive a letter grade. Not open to students with credit in IES 1056.

Type of Class/Course: Degree Credit

Textbook:

29 CFR 1910 OSHA General Industry Standards and Regulations. Mancoom, 2016.

Cal/OSHA Construction & Electrical Safety Orders. Mancoom, 2018.

Additional Required Materials: None

Course Objectives:

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

1. identify basic electrical terms,
2. describe common electrical components found within a broad spectrum of industries,
3. identify hazards that occur in or on machinery, and
4. select the appropriate OSHA standard that applies to a hazard.

Course Scope and Content:

Unit I Electrical Fundamentals

- A. Circuits
- B. Installation
- C. Basic Components
- D. Working on Energized Equipment

Unit II Electrical Effects on the Human Body, 29 Code of Federal Regulations (CFR) 1910.303 and 29 CFR 1926.403, System and Equipment Grounding

- A. Shock, Arcing, Falls, Electrocution
- B. System Grounding
- C. Personnel Grounding
- D. Control of Hazardous Energy - Lockout/Tagout

Learning Activities Required Outside of Class: None



Methods of Instruction:

1. Lecture
2. Group exercises in class

Methods of Evaluation:

1. Written final exam
2. Observation of student performance

Supplemental Data:

TOP Code:	095670: Indus Occupational Safe Health
SAM Priority Code:	C: Clearly Occupational
Distance Education:	Online; Offline
Funding Agency:	Y: Not Applicable(funds not used)
Program Status:	1: 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:	Yes
Eligible for Pass/No Pass:	C: Pass/No Pass
Taft College General Education:	NONE

Discipline:	Industrial Safety
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