

Course Outline

COURSE: JFT 24 **DIVISION:** 50 **ALSO LISTED AS:**

TERM EFFECTIVE: Fall 2011 **Inactive Course**

SHORT TITLE: HAZ MAT INVESTIGA

LONG TITLE: Hazardous Materials Investigations

<u>Units</u>	<u>Number of Weeks</u>	<u>Type</u>	<u>Contact Hours/Week</u>	<u>Total Contact Hours</u>
1	1	Lecture:	20	20
		Lab:	20	20
		Other:	0	0
		Total:	40	40

COURSE DESCRIPTION:

This course is designed to develop skills in the technical aspects of Hazardous Materials Investigations both for federal and state standards. **ADVISORY:** Eligible for English 250 and English 420.

PREREQUISITES:

COREQUISITES:

CREDIT STATUS: D - Credit - Degree Applicable

GRADING MODES

L - Standard Letter Grade

REPEATABILITY: N - Course may not be repeated

SCHEDULE TYPES:

02 - Lecture and/or discussion

03 - Lecture/Laboratory

04 - Laboratory/Studio/Activity

STUDENT LEARNING OUTCOMES:

1. Research proper state and federal laws and regulations dealing specifically with Haz Mat investigations.
2. Determine the characteristics of a Haz Mat incident and the possibility that a criminal or civil law was committed.

3. Safely and competently respond to a Haz Mat incident and proceed within the limitations of available resources.
4. Explain the need for, types, selection criteria and limits of protective equipment commonly used in Haz Mat incidents.
5. Recognize the need and process to obtain and serve search and inspection warrants.
6. Understand the different methods for comprehensive report writing at a Haz Mat incident.
7. Identify need and method to communicate and coordinate with any and all agencies having authorized activities dealing with a Haz Mat incident, recognizing those agencies' role and capabilities.
8. Develop techniques for both witness and alleged criminal interview at a Haz Mat incident.
9. Develop skills in the area of field chemical sampling at a Haz Mat incident.
10. Demonstrate proper safe and competent response to a simulated Haz Mat and illegal dump incident.
11. Demonstrate proper case preparation by submitting documentation and evidence to a simulated District Attorney panel.
12. Students will be able to achieve all of the objectives through completion of a state certified exam meeting listed performance standards.

CONTENT, STUDENT PERFORMANCE OBJECTIVES, OUT-OF-CLASS ASSIGNMENTS

Inactive Course: 09/26/2011

1 WK 40 HRS I. Overview of the Hazardous Materials Investigation

- A. Review of the Haz Mat problem
 - B. The differences of Haz Mat incidents and the potential of an illegal spill
 - C. Common recognition clues determining an illegal Haz Mat spill
 - D. Overview of the investigations process to include identification of site, containment, evidence gathering, and building prosecution file, and
 - E. Review of procedures at an investigations site
- II. Identification of Laws, Regulations, and Definitions Regarding Haz Mat and Wastes
- A. Overview of pertinent definitions dealing with Haz Mat investigations
 - B. Overview of 29 CFR 1910.120 section Q
 - C. Review of state and federal laws pertaining to illegal Haz Mat spills/dumps to include penal codes, Fish and Game codes, health and safety codes,

water codes, vehicle codes, clean water initiative (Prop 65), business and professional codes, clean air act, safe drinking water act, and insecticide, fungicide and rodenticide act; and

III. Characterizing Haz Mat Sites

A. Procedures for detection of possible Haz Mat spill/dump site

B. Review of possible sources of information

C. How to use historical data in an investigation; and

D. Determining signs and clues at a possible illegal Haz Mat spill/dump site

IV. Safety and Competent Response at an Illegal Haz Mat Spill/Dump Site

A. Safe approach distance guides;

B. How to conduct a safe assessment and identification

C. Common information sources in identification and hazard assessment;

D. First on scene safe initial actions;

E. Essential field safety guides (do's and don't's);

F. Isolation and entry denial tactics;

G. Identification of Haz Mat resources;

H. Required notifications at a Haz Mat incident;

I. Protective measures at a Haz Mat incident; and

J. Possible death and injuries at a Haz Mat incident

V. Protective Equipment and the Investigator's Limitations

A. The correlation between identification hazard assessment and protective equipment;

B. Protective equipment components;

C. Routes of entry from exposure;

D. Limitations of street clothes and uniforms;

E. Limitations of protective clothing available;

F. Typical hazardous to first responders at a Haz Mat incident;

G. Level of protective clothing;

H. Selection criteria for levels of protective clothing;

I. Need, hazards, requirements of

- protective clothing;
 - J. Types, components, requirements and limitations of respiratory equipment;
 - K. Respiratory hazards;
 - L. Typical Haz Mat monitoring devices; and
 - M. General limitations of protective equipment
- VI. Processing and Serving Search Warrants
- A. Process to obtain affidavit for inspection warrant;
 - B. Purpose of an affidavit;
 - C. Specific facts for belief of a violation;
 - D. Process for requesting authorization for as search warrant request;
 - E. Definition and purpose of an inspection warrant; and
 - F. Safety techniques in serving a search warrant.
- VII. Comprehensive Report Writing
- A. Components of an investigations report;
 - B. Documenting how violation was detected;
 - C. Action taken during investigations including video, samples, diagrams, interviews;
 - D. Disposition of samples for analysis;
 - E. Reporting requirements including other agencies involved;
 - F. Summary of violations; and
 - G. Documenting investigator's opinion.
- VIII. Agency Coordination
- A. Successful agency coordination, a case study;
 - B. Key agency coordinators;
 - C. Ways to enhance coordination;
 - D. Techniques for planning an investigation;
 - E. Organization at the incident; and
 - F. Planning notes and review of incident.
- IX. Investigator's Agency Coordination
- A. Typical first responder agencies at Haz Mat incidents;
 - B. Roles, responsibilities, capabilities, and limits of local agencies responding to Haz Mat incidents;
 - C. Roles, responsibilities, capabilities, and limits of state agencies responding to Haz Mat incidents;
 - D. Roles, responsibilities, capabilities,

and limits of federal agencies responding to Haz Mat incidents;

E. Roles, responsibilities, capabilities, and limits of private sector responding to Haz Mat incidents.

X. Witness and Criminal Interview Techniques

A. Interview techniques for witnesses, workers, managers, property owners, and suspected criminals;

B. Do's and Don'ts of interviews;

C. Legal and illegal interviews; and

D. Enhanced techniques of interviewing.

XI. Field Chemical Sampling

A. Techniques for preventing contamination to investigators;

B. Confirmation techniques of Haz Mat present;

C. PH paper test;

D. Sampling threshold levels of Haz Mat;

E. Use of chemical monitoring instruments in the field;

F. Pros and cons of chemical monitoring instruments; and

G. Understanding results of chemical monitoring instruments.

Lecture, discussion and demonstrations will serve as the medium of instruction. Audio-visual aids

REPRESENTATIVE TEXTBOOKS:

Required: ^uHealth & Safety Codes^s

^uWater Codes^s

^uPenal Code Book^s

^uFish & Game Codes^s

^uVehicle Codes^s

^uClean Air Act^s

^uSafe Drinking Water Act^s

^uInsecticide, Fungicide, and Rodenticide Act^s

Reading level determined to be 12th + grade level.

ARTICULATION and CERTIFICATE INFORMATION

Associate Degree:

CSU GE:

IGETC:

CSU TRANSFER:

Transferable CSU, effective 199870

UC TRANSFER:

Not Transferable

SUPPLEMENTAL DATA:

Basic Skills: N

Classification: I

Noncredit Category: Y

Cooperative Education:

Program Status: 1 Program Applicable

Special Class Status: N

CAN:

CAN Sequence:

CSU Crosswalk Course Department: JFT

CSU Crosswalk Course Number: 24

Prior to College Level: Y

Non Credit Enhanced Funding: N

Funding Agency Code: Y

In-Service: Y

Occupational Course: C

Maximum Hours:

Minimum Hours:

Course Control Number: CCC000456108

Sports/Physical Education Course: N

Taxonomy of Program: 213300