

University of Illinois Fire Service Institute

Course Syllabus

Course Title: Hazardous Materials Incident Command

Course Duration: 16 hours

Program: Hazardous Materials

Course Prerequisites: Hazardous Materials Awareness
Hazardous Materials Operations
NIMS IS – 100
NIMS IS – 700

Course Description:

The goal of this 16-hour course is to prepare local responders to operate as a local member of a regional team within the NIMS at a CBRNE (Chemical, Biological, Radiological, Nuclear, or Explosive) event requiring statewide response that has resulted in the exposure to a hazardous material. During this course the students will demonstrate the individual skills necessary to direct and coordinate all aspects of a hazardous materials incident; implement the incident management system; simulate an activation of the emergency response plan, state and federal regional response plans; show knowledge and understanding of the importance of decontamination procedures; demonstrate an understanding of hazards associated with employees working in chemical protective clothing; analyze a hazardous materials incident, set objectives, identify potential action plans, evaluate the planned response, documentation, and complete the final termination requirements.

Course Requirements and/or Recommendations:

Pre-Course Work – Hazmat Incident Command – Step 1
Course Work – Complete all assignments, exercises and practicals.
Post-Course Work – None

Required Textbook:

Noll, Gregory G., Michael S. Hildebrand. *Hazardous Materials: Managing the Incident, 4th Ed.* Burlington, MA: Jones & Bartlett Learning, 2014.

The student will need to acquire the textbook prior to the start of class.

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Course Policies:

Attendance Policy: IFSI requires students to attend (100%) or make up all course content that leads to certification. Students are expected to attend on time and to remain in class for the duration of the course. Students **MUST COMPLETE** all portions of a certification course, both classroom and practical, to be eligible to receive their certification.

If a student misses any portion of class with an accumulated absence of 20% or less of scheduled class time, it will be the student's responsibility to arrange the make-up of the missed course content with the instructor(s) or program manager. The student must make up the specific course content that s/he missed, not just the hours. Make-ups are limited to 20% of scheduled class time. Make-ups must be documented on the class roster. If a student's absence is greater than 20% refer to "True Emergencies" section of the IFSI Examination Policy.

Safety Policy: Students shall understand and follow all instructions pertaining to operational safety, as stated by instructors or as written in course materials. Instructors and students shall be mindful of safety at all times. Conduct judged to be unsafe shall be grounds for dismissal from the course.

Academic Integrity Policy: IFSI has the responsibility for maintaining academic integrity so as to protect the quality of the education provided through its courses, and to protect those who depend upon our integrity. It is the responsibility of the student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions. Any violation of the code of conduct is grounds for immediate dismissal from the course.

Grading Policy: Decisions regarding certificates of course completion shall be made solely by the lead instructor of the course. All grading of exams shall be conducted by the Curriculum/Testing Office. All grading of practical exercises shall be based upon the standards set by the regulatory agency referenced in the course material and IFSI.

Retesting: If a student fails to pass an exam, retesting takes place on set dates at regional sites across the state. More information is provided in the course completion e-mail and on the IFSI website.

American Disabilities Act: As guaranteed in the Vocational Rehabilitation Act and in the American Disabilities Act, if any student needs special accommodations, they are to notify their instructor and provide documentation as soon as possible so arrangements can be made to provide for the student's

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needs. If arrangements cannot be made at the class site, the student will test at an alternative time and place where the special accommodations can be made.

Evaluation Strategy: Students will be evaluated with an end of course exam and performance evaluation checklist.

Course Content:

Module: 1

Title: Incident Command Core Competencies

Terminal Learning Objective:

1. At the conclusion of this module, the student will recognize his/her roles as an Incident Commander at a hazardous materials incident.

Module: 2

Title: Overview of the Hazardous Materials Incident Command System

Terminal Learning Objective:

2. At the conclusion of this module, the student will identify basic structure and function of the Incident Command System.

Module: 3

Title: Analyzing the Incident

Terminal Learning Objective:

3. At the conclusion of this module, the student will explain how hazard and response information relates to the management of the scene.

Module: 4

Title: Planning the Response

Terminal Learning Objective:

4. At the conclusion of this module, the student will identify factors to consider in planning the hazardous materials response.

Module: 5

Title: Implementing the Incident Command System

Terminal Learning Objective:

5. At the conclusion of this module, the student will describe the implementation of the Incident Command System.

Module: 6

Title: Evaluating Progress

Terminal Learning Objective:

6. At the conclusion of this module, the student will evaluate the overall progress of the hazardous materials response from an incident management perspective.

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Module: 7

Title: Terminating the Incident

Terminal Learning Objective:

7. At the conclusion of this module, the student will explain how to effectively terminate the incident.

Reference List:

Adams, Barbara and Leslie A. Miller, *Hazardous Materials for First Responders, 3rd Edition*. Stillwater, Oklahoma: Fire Protection Publications, 2004.

Brunacini, Alan V., *Fire Command: The Essentials of Local IMS*. Phoenix, AZ: Heritage Publishers, 2002.

FEMA 501-1, *NIMS Basic: Introduction and Overview*

FEMA 501-5, *NIMS Basic: Communications and Information Management*

Illinois Fire Service Institute Hazardous Materials Awareness and Operations Curriculum.

Laughlin, Jerry and Tavid G. Trebisacci, eds., *Hazardous Materials Response Handbook*, 4th ed. Quincy, Massachusetts: National Fire Protection Association, 2002.

National Fire Protection Association, *NFPA 472: Recommended Practice for Responding to Hazardous Materials Incidents*, 2013 edition.

National Fire Protection Association, *NFPA 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications*, 2017 edition.

National Fire Protection Association, *NFPA 1991: Standard on Vapor-Protective Ensembles for Hazardous Materials Emergencies*, 2000 edition.

National Fire Protection Association, *NFPA 1992: Standard on Liquid Splash-Protective Ensembles and Clothing for Hazardous Materials Emergencies*, 2000 edition.

Noll, Gregory G., Michael S. Hildebrand. *Hazardous Materials: Managing the Incident, 4th Ed*. Burlington, MA: Jones & Bartlett Learning, 2014.

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United States Department of Homeland Security, *National Incident Management System, 2004*. Washington, D.C., 2004.

Course Schedule

DAY ONE

<u>Event</u>	<u>Duration</u>
Introductions & Course Overview	30 minutes
Module 1 – Incident Command Core Competencies	1 hour
Module 2 – Overview of the Hazardous Materials Incident Command System	1 hour 30 minutes
Lego Exercise	1 hour
Lunch	
Exercise #1: Initial Call	40 minutes
Module 3 – Analyzing the Incident	1 hour
Exercise #2: Analyzing the Incident	40 minutes
Module 4 – Planning the Response	1 hour
Exercise #3 – Planning the Response	40 minutes

DAY TWO

<u>Event</u>	<u>Duration</u>
Module 5 – Implementing the Incident Command System	30 minutes
Module 6 – Evaluating Progress	15 minutes
Module 7 – Terminating the Incident	15 minutes

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**Exercise #4 – Implementing, Evaluation, &
Termination of the Incident**

1 hour 30 minutes

Lunch

Final Incident

2 hours 30 min

Final Exam and Performance Evaluations

3 hours
