

Las Positas College  
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## Course Outline for OSH 62

### PHYSICAL HAZARDS

Effective: Fall 2018

#### I. CATALOG DESCRIPTION:

OSH 62 — PHYSICAL HAZARDS — 3.00 units

Examination of physical hazards in the work environment and methods of control. Includes review of key hazards associated with human factors e.g., work area layout and planning, machine guarding, electrical safety, materials handling, rigging, conveyors, power tools, personal protective equipment, compressed gases, illumination, and working surfaces. Emphasis on methods for safety observation and inspection.

3.00 Units Lecture

#### Grading Methods:

Letter Grade

#### Discipline:

- Industrial Safety

	<u>MIN</u>
<b>Lecture Hours:</b>	54.00
<b>Total Hours:</b>	54.00

#### II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

#### III. PREREQUISITE AND/OR ADVISORY SKILLS:

#### IV. MEASURABLE OBJECTIVES:

**Upon completion of this course, the student should be able to:**

- Discuss methods to create a safe, healthful work environment
- Recognize hazards commonly found in the workplace
- Explain acceptable levels of risk
- Recall how to control the hazards to prevent injuries, illness, and property damage
- Describe the skills needed to perform the roll of a safety specialist
- Demonstrate knowledge of regulatory standards impacting safety and health
- Explain and illustrate methods of control of hazards in the workplace
- Recall the Three E's of Safety : Engineering, Education, and Enforcement

#### V. CONTENT:

- Work area design, layout and planning considerations
- Principles of machine guarding
- Principles and application of Electrical safety control
- Manual materials handling
- Warehousing and materials handling equipment
- Rigging equipment and procedures
- Conveyors and elevators
- High pressure safety, compressed gas cylinders and systems
  - Requirements of illumination in and around the work area
- Slips, trips, and falls
- Safety observation and inspection techniques
- Fire prevention/safety
- General safety considerations and level of risk
- Role of Safety Specialist

#### VI. METHODS OF INSTRUCTION:

- Lecture** - by instructor and guest speakers
- Student Presentations** - on research topics
- Field Trips** - Industry locations
- Written exercises and case studies** -

#### VII. TYPICAL ASSIGNMENTS:

- Read text assignment each week.
- Student safety topic presentation each week.
- Discuss safety events each week (from newspaper, work and home)

## VIII. EVALUATION:

### A. **Methods**

1. Exams/Tests
2. Quizzes
3. Research Projects
4. Papers
5. Oral Presentation
6. Class Participation
7. Home Work

### B. **Frequency**

1. One term paper/oral presentation based on research project
2. Minimum of 4 quizzes
3. Midterm examination
4. Final examination
5. Weekly homework assignments
6. Participation in weekly classes

## IX. TYPICAL TEXTS:

1. Dingwall, Robert, and Shelley Frost. *Health and Safety In A Changing World*. 1st ed., Routledge Publisher, 2016.
2. Kalloway, Kevin. *Management of Occupational Health and Safety*. 7th ed., Nelson Thompson Learning, 2016.
3. Robert, Friis. *Occupational Health & Safety For the 21st Century*. 1st ed., Jones & Bartlett Learning, 2016.
4. Supervisor's Safety Manual, National Safety Council. 10th edition (2009).

## X. OTHER MATERIALS REQUIRED OF STUDENTS: