

SOUTHWESTERN COLLEGE COURSE OUTLINE

Division: **Health & Public Services**

Origination Date: **9/98**

Modification Date:

Effective Date: **Fall 1999**

Course Designator and Number	Title	Units	Lec	Lab.
EHMT 261	Occupational Safety Management	3	3	

Same as (other course(s) designator(s),

Grading Basis: **Grading Scale; Credit/No Credit option available**

Prerequisite:

Corequisite:

Recommended Preparation: **EHMT 100 & 130**

Course Description & Scope: (50 words or less)

This course illuminates management's responsibility for safety, hazard, communication, machine and mechanism safety, and accident investigation. Additional topics include fire protection, radiation, electric systems, and industrial biological agents. [CSU]

Measurable Course Objectives and Minimum Standards, as Determined by Standards set by the instructor, at 70% Proficiency for a Grade of "C":

1. Student will, **understand management's responsibility for safety, will identify management's role in the institution of safety, and will apply these ideas in classroom discussion and written assessment.**
2. Student will, **through a written exam, identify management's role in the institution of safety.**
3. Student will **explain, through written assessments, an understanding of industrial machines and mechanisms.**
4. Student will, **through written assessments, demonstrate knowledge of biological agents and explain the use of threshold limit values (TLVs) as they relate to physical, chemical, and biological hazards.**
5. Student will, **through a written assessment, describe the basic principles of fire prevention in industrial and non-industrial occupancies.**
6. Student will, **through written assessments, identify radiation hazards, practice radiation measurement techniques, and explain radiation protection.**
7. Student will, **through written assessments, explain the need for an effective electrical safety program.**
8. Student will **detail the components and procedures of an accident investigation, evaluate the results of the accident investigation, and create an accident report.**

Core Content to be Covered in all Sections:

1. Approximate 12 % of course
Management's Role in Safety
 - Policies & Regulations
 - Responsibilities
 - Industrial Application
 - Organization
 - Safety Committee
 - Safety Quality Circles

2. Approximate 11 % of course
Industrial Hazard Communication
 - Historical Review
 - Laws/Regulations
 - Development
 - Adoption of Programs
 - Industrial Applications

3. Approximate 11 % of course
Industrial Machines & Mechanisms
 - Introduction to Safety
 - Guarding
 - Prevention of Injuries
 - * Primary Sources
 - * Secondary Sources
 - Guarding Power Transmission Mechanisms
 - Guard material

4. Approximate 16 % of course
Industrial Biological Agents and Threshold Values
 - Biological Agents
 - Standards for chemicals and physical agents
 - PEL's and TLV's
 - Engineering Control Methods
 - Process Evaluation

5. Approximate 17 % of course
Fire Prevention
 - Safety Principles
 - Principles of Combustion
 - Heat Source
 - Vapors
 - Spontaneous Combustion
 - Causes of industrial fires
 - Fire Prevention Program
 - Passageways and Fire Doors
 - Fire Detection Devices
 - Classification of Fires
 - Fire Extinguishing

6. Approximate 11 % of course
Radiation
 - Historical Perspective
 - Categories of Radiation: Safety sources
 - Exposure
 - * Physiological effects
 - * Cellular mutations
 - * Ultraviolet: Dermal, ocular
 - Measurement
 - Protection

7. Approximate 11 % of course
Electrical Safety
 - Electrical Hazards
 - Effects of Electrical Shocks
 * Ventricular Fibrillation
 * Tissue Burn
 - Inadvertent Startups
 - Industrial Application
 - Safety Programs
 - Protection
8. Approximate 11 % of course
Accident Investigation
 - Introduction
 - Components of an Investigation
 - Investigation Procedures
 - Analyzing the Results
 - Accident Report
 - Documentation
 - Follow-up

NOTE: For Specific Details, see Instructor's Syllabus.

Method of evaluation to determine if objectives have been met by students:
 (Check all that apply)

Exams:

Essay	<input type="checkbox"/>	Class Activity	<input checked="" type="checkbox"/>	Written Assignments	<input type="checkbox"/>
Problem Solving Exercise	<input type="checkbox"/>	Skill Demonstration	<input type="checkbox"/>	Lab Activity	<input type="checkbox"/>
Objective Test	<input checked="" type="checkbox"/>	Oral Assignments	<input type="checkbox"/>	Quizzes	<input type="checkbox"/>

Other

Instructional Methodology: (Check all that apply)

Lecture	<input checked="" type="checkbox"/>	Demonstration	<input checked="" type="checkbox"/>	Discussion	<input checked="" type="checkbox"/>
Audiovisual	<input checked="" type="checkbox"/>	Individual Assistance	<input checked="" type="checkbox"/>	Group Activity	<input checked="" type="checkbox"/>
Computer Assisted Instruction	<input type="checkbox"/>				

Requires a minimum of three (3) hours of work per unit, including class time

Required and Major Optional Reading(s), Including Textbook(s) and Software: (Author-last name, first name. Title
 Location: Publisher, Year)

Petersen. Safety Management. Moray, Latest Edition.