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Course Outline for OSH 62

PHYSICAL HAZARDS

Effective: Fall

I. CATALOG DESCRIPTION:

OSH 62 — PHYSICAL HAZARDS — 3.00 units

Examination of physical hazards in the work environment and methods of control. Includes hazards associated with human factors, 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:

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

1. know how to create a safe, healthful work environment;
2. learn how to recognize hazards;
3. learn what are acceptable levels of risk;
4. learn how to control the hazards to prevent injuries, illness, and property damage;
5. learn skills needed to perform job responsibilities;
6. develop awareness of regulatory standards as it pertains to safety health and environment;
7. explain and illustrate methods of control of hazards with particular reference to regulatory standards;
8. know The Three E's of Safety: Engineering, Education, and Enforcement.

V. CONTENT:

- A. Design, layout and planning considerations
- B. Principles of guarding
- C. Electrical safety, principles and applications
- D. Manual materials handling
- E. Warehousing and materials handling equipment
- F. Rigging equipment and procedures
- G. Conveyors and elevators
- H. High pressure safety, compressed gas cylinders and systems
 - I. Illuminations
- J. Slips, trips, and falls
- K. Safety observation and inspection techniques
- L. Fire prevention/safety
- M. General safety considerations, including safety observations and inspection techniques

VI. METHODS OF INSTRUCTION:

- A. **Lecture** - classroom workshops, group discussions
- B. Group tours of industrial locations
- C. Student presentations and projects

VII. TYPICAL ASSIGNMENTS:

A. Read Text Assignment each week. B. Student Safety Tack Presentation each week. C. Discuss safety events each week (from newspaper, work and home) 1. Workshop assignment (Accident Case Study or MSDS Check Sheet)

VIII. EVALUATION:

- A. **Methods**

1. Exams/Tests
B. **Frequency**

1. Frequency
 - a. Assignments weekly
 - b. Class participation daily/weekly
 - c. One safety talk in term
 - d. One written paper in term
 - e. Two one-hour examinations
 - f. One two-hour final examination
2. Typical Examination questions
 - a. Multiple choice:
 1. Personal Protective Devices must be worn when noise levels exceed:
 - a. 80 dBA;
 - b. 90 dBA;
 - c. 115 dBA;
 - d. None of the above.
 2. An explosive meter reads 25 percent. What does this reading indicate:
 - a. AH atmosphere is unsafe.
 - b. The concentration of vapors is 25 times higher than recommended.
 - c. The concentration of vapor is toxic.
 - d. The concentration of vapors is one-fourth of the lower explosive limit.
 - e. The lower explosive limit of the vapor being measured is 25 percent.
 - b. Essay:How do you figure OSHA injury frequency rates and why are they important?

IX. TYPICAL TEXTS:

1. Supervisor's Safety Manual, National Safety Council. Latest edition.

X. OTHER MATERIALS REQUIRED OF STUDENTS: