Date: June 1, 2016  
Last Revision: ----- --, ----

**Course Title:** Hazardous Materials Awareness  

**SFA Course Code:** HMAJB  

**Course Length:** 4.0 Hours  
**Lecture/Lab Breakdown:** 3/1  

**Prerequisites:** None  


**Course Goal:** The goal of the Hazardous Materials Awareness (HMA) course is to prepare students who, in the course of their normal duties, could encounter an emergency involving hazardous materials/weapons of mass destruction (WMD). They are expected to recognize the presence of a hazardous material/WMD, call for trained personnel to assist, secure and protect the area. This course serves as initial training as required under 29 CFR 1919.120 and the educational requirements of NFPA 472 standard to the Awareness Level.

**Course Description:** The primary target audiences for this course are the First Responders (fire, rescue, emergency medical, police, etc.) who will witness or discover a hazardous substance/materials release. Students will be trained to initiate an emergency response sequence by notifying the proper authorities of the release. They shall have sufficient training or have had sufficient experience to objectively demonstrate competency to understand what hazardous substances are, the risks, potential outcomes, the ability to recognize and identify their presence, their role including site security, safe scene management and how to use the U.S. Department of Transportation (US DOT) Emergency Response Guidebook during a hazardous materials/WMD emergency.

**Description of Methodology:** The methodology for this course consists of lecture, discussion and supervised practice using ERG exercise.

**Student Equipment & Supplies:** Pen/pencil & notebook and recommended text book if provided.

**Instructor Requirements:** An accredited PA State Fire Academy Local Level Instructor with a background in hazardous materials with IFSAC or Pro-Board Hazardous Material Awareness level certification or higher.
Equipment/Audiovisual/Facility/Supply Requirements:
1. Classroom setup with usual amenities; computer and computer projection equipment with screen/monitor; audio visuals for the course.
2. Instructor Guide and PowerPoint Presentation (J&B and GHS)
3. Student Manual for each student (recommended)
4. One ERG (latest edition) for each student.
5. Safety Data Sheet (one per every two students)
6. 1 Skill Sheet – Hazardous Materials Identification for ERG

Special Notes & Conditions: Maximum enrollment is 30 students. Minimum age is 14 years old. The instructor should select specific discussion points and utilizing complete the skill sheet using a hazardous materials/WMD scenario.

Course Outline

<table>
<thead>
<tr>
<th>Elapsed Time</th>
<th>Topic</th>
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</thead>
<tbody>
<tr>
<td>0.50</td>
<td>Introduction and Hazardous Materials Overview</td>
</tr>
<tr>
<td>0.75</td>
<td>Hazardous Materials: Properties and Effects</td>
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<tr>
<td>1.50</td>
<td>Recognizing and Identifying the Hazards</td>
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<tr>
<td>0.50</td>
<td>Estimating Potential Harm and Planning a Response</td>
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<tr>
<td>0.25</td>
<td>Implementing the Planned Response</td>
</tr>
<tr>
<td>0.50</td>
<td>Written Examination and Course Evaluation</td>
</tr>
<tr>
<td><strong>4.00 Hours</strong></td>
<td><strong>Total Time</strong></td>
</tr>
</tbody>
</table>

Competency Evaluation Mechanism: 100% Class Attendance. Student performance on practical skill evolutions and written examination grade (minimum passing grade of 70% required for successful completion of the course).

Learning Outcomes (Behavioral Objectives):

- The student will identify the risks associated with hazardous materials.
- The student will describe the potential outcome associated with an emergency created when hazardous materials are present.
- The student will recognize hazardous materials in an emergency.
- The student will identify the hazardous materials when possible.
- The student will identify the role of the first responder at the awareness level.
- The student will demonstrate the use of North American Emergency Response Guidebook.
- The student will identify the need for additional resources and to make the appropriate notification to the communications center.
- The student will describe types of Weapons of Mass Destruction (WMD).
- The student will be able to identify types of WM including secondary devices.

Questions/Comments:
Please contact the State Fire Academy Assistant Administrator