

Las Positas College
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Course Outline for FST 64

HAZMAT INCIDENT COMMANDER

Effective: Fall 2018

I. CATALOG DESCRIPTION:

FST 64 — HAZMAT INCIDENT COMMANDER — 1.00 units

This class uses California Specialized Training Institute (CSTI) curriculum to prepare perspective Company Officers to manage Hazardous Materials incidents.

1.00 Units Lecture

Grading Methods:

Pass/No Pass

Discipline:

- Fire Technology

	<u>MIN</u>
Lecture Hours:	18.00
Expected Outside of Class Hours:	36.00
Total Hours:	54.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- Define the role of the Incident Commander as defined by Title 8 California Code of Regulations 5192(q)(6)(e) and 29 CFR 1910.120(q)(6)(v)
- Identify the laws, regulations and plans that govern an emergency response to a hazardous material incident.
- Interpret hazard and response information from sources such as printed reference material, technical resources, computer databases and monitoring equipment.
- Estimate the potential outcomes within the endangered area, given a simulated emergency response to a release of hazardous materials.
- Create incident response objectives, given a simulated emergency response to a release of hazardous materials.
- Identify the potential action response options (defensive, offensive and non-intervention) available.
- Choose appropriate levels of personal protective equipment to use in hazardous materials incident.
- Choose appropriate response objectives: defensive, offensive and/or non-interventional. Describe how to use the principles of Operational Risk management to choose appropriate response objective.
- Demonstrate implementing ICS for a simulated emergency response to a release of hazardous materials incident including: identifying the procedure for notifying and using non-local resources; demonstrating the ability to direct and support resources; and identifying the focal point for information transfer to the media and elected officials.
- Produce an Incident Action Plan for a simulated emergency response to a release of hazardous materials. The IAP shall consist of at least an ICS form 201 and a site safety plan that complies with local standard operating guides.
- Identify government and private sector resources available to assist in an emergency response to a release of hazardous materials and state their jurisdiction, authority, capabilities, and the procedures to access these resources.
- Evaluate the progress of the planned response to ensure the response objectives are being met and adjust the incident plan accordingly.
- Terminate the emergency phase of a simulated hazmat incident by completing one or more of the following tasks: transfer command; conduct an incident briefing; conduct a multi-agency critique; and submit required reports and documentation.
- Describe the primary hazardous materials protective action options and identify factors to use in evaluating the selection of a protective action.

V. CONTENT:

- Introduction
 - Course Overview
 - Key Administrative Announcements
 - Need for Incident Commander Training
 - "TEAM" Acronym Theme
 - Class Groups and Teams
- Hazmat Laws, Regulations and Plans
 - Basic Laws Governing Hazmat Response

2. National Contingency Plan
3. Role of the On-Scene Coordinator
4. Hazwoper Regulation
5. State Laws and Regulation
6. Assisting and Cooperating Agencies
- C. ICS, Team Typing and Response Planning
 1. Legal Mandates for ICS
 2. The Hazmat Group
 3. Hazmat Team Typing
 4. The Role of the Information Officer in Hazmat
 5. Incident Action Plans in Hazmat
- D. Hazard Assessment
 1. Hazard Assessment Process
 2. Physical Properties
 3. Toxicological Properties
 4. Reference Sources
 - a. CHEMTREC
 - b. CHEMTEL, INC.
 - c. INFOTRAC
 5. Determining Response Options
 6. Monitoring Detection Instruments
 - a. Potential Problems Anticipated
 1. Response time
 2. Blind spots and contamination
 3. Colorimetric tubes
 4. Oxygen levels
 - b. Interpreting Results
 7. Estimating Potential Harm
- E. Hazard Materials Site Safety
 1. Hazwoper Regulation Requirements
 2. NFPA 471 Requirements
 3. Safety Officer, Assistant Safety Officer-HazMat, and Entry Briefings
 4. Hazards of Personal Protective Equipment
 - a. Wearing Chemical Protective Clothing (CPC) puts the wearer in a hostile environment
 - b. Hazards generated by wearing CPC
 - c. Main hazard: heat-related illness
 - d. Incident Commander must manage incident with this in mind
- F. Operational Risk Management (ORM)
 1. Response Options
 2. Principles of Operational Risk Management
 3. ORM Steps
 - a. Identify the hazard
 - b. Assess the risk
 - c. Analyze risk control measures
 - d. Make control decision
 - e. Implement risk control
 - f. Supervise and review
 4. Risk Identification
 5. Controlling Risk in Hazmat Response
- G. Protective Actions
 1. Protective Actions
 2. Authorities for Protective Actions
 3. Protective Actions Time Factors
 4. Protective Action Selection
 5. Protective Action Management
 6. Special Populations and Protective Actions
- H. Incident Termination
 1. Basics of Incident Termination
 2. Phases of Incident Termination
 3. Incident Debrief
 4. Incident Critique
 5. Post-Incident Analysis

VI. METHODS OF INSTRUCTION:

- A. **Audio-visual Activity** -
- B. **Lecture** -
- C. **Classroom Activity** -

VII. TYPICAL ASSIGNMENTS:

- A. Reading assignments from the text
- B. Use reference materials to search for information on several chemicals and complete the associated form.
- C. Given a scenario, work in groups to determine recommended protective actions

VIII. EVALUATION:

A. **Methods**

1. Exams/Tests
2. Group Projects
3. Lab Activities
4. Other:
 - a. California Specialized Training Institute requires a written exam with a pass rate of 70% to achieve certification.
 - b. Group exercises involve using reference materials to search for information and appropriately complete the correct forms
 - c. Tabletop (lab) activities involve using groups to physical depley resources on a scale model of an incident.

B. **Frequency**

1. The exam will be given once, at the end of the course.
2. Group exercises will be completed six times during the course.
3. Tabletop exercises will be completed four times during the course.

IX. TYPICAL TEXTS:

1. State of California. *California Code of Regulations Title 8, Sec. 5192(q)*. Current ed., California Legislative Office, 2017.
2. United States Government. *Code of Federal Regulations Part 29, Sec. 1910.120(q)*. Current ed., US Government Printing Office, 2017.
3. United States Government. *Code of Federal Regulations Part 29, Sec. 1910.120(q), Appendix E*. Current ed., US Government Printing Office, 2017.
4. State of California. *California Code of Regulations Title 19, Sec. 2510-2550*. Current ed., California Legislative Office, 2017.
5. California Occupational Safety and Health Administration. *Compliance Directive CPL 02-02-073*. Current ed., OSHA, 2017.
6. State of California. *Hazardous Materials Incident Commander Student Manual*. Current ed., California Office of Emergency Services, 2017.

X. OTHER MATERIALS REQUIRED OF STUDENTS: