

ALABAMA FIRE COLLEGE

AND PERSONNEL STANDARDS & EDUCATION COMMISSION



COURSE SYLLABUS

Hazardous Materials/WMD:

FSC 170

40 clock hours (minimum)

Awareness and Operations

(to include Mission Specific Levels: 6.2-Personal Protective Equipment & 6.6 –Product Control)

PREREQUISITES

- 18 years of age
- IS 100.c – Introduction to the Incident Command System
- IS 200.c – Basic Incident Command System for Initial Response
- IS 700.b – National Incident Management System (NIMS), An Introduction
- IS 800.c – National Response Framework, An Introduction

REQUIRED COURSE MATERIALS

- *AFC Awareness Student Manual*
 - Available from the Alabama Fire College Bookstore
- *AFC Operations Student Manual*
 - Available from the Alabama Fire College Bookstore
- *2020 DOT Emergency Response Guidebook*
 - Available from the Alabama Fire College Bookstore
 - Available from the USDOT at <https://www.phmsa.dot.gov/sites/phmsa.dot.gov/files/docs/ERG2020.pdf>
- *FEMA Emergency Response to Terrorism Job Aid – Edition 2.0 (Recommended)*
 - Available from the AFC at <https://www.alabamafirecollege.org/wp-content/uploads/fema-job-aid-2.0-color.pdf>
- Other equipment recommended
 - NFPA-compliant turnout gear
 - SCBA and spare cylinder
 - Work gloves
 - Safety glasses

DESCRIPTION

This course is for emergency response personnel who may be first on the scene of a hazardous materials emergency at the awareness & operational level, acting in a defensive posture to protect people, the environment, or property from the effects of an unplanned hazardous materials release consistent with the competencies recommended by NFPA 1072 and supplemented by information from government agencies such as the Occupational Safety and Health Administration (OSHA), the Environmental Protection Agency (EPA), and the Department of Transportation (DOT).

STUDENT LEARNING OBJECTIVES

- Introduction to Hazardous Materials - The purpose of this module is to discuss relevant Federal hazardous materials response policies, the National Fire Protection Association® (NFPA®) 1072-2017 Ed.: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications hazardous materials awareness-level competencies, define hazardous materials and define weapons of mass destruction.
- The DOT Hazard Classification System, Occupancy Clues, and Container Recognition - The purpose of this module is to discuss the nine U.S. Department of Transportation hazardous materials classes and divisions, discuss common occupancies and locations for hazardous materials and describe commonly used dangerous goods containers.
- Hazardous Materials Recognition, Identification, and Information Communication - The purpose of this module is to provide instruction and practical experience in the identification of hazardous materials at the awareness level and present references that can be used for additional information.
- Protective Actions - The purpose of this module is to provide you with the knowledge and skills needed to apply techniques and procedures for protecting yourself and others from exposure to hazardous materials during a hazardous materials incident.
- Weapons of Mass Destruction Awareness - The purpose of this module is to provide instruction and guided discussion in the recognition and identification of potential weapons of mass destruction and what actions Awareness level personnel should take.
- Hazard Assessment – discusses the sources of information available to Operations Level responders and defines the terms to understand hazardous materials properties.
- Risk Evaluation - provides the ability to identify the behavior of hazardous materials and their containers and recognize the potential harm due to exposure from hazardous materials.
- Command and Site Management – discusses the use of the Incident Command System and how it can be applied to hazardous materials incidents. Also discussed are the elements of site management to effectively control an incident scene.
- Personal Protective Equipment - provides the knowledge required to select and safely don, operate in, and doff PPE.
- Product Control – discusses the physical and chemical process to control the spread of hazardous materials to limit their impact after releases have occurred and the possibilities for remotely stopping leaks at the source.
- Decontamination - provides students with the knowledge and considerations necessary for conducting emergency, mass, and technical decontamination for hazardous materials incidents.
- Termination – provide an understanding of the necessary actions Operations Level responders should take to properly transition between the termination of the emergency phase and the initiation of clean up and recovery operations.

CERTIFICATION REQUIREMENTS

To be issued certification, the candidate will: provide documentation of prerequisites, complete required training hours including skills training, successfully complete the cognitive written exam, and successfully complete the practical exam.

ACCREDITATION

Alabama Fire College and Personnel Standards Commission maintains accreditation with Pro Board and IFSAC. Each student will automatically receive national registration and certification upon successful completion of all requirements for certification.

COURSE SCHEDULE (SUBJECT TO CHANGE)

| | |
|------------|--|
| Day One: | Chapter 1-Introduction to the Hazardous Materials Awareness Course; Chapter 2-Introduction to Hazardous Materials; Chapter 3-The DOT Hazard Classification System, Occupancy Clues, and Container Recognition; Chapter 4-Hazardous Materials Recognition, Identification, and Information Communication; Chapter 5-Protective Actions; Chapter 6-Weapons of Mass Destruction Awareness |
| Day Two: | Chapter 1 Introduction to HMO Course, Chapter 2 Hazard Assessment, Chapter 3 Risk Evaluation and Harm, Chapter 4 Command and Site Management, Chapter 5 PPE and Dress-out Demonstration |
| Day Three: | Chapter 6 Product Control, Chapter 7 Decontamination, Chapter 8 Termination, Decontamination Field Activities |
| Day Four: | Confinement Practical, Field Exercises (Dress-out, Confinement, and Decontamination), Skills Review and Scenarios |
| Day Five: | Practical Skills Examination, Course Survey, Certification Exam |

GRADE ASSESSMENT

WRITTEN EXAMINATION

Perform to a minimum 70% competency on the examination,
(One retest is allowed after 30 days but within one year of course end date.)

PRACTICAL EXAMINATION

Successfully complete a skills/project evaluation to a minimum of 70% competency and successful completion of all critical points. Evaluators will test at least 25% of the skills for each. Skill sheets to be tested will be randomly selected by AFC Certification Unit for the practical examination. (One retest is allowed after 30 days but within one year of course end date.)