

University of Illinois Fire Service Institute

Course Syllabus

Course Title: Basic Operations Firefighter / NFPA Firefighter I Blended

Course Duration: 220 hours

Program: Fire Fighting

Course Prerequisites: None

Required for National Certification (ProBoard/IFSAC): Hazardous Materials Operations

Course Description:

The Basic Operations Firefighter course is designed to give firefighters the practical and cognitive training needed to operate safely and effectively on the fire ground. This course exceeds the requirements outlined by the Illinois Office of the State Fire Marshal for Basic Operations Firefighter training. Upon successful completion, the student will meet Illinois OSFM, ProBoard, and IFSAC NFPA Firefighter I requirements for certification. IFSI Basic Operations Firefighter focuses on a virtual classroom and hands-on approach to firefighting, which promotes both skill competency and an understanding of the fire ground. Students complete numerous evolutions, which encourage them to apply their skills to a variety of scenarios.

Course Requirements and/or Recommendations:

Pre–Course Work: None

Course Work:

- Attend and participate in one Virtual Learning Sessions (VLS) per week.
- Pass all assignments and quizzes.
- Attend all practical weekends and pass all practical evaluations.
- Pass final exam

Post–Course Work: None

How the Course Works:

Each week's content will be delivered online. Students will be required to complete a series of activities for each lesson which will include a reading assignment, Virtual Learning Session (VLS), homework assignment, and a weekly quiz. You can expect to spend approximately five (5) hours each week on this course plus sixteen (16) hours on practical sessions every other weekend.

All course content in the weekly modules and all weekend practicals must be completed to successfully complete the course.

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Mandatory In-Person Orientation – Saturday, July 27th, 2024

PPE (including SCBA and one spare bottle) is required at this session for inspection by IFSI staff. PPE must be within its NFPA 10-year life expectancy. All bottles must be marked with a valid hydrostatic test date (within the last five years). Students should bring the laptop or tablet they will be using for the online portion of the course.

The orientation will be hosted at each regional training site and will introduce students to the instructors and provide an overview of the 18-week program. Instructors will also confirm each student's access to the Learning Management System.

Course Schedule:

Each week begins on **Monday at 12:01 AM** and assignments are **due on or by 11:59 PM of the following Sunday**. Students are expected to keep up with each week's assignments. This course is online and allows students to make the best use of their time.

The schedule is in the first topic section of the course. The schedule may change as the class progresses or may not follow the subject areas as listed. Students should look for any changes or updates in the **Announcements** forum in the first topic section.

Virtual Learning Sessions (VLS):

Each week an instructor will conduct two VLS sessions. Sessions are scheduled on Monday and Tuesday evenings from 7:00-9:00 PM. Students only need to attend one of the VLS sessions. The **VLS sessions are mandatory**. The instructor will use these sessions to convey critical elements of each subject, and students can ask questions about the subject material. Student attendance and participation will be recorded as a grade.

VLS Make-up Assignment:

VLS sessions are required as part of this course. If the student misses both weekly Virtual Learning Sessions, he/she will need to make up that VLS session.

To make up a VLS session, the student will navigate to the Online VLS Library and select the archived session that he/she missed. The student will open the VLS Makeup Assignment, watch the entire recorded VLS, and write a three to four paragraph summary of what the instructor discussed.

Student Assignments (Homework Activity):

Students are required to complete a weekly Assignment ONLINE that will be graded by the Academic Instructor Mentor (AIM) assigned for his/her Company.

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Before starting this Course, we suggest that students set up a new file folder on their hard drive where they can save their Homework Assignments. This folder should be password protected to avoid any violations of the IFSI Academic Integrity Policy (found in the Online Classroom Guidebook). Because the Assignments are completed in an ONLINE form, students will need to copy/paste their Assignments to a Word Document (etc.) to save if they so choose. Once the course has been completed, the work can be printed and used as a reference for Basic Firefighting Operations.

Student Quizzes:

There is an untimed quiz to take at the end of each lesson. Students must achieve a 70% or higher and they can take the quiz more than one time. The student quiz will prepare the student for the final state certification exam.

Practical Weekends:

There are nine practical weekends. The practical weekends will consist of two approximately eight-hour days (Saturday and Sunday). **Attendance is required at every practical weekend.**

Written Examination:

Once students have completed all subject areas and passed the subject area quizzes, they will be eligible to take the written examination during the final weekend session.

Evaluation Strategy:

State and national certification require completing all the online coursework and passing the module quizzes, the hands-on practical activities, and the written examination.

Required Textbook:

Essentials of Fire Fighting, 7th Edition, Fire Protection Publications, 2018.

The textbook is provided to the student during orientation.

Course Policies:

Attendance Policy: IFSI requires students to attend (100%) or make up all course content that leads to certification. Students are expected to arrive 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 10% 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 10% of scheduled class time. Make-ups must

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be documented on the class roster. If a student's absence is greater than 10% refer to the "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 always be mindful of safety. Conduct judged to be unsafe shall be grounds for dismissal from the course.

Academic Integrity Policy: IFSI has the responsibility for maintaining academic integrity 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 Program Director of the course. All grading of exams shall be conducted by the Curriculum, Testing, and Certification (CTC) 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 email and on the IFSI website.

American Disabilities Act: As guaranteed in the Vocational Rehabilitation Act and 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.

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Course Content:

Week: 1

Title: Introduction to the Fire Service and Firefighter Safety

Terminal Learning Objectives:

At the conclusion of this module, the student will explain the structure of Fire Departments and the safe practices of a firefighter.

Title: Communications

Terminal Learning Objectives:

At the conclusion of this module, the student will explain the function of different communication systems used in the fire service.

Title: Apparatus

Terminal Learning Objective:

At the conclusion of this module, the student will identify the various types of fire department apparatus.

Week: 2

Title: Firefighter Personal Protective Equipment

Terminal Learning Objectives:

At the conclusion of this module, the student will use various types of protective equipment.

Title: Portable Extinguishers

Terminal Learning Objectives:

At the conclusion of this module, the student will explain the uses and operations of portable extinguishers.

Week: 3

Title: Fire Dynamics

Terminal Learning Objectives:

At the conclusion of this module, the student will explain principles of fire behavior, and how it may affect fireground procedures.

Week: 4

Title: Hose

Terminal Learning Objectives:

At the conclusion of this module, the student will explain features of fire hose and appliances.

Title: Hose Operations & Streams

Terminal Learning Objectives:

At the conclusion of this module, the student will be able to describe what it takes for an effective hose line operation.

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Title: Mobile Water Supply

Terminal Learning Objective:

At the conclusion of this module, the student will discuss considerations of a mobile water supply operation.

Title: Master Streams

Terminal Learning Objective:

At the conclusion of this module, the student will explain the basic operation of a master stream used on the fireground.

Week: 5

Title: Ropes and Knots

Terminal Learning Objectives:

At the conclusion of this module, the student will demonstrate the proper techniques of utilizing rope and tying knots.

Title: Ground Ladders

Terminal Learning Objectives:

At the conclusion of this module, the student will explain proper procedures for utilizing fire service ladders.

Week: 6

First-Term Review and Quiz

Week: 7

Title: Structural Search & Rescue

Terminal Learning Objectives:

At the conclusion of this module, the student will be able to identify the proper procedures to use when conducting a search and rescue operation.

Title: Rapid Intervention Team

Terminal Learning Objective:

At the conclusion of this module, the student will explain the fundamental functions of a Rapid Intervention Team (RIT)

Title: Firefighter Survival

Terminal Learning Objective:

At the conclusion of this module, the student will understand techniques to enhance firefighter survival.

Title: Monitoring

Terminal Learning Objective:

At the conclusion of this module, the student will describe atmospheric monitoring procedures.

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Week: 8

Title: Building Construction

Terminal Learning Objectives:

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

Week: 9

Title: Forcible Entry

Terminal Learning Objectives:

At the conclusion of this module, the student will explain principles and procedures of forcible entry.

Week: 10

Title: Fire Suppression

Terminal Learning Objectives:

At the conclusion of this module, the student will explain the principles of fire control.

Title: Vehicle Fires

Terminal Learning Objective:

At the conclusion of this module, the student will explain the basic tactics for extinguishing vehicle fires.

Title: Basement / Below Grade Fires

Terminal Learning Objective:

At the conclusion of this module, the student will explain basic strategies and tactics associated with extinguishing basement fires.

Title: Wildland Firefighting

Terminal Learning Objective:

At the conclusion of this module, the student will explain principles and procedures of fighting ground cover/wildland fires.

Week: 11

Title: Tactical Ventilation

Terminal Learning Objectives:

At the conclusion of this module, the student will explain the proper uses and safety considerations of ventilation.

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Week: 12

Title: Loss Control

Terminal Learning Objective:

At the conclusion of this module, the student will explain loss control on the fireground.

Week: 13

Title: Installed Systems

Terminal Learning Objective:

At the conclusion of this module, the student will identify various types of installed fire suppression systems.

Week: 14

Fire Service Vehicle Operator (Exam held on Practical Weekend 8)

Week: 15

Second-Term Review and Quiz

Week: 16

Opioid Awareness and Resiliency Awareness

Weeks: 17

Student Self-Study

Reference List:

Essentials of Fire Fighting and Fire Department Operations, 7th Edition,
Instructor Resource Kit, Fire Protection Publications, 2018

NFPA 1001, Standard on Professional Qualifications for Firefighters, 2019 Edition

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Course Schedule

Orientation

Introduction to Class Roll Call/ Introductions/ class layout/ online portion & system login/ practical weekends/ gear & SCBA checks/ rules	3 hours 30 minutes
Introduction to Facilities 1403 Walkthrough/ Apparatus Familiarization & Procedures	1 hour
Fill stations	1 hour
Classroom/ close out day/ release students	30 minutes

WEEK 1

Online Studies (5 hours)

Orientation and Firefighter Safety	Chapter 1
Communications	Chapter 2
Apparatus	

WEEK 2

Online Studies (5 hours)

PPE & SCBA	Chapter 5
Portable Extinguishers	Chapter 6

Practical Session #1

Saturday

Roll call	30 minutes
Questions/ Group assignments/ Weekend Plan/ PPE Skills	

All drills completed as a group 3 hours 30 minutes

- Drill 3.1** Introduction to PPE
- Drill 3.2** Over the head method
- Drill 3.7** Emergency Procedures
- Drill 3.3** Single Firefighter bottle change
- Drill 3.8** Two firefighter bottle change
- Drill 3.5** Coat swing method
- PEC 30a** Cleaning and inspecting
- Drill 9** Cascade System

Lunch

Three (3) stations same drill 1 hour

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Drill 3.4 Don SCBA in a seated position

Rotations 2 hours 30 minutes

Drill Basic SCBA Drills (**Site Based**)

Drill Fire Dynamics and Streams demo

Classroom/ close out day/ release students 30 minutes

Sunday

Roll call/ schedule for the day 30 minutes

Rotations 3 hours

Drill 25.3 Communications

Drill 20.6 Disentanglement

Drill 15.3 Utility services (Electric, Gas, Water)

Classroom/ close out day/ release students 30 minutes

WEEK 3

Online Studies (5 hours)

Fire Dynamics

Chapter 4

WEEK 4

Online Studies (5 hours)

Fire Hose

Chapter 12

Hose Operations and Hose Streams

Chapter 13

Mobile Water Supply

Master Streams

Practical Session # 2

Saturday

Roll call

Questions/ Group assignments/ Weekend Plan/ PPE Skills 30 minutes

Three (3) rotations 3 hours 30 minutes

Drill 7.1 Hose Rolls

Drill 7.2 Coupling and Uncoupling

Drill 7.6 Replacing Hose Lines

Lunch

Group

Drill 7.4 Flat, Accordion, Minuteman, Horseshoe 3 hours 30 minutes

Classroom/ close out day/ release students 30 minutes

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Sunday

Three (3) rotations 3 hours 30 minutes
Drill 24.1 Master Streams
Drill 15.1 Advancing and Flowing
Drill 8 Long Lead Outs

Lunch

Rotation 4 hours
Drill 15.2 Stream Application
Drill 18.1 Foam
Drill 8.6 Advancing a 1 3/4 attack line
Drill 8.9 Line up a Ladder

Classroom/ close out day/ release students 30 minutes

Three (3) stations cover all drills at each station 1 hour
Drill 14.1 Dry Chemical Extinguisher
Drill 14.1 Extinguisher Charging & Maintenance
Drill 14.2 Pump Can and APW

WEEK 5

Online Studies (5 hours)

Ropes and Knots Chapter 7
Ground Ladders Chapter 8

WEEK 6

Online Studies (2.5 hours)

Review Week and
First Term Quiz

Practical Session # 3

Saturday

Roll call 30 minutes
Questions/ Group assignments/ Weekend Plan/ PPE Skills

Group 3 hours
Drill 13.1 Knots

Lunch

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Drills 3 hours
Drill 13.2 Hoisting Tools and Equipment
Drill 13.3 Hoisting a Line Charged/Uncharged

Classroom/ close out day/ release students 30 minutes

Sunday

Two (2) stations Drills 2 and 3 run as one station 3 hours
Drill 9.1 Ladder Carries
Drill 9.2 Ladder Raises
Drill 9.3 Tying a Halyard

Lunch

Three (3) rotations 3 hours
Drill 9.4 Climbing Ladders
Drill 9.5 Exiting off Ladders
Drill 9.6 Deploying a Roof Ladder

Classroom/ close out day/ release students 30 minutes

WEEK 7

Online Studies (5 hours)

Structural Search and Rescue Chapter 10
Rapid Intervention Team
Firefighter Survival
Monitoring

WEEK 8

Online Studies (5 hours)

Building Construction Chapter 3

Practical Session # 4

Saturday

Roll Call 30 minute

Questions/ Group assignments/ Weekend Plan/ PPE Skills

Three (3) stations same drill 1 hour

Drill 8.2 Hydrant Connections

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Three (3) stations same drill		3 hours
Drill 8.12 Forward Lays		
Drill 8.13 Reverse Lays		
Lunch		
Group		1 hour
Drill 8.3 Drafting and Porta Tank Operations		
Three (3) rotations Drill 12.1 and 12.3 is one station		2 hours 30 minutes
Drill 12.1 Forcible Entry Application		
Drill 12.3 Inward & Outward Swinging Doors		
Classroom/ close out day/ release students		30 minutes
	Sunday	
Three (3) rotations		2 hours
Drill 12.2 Padlock, Pipe, Chain		
Drill 12.5 Cut Rebar		
Drill 12.6 Through the Lock, Rabbit Tool, Lock Box		
Two rotations		2 hours
Drill 10.2 Ventilation		
Drill 10.1 Ventilation Walk Through		
PEC 10.3 Horizontal Ventilation		
Lunch		
Three (3) rotations		3 hours
Drill 10.5 Chopping Prop hand tools		
Drill 10.4 Flat Roof Prop Hand tools		
Drill 10.3 Pitch Roof Prop hand tools		
Classroom/ close out day/ release students		30 minutes
	WEEK 9	
Forcible Entry	Online Studies (5 hours)	Chapter 9
	WEEK 10	
Fire Suppression Vehicle Fires	Online Studies (5 hours)	Chapter 14

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Basement/Below Grade Fires
Wildland Firefighting

Practical Session # 5

Saturday

Roll call	30 minutes
Questions/ Group assignments/ Weekend Plan/ PPE Skills	
Two (2) rotations	2 hours
Drill 10.6 Pitched Roof Prop saw	
Drill 10.7 Flat Roof Prop saw	
Group	
Drill 11.2 Civilian Drags and Carries	1 hour 30 minutes
Lunch	
Drill 11.2 Civilian Drags and Carries (Continued)	1 hour 30 minutes
Three (3) rotations	
Drill 11.3 Civilian Rescue Stairs & Ladders	1 hour
Scenario – Site Scenario (Interior Attack)	1 hour
Classroom/ close out day/ release students	30 minutes

Sunday

Continue Site Scenario (Interior Attack)	2 hours
Drill 17.1 Basement Fire	2 hours
Lunch	
LP Burn	3 hours
Classroom/ close out day/ release students	30 minutes

WEEK 11

Online Studies (5 hours)

Tactical Ventilation	Chapter 11
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Week 12

Online Studies (5 hours)

Overhaul, Property Conservation, Scene Preservation

Chapter 15

Practical Weekend # 6

Saturday

Roll call

30 minutes

Questions/ Group assignments/ Weekend Plan/ PPE Skills

Three (3) rotations

2 hours

Drill 28.1 Firing Devices & Equipment Familiarization

Drill 28.2 Cutting a line

Drill 28.3 Extinguishing Techniques

Three (3) rotations

2 hours

Drill 22.2 Water Chute, Catch all

Drill 22.1 Salvage Cover Roll, Fold, and Deployment

Drill 29.1 Monitoring

Lunch

Three (3) rotations

1 hour 30 minutes

Drill 26.1 Cause and Origin

Drill 19.1 Sprinkler Head

PEC 19.2 Operating a Main Control Valve

Group

2 hours

Drill 20.4 Evacuation - Emergency Egress

Classroom/ close out day/ release students

30 minutes

Sunday

Drills

3 hours

Drill 21.1 Approaching a Downed FF

Drill 21.3 RIT Pack Operations

Drill 21.2 Firefighter Drags

Drill 21.4 Moving FF up and Down Stairs

Classroom/ close out day/ release students

30 minutes

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WEEK 13

Online Studies (5 hours)

Fire Protection Systems

Chapter 22

Week 14

Online Studies (6 hours)

Fire Service Vehicle Operator

Practical Weekend # 7

Saturday

Roll call

30 minutes

Questions/ Group assignments/ Weekend Plan/ PPE Skills

Assigned PECs

3 hours 30 minutes

Lunch

Assigned PECs

3 hours 30 minutes

Classroom/ close out day/ release students

30 minutes

Sunday

Assigned PECs

3 hours 30 minutes

Lunch

Assigned PECs

3 hours 30 minutes

Classroom/ close out day/ release students

WEEK 15

Online Studies (2.5 hours)

Second-Term Review and Quiz

WEEK 16

Online Studies (5 hours)

Opioid Awareness and Resiliency Awareness

Practical Weekend # 8

Saturday

Roll call

30 minutes

Questions/ Group assignments/ Weekend Plan/ PPE Skills

PEC/Scenario

3 hours 30 minutes

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Lunch

PEC/Scenario 3 hours 30 minutes

Classroom/ close out day/ release students 30 minutes

Sunday

PEC/Scenario 3 hours 45 minutes

PEC/Scenario 3 hours 45 minutes

Classroom/ close out day/ release students 30 minutes

Weeks 17 Online Studies

Self-Study

Chapters 1-16

Practical Weekend # 9

Saturday

Roll call 30 minutes

Questions/ Group assignments/ Weekend Plan/ PPE Skills

Scenarios and Runs 7 hours 30 minutes

Sunday

Final Exam and site clean-up 4 hours

Lunch

Graduation 4 hours

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Illinois Administrative Code Title 41 § 141.301

Amended at 47 Ill. Reg. 424, effective January 1, 2023

Section 141.301 - Basic Operations Firefighter

Prerequisites

- 1) Engagement as Illinois Fire Protection Personnel, as attested to by the employing Fire Chief of the individual seeking Certification.
- 2) SUCCESSFUL COMPLETION of a Basic Operations Firefighter Course consisting of a minimum of 180 instructional hours. *** completed during the BOF BLENDED Course**
- 3) PASSAGE of the State Written and State Practical Examinations. *** completed during the BOF BLENDED Course**
- 4) COMPLETION of the classroom portion for Fire Service Vehicle Operator Certification. (IFSI has two ways of attaining. Available ONLINE, and in-person through Cornerstone. Course will be offered Online to run concurrently with BOF Blended). *** Students must complete written end-of-course examination if taken through IFSI to achieve classroom course completion.**
- 5) COMPLETION of certification requirements for Hazardous Materials Operations. (IN-PERSON Course available through IFSI to run after completion of BOF Blended). ***Students may also complete in-person courses through IFSI, offered throughout the state.**

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- 6) COMPLETION of a CPR/Basic First Aid course. ** Course available through IFSI.*
- 7) COMPLETION of NIMS 100 and 700 courses. ** Courses available through IFSI.* (Can be completed on the FEMA web site).
- 8) COMPLETION of the Courage to be Safe. ** Course available through IFSI.* (Can be completed on the NFFF Fire Hero web site.)
- 9) Familiarity with the signs and symptoms of mental illness, mental health and resiliency, and applicable resources to manage such situations. ** completed with Resiliency Awareness module during the BOF Blended Course.*
- 10) Ability to identify the signs and symptoms of substance abuse, particularly opioids, and a familiarity with applicable resources to manage such situations. ** completed with Opioid Awareness module during the BOF Blended Course.*
- 11) Application for Certification.