

OESM 212: HAZARDOUS WASTE MANAGEMENT APPLICATIONS

Course Description:

This course is an in-depth study of the application of hazardous waste regulations with an emphasis on generator compliance, site investigation & remediation, permitting, enforcement, and liability. The Resource Conservation and Recovery Act (RCRA), HIOSH/OSHA hazardous waste worker safety laws, ground water discharge permitting, and Hawaii hazardous waste laws are included.

Course Objectives:

Upon completion of the course, students are expected to be able to:

- Define hazardous material and hazardous waste
- Identify federal, state, and local regulations pertinent to hazardous waste management
- Explain major topics covered by RCRA
- Discuss regulatory impacts on hazardous waste management
- Describe regulatory requirements for hazardous material/waste handling & sampling procedures
- Discuss major topics covered by SARA
- Analyze situations in case studies
- Apply relevant regulations to given scenarios
- Describe treatment technologies and their effectiveness
- Discuss pollution prevention strategies
- Examine real estate transactions issues
- Discuss risk assessment and risk communication issues

Required Textbook:

Waste Management Concepts Vol 5. Prentice Hall's Environmental Technology Series.
1998

Handouts and Reference materials

Student Evaluation:

Two exams	80 points
Oral Reports/Participation	20 points

Grading:

A: 90-100 B: 80-90 C: 70-80 D: 60-70

Final grades are permanent. Final "I" grades will not be allowed in this class. Final "N" grades will be given only in very rare and exceptional cases.

HCC Grading Policies:

- a. No Show Policy. Students must attend both of the first two class sessions of the semester or may be dropped unless they notify the instructor or the Division Chair in advance of their absence.
- b. Disappear Policy. Students may receive an "F" grade if they do not officially drop their course by the drop deadline listed in the Academic Calendar of the current HCC catalogue or the schedule of classes.

Emergency Procedures:

- a. Location of first aid kit: In the back of classroom by the sink.
- b. Evacuation of building: Use Diamond Head and Ewa stairs and proceed to parking lot #2 (by the cafeteria). Assemble and wait for further instructions from the instructor.
- c. Accident or Injury During Evening, after 4:30 p.m.:
 1. Call 911 for an ambulance. Give essential information:
 - Location -- building and room number, road to enter campus
 - Type of emergency and victim's condition
 - Your name and phone number
 2. Call extension 247 or 284-1270 (cell - Security)
 - To notify others that an ambulance has been summoned
 - To have Campus Security escort the ambulance to the location
 - To request other assistance

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Week	Topic	Reading Assignment	Comment
1	Introduction Regulatory Framework	Chapter 2	Determine Appropriate Agency
2	Compliance, Enforcement & Liability	Chapter 8	Notification of HW activity, video
3	Generator Requirements & Transportation	Chapters 3 & 4	On-site Management of HW, prep HW Manifest
4	Treatment Storage & Disposal Requirements, Permits	Chapters 6 & 7	UH Case Study
5	Air & Water Quality		Oral Report Assignment
6	RCRA Corrective Action, Hazardous Waste Remediation		Case Study
7	Review, RCRA remediation waste		
8	MIDTERM EXAM		
9	Introduction to Superfund		
10	RCRA vs. Superfund, Process to HW cleanup		Case Study
11	Sampling & Analysis, Site Investigation		Oral Reports Due
12	Treatment Technologies	Chapter 12, Video	Oral Reports Due
13	Clean Up, Final Steps		
14	Pollution Prevention	Chapter 1	
15	Real Estate Transactions		Risk Assessments
16	Risk Communication		Public Hearing video
17	FINAL EXAM		