I. **OVERVIEW**

The following information will appear in the 2011 - 2012 catalog

**MFGA 306**

Introduction to Occupational Safety & Health

3 Units

*Also offered as:* INTEC - 306: Introduction to Occupational Safety & Health

*Formerly listed as:* INTEC - 306: Introduction to Occupational Safety & Health

Introduction to the principles and techniques of occupational safety and health.

Field trips are not required. (A-F Only) Lecture

II. **LEARNING CONTEXT**

Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   a. Historical Perspectives
      
      i. Review
      
      ii. Evolution of current organization
      
      iii. The safety movement
      
      iv. Development of codes and standards
      
      v. Occupational Safety and Health Act

   b. Scope of Industrial Safety
      
      i. Type of losses
      
      ii. Cost factors
      
      iii. Causal factors

   c. Basic Elements
      
      i. Nature of loss prevention
      
      ii. Risk management techniques

   d. Policy and Responsibility
      
      i. Organization requirements
      
      ii. Survey of controls
         
      a. Mechanical
b. Electrical

c. Fire

e. Industrial Hygiene
   i. Concerns
   ii. Common problems
   iii. Protection measures

f. Human factors in Safety
   i. Motivation
   ii. Attitudes
   iii. Limitations

g. Biomechanics
   i. Man-machine relationship

h. Accident Investigation
   i. Requirements
   ii. Fact finding
   iii. Reporting

i. Reports and Records
   i. Contemporary law
   ii. Statistical measurements

j. Organization
   i. Roles
   ii. Objectives
   iii. Structure

k. Future trends

B. HOURS AND UNITS

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<th>INST METHOD</th>
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<tr>
<td>Lect</td>
<td>54</td>
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<td>Lab</td>
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C. METHODS OF INSTRUCTION (TYPICAL)

Instructors of the course might conduct the course using the following method:

1. Class Lecture
2. Group Discussion
3. Multimedia: Power Point, DVD, internet links
4. Guest Speakers

D. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS
   Time spent on coursework in addition to hours of instruction (lecture hours)

   a. Weekly Chapter Reading Assignments
   b. Per Term Homework Assignments
   c. Per Term Completion of Case Studies
   d. Per Term Preparation for Quizzes
   e. Per Term Preparation for Mid Term and Final Exams
   f. Per Term Preparation for OSHA Certification Test

2. EVIDENCE OF CRITICAL THINKING
   Assignments require the appropriate level of critical thinking

   a. Case 1: A maintenance man was working on a metal stair platform and wanted to use a 1/4 inch drill. The drill had a three-wire power cord. An extension cored running from the source of power also was a three-wire cord, but was not long enough. In order to connect the drill to the extension cord, the man obtained another short extension cord from the tool crib. As the man started to drill, he was electrocuted. What caused the accident? What could have been done to prevent this accident? What can be done to prevent similar accidents in the future?

   b. Chapter Question: T or F: Safety managers must draw on all of their communication skills when conducting interviews and consultations.

E. TEXTS AND OTHER READINGS (TYPICAL)

1. Other: NATIONAL SAF SUPERVISOR'S SAFETY MANUAL, National Safety Council (NSC) 10th Edition
   www.nsc.org

III. DESIRED LEARNING

A. COURSE GOAL
   As a result of satisfactory completion of this course, the student should be prepared to:

   understand occupational safety practices and achieve or hold the OSHA HAZMAT certification card status.

B. STUDENT LEARNING GOALS
Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. **Required Learning Goals**
   
   Upon satisfactory completion of this course, the student will be able to:
   
   a. Relate historical events to the emergence of concerns and legislation in occupational safety
   
   b. Correlate significant disasters to specific standards and codes
   
   c. Identify various types of losses and explain their respective cost and causal factors
   
   d. List and define the basic elements of a loss prevention program
   
   e. Apply designated loss control policies to the implementation of an effective program
   
   f. Match the appropriate environmental control techniques to mechanical, electrical, and fire hazards
   
   g. Describe the human factors that must be considered in accident prevention
   
   h. Conduct accident investigation employing the correct fact finding and reporting techniques
   
   i. Outline a typical safety organization and define the roles of each unit.

IV. **METHODS OF ASSESSMENT (TYPICAL)**

   A. **FORMATIVE ASSESSMENT**
      
      1. Quizzes
      
      2. Group Task Analysis/Troubleshooting
      
      3. Case Studies
      
      4. Small Group Presentations

   B. **SUMMATIVE ASSESSMENT**
      
      1. Final Exam
      
      2. Mid Term
      
      3. Safety Model Mockup Creation