

Last updated: 9/99

San Bernardino Valley College
Course Outline for ENV 005
HAZARDOUS WASTE MANAGEMENT

I. CATALOG DESCRIPTION:

ENV 005: Hazardous Waste Management
3 hours/week lecture = 3 units

Catalog Description: This course covers both federal and California laws and regulations governing hazardous waste management including hazardous waste generation logs, identification of wastes, EPA identification numbers, small quantity generators, permit and notification requirements, minimization and source reduction, permitting of hazardous waste facilities and transporting of hazardous wastes.

Schedule Description: This course covers both federal and California laws and regulations governing hazardous waste management.

Prerequisite/corequisite: None

Departmental Advisory: ENV 003

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

III. EXPECTED OUTCOMES FOR STUDENTS:

Upon completion of the course, the student will be able to:

- A. Identify, research and apply the principles of the federal and state laws and regulations to the management of hazardous wastes.
- B. Set up and manage a hazardous waste collection point.
- C. Determine if a material is a hazardous waste and then correctly process the waste for disposal.
- D. Solve a specific problem involving the collection, storage and disposal of a hazardous waste.

IV. CONTENT:

- A. Introduction to Hazardous Waste Management
 - 1. What is a hazardous waste?
 - 2. Understanding the California hazardous waste requirements
- B. Regulatory Framework for Hazardous Waste Management
 - 1. Federal hazardous waste control law
 - 2. California hazardous waste laws
 - 3. Agency responsibilities
 - 4. Local agency enforcement
 - 5. Source of laws and regulations on hazardous waste
 - 6. Source of federal laws and regulations
 - 7. Source of state laws and regulations
- C. Basic Requirements of Hazardous Waste Management
 - 1. Requirements of hazardous waste management
 - 2. Classification of generators
 - 3. Hazardous waste generation log

4. Recordkeeping requirements
 - D. Identifying A Hazardous Waste
 1. Wastes subject to the hazardous waste laws
 2. Wastes excluded from the definition of waste
 3. Wastes excluded from the definition of hazardous waste
 4. Special rules for certain wastes
 5. Waste stream classification
 6. Identifying hazardous waste by characteristics
 7. How to identify a hazardous waste
 8. Documenting regulatory requirements for hazardous wastes
 9. Recordkeeping requirements
 - E. Permit and Notification Requirements
 1. EPA identification number
 2. Hazardous waste notification statements
 3. Extremely hazardous wastes permit and fees
 4. Other notifications and permits
 - F. Managing Hazardous Waste on Site
 1. Time limits
 2. Storage requirements for generators
 3. Inspection log
 4. Deficiency report
 5. Inspection checklist requirements
 6. Record keeping requirements
 7. Hazardous waste contingency plan
 - G. Transporting of Hazardous Wastes to Treatment and Disposal Facilities
 1. Transporting hazardous wastes
 2. Hazardous waste manifest
 3. Land disposal bands for restricted hazardous wastes
 4. Recycling
 - H. Hazardous Waste Minimization and Source Reduction
 1. Hazardous waste reduction
 2. Mandatory hazardous waste source reduction
 - I. Permitted Hazardous Waste Facilities
 1. Hazardous waste treatment, storage and disposal facilities
 2. Requirements for hazardous waste facility permits
 3. On site treatment by generators
 4. Prohibited hazardous waste management systems
 - J. Hazardous Waste Taxes and Fees
 1. Taxes and fees
 2. Enforcement of hazardous waste laws
 3. Hazardous waste liabilities and cleanup
- V. METHODS OF INSTRUCTION:
- A. Lecture
 - B. Reading

VI. TYPICAL ASSIGNMENTS:

- A. Read lessons and complete weekly homework assignments.
Typical Questions:
 - 1. What is the capacity of secondary containment required for 4 - 55 gal drums?
 - 2. What is a hazardous waste?
- B. Complete a hazardous waste manifest for transportation and disposal of several hazardous wastes.
- C. Term Paper – Research and analysis of the collection, storage, transportation and disposal of hazardous wastes.
- D. Written Assignment – Student will be given a specific problem involving a hazardous waste and will be required to solve the problem along with an explanation of why a certain solution was selected.

VII. EVALUATION:

- A. Methods of Evaluation:
 - 1. Graded assignments
 - 2. Midterm/final exam/term projectTypical Questions:
 - a. Name the characteristics of a hazardous waste.
 - b. What is the difference between a RCRA hazardous waste and a NON-RCRA hazardous waste?
- B. Frequency of Evaluation:
 - 1. Ten (10) exercises
 - 2. Two (2) written assignments
 - 3. One (1) midterm
 - 4. One (1) final and term project

VIII. TYPICAL TEXTS:

Hazardous Waste Management Manual. California Chamber of Commerce, 1998-1999.
Blackman, William C. Basic Hazardous Waste Management, Second Edition. Lewis Publishers, 1996.

IX. OTHER SUPPLIES REQUIRED OF STUDENTS:

Conversation chart for Celsius and Fahrenheit temperatures