

**Course Outline**

**COURSE:** JFT 18F                      **DIVISION:** 50                      **ALSO LISTED AS:**

**TERM EFFECTIVE:** Fall 2011                      **Inactive Course**

**SHORT TITLE:** HAZ MAT TECH 1F

**LONG TITLE:** Haz Mat Tech 1F - Special Mitigation Techniques

<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 module is an intensive "hands-on" introduction to specialized mitigation techniques employed by the Hazardous Materials Specialist. Instruction includes plugging, patching, and repairing railroad cars, intermodel tanks, and highway cargo tank cars, advanced chemical field identification testing procedures, and fixed facility repair considerations. **PREREQUISITE:** Haz Mat 1A (JFT 18A), Haz Mat 1B (JFT 18B), Haz Mat 1C (JFT 18C) and Haz Mat 1D (JFT 18D). **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. Obtain and record pre- and post- entry vitals using proper medical monitoring procedures.

2. Don level A chemical protective clothing and perform simulated hazardous materials mitigation skills in a manipulative obstacle course.
3. Demonstrate appropriate mitigation skills to simulated leaks from a 1 ton chlorine cylinder, an elevated storage tank, a pipe and valve prop, and drums.
4. Describe the process of identifying unknown solids, liquids, and gases.
5. Describe proper safety precautions for working around chemicals, and demonstrate safe procedures during all hands-on activities.
6. Demonstrate proper procedures for identifying unknown substances.
7. Describe the design, function, usage and limitations of various monitoring equipment and detection devices.
8. Recognize explosives by chemical formula, structure or characteristics, and give examples of improvised and conventional explosives.
9. Assess conditions at a simulated railroad tank car leak, and demonstrate proper procedures for mitigating a variety of leaks from different kinds of rail cars.
10. Describe the three tactical priorities at a haz mat incident, essential command and control functions, and the level that a haz mat incident may be divided into.
11. Identify advantages of recycling, general conditions and restrictions that apply to recycling, and some of the materials that can and cannot be recycled.
12. Identify site mitigation requirements, as well as agencies that can assist and potential sources of funding.
13. Identify components of the three phases of an effective incident termination; debriefing, post-incident analysis and critique.

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

Inactive Course: 09/26/2011

1 WK 40 HRS This model is an intensive "hands-on" introduction to specialized mitigation techniques employed by the Hazardous Materials Specialist. Instruction includes plugging, patching, and repairing railroad tank cars, intermodal tanks, and highway cargo tank cars, advanced chemical identification test procedures, and fixed facility repair considerations.

Lecture, discussion and demonstrations will serve as the medium of instruction. Audio-visual aids will be utilized as they facilitate meaningful instruction. Individual guidance will be provided as required.

**REPRESENTATIVE TEXTBOOKS:**

Required: ^uHazardous Materials 1F - Special Mitigation Techniques^s  
^uManual^s  
^uHazardous Materials 1F - Special Mitigation Techniques^s  
^uStudent Workbook^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: 18F  
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: CCC000456104  
Sports/Physical Education Course: N  
Taxonomy of Program: 213300