

## OESM 218: EMERGENCY RESPONSE TO HAZARDOUS MATERIALS

Saturday, 7:00 am-2:00 pm

Instructor: Chulee C. Grove

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### Course Description:

This class provides hands-on instructions on health and safety issues associated with hazardous waste operations, including scope and requirements of the Hazardous Waste Operations and Emergency Response regulation (29 CFR 1910.120), health effects of hazardous materials and appropriate handling techniques, roles and responsibilities of a site safety officer in hazardous waste operations, content of a site safety plan, and emergency planning and response to hazardous material incidents.

This course satisfies the requirements for generalized employee training under 29 CFR 1910.120(e). The *40-hr HAZWOPER Certificate* will be awarded to students who attend all classes AND successfully complete the course.

**IMPORTANT**

**Students *MUST* attend *ALL* classes to receive the 40-hr HAZWOPER certificate.**

### Course Objectives:

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

- Recognize and assess hazards associated with hazardous waste operations and chemical emergency response
- Describe operating modes, use, calibration, and limitations of monitoring instruments used in hazardous waste operations
- Plan and conduct personnel decontamination
- Explain and perform spill containment methods
- Correctly select, use, and maintain personal protective equipment
- Conduct environmental sampling of various media
- Appropriately respond to hazardous material incidents
- Develop a site-specific health and safety plan

### Textbook & Supplies:

Students will receive a packet of instructor-prepared notes on the first day of instruction. All equipment, instruments, and personal protective equipment (PPE) will be provided at no additional cost. However, students are responsible and accountable for all materials used in class. Equipment, instruments, and PPE must be kept cleaned and properly maintained throughout the entire class. PPE must be inspected prior to and after each use.

## Student Evaluation:

Students must complete **all** of the following:

Three quizzes (short answers, objective)	60 points
Final Examinations:	
Written Exam (multiple choice)	90 points
Field Exam	50 points

## Grading:

**A:** 180-200    **B:** 160-179    **C:** 130-159    **D:**100-129    **F:** less than 100

Final grades are permanent. Final "I" grade will not be allowed in this class. Final "N" grade 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.

## Services for Students with Disabilities:

Students with disabilities may obtain information on available services online at [honolulu.hawaii.edu/disability](http://honolulu.hawaii.edu/disability).

For specific information, contact Student ACCESS at 844-2392, by e-mail at [access@hcc.hawaii.edu](mailto:access@hcc.hawaii.edu), or by visiting the Student ACCESS Office in Bldg. 7, Room 319.

## Emergency Procedures:

- a. *Location of first aid kit:* In the back of classroom near the Diamond Head door.
- 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:*
  1. Call 911 for an ambulance. Give essential information:
    - Location - building, room number, and road to enter campus
    - Type of emergency and victim's condition
    - Your name and phone number
  2. Call Security, 284-1270 or 271-4836: To notify about the incident and request assistance

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WEEK	TOPICS	REFERENCE
1	Overview: HazWste Operations & Regulations Waste Classification (40 CFR 261) Response Chemistry Hazard Recognition <i>Exercise #1</i>	Note #1
2	Overview: 29 CFR 1910.120 Health Effects of Hazardous Substances Exposure Limits Medical Surveillance <i>Exercise #2</i>	Note #2
3	<b>Quiz I</b> (covers weeks 1 & 2) Environmental Monitoring Health and Safety Planning <i>Exercises # 3.1 &amp; 3.2</i>	Note #3
4, 5	Health and Safety Planning (cont) Personal Protective Equipment <i>Exercises # 3.3, 4.1, 4.2 &amp; 4.3</i>	Note #3 Note #4
6	<b>Quiz II</b> (covers weeks 3, 4, 5) Decontamination <i>Exercise #5</i>	Note #5
7	Site Control & Containment Handling Drums & other Containers <i>Exercise #6</i>	Note #6
8	Special Hazards <i>Exercise #7</i>	Note #7
9	<b>Quiz III</b> (covers weeks 6,7,8) Managing Emergency Operations <i>Field Exam Preparation: Command Structure &amp; Responsibilities</i>	Note #8
10	<i>Field Exam Preparation: Written Plans &amp; Logistics</i>	
11	<b>FINAL FIELD EXAM</b> : Wear Comfortable Clothing <b>FINAL WRITTEN EXAM</b> (covers weeks 1-10)	