



**A Course Delivery Formats:**

- Online Interactive Course
- Online Streamed Video
- DVD

**Additional Materials:** Instructor’s PowerPoint, Question Files

When it comes to mastering the basics for certification or refresher training, you need the Essentials of Fire Fighting series. Each title in this 33 volume series is instructionally designed to teach current Firefighter I & II skills and prerequisite knowledge. Simplify technical material and reinforce your training objectives through the, *seeing is believing* of these training programs.

Teaches to – **NFPA 1001: Standard for Fire Fighter Professional Qualifications**

## Firefighter I

### 1. Firefighter Safety: Part 1 Video time - 19:36

Presents an overview of fire department and firefighter responsibilities under NFPA 1500. Describes the Incident Command System, control zones at emergency response scenes and how to meet the physical demands of the job through fitness and wellness programs.

**Training Objectives:**

- |   |                                |
|---|--------------------------------|
| 1. Firefighter Responsibilities of NFPA 1500          | 4. The Incident Command System |
| 2. Maintaining Health & Fitness                       | 5. Control Zone                |
| 3. Safety Practices in the Fire Station & in Training |                                |

### 2. Firefighter Safety: Part 2 Video time – 24:13

Discusses standard operating procedures and the importance of teamwork. Describes accountability systems and on-scene rehabilitation and their importance to safety. Presents survival methods for firefighters who become disoriented or trapped in fires. Identifies safe procedures for riding fire apparatus, working on roadway emergency scenes, shutting off utilities at an emergency scene and responding to electrical emergencies.

**Training Objectives:**

- |   |  |
|---|--|
| 1. Safety in Standard Operating Procedures & Teamwork | 4. Riding in Vehicles                  |
| 2. Accountability Systems & On-Scene Rehabilitation   | 5. Working on Roadway Emergency Scenes |
| 3. Surviving Disorientation or Entrapment in a Fire   | 6. How to Shut off Utilities           |
|   | 7. Safety at Electrical Emergencies    |

### **3. Fire Behavior** Video time – 24:25

Describes the science of fire and combustion, the Fire Tetrahedron, states of fuel, pyrolysis and vaporization. Identifies types of heat energy, methods of heat transfer, the stages of compartment fire development, the products of combustion, factors in fire development and dangerous fire conditions for firefighters.

#### **Training Objectives:**

- |   |   |
|---|---|
| 1. Fire & Combustion                              | 6. Stages of Compartment Fire Development |
| 2. Oxygen & Oxidizing Agents                      | 7. The Products of Combustion             |
| 3. Fuel: Pyrolysis & Vaporization                 | 8. Factors in Fire Development            |
| 4. Heat Energy & Self-Sustained Chemical Reaction | 9. Special Fire Conditions                |
| 5. Three Methods of Heat Transfer                 |   |

### **4. SCBA 1: Introduction** Video time – 25:38

Presents the functions of each component of the SCBA system, safety features of various types of SCBA, limitations of SCBA and hazardous environments that require respiratory protection.

#### **Training Objectives:**

- |  |                                       |
|--|---------------------------------------|
| 1. SCBA Types & Components               | 5. SCBA Safety Precautions & Features |
| 2. The Harness & Air-Cylinder Assemblies | 6. Hazardous Atmospheres              |
| 3. The Regulator Assembly                | 7. SCBA Limitations                   |
| 4. The Facepiece Assembly                |                                       |

### **5. SCBA 2: Use & Maintenance** Video time – 24:29

Demonstrates correct SCBA donning and doffing techniques, inspection and care procedures, how to change cylinders at an emergency scene and safety precautions and rules for using SCBA in emergency situations.

#### **Training Objectives:**

- |   |                                       |
|---|---------------------------------------|
| 1. Donning Using the Over-the-Head Method | 5. Doffing Techniques                 |
| 2. Donning Using the Coat Method          | 6. Inspection & Care Procedures       |
| 3. Donning a Mounted SCBA                 | 7. Changing Cylinders                 |
| 4. Donning the Facepiece                  | 8. SCBA Safety & Emergency Procedures |

### **6. Personal Protective Clothing** Video time – 25:05

Lists the elements of the complete protective ensemble worn by firefighters and describes the functions and specifications for each element of personal protective clothing. Describes special clothing situations, firefighter responsibilities for the care and maintenance of turnout gear and safety requirements for work uniforms and safety shoes.

#### **Training Objectives:**

- |                                    |                                    |
|------------------------------------|------------------------------------|
| 1. The Protective Ensemble         | 5. Special Clothing Situations     |
| 2. Hoods, Helmets & Eye Protection | 6. Turnout Gear Care & Maintenance |
| 3. Protective Coats & Pants        | 7. Work Uniforms & Safety Shoes    |
| 4. Gloves & Boots                  |                                    |

## **7. Portable Extinguishers**      Video time – 25:09

Designed to be used in public education programs as well as fire service training. Presents the classification and rating system used for extinguishers, types of hand-held extinguishers and how to select the correct extinguisher for a fire. Presents steps for operating portable extinguishers and demonstrates how to extinguish fires using the most common types of extinguishers. Discusses extinguisher maintenance and demonstrates extinguisher inspection.

### **Training Objectives:**

1. Fire Extinguisher Classification & Rating System
2. Types of Extinguishers
3. Basic Steps for Operating Fire Extinguishers
4. Stored-Pressure Water & Foam Extinguishers
5. Carbon Dioxide Extinguishers
6. Dry Chemical Extinguishers
7. Dry Powder Extinguishers
8. Fire Extinguisher Maintenance & Inspections

## **8. Ropes & Knots**      Video time – 26:43

Presents types, ratings and uses for fire service rope. Describes rope materials and construction, methods for inspecting rope and how to maintain and store rope. Demonstrates six basic knots used by firefighters and methods for hoisting equipment.

### **Training Objectives:**

1. Fire Service Rope Uses, Ratings & Types
2. Rope Materials & Construction
3. Inspecting Ropes
4. Maintaining & Storing Ropes
5. Knot-Tying Terminology/Tie a Bowline Knot
6. Tie Clove Hitch & Half Hitch Knots
7. Figure Eight on a Bight, Becket or Sheet Bend & Overhead Safety Knots
8. Using Rope to Hoist Equipment

## **9. Fire Control 1**      Video time – 18:28

Discusses basic fire control strategies and safety. Demonstrates how to advance a charged attack line into a structure fire, three methods of water application, master stream devices, basic fire suppression tactics for Class B fires, and techniques for suppressing vehicle fires and other exterior fires.

### **Training Objectives:**

1. Fire Control Strategies & Safety
2. Advancing an Attack Line
3. Three Methods of Water Application
4. Master Stream Devices
5. Class B Fires
6. Vehicle Fires
7. Refuse & Ground-Cover Fires

## 10. Ladders 1 Video time – 22:35

Defines basic ladder terminology and discusses ladder types and their uses on the fireground. Demonstrates ladder maintenance and inspections, how to select the correct ladder for the task and basics in ladder handling.

### Training Objectives:

- |  |   |
|--|---|
| 1. Ladder Terminology                                    | 4. Cleaning & Inspecting Ladders                    |
| 2. Ground Ladder Types & Uses                            | 5. Ladder Selection & Handling                      |
| 3. Ladder Construction Factors: Wood, Metal & Fiberglass | 6. Ladder Carries for One, Two & Three Firefighters |

## 11. Ladders 2 Video time – 18:11

Shows factors that affect ground-ladder placement, correct ladder placement to meet specific objectives and ladder raises for one, two and three firefighters. Demonstrates procedures for securing ladders, methods for climbing ladders and how to place a roof ladder.

### Training Objectives:

- |                                      |   |
|--------------------------------------|---|
| 1. Ladder Placement Factors          | 4. Ladder Raises for Two & Three Firefighters |
| 2. Raising & Positioning Ladders     | 5. Securing Ladders                           |
| 3. Ladder Raises for One Firefighter | 6. Climbing & Working From Ladders            |

## 12. Ventilation Basics & Horizontal Procedures Video time – 20:18

Describes the fundamentals of ventilation, including benefits and safety concerns, especially backdraft and flashover. Describes horizontal and vertical ventilation, positive pressure, negative pressure and hydraulic ventilation. Demonstrates horizontal ventilation procedures.

### Training Objectives:

- |  |   |
|--|---|
| 1. Benefits of Ventilation               | 4. Mechanical Ventilation: Positive & Negative Pressure |
| 2. Safety Factors: Backdraft & Flashover | 5. Mechanical Ventilation: Hydraulic                    |
| 3. Horizontal & Vertical Ventilation     |   |

## 13. Vertical Ventilation Video time – 25:49

Describes safety precautions for rooftop operations, roof types and construction and their impact in vertical ventilation. Shows how to determine the integrity of a roof system and basic indicators of roof collapse. Demonstrates methods for opening flat and pitched roofs using a variety of techniques.

### Training Objectives:

- |   |  |
|---|--|
| 1. Vertical Ventilation Principles & Rooftop Safety | 4. Opening Flat & Pitched Roofs: The Square or Rectangular Cut |
| 2. Types of Common Roof Construction                | 5. The Kerf, Triangular, Louvered & Trench Cuts                |
| 3. How To Determine Roof Integrity                  |  |

**14. Fire Hose Basics** Video time – 21:01

Shows fire hose construction, sizes, uses, basic hose maintenance and how to prevent hose damage. Identifies types of hose couplings, tools and appliances and demonstrates hose-roll methods.

**Training Objectives:**

- |                                      |                           |
|--------------------------------------|---------------------------|
| 1. Basic Information About Fire Hose | 4. Common Hose Appliances |
| 2. Fire Hose Maintenance             | 5. Common Hose Tools      |
| 3. Common Hose Couplings             | 6. Two Hose-Roll Methods  |

**15. Handling Hose** Video time – 25:05

Presents guidelines for loading hose and basic types of hose loads and finishes. Demonstrates common hoselays and methods for coupling and uncoupling hose.

**Training Objectives:**

- |                                       |  |
|---------------------------------------|--|
| 1. Basic Guidelines for Loading Hose  | 5. The Preconnected Flat Load & Minuteman Load |
| 2. The Accordion Hose Load            | 6. Three Basic Hose Lays                       |
| 3. The Horseshoe Load & the Flat Load | 7. Methods of Coupling & Uncoupling Hose       |
| 4. Hose Finishes                      |  |

**16. Advancing Hoselines** Video time – 23:52

Demonstrates how to pull and carry hose from a pumper to the fire location for a variety of hoseloads. Shows how to advance hose into structures and in stairways, from a standpipe and up a ladder and how to hoist hose. Describes how to extend a section of hose and how to retrieve a loose hoseline. Shows basic procedures for operating and controlling attack lines.

**Training Objectives:**

- |   |   |
|---|---|
| 1. Pulling & Carrying Preconnected Hose         | 5. Advancing Hose From a Standpipe            |
| 2. Advancing the Flat Load & the Horseshoe Load | 6. Advancing Hose Up a Ladder & Hoisting Hose |
| 3. Advancing Wyed Lines & the Working Line Drag | 7. How to Extend & Retrieve Hose              |
| 4. Advancing into a Structure & in Stairways    | 8. Operating & Controlling Attack Lines       |

**17. Fire Streams** Video time – 20:08

Identifies basic sizes and types of fire streams and the advantages and disadvantages of each type. Shows the use and maintenance of different types of nozzles. Defines “water hammer” and shows how to prevent it.

**Training Objectives:**

- |                              |                               |
|------------------------------|-------------------------------|
| 1. Fire Stream Sizes & Types | 4. Nozzle Types & Maintenance |
| 2. Solid Streams             | 5. Preventing Water Hammer    |
| 3. Fog (Spray) Streams       |                               |

**18. Forcible Entry** Video time - 19:51

Identifies forcible entry tools and how they should be used and maintained. Demonstrates procedures for through-the-lock entry on doors and forced entry through different types of doors and windows.

**Training Objectives:**

- |  |                                    |
|--|------------------------------------|
| 1. Tool Basics: Cutting Tools                                  | 3. Through-the-Lock Entry on Doors |
| 2. Prying, Pushing/Pulling, Striking, & Through-the-Lock Tools | 4. Forcing Entry Through Doors     |
|  | 5. Forcing Windows                 |

**19. Fire Detection, Alarms & Communications** Video time – 24:54

Presents methods and technologies for receiving alarms from the public. Shows the basic components of fire alarm and smoke detection systems. Presents an overview of the communications center and systems for dispatching fire department personnel to an emergency. Demonstrates good radio procedures and procedures for routine and emergency communications.

**Training Objectives:**

- |  |   |
|--|---|
| 1. Receiving & Reporting Alarms              | 4. Systems for Dispatching Firefighters |
| 2. Fire Detection & Alarm-Initiating Devices | 5. Basic Radio Procedures               |
| 3. The Communications Center                 | 6. Routine & Emergency Communications   |

**20. Lighting & Power Sources** Video time – 16:11

Describe types of lighting used in the fire service, auxiliary electrical equipment and power plants. Reviews safety considerations for using lighting and electrical equipment. Demonstrates how to set up electrical equipment, illuminate the emergency scene and maintenance of lighting and portable power plants.

**Training Objectives:**

- |                                   |   |
|-----------------------------------|---|
| 1. Lighting Equipment             | 4. Lighting & Electrical Equipment Safety |
| 2. Auxiliary Electrical Equipment | 5. Maintaining Portable Power Plants      |
| 3. Power Plants                   |   |

**21. Property Conservation: Salvage** Video time – 20:54

Presents the benefits of good salvage operations to the public and the fire department. Demonstrates the procedures for storing and deploying salvage covers, how to construct a water chute and a catchall using salvage covers and how to cover openings in the roof, windows and doors to protect the property from secondary damage.

**Training Objectives:**

- |   |   |
|---|---|
| 1. Benefits of Salvage Operations         | 4. Salvage Covers/Two-Firefighter Spreads |
| 2. Common Salvage Equipment               | 5. Water Chutes & Catch-Alls              |
| 3. Salvage Covers/One-Firefighter Spreads | 6. Covering Openings                      |

## 22. Property Conservation: Overhaul

Video time – 20:34

Presents indicators of structural instability and procedures for finding hidden fires. Describes procedures for opening concealed spaces, extinguishing hidden fires, preserving evidence and restoring the premises after a fire.

### Training Objectives:

1. Indicators of Structural Instability
2. Finding Hidden Fires
3. Opening Concealed Spaces & Extinguishing Hidden Fires
4. Preserving Evidence
5. Restoring the Premises

## 23. Sprinkler Systems

Video time – 26:49

Describes the effectiveness of sprinkler systems in saving life and property. Describes how sprinklers work and presents different types of sprinkler systems, components of sprinkler systems and the locations and appearance of control and operating valves. Describes considerations for responding to fires in protected buildings.

### Training Objectives:

1. How Sprinklers Work
2. Components of Sprinkler Systems
3. Sources of Water Supply
4. Control & Operating Valves
5. Sprinkler Types & Release Mechanisms
6. Wet-Pipe & Dry-Pipe Sprinkler Systems
7. Deluge, Pre-Action & Residential Sprinkler Systems
8. Responding to Fires in Protected Buildings

## Firefighter II

### 1. Building Construction

Video time – 23:16

Describes construction classifications used in most building codes and the role of fire resistance ratings. Describes the characteristics and fire behavior of five types of construction, defines building construction terms, the effects of fire and fire suppression activities on various building materials. Identifies the signs of dangerous building conditions, such as heavy fire loads and building collapse.

### Training Objectives:

1. Construction Classifications
2. The Five Types of Construction
3. Building Construction Terms
4. Fire Effects on Wood & Masonry
5. Fire Effects on Steel & Reinforced Concrete
6. Fire Effects on Gypsum & Glass
7. Dangerous Building Conditions

### 2. Rescue Operations

Video time – 27:09

Demonstrates how to move injured victims using carries and drags. Presents various types of rescue tools and the dangers of vehicle restraint systems. Demonstrates methods to extricate an entrapped victim from a vehicle.

### Training Objectives:

1. Moving Injured Victims
2. Rescue Tools
3. Dangers of Vehicle Components & Systems
4. Extricating a Victim From a Car

### 3. Advanced Ventilation Video time - 19:07

Presents the factors affecting ventilation decisions. Shows precautions against upsetting vertical ventilation, methods for ventilating a basement or windowless building and special ventilation considerations of high-rise buildings.

#### Training Objectives:

1. Ventilation Decision Factors
2. The Decision Sequence
3. Precautions for Vertical Ventilation
4. Basements & Windowless Buildings
5. High-Rise Buildings

### 4. Water Supply Video time – 21:08

Explains the components of water supplies for fire department operations, the operation of different types of hydrants and how to service test fire hose.

#### Training Objectives:

1. Components of a Water System
2. Parts of a Distribution System
3. Valves in Water Distribution Systems
4. Measuring Pressure
5. Operating Hydrants
6. Service Testing Fire Hose

### 5. Fire Control 2 Video time – 17:10

Demonstrates fire control tactics for difficult fires, including a large, exterior Class B fire, fires in upper levels of structures, fires below grade, fires in energized electrical equipment and fires involving a flammable gas cylinder.

#### Training Objectives:

1. Using Foam on a Large Class B Fire
2. Fires in Upper Levels
3. Fires Below Grade
4. Fires in Energized Electrical Equipment
5. Fire in a Flammable Gas Cylinder

### 6. Foam Fire Streams Video time – 25:33

Describes the fundamentals of foam, including how foam is generated, how it extinguishes or suppresses fires, types of foam proportioners, nozzles and other foam generating systems and various types of foam. Demonstrates how to assemble a foam fire stream using an eductor. Features troubleshooting tips for foam operations.

#### Training Objectives:

1. How Foam Extinguishes or Prevents Fire
2. How Foam is Generated
3. Foam Proportioners
4. Nozzles & Foam-Delivery Devices
5. Compressed-Air Foam Systems
6. Foam Types
7. Foam Fire Stream Assembly
8. Troubleshooting Tips



## 7. Fire Hose Appliances Video time – 16:23

Shows different types of fire hose appliances, including valves, valve devices, fittings and intake devices. Identifies the correct type of appliances to be used in specific fire ground operations. Demonstrates how to clean and maintain hose appliances.

### Training Objectives:

- |                               |                                |
|-------------------------------|--------------------------------|
| 1. Fire Hose Appliance Basics | 4. Fittings & Intake Devices   |
| 2. Valves                     | 5. Maintaining Hose Appliances |
| 3. Valve Devices              |                                |

## 8. Fire Origin & Cause Video time – 20:13

Presents the firefighter's role in fire cause determination from first alarm to final overhaul. Shows how to secure the fire scene pending an investigation and describes legal considerations of fire cause determination. Demonstrates how to safeguard evidence at the scene.

### Training Objectives:

- |   |                                      |
|---|--------------------------------------|
| 1. The Firefighter's Role in Fire Cause Determination | 5. Salvage & Overhaul Considerations |
| 2. Observations En Route                              | 6. Securing the Scene                |
| 3. Observations Upon Arrival                          | 7. Legal Considerations              |
| 4. Observations During Fire Fighting                  | 8. Preserving Evidence               |

## 9. Pre-Incident & Fire Safety Surveys Video time – 17:20

Presents the firefighter's role in fire prevention and preparedness. Demonstrates steps for conducting pre-incident surveys. Identifies common hazards found in occupancies and shows how to inspect fire protection systems for readiness.

### Training Objectives:

- |  |                                    |
|--|------------------------------------|
| 1. The Firefighter's Role in Prevention & Preparedness | 3. Common Fire Hazards             |
| 2. Conducting Pre-Incident Surveys                     | 4. Fire Protection Systems         |
|  | 5. Residential Fire Safety Surveys |

## 10. Fire Prevention & Public Education Video time – 22:29

Explains the importance of fire prevention and public education to the fire department and to the community. Demonstrates how to conduct a residential fire safety survey, describes common fire and life safety hazards in the home, how to present fire safety information to small groups and how to conduct station tours.

### Training Objectives:

- |   |                                       |
|---|---------------------------------------|
| 1. The Importance of Fire Prevention & Public Education | 4. Hazards in the Home, Part 2        |
| 2. Home Fire Safety Surveys                             | 5. Presenting Fire Safety Information |
| 3. Hazards in the Home, Part 1                          | 6. Conducting Station Tours           |

## NFPA Standards Matrix Essentials of Fire Fighting

### NFPA 1001: Standard for Fire Fighter Professional Qualifications, 2013

Vol. #	Firefighter I Title	NFPA 1001
101	Firefighter Safety: Part 1	5.1.1, 5.3.3
102	Firefighter Safety: Part 2	5.1.1, 5.3.2, 5.3.3, 5.3.5, 5.3.18
103	Fire Behavior	5.3.10, 5.3.11
104	SCBA 1: Introduction	5.3.1
105	SCBA 2: Use & Maintenance	5.3.1, 5.5.1
106	Personal Protective Clothing	5.3.2, 5.3.3
107	Portable Extinguishers	5.3.16
108	Ropes & Knots	5.1.1, 5.1.2, 5.5.1
109	Fire Control 1	5.3.7, 5.3.8, 5.3.10, 5.3.19, FFII 6.3.1
110	Ladders 1	5.3.6, 5.3.8, 5.3.10, 5.5.1
111	Ladders 2	5.3.6, 5.3.10
112	Ventilation Basics & Horizontal Procedures	5.3.11, 5.3.12
113	Vertical Ventilation	5.3.12
114	Fire Hose Basics	5.3.10, 5.5.2
115	Handling Hose	5.3.10, 5.3.15, 5.5.2
116	Advancing Hoselines	5.3.10
117	Fire Streams	5.3.10
118	Forcible Entry	5.3.4
119	Fire Detection, Alarms & Communications	5.2
120	Lighting & Power Sources	5.3.17, FFII 6.5.4
121	Property Conservation: Salvage	5.3.14
122	Property Conservation: Overhaul	5.3.13
123	Sprinkler Systems	5.3.14
Vol. #	Firefighter II Title	NFPA 1001
201	Building Construction	6.3.2
202	Rescue Operations	6.4.1, 6.4.2
203	Advanced Ventilation	6.3.2
204	Water Supply	6.5.3
205	Fire Control 2	6.3.1, 6.3.2, 6.3.3
206	Foam Fire Streams	6.3.1
207	Fire Hose Appliances	6.3.2
208	Fire Origin & Cause	6.3.4
209	Pre-Incident & Fire Safety Surveys	6.5.1, 6.5.3
210	Fire Prevention & Public Education	6.5.1, 6.5.2

(The NFPA sections cited are only a guide. Additional NFPA sections may apply.  
See compatible textbooks for an NFPA Correlation Guide.)