

# University of Illinois Fire Service Institute

## Course Syllabus

**Course Title:** Hydrant Supply Operations

**Course Duration:** 8 hours

**Program:** Driver/Operator

**Course Prerequisites:** None

### Course Description:

This 8-hour course is designed for Firefighters with 1-3 years of experience, who are new to operating fire department pumping apparatus. In this course, the student will review the design, construction, and limitations of municipal and private water systems to understand how to maximize the amount of water available to the fire scene. Students will discuss how to determine the total amount of water available from a hydrant for firefighting operations, positioning and connecting a fire department pumping apparatus to a hydrant, maximizing the flow from the hydrant, and relay pumping. Upon successful completion of this course, the student will have a better understanding of the pump operator's role in maximizing water supply for fireground operations.

### Course Requirements and/or Recommendations:

Pre-Course Work – None  
Course Work – None  
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.

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

## **Course Content:**

Module: 1

Title: Water Distribution Systems

Terminal Learning Objective:

At the conclusion of this module, the student will discuss the use of water distribution systems for fire suppression.

Module: 2

Title: Water Supply Operations

Terminal Learning Objective:

At the conclusion of this module, the student will demonstrate operating a fire department pumper from a fire hydrant.

Module: 3

Title: Available Water Supply

Terminal Learning Objective:

At the conclusion of this module, the student will estimate the amount of water that is available from a fire hydrant.

## **Reference List:** *(listed in alphabetical order)*

IFSTA, Pumping Apparatus Driver/Operator Handbook, 3<sup>rd</sup> Edition 2015

Illinois State Fire Marshal's Office, Fire Apparatus Engineer Curriculum, 2000 Edition

Jones and Bartlett Learning, Fire Apparatus Driver/Operator, 3<sup>rd</sup> Edition 2018

NFPA 1001, Standard for Professional Firefighter Qualifications, 2013 Edition

NFPA 1002, Standard for Fire Apparatus Driver/Operator, 2017 Edition

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## Course Schedule

### DAY ONE

<u>Event</u>	<u>Duration</u>
Module 1 - Water Distribution Systems Classroom	30 minutes
Module 2 - Water Supply Operations Classroom	15 minutes
Drill 2.1 – Maximizing Water Flow	1 hour
Drill 2.2 – Hydrant Connection	1 hour
Drill 2.3 – Hydrant Changeover	1 hour
Module 3 - Available Water Supply Classroom	30 minutes
Drill 3.1 – Available Water	45 minutes
Additional Practice	3 hours

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