April 2002 Revised October 2007

COURSE OUTLINE

Fire Technology 119 Fire Academy IV

I. Catalog Statement

Fire Technology 119 is designed to train students in the theory and practice of fire fighting technology. Topics include urban search and rescue operation, rescue systems, trench rescue operations, the incident command system, and hazardous materials including weapons of mass destruction. The course also provides students with live fire exercises in flammable liquids, compressed gases, aircraft rescue firefighting, flashover recognition and survival, and advanced structural firefighting techniques. Multi-company fire ground operations, including truck and engine company operations are included.

This course together with Fire Technology 116, Fire Academy I, Fire 117, Fire Academy II, and Fire 118, Fire Academy III, meets the State Board of Fire Services training requirements for Firefighter I certification. Experience requirements will still need to be met prior to application for Firefighter I certification.

Units – 12.0 Lecture Hours – 9.0 Total Laboratory Hours – 11.0 (Faculty Laboratory Hours 12.0 + Student Laboratory Hours 0 = 12.0 Total Laboratory Hours)

Prerequisite: Fire Technology 118

II. Course Entry Expectations

Skills Expectations: Reading 5; Writing 5; Listening/Speaking 5; Math 3

Prior to enrolling in the course, the student should be able to:

- 1. select appropriate ventilation techniques and equipment;
- 2. explain various techniques of rescue and forcible entry;
- 3. demonstrate the operations of rapid intervention companies;
- 4. demonstrate techniques of vehicle extrication;
- 5. demonstrate techniques for rescue emergencies;
- 6. select appropriate tools and equipment for rescue;
- 7. demonstrate the techniques for effective river and flood rescue operations;
- 8. identify confined space rescue situations and demonstrate the basic confined space rescue techniques;
- 9. demonstrate various techniques used in wild land fire fighting.

III. Course Exit Standards

Upon successful completion of the required coursework, the student will be able to:

- 1. explain techniques for flashover survival;
- 2. demonstrate techniques of structural fire fighting;
- 3. demonstrate techniques of compressed gas and flammable liquid fire fighting;
- 4. operate in multiple company evolutions;
- 5. identify hazardous materials incidents including those that involved weapons of mass destruction
- 6. employ trench rescue equipment, tool, and practical incident stabilization;
- 7. use various rescue systems such as moving heavy objects, building shoring, and setting up rope rescue systems;
- 8. demonstrate techniques used to rescue persons from moving water
- 9. demonstrate the ability to work as a member of a team to perform fire ground multi-company operations

IV. Course Content

A.	River and Flood Rescue (OSFM FSTEP – 24 hours	24 hours
B.	Trench Rescue Operational (OSFM FSTEP TRO – 18 hours)	18 hours
C.	Flashover recognition and survival (FSTEP FC2 – 18 hours)	18 hours
D.	Structural fire fighting (FSTEP FC3 – 26 hours)	26 hours
E.	Multi-Company Evolutions	42 hours
F.	Compressed gas and flammable liquids (FSTEP FC4 – 18 hours)	18 hours
G.	Hazardous Materials First Responder (FFI Unit X – 28 hours)	26 hours
H.	Weapons of Mass Destruction (CSTI – 10 hours)	10 hours
I.	Wild land firefighting (S-190, FSTEP FC6, FFI Unit T - 29.75 hrs)	29.5 hours
J.	Confined space rescue awareness (FFI Unit W, FSTEP CSRA – 10 hours)	10 hours
K.	Fitness and Conditioning	22 hours
L.	Testing	76.5 hours

V. Methods of Presentation

The following instructional methodologies may be used in the course:

- 1. lecture and demonstration;
- 2. drill ground demonstration and practice;
- 3. videos;
- 4. multimedia presentations.

VI. Assignments and Methods of Evaluation

- 1. Written assignments (gig reports, papers, etc);
- 2. Manipulative skills demonstrations / Manipulative Final Exam / Skills Testing;
- 3. Evaluation of student projects / reports;
- 4. In-class written tests and one written block examination;
- 5. Uniform Inspections;
- 6. Notebook Inspections;
- 7. Code of conduct evaluations / points system.

VII. Textbooks

International Association of Fire Chiefs, National Fire Protection Association.

Fundamentals of Firefighter Skills.

Sudbury, Massachusetts: Jones and Bartlett Publishers, 2004.

10th Grade Textbook Reading Level. ISBN: 0763734543.