# Program of Instruction Course Syllabus

**Course Title:** Fire Fighting Foam Applications

Course Duration: 1-16 hours

**Program:** Fire Fighting

Course Prerequisites: None

Course Description: This class provides the firefighter with a basic understanding of the common types of fire fighting foams, the apparatus and equipment needed to deliver them, and the procedures for setting up and using them effectively. The class also addresses the logistics of large scale foam operations. Both transportation and storage tank incidents, with and without fire, will be discussed. Pre-planning, emergency operations, and post-incident cleaning and other activities will be discussed. Hands-on practice setting up and operating foam lines is included. Adequate foam for the class size and any environmental impact considerations are the sole responsibility of the host department.

Course Requirements and/or Recommendations: These can be divided into three categories: those completed prior to arriving in class (Pre-Course Work), those completed during class, such as homework assignments and quizzes (Course Work), and requirements completed after class but prior to receiving a certificate of completion. (Post-Course Work)

#### Summary of Directions

Pre-Course Work: None

Course Work: Attend and participate

Post-Course Work: None

#### Course Policies:

**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.

#### **Course Content:**

Module 1: What is Foam

Terminal Learning Objectives:

At the conclusion of this module, the student will explain what foam is and how it is used to control hazards.

Module 2: Types of Foam

**Terminal Learning Objectives:** 

At the conclusion of this module, the student will explain the different types of foam available and the associated advantages/disadvantages for each.

Module 3: Foam Application

**Terminal Learning Objectives:** 

At the conclusion of this module, the student will be able to identify the equipment and techniques necessary to apply foam to a spill or fire.

Module 4: Foam Operations in Fixed Facilities

Terminal Learning Objectives:

At the conclusion of this module, the student will be able to identify the different suppression systems at storage tank facilities.

Module 5: Special Considerations

Terminal Learning Objectives:

At the conclusion of this module, the student will be able to identify special consideration in the care of foam and foam equipment and pre-planning for a high-volume foam operation

Module 6: Compressed Air Foam Systems

Terminal Learning Objectives:

At the conclusion of this module, the student will describe the concept of Compressed Air Foam for firefighting operations.

## **Course Schedule**

## **DAY ONE**

<u>Event</u>	<u>Duration</u>
Module 1 – What is Foam	30 minutes
Module 2 – Types of Foam	30 minutes
Module 3 –Foam Application	60 minutes
Module 4 – Foam Operations in Fixed Facilities	45 minutes
Module 5 – Special Considerations	30 minutes
Module 6 – Compressed Air Foam Systems	45 minutes
Drill 3.1	2 hours

### **DAY TWO**

<u>Event</u>	<u>Duration</u>
Additional Foam Practice, as Necessary	10 hours