### **IED 112 Course Outline as of Fall 2011**

### **CATALOG INFORMATION**

Dept and Nbr: IED 112 Title: INDUST. PREVENT. MAINT.

Full Title: Industrial Preventive Maintenance

Last Reviewed: 11/5/2001

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	1.00	Lecture Scheduled	2.00	8	Lecture Scheduled	16.00
Minimum	1.00	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	16.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 32.00 Total Student Learning Hours: 48.00

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

### **Catalog Description:**

The study of preventive maintenance and inspection practices as related to industrial machinery.

## **Prerequisites/Corequisites:**

### **Recommended Preparation:**

### **Limits on Enrollment:**

### **Schedule of Classes Information:**

Description: The study of preventive maintenance and inspection practices as related to

industrial machinery. (Grade or P/NP)

Prerequisites/Corequisites: Recommended:

Limits on Enrollment:

**Transfer Credit:** 

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: Area Effective: Inactive: CSU GE: Transfer Area Effective: Inactive:

**IGETC:** Transfer Area Effective: Inactive:

**CSU Transfer:** Effective: Inactive:

**UC Transfer:** Effective: Inactive:

CID:

## Certificate/Major Applicable:

Not Certificate/Major Applicable

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon successful completion of this course students will:

- 1. Describe maintenance and inspection procedures for a variety of industrial machinery.
- 2. Locate and apply instructions from technical manuals to maintenance and inspection procedures.
- 3. Locate and identify critical lubrication points in machinery.
- 4. Differentiate among types of lubricants.
- 5. Interpret rating symbols on maintenance product labels and correlate to application.
- 6. Recognize symptoms of potential machine failure.

## **Topics and Scope:**

- I. Maintenance and inspection procedures
  - a. scheduled maintenance
  - b. preventive maintenance
- II. Using technical manuals
  - a. hard copy
  - b. computerized
  - c. locating information
  - d. interpreting instructions
- III. Lubrication
  - a. solid and liquid lubricants
  - b. lubrication points
  - c. rating symbols
- IV. Failure analysis
  - a. metallic parts failures
  - b. failures due to neglect/lack of maintenance

# **Assignment:**

1. Reading assignments and worksheets covering course topics.

2. Individual and group activities interpreting maintenance and inspection procedures.

### Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework, Written exercises.

Writing 15 - 30%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Quizzes, Exams

Problem solving 10 - 40%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations 0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion

Exams 30 - 60%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance and participation.

Other Category 10 - 20%

# Representative Textbooks and Materials:

Instructor and/or industry provided handouts.