

# University of Illinois Fire Service Institute

## Course Syllabus

**Course Title:** Basic Operations and Advanced Technician Firefighter - Academy

**Course Duration:** 370 hours

**Program:** Firefighting

**Course Prerequisites:** None

**Required for IFSI Course Completion:**

- **Opioids Course**
- **Resiliency Course**
- **CPR/Basic First Aid Course**
- **NIMS 100, 200, 700 Course**
- **Courage to be Safe Course**
- **Traffic Incident Management Course**
- **FSVO-Fire Service Vehicle Operators Course**
- **Liquid Petroleum Gas (Propane) Course**

\*Hazmat Awareness/Operations available AFTER course delivery.

### **Course Description:**

The Basic Firefighter / NFPA Firefighter I Academy is designed to give new firefighters the practical and cognitive training needed to operate safely and effectively on the fireground. The Academy exceeds the requirements outlined by the Illinois Office of the State Fire Marshal for entry-level firefighter training.

Academy focuses on an intense hands-on approach to firefighter, which promotes both skill competency and an understanding of the fireground.

Students complete numerous fireground-speed evolutions, and rolling responses, which encourage them to apply their skills to a variety of scenarios.

In addition to the basic skills that are taught, firefighters are taught how to thrive in their profession. This is accomplished through health and wellness education from a holistic standpoint that has a focus on physical, as well as mental health and healthy lifestyles for firefighters.

### **Course Requirements and/or Recommendations:**

Pre-Course Work – Read documents online.

Course Work – Satisfactory completion of all hands-on skills evaluations

Passing cumulative score of at least 70%.

Academic component weights are as follows:

Quizzes: 10% of final grade

Workbook: 20% of final grade

Mid-term: 30% of final grade

Final: 40% of final grade

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## Required Textbook:

*Fundamentals of Firefighter Skills*, Fifth Edition, J&B.

Textbook is provided to the student.

## Course Policies:

**Attendance Policy:** IFSI requires students to attend (100%) or make up all course content that leads to certification. Students are expected to attend on time and to remain in class for the duration of the course. Students **MUST** COMPLETE all portions of a certification course, both classroom and practical, to be eligible to receive their certification.

If a student misses any portion of class with an accumulated absence of 20% or less of scheduled class time, it will be the student's responsibility to arrange the make-up of the missed course content with the instructor(s) or program manager. The student must make up the specific course content that s/he missed, not just the hours. Make-ups are limited to 20% of scheduled class time. Make-ups must be documented on the class roster. If a student's absence is greater than 20% refer to "True Emergencies" section of the IFSI Examination Policy.

**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.

**Grading Policy:** Decisions regarding certificates of course completion shall be made solely by the lead instructor of the course. All grading of exams shall be conducted by the Curriculum/Testing Office. All grading of practical exercises shall be based upon the standards set by the regulatory agency referenced in the course material and IFSI.

**Retesting:** If a student fails to pass an exam, retesting takes place on set dates at regional sites across the state. More information is provided in the course completion e-mail and on the IFSI website.

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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 alternative time and place where the special accommodations can be made.

**Evaluation Strategy:** Students will be evaluated with a mid-term and end of course exams. In addition, quizzes will be delivered at least weekly and performance evaluation checklists will be administered at various times during weeks 2-7.

## Course Content:

### Week: 1

Title: Academy Orientation

Terminal Learning Objective:

At the conclusion of this module, the student will identify the expected duties of a candidate during the Academy.

Title: The Fire Service

Terminal Learning Objective:

1. At the conclusion of this module, the student will describe the organization and structure of a fire department.

Title: Firefighter Health & Safety

Terminal Learning Objective:

2. At the conclusion of this module, the student will utilize healthy and safe practices and safety equipment while operating as a Firefighter I.

Title: Personal Protective Equipment

Terminal Learning Objective:

3. At the conclusion of this module, the student will utilize fire service personal protective equipment and self-contained breathing apparatus.

Title: Fire Hose, Fire Appliances and Tools, Nozzles

Terminal Learning Objective:

11. At the conclusion of this module, the student will be able to utilize fire hose and associated equipment to produce effective fire streams.

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Title: Supply Line and Attack Line Evolutions

Terminal Learning Objective:

13. At the conclusion of this module, the student will be able to utilize supply lines and attack lines to complete an assignment on an emergency scene.

Title: Fire Behavior

Terminal Learning Objective:

5. At the conclusion of this module, the student will describe the impacts that fire behavior has on the duties of the Firefighter I.

Title: Water Supply Systems

Terminal Learning Objective:

10. At the conclusion of this module, the student will establish a water supply at an emergency scene.

**Opioid awareness:** An online, on-demand 30-minute course is required and is offered concurrently with each course delivery. (Opens day 2 of week 1, and is due on day 5 of week 1)

**NIMS 100, 200, and 700:** Online courses open day 5 of week 1.

## Week: 2

Title: Firefighter Rehabilitation

Terminal Learning Objective:

20. At the conclusion of this module, the student will explain the purpose of firefighter rehabilitation.

Title: Fire Service Ladders

Terminal Learning Objective:

12. At the conclusion of this module, the student will utilize ground ladders to complete an assignment on an emergency scene.

Title: Firefighter Tools and Equipment

Terminal Learning Objective:

7. At the conclusion of this module, the student will identify, operate, clean, and maintain fire service tools and equipment.

Title: Forcible Entry

Terminal Learning Objective:

15. At the conclusion of this module, the student will force entry into a structure through various openings.

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Title: Portable Fire Extinguishers

Terminal Learning Objective:

9. At the conclusion of this module, the student will utilize portable fire extinguishers to suppress an incipient fire.

Title: Fire Suppression

Terminal Learning Objective:

14. At the conclusion of this module, the student will utilize a variety of methods to suppress fire.

Fire Department Organization

**NIMS 100, 200, and 700:** Courses are due Day 9 – Thursday (week 2)

**Traffic Incident Management:** Open Day 10 - Friday

**Week: 3**

Title: Search and Rescue

Terminal Learning Objective:

17. At the conclusion of this module, the student will perform search and rescue at the scene of a structure fire.

Title: Ventilation

Terminal Learning Objective:

16. At the conclusion of this module, the student will be able to perform ventilation operations at the scene of a structure fire.

Title: Ropes and Knots

Terminal Learning Objective:

8. At the conclusion of this module, the student will utilize fire service ropes for various emergency scene tasks.

Title: Wildland and Ground Cover Fires

Terminal Learning Objective:

21. At the conclusion of this module, the student will demonstrate a basic understanding of the control of a ground cover fire.

**Traffic Incident Management:** Due day 14 – Thursday (week 3)

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## Week: 4

Title: Salvage and Overhaul

Terminal Learning Objective:

18. At the conclusion of this module, the student will conduct salvage and overhaul operations at an emergency scene.

Title: Building Construction

Terminal Learning Objective:

6. At the conclusion of this module, the student will identify building construction features and how fire and heat affect structural components and materials.

Title: Firefighter Survival

Terminal Learning Objective:

19. At the conclusion of this module, the student will utilize techniques that will protect themselves and crews at the scene of an emergency.

Title: Fire Service Communications

Terminal Learning Objective:

4. At the conclusion of this module, the student will operate fire department communication devices for routine and emergency situations.

Evidence Protection

Advanced Building Construction

Advanced Fire Suppression

Documentation

**FSVO:** Homework opens on Day 16 – Monday (week 4) and closes Thursday week 5, with state test on Friday, October 10<sup>th</sup>!

**Resiliency:** Opens Day 16 – Monday (week 4) and is due Day 20 – Friday (week 4)

**Mid Term Exam**

## Week: 5

Fire & Life Safety Initiatives & Preparedness

Fire Detection & Alarm Suppression Systems

Rescue Operations

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Fire Dynamics

**FSVO:** Closes Day 24 – Thursday, state test is on Day 25 – Friday (week 5).

**Courage to be Safe:** Opens Day 25 – Friday (week 5)

**Week: 6**

**Final Exam:** Test for FF 1 Day 26 – Monday (week 6)

**Courage to be Safe:** Course due Day 29 – Thursday (week 6)

CF drill, fire attack, force entry, search, and fire attack – Multiple days

Radios and TICs

FF II PEC Final Scenarios

**Week: 7**

**Final Exam:** Test for FF II Day 31 – Monday (week 7)

**CPR and First Aid:** Day 31 – Monday (week 7) and Day 33 – Wednesday (week 7)

**PT Final Test:** Day 32 – Tuesday (week 7)

Labor/Honor Guard lecture

**Team Building Exercise:** Day 33 – Wednesday (week 7)

LODD Presentation

Clean up and turn in Day 34

**Graduation:** Day 35 – Friday

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## Reference List:

NFPA 1010, Standard on Professional Qualifications for Firefighters, 2024 Edition

## Reading Assignments Index

### **Textbook:**

Fundamentals of Firefighter Skills, 5<sup>th</sup> Edition, J&B (2025)

Reading assignments are located in the textbook and this student manual.

### **B**

Building Construction, pgs. 199-242

### **C**

Candidate Rules & Regulations (Student Manual)

Cleaning Procedures (Student Manual)

### **D**

Dress Code Policy (Student Manual)

### **F**

Fire Behavior, pgs. 163-198

Firefighter Health & Safety, pgs. 33-60

Firefighter Rehabilitation, pgs. 869-888

Firefighter Tools and Equipment, pgs. 243-270

Fire Hose, Fire Appliances and Tools, Nozzles, pgs. 385-430

Fire Service Communications, pgs. 199-242

Fire Service Ladders, pgs. 431-486

Fire Suppression, pgs. 539-594

Firefighter Survival, pgs. 837-868

Forcible Entry, pgs. 595-688

### **P**

Personal Protective Equipment, pgs. 65-132

Portable Fire Extinguishers, pgs. 319-354

### **R**

Ropes and Knots, pgs. 271-318

### **S**

Salvage and Overhaul, pgs. 795-836

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Search and Rescue, pgs. 743-794

Standard Operating Guidelines (Student Manual)

Supply Line and Attack Line Evolutions, pgs. 487-538

**T**

The Fire Service, pgs. 3-32

**V**

Ventilation, pgs. 689-742

**W**

Water Supply Systems, pgs. 355-384

Wildland and Ground Cover Fires, pgs. 889-926