FIREFIGHTING BASICS: FIREFIGHTER I & II

Action Training Systems, Inc. has updated their most popular training product “Essentials of Firefighting: Firefighter I & II” to reflect the most recent changes in NFPA 1001, Standard for Fire Fighter Professional Qualifications. This 33-part training series now titled “Firefighting Basics: Firefighter I & II has had many revisions and additions, it continues to be an excellent companion to the fire service’s most popular and current edition textbooks.

Included in the revised titles is new research from the National Institute of Standards and Technology (NIST) on fire behavior and fire control including controlling flow paths and best practices in ventilation operations and tactics. There is now greater emphasis and demonstrations on oxygen control and coordinating fire ground activities.

The series also includes discussions on use of transitional attacks, new tactics for basement fires, the use of master streams for exposure control, and the use of air monitors for identifying hazardous atmospheres. Other expanded topics include information on response to ground-cover fires and recommended practices for response to Active Shooter/Hostile Event Response and the importance of post incident reporting.

There is updated or expanded information on responder wellness and mental health, such as the importance of fitness, recognizing and addressing PTSD, and on-the-job recommendations for limiting cancer risk. Additional firefighter safety concerns are presented including best practices for roadway response, training ground safety and updates for the use of SCBA on scene, monitoring air consumption, and the use of controlled breathing techniques.

All of the updated programs have been meticulously reviewed and validated by leading subject experts and reflect the most current recognized standards and best practices.

Each title features dynamic and engaging high-quality video and graphics, and accurately demonstrates and reinforces key training concepts. Action Training Systems training programs have been proven to significantly increase student’s competency and retention of information. For more information, please call or visit our website.

Train for Competency. Train for Safety. Train for Results.
Firefighting Basics: Firefighter I & II

When it comes to training firefighters for certification or recurrent training purposes, our updated 33-part video-based training series, Firefighting Basics: Firefighter I & II, includes everything you have come to trust and depend on from Action Training Systems.

All titles feature:

- Dynamic and engaging high-quality video that has been meticulously reviewed and validated by leading subject matter experts
- Instructionally designed and simplified technical material that reinforces training objectives
- Skills demonstrations and prerequisite knowledge that covers key training concepts

This series teaches to current NFPA 1001: Standard for Fire Fighter Professional Qualifications, and is an excellent teaching companion to popular textbooks and training manuals. Our videos are proven to significantly increase learner comprehension and the retention of information, making for a more competent responder.

**FIREFIGHTER I**

1. **Firefighter Safety: Part 1**  Video Runtime – 27:01

   Presents an overview of fire department and firefighter responsibilities under NFPA 1500, including how important health, fitness and mental wellness is to your safety, ways to limit your exposure to cancer-causing risks and other work place hazards, including tips for accident and injury prevention. Also reviewed is the use of the ICS system and how control zones help you to avoid or identify risks at an emergency scene or active shooter event.

   **Training Objectives:**
   1. Firefighter Responsibilities of NFPA 1500
   2. Firefighter Fitness, Health & Wellness
   3. Fire Station Safety & Training Safety
   4. The Incident Command System
   5. Hazard Control Zones
2. **Firefighter Safety: Part 2** Video Runtime – 24:11

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
2. Personnel Accountability Systems & On-Scene Rehabilitation
3. Disorientation or Entrapment Survival
4. Vehicle Passenger Safety
5. Roadway Safety
6. Utility Shut Off Procedures
7. Safety at Electrical Emergencies

3. **Fire Dynamics** Video Runtime – 27:02

Describes the science of fire and combustion, the fire tetrahedron, states of fuel, pyrolysis and vaporization. You will also learn to identify types of heat energy, methods of heat transfer, the stages of compartment fire development, the products of combustion, structure fire flow paths and factors in rapid fire development.

**Training Objectives:**
1. Fire & Combustion
2. Oxygen & Oxidizing Agents
3. Fuel: Pyrolysis & Vaporization
4. Heat Energy & Self-Sustained Chemical Reaction
5. Three Methods of Heat Transfer
6. Products of Combustion & Fire Development Factors
7. Stages of Compartment Fire Development
8. Structure Fire Flow Paths


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

**Training Objectives:**
1. Open-circuit SCBA & Components
2. The Harness & Air-Cylinder Assemblies
3. The Regulator Assembly
4. The Facepiece Assembly
5. SCBA Safety Features & Precautions
6. Hazardous Atmospheres
7. SCBA Limitations

5. **SCBA 2: Use & Maintenance** Video Runtime – 27:01

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

**Training Objectives:**
1. Donning Using the Over-the-Head Method
2. Donning Using the Coat Method
3. Donning a Mounted SCBA
4. Donning the Facepiece
5. Doffing Techniques
6. Inspection & Care Procedures
7. Changing & Filling Cylinders
8. SCBA Safety & Emergency Procedures
6. **Personal Protective Clothing**  Video Runtime – 27:36
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
2. Hoods, Helmets & Eye Protection
3. Protective Coats & Pants
4. Gloves & Boots
5. Special Clothing Situations
6. Turnout Gear Care & Maintenance
7. Work Uniforms & Safety Shoes

7. **Portable Extinguishers**  Video Runtime – 27:14
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 Portable 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. Extinguisher Inspection & Maintenance

8. **Ropes & Knots**  Video Runtime – 27:18
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 commonly used fire service knots and methods for hoisting equipment.

**Training Objectives:**
1. Fire Service Rope Uses, Ratings & Types
2. Rope Materials & Construction
3. Inspecting Ropes
4. Rope Maintenance & Storage
5. Knot-Tying Terminology & Tying Knots & Hitches
6. Hoisting methods with Ropes

9. **Fire Control 1**  Video Runtime – 23:50
Discusses basic fire control strategies and safety. Demonstrates how to advance a charged attack line into a structure fire, methods of water application, master stream devices, basic fire suppression tactics for Class B fires, and techniques for suppressing vehicle fires, exterior class A, and ground-cover fires.

**Training Objectives:**
1. Fire Control Strategies & Safety
2. Advancing an Attack Line
3. Methods of Water Application
4. Master Stream Devices
5. Class B Fires
6. Vehicle Fires
7. Exterior Class A & Ground-Cover Fires
10. **Ladders 1**  Video Runtime – 21:42  
Defines basic ground and aerial ladder terminology. Discusses ladder types, construction and uses on the fireground. Demonstrates ladder maintenance and inspections, and the basics in ladder handling.

**Training Objectives:**
1. Ground Ladder Terminology
2. Aerial Ladder Terminology
3. Ground Ladder Materials, Types & Uses
4. Maintenance: Cleaning & Inspecting Ladders
5. Ladder Selection & Safety
6. Ladder Carries for 1, 2, & 3 Firefighters

11. **Ladders 2**  Video Runtime – 18:56  
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
2. Raising & Positioning Ladders
3. 1- Firefighter Ladder Raises
4. 2 & 3 Firefighter Ladder Raises
5. Securing Ladders
6. Climbing & Working From Ladders

12. **Ventilation Basics & Horizontal Procedures**  Video Runtime – 23:06  
Describes the fundamentals of ventilation, including benefits and safety concerns, with a focus on horizontal ventilation techniques. Describes hazards of rapid fire development and the importance of coordinating ventilation activities with suppression operations. Also discussed is the use positive-pressure, negative-pressure and hydraulic ventilation.

**Training Objectives:**
1. Ventilation & Oxygen Control
2. Hazards of Rapid Fire Development
3. Natural Horizontal Ventilation Operations
4. Mechanical Ventilation: Positive & Negative
5. Mechanical Ventilation: Hydraulic

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
2. Types of Common Roof Construction
3. How To Determine Roof Integrity
4. Opening Flat & Pitched Roofs: The Square or Rectangular Cut
5. The Kerf, Triangular, Louvered & Trench Cuts

14. **Fire Hose Basics**  Video Runtime – 19:04  
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
2. Fire Hose Maintenance
3. Common Hose Couplings
4. Common Hose Appliances
5. Common Hose Tools
6. Two Hose-Roll Methods
15. Handling Hose Video Runtime – 22:19
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
2. The Accordion Hose Load
3. The Horseshoe Load & The Flat Load
4. Hose Finishes
5. The Preconnected Flat Load & Minuteman Load
6. Two Common Hose Lays
7. Methods of Coupling & Uncoupling Hose

16. Advancing Hoselines Video Runtime – 21:57
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
2. Advancing the Flat Load & the Horseshoe Load
3. Advancing Wyed Lines & Working Line Drag
4. Advancing into Structure & Stairways
5. Advancing Hose From a Standpipe
6. Advancing Hose Up a Ladder & Hoisting Hose
7. How to Extend & Retrieve Hose
8. Operating & Controlling Attack Lines

17. Fire Streams Video Runtime – 19:43
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
2. Solid Streams
3. Fog (Spray) Streams
4. Nozzle Types & Maintenance
5. Preventing Water Hammer

18. Forcible Entry Video Runtime – 19:56
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
2. Prying, Pushing/Pulling & Striking Tools
3. Through-the-Lock Entry on Doors
4. Forcing Entry Through Doors
5. Forcing Windows

19. Fire Detection, Alarms & Communications Video Runtime – 26:17
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
2. Fire Detection & Alarm-Initiating Devices
3. The Communications Center
4. Systems for Dispatching Firefighters
5. Basic Radio Procedures
6. Routine & Emergency Incident Communications

20. Lighting & Power Sources
Video Runtime – 18:29
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 & Lighting Equipment
2. Power Plants
3. Lighting & Electrical Equipment Safety
4. Maintaining Portable Power Plants

21. Property Conservation: Salvage
Video Runtime – 21:24
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
2. Common Salvage Equipment
3. Salvage Covers/One-Firefighter Spreads
4. Salvage Covers/Two-Firefighter Spreads
5. Water Chutes & Catch-Alls
6. Covering Openings

22. Property Conservation: Overhaul
Video Runtime – 20:35
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 Runtime – 27:01
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
1. **Building Construction** 

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**

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. Vehicle Extrication Procedures

3. **Advanced Ventilation**

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. A Decision-Making Sequence
3. Precautions for Vertical Ventilation
4. Basements & Windowless Buildings
5. High-Rise Buildings

4. **Water Supply**

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. Static & Mobile Water Supply
7. Service Testing Fire Hose

5. **Fire Control 2**

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. Strategies for Energized Electrical Fires (Class C)
5. Fire in a Flammable Gas Cylinder
6. Foam Fire Streams Video Runtime – 22:16
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. Generating & Proportioning Foam
3. Nozzles & Foam-Delivery Devices
4. Foam Types & Concentrates
5. Foam Fire Stream Assembly

7. Fire Hose Appliances Video Runtime – 14:57
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
2. Valves
3. Valve Devices
4. Fittings & Intake Devices
5. Maintaining Hose Appliances

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. Fire Cause Determination
2. Observations En Route & Upon Arrival
3. Salvage & Overhaul Considerations
4. Securing the Scene
5. Legal Considerations & Evidence Preservation

9. Pre-Incident & Fire Safety Surveys Video Runtime – TBD
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. Prevention & Preparedness
2. Conducting Pre-Incident Surveys
3. Common Fire Hazards
4. Fire Protection Systems

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. Community Risk Reduction Programs
2. Home Fire Safety Surveys
3. Hazards in the Home
4. Presenting Fire Safety Information
5. Conducting Station Tours
### NFPA 1001 Matrix
**Firefighting Basics: Firefighter I & II**

<table>
<thead>
<tr>
<th>Firefighter I Title</th>
<th>Training Objectives &amp; NFPA Standard</th>
</tr>
</thead>
</table>
| **101 Firefighter Safety: Part 1** | **Section 2: Firefighter Responsibilities of NFPA 1500**  
Describe components of NFPA 1500 (4.4.1)  
Describe firefighter responsibilities in NFPA 1500. (4.4.1)  
**Section 3: Firefighter Fitness, Health & Wellness**  
Describe the importance of fitness, health and wellness as it relates to firefighter safety and injury prevention. (4.4.1; 4.3.10)  
Describe ways to limit exposure to toxic chemicals on the fireground. (4.3.3)  
List signs and symptoms of stress. (4.4.1)  
**Section 4: Fire Station Safety & Training Safety**  
Describe fire station safety best practices. (4.4.1; 4.3.10)  
Describe the importance of using good safety procedures during training exercises. (4.4.1; 4.1.1)  
**Section 5: The Incident Command System**  
Describe the use of the Incident Command System at emergency incidents. (4.4.1; 5.1.5; 5.1.2; 5.3.2)  
**Section 6: Hazard Control Zones**  
Identify types of hazard control zones used at emergency scenes. (4.4.1; 4.3.3) |
| **102 Firefighter Safety: Part 2** | **Section 2: Standard Operating Procedures & Teamwork**  
Describe standard operating procedures and the importance of teamwork. (4.1.1; 4.1.2)  
**Section 3: Personnel Accountability Systems & On-Scene Rehabilitation**  
Describe accountability systems used for firefighter safety, and the use of on-scene rehabilitation areas. (4.2.4; 4.3.5)  
**Section 4: Disorientation or Entrapment Survival**  
Identify methods for survival for firefighters who |

In this title on “Firefighter Safety Part 1,” you will learn firefighter responsibilities of NFPA 1500, how important health, fitness and mental wellness is to your safety, ways to limit your exposure to cancer-causing risks and other workplace hazards, and tips for accident and injury prevention. Also reviewed is the use of the ICS system and how control zones help you to avoid or identify risks at an emergency scene or active shooter event.

In this title on “Firefighter Safety Part 2,” you will learn the importance of standard operating procedures, teamwork, accountability systems and on-scene rehabilitation for firefighter safety. You will
<table>
<thead>
<tr>
<th>Section 2: Fire &amp; Combustion</th>
<th>Describe the science of fire and combustion. (4.3.10; 4.3.11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 3: Oxygen &amp; Oxidizing Agents</td>
<td>Describe the component of oxygen and other oxidizing agents in the fire tetrahedron and their role in fire development. (4.3.11)</td>
</tr>
<tr>
<td>Section 4: Fuel: Pyrolysis &amp; Vaporization</td>
<td>Describe the fire tetrahedron component of fuel and the three states of fuel. (4.3.10; 4.3.11) Define pyrolysis and vaporization. (4.3.11)</td>
</tr>
<tr>
<td>Section 5: Heat Energy &amp; Self-Sustained Chemical Reaction</td>
<td>Describe the three types of heat energy and the role of a self-sustained chemical reaction in the fire tetrahedron. (4.3.4)</td>
</tr>
<tr>
<td>Section 6: Three Methods of Heat Transfer</td>
<td>Describe the three methods of heat transfer: Conduction, convection and radiation. (4.3.11)</td>
</tr>
<tr>
<td>Section 7: Products of Combustion &amp; Fire Development Factors</td>
<td>Describe the products of combustion and fire development factors. (4.3.11; 4.3.12)</td>
</tr>
<tr>
<td>Section 8: Stages of Compartment Fire Development</td>
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</tr>
</tbody>
</table>

103 Fire Dynamics

In this title on "Fire Dynamics," you will learn the science of fire and combustion, the fire tetrahedron, states of fuel, pyrolysis and vaporization. You will also learn to identify types of heat energy, methods of heat transfer, the stages of compartment fire development, the products of combustion, structure fire flow paths and factors in rapid fire development.
<table>
<thead>
<tr>
<th>Section 1: Introduction</th>
<th>Describe the stages of compartment fire development. (4.3.11)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 9: Structure Fire Flow Paths</td>
<td>Describe structure fire flow paths. (4.3.11)</td>
</tr>
<tr>
<td>Section 2: Open-circuit SCBA &amp; Components</td>
<td>Describe the most commonly used SCBA in the fire service. (4.1.1)</td>
</tr>
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<td></td>
<td>List the main components of positive-pressure SCBA. (4.3.1)</td>
</tr>
<tr>
<td>Section 3: The Harness &amp; Air-Cylinder Assemblies</td>
<td>Describe the features and functions of SCBA components, including the harness assembly and air-cylinder assembly. (4.3.1)</td>
</tr>
<tr>
<td>Section 4: The Regulator Assembly</td>
<td>Describe the regulator assembly. (4.3.1)</td>
</tr>
<tr>
<td>Section 5: The Facepiece Assembly</td>
<td>Describe the facepiece assembly. (4.3.1)</td>
</tr>
<tr>
<td>Section 6: SCBA Safety Features &amp; Precautions</td>
<td>Identify safety precautions and features of SCBA. (4.3.1)</td>
</tr>
<tr>
<td>Section 7: Hazardous Atmospheres: Part 1</td>
<td>Identify fire-related hazardous atmospheres which require SCBA protection. (4.3.1; 4.3.21)</td>
</tr>
<tr>
<td>Section 8: Hazardous Atmospheres: Part 2</td>
<td>Identify non-fire related hazardous atmospheres which require SCBA protection. (4.3.1)</td>
</tr>
<tr>
<td>Section 9: SCBA Limitations</td>
<td>Describe SCBA limitations as they relate to the wearer, the equipment, and the air supply. (4.3.1)</td>
</tr>
</tbody>
</table>

**104 SCBA 1: Introduction**

In this title, “SCBA 1: Introduction,” you will learn the functions of each component of the SCBA system, safety features and limitations of SCBA. Also presented is a review of the hazardous environments that require respiratory protection.

**105 SCBA 2: Use & Maintenance**

In this title on “SCBA 2: Use & Maintenance,” you will learn correct SCBA donning and doffing techniques, inspection and care procedures, how to change cylinders at an

**Section 2: Donning Using the Over-the-Head Method**
Demonstrate donning SCBA using the over-the-head method. (4.3.1)

**Section 3: Donning Using the Coat Method**
Demonstrate donning SCBA using the coat method. (4.3.1)

**Section 4: Donning a Mounted SCBA**
Demonstrate techniques for donning SCBA from a mounted position. (4.3.1)
Section 5: Donning the Facepiece
Demonstrate procedures for donning a facepiece with a mask-mounted regulator. (4.3.1)

Section 6: Doffing Techniques
Demonstrate doffing procedures for SCBA with a mask-mounted regulator. (4.3.1)

Section 7: Inspection & Care Procedures
List inspection and care procedures for SCBA. (4.5.1)

Section 8: Changing & Filling Cylinders
Demonstrate how to change SCBA cylinders at an emergency scene with two people and by yourself. (4.3.1)
Demonstrate how to fill cylinders. (4.3.1)

Section 9: SCBA Safety & Emergency Procedures
List SCBA safety precautions and emergency procedures during use. (4.1.1; 4.3.10)

Section 2: The Protective Ensemble
List the elements of the complete protective ensemble worn by firefighters. (4.1.1; 4.3.2; 4.3.3)

Section 3: Hoods, Helmets & Eye Protection
Describe functions and specifications for personal protective clothing including hoods, helmets and eye protection. (4.1.1; 4.3.2)

Section 4: Protective Coats & Pants
Describe functions and specifications for personal protective coats and pants. (4.1.1)

Section 5: Gloves & Boots
Describe functions and specifications for personal protective gloves and boots. (4.1.1)
Describe situations where special clothing or additional protection is required. (4.1.1)

Section 6: Special Clothing Situations
Describe your responsibilities for the care and maintenance of turnout gear. (4.1.2)

Section 7: Turnout Gear Care & Maintenance
Describe safety requirements for work uniforms and safety shoes. (4.1.1; 4.3.10)

Section 8: Work Uniforms & Safety Shoes
Describe safety requirements for work uniforms and
<table>
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<tr>
<th>107 Portable Extinguishers</th>
<th>safety shoes. (4.1.1; 4.3.10)</th>
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</thead>
<tbody>
<tr>
<td><strong>Section 2: Fire Extinguisher Classification &amp; Rating System</strong></td>
<td></td>
</tr>
<tr>
<td>Describe the classification and rating system used for portable extinguishers. (4.3.16)</td>
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<tr>
<td><strong>Section 3: Types of Portable Extinguishers</strong></td>
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</tr>
<tr>
<td>Describe different types of hand-held fire extinguishers. (4.3.16)</td>
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<tr>
<td><strong>Section 4: Basic Steps for Operating Fire Extinguishers</strong></td>
<td></td>
</tr>
<tr>
<td>Show the basic steps for operating portable extinguishers. (4.3.16)</td>
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</tr>
<tr>
<td><strong>Section 5: Using Stored-Pressure Water &amp; Foam Extinguishers</strong></td>
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</tr>
<tr>
<td>Describe basic steps for extinguishing fires using stored-pressure water and foam extinguishers. (4.3.16)</td>
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<td><strong>Section 6: Using a Carbon Dioxide Extinguisher</strong></td>
<td></td>
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<tr>
<td>Describe basic steps used to extinguish fires using carbon dioxide extinguishers. (4.3.16)</td>
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<tr>
<td><strong>Section 7: Using Dry Chemical Extinguishers</strong></td>
<td></td>
</tr>
<tr>
<td>Demonstrate steps for extinguishing fires using dry chemical extinguishers. (4.3.16)</td>
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<tr>
<td><strong>Section 8: Using Dry Powder Extinguishers</strong></td>
<td></td>
</tr>
<tr>
<td>Demonstrate steps for extinguishing fires using dry powder extinguishers. (4.3.16)</td>
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<tr>
<td><strong>Section 9: Extinguisher Inspection &amp; Maintenance</strong></td>
<td></td>
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<tr>
<td>Describe how to inspect extinguishers and extinguisher maintenance requirements. (4.3.16)</td>
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<table>
<thead>
<tr>
<th>108 Ropes &amp; Knots</th>
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<tbody>
<tr>
<td><strong>Section 2: Fire Service Rope Uses, Ratings &amp; Types</strong></td>
<td></td>
</tr>
<tr>
<td>Describe various types, ratings and uses for fire service rope. (4.3.20)</td>
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<tr>
<td><strong>Section 3: Rope Materials &amp; Construction</strong></td>
<td></td>
</tr>
<tr>
<td>Describe rope materials and rope construction. (4.3.20)</td>
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<tr>
<td><strong>Section 4: Inspecting Rope</strong></td>
<td></td>
</tr>
<tr>
<td>Describe methods for inspecting various types of rope. (4.3.20; 4.5.1)</td>
<td></td>
</tr>
</tbody>
</table>
109 Fire Control 1

In this title on “Fire Control 1,” you will learn about basic fire control strategies and safety. Including how to advance a charged attack line into a structure fire, methods of water application, master stream devices, basic fire suppression tactics for Class B fires, and techniques for suppressing vehicle, exterior class A and ground-cover fires.

| Section 2: Fire Control Strategies & Safety | Describe basic fire control strategies and safety precautions for structural fires. (4.3.10) |
| Section 3: Advancing an Attack Line | Describe basic precautions and procedures for advancing a charged attack line into a structure. (4.3.7; 4.3.10) |
| Section 4: Methods of Water Application | Identify the primary methods of water application in structural firefighting. (4.3.3; 4.3.8; 4.3.10) |
| Section 5: Master Stream Devices | Describe the use of master stream devices and their application in fire control. (4.3.7; 4.3.8; 4.3.10) |
| Section 6: Class B Fires | Describe basic fire suppression tactics for Class B fires. (4.3.8; 4.3.10; 4.3.13) |
| Section 7: Vehicle Fires | Describe basic precautions and techniques for suppressing vehicle fires. (4.3.7) |
| Section 8: Exterior Class A & Ground-Cover Fires | Describe basic precautions and procedures for extinguishing exterior class A and ground-cover fires. (4.3.19) |

110 Ladders: Part 1

In this title on “Ladders: Part 1,” you will learn basic ground and aerial ladder terminology.

| Section 2: Ground Ladder Terminology | Define basic fire service ladder terminology. (4.3.6) |
| Section 3: Aerial Ladder Terminology | Define aerial ladder terminology. (4.3.6; 4.3.12) |
| Section 4: Ground Ladder Materials, Types & Uses | Identify ground ladder types and uses. (4.3.6; 4.3.9; 4.3.11; 4.3.12) |
### 111 Ladders: Part 2

In this title “**Ladders: Part 2,**” you will learn factors that affect ground-ladder placement, correct ladder placement to meet specific objectives and ladder raises for one, two and three firefighters. You will learn procedures for securing ladders, methods for climbing ladders and working from ladders.

#### Section 2: Ladder Placement Factors
Describe factors that affect ground ladder placement. (4.3.6)

#### Section 3: Raising & Positioning Ladders
Describe how to raise and position ladders for specific objectives. (4.3.6; 4.3.9; 4.3.11; 4.3.12)

#### Section 4: 1-Firefighter Ladder Raises
Describe ladder-raising techniques for one firefighter. (4.3.6; 4.3.12)

#### Section 5: 2 & 3 Firefighter Ladder Raises
Describe ladder-raising procedures for two and three firefighters. (4.3.6; 4.3.11; 4.3.12)

#### Section 6: Securing Ladders
Describe procedures for securing ladders. (4.3.6)

#### Section 7: Climbing & Working From Ladders
Identify correct methods for climbing ladders and working from ladders. (4.3.9; 4.3.11; 4.3.12)

### 112 Ventilation Basics & Horizontal Procedures

In this title on “**Ventilation Basics & Horizontal Procedures,**” you will learn the fundamentals of ventilation, with a focus on horizontal ventilation techniques. You will learn about the hazards of rapid fire

#### Section 2: Ventilation & Oxygen Control
Describe ventilation tactics and oxygen control in compartment fires. (4.3.11; 4.3.12)

#### Section 3: Hazards of Rapid Fire Development
Describe the hazards of rapid fire development. (4.3.11; 4.3.12)

#### Section 4: Natural Horizontal Ventilation Operations
Describe natural horizontal ventilation operations. (4.3.11)

#### Section 5: Mechanical Ventilation: Positive &
### Vertical Ventilation

In this title on "**Vertical Ventilation Procedures,**" you will learn the safety precautions for rooftop operations, roof types and construction and their impact in vertical ventilation. You will learn how to determine the integrity of a roof system, basic indicators of roof collapse, and methods for opening flat and pitched roofs using a variety of techniques.

#### Section 2: Vertical Ventilation Principles & Rooftop Safety
Describe the principles of vertical ventilation and general safety precautions for rooftop operations. (4.3.12)

#### Section 3: Types of Common Roof Construction
Identify common roof types and roof construction and their role in vertical ventilation. (4.3.12)

#### Section 4: Determining Roof Integrity
Determine the integrity of a roof system. (4.3.12)

#### Section 5: Opening Flat & Pitched Roofs: Square or Rectangular Cut
Describe how to open flat and pitched roofs using a square or rectangular cut. (4.3.12; 4.5.1)

#### Section 6: The Kerf, Triangular, Louvered & Trench Cuts
Describe the kerf, triangular, louvered and trench cuts. (4.3.12)

### Fire Hose Basics

In this title on "**Fire Hose Basics,**" you will learn about fire hose construction, sizes, uses, basic hose maintenance and how to prevent hose damage. You will learn how to identify types of hose couplings, tools and appliances and how to complete two hose-roll methods.

#### Section 2: Basic Information About Fire Hose
Describe basic information about fire hose. (4.3.8)

#### Section 3: Fire Hose Maintenance
Describe basic fire hose maintenance. (4.5.2)

#### Section 4: Common Hose Couplings
Identify common hose couplings. (4.3.10)

#### Section 5: Common Hose Appliances
Identify common hose appliances. (4.3.8)

#### Section 6: Common Hose Tools
Identify common hose tools. (4.3.8)

#### Section 7: Two Hose-Roll Methods
Describe how to perform two of the most common hose-roll methods, the straight roll and the donut roll. (4.5.2)
| 115 Handling Hose | **Section 2: Basic Guidelines for Loading Hose**  
Describe basic guidelines for loading hose. (4.5.2) |
| | **Section 3: The Accordion Load**  
Describe how to an accordion hose load is created. (4.5.2) |
| | **Section 4: The Horseshoe Load & The Flat Load**  
Describe how the horseshoe load and the flat load are created. (4.5.2) |
| | **Section 5: Hose Finishes**  
Describe two types of hose finishes, the straight and reverse horseshoe finish. (4.5.2) |
| | **Section 6: The Preconnected Flat Load & Minuteman Load**  
Describe how to create the flat and the minuteman loads for preconnected hose. (4.5.2) |
| | **Section 7: Two Common Hose Lays**  
Describe two common hose lays: the forward and reverse lay. (4.5.2; 4.5.15) |
| | **Section 8: Methods for Coupling & Uncoupling Hose**  
Describe several methods for coupling and uncoupling hose. (4.3.10) |

| 116 Advancing Hoselines | **Section 2: Pulling & Carrying Preconnected Hose**  
Describe how to pull and carry hose from preconnected lines to the fire location. (4.3.10; 4.5.15) |
| | **Section 3: Advancing Flat Load & Horseshoe Load**  
Describe how to pull and carry hose from non-preconnected hoseloads, such as the flat load and the horseshoe load. (4.5.2) |
| | **Section 4: Advancing Wyed Lines & Working Line Drag**  
Describe how to advance wyed hoselines and the working line hose drag. (4.3.10) |
| | **Section 5: Advancing into Structure & Stairways**  
Describe basic safety procedures for advancing into structures and in stairways. (4.3.10) |
| | **Section 6: Advancing Hose From a Standpipe**  
Describe how to advance hoseline from a standpipe. (4.3.10) |
<table>
<thead>
<tr>
<th>Section 7: Advancing Hose Up Ladder &amp; Hoisting Hose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe how to advance hose up a ladder and how to hoist hose. (4.3.10)</td>
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<table>
<thead>
<tr>
<th>Section 8: How to Extend &amp; Retrieve Hose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe how to extend a hoseline and how to retrieve a loose hoseline. (4.3.10; 4.3.15)</td>
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<thead>
<tr>
<th>Section 9: Operating &amp; Controlling Attack Lines</th>
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</thead>
<tbody>
<tr>
<td>Describe basic procedures for operating and controlling attack lines. (4.3.7; 4.3.8; 4.3.10)</td>
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<thead>
<tr>
<th>Section 2: Fire Stream Sizes &amp; Types</th>
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</thead>
<tbody>
<tr>
<td>Describe the elements and factors that influence a fire stream. (4.3.10)</td>
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<tr>
<td>Describe the three sizes and types of the fire streams. (4.3.10)</td>
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</tbody>
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<thead>
<tr>
<th>Section 3: Solid Streams</th>
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</thead>
<tbody>
<tr>
<td>Describe how to produce an effective solid fire stream. (4.3.7; 4.3.8; 4.3.10)</td>
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<tr>
<td>Describe advantages and disadvantages of the use of solid streams. (4.3.10)</td>
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<thead>
<tr>
<th>Section 4: Fog (Spray) Streams</th>
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<tbody>
<tr>
<td>Describe the factors that affect in fog streams. (4.3.10)</td>
</tr>
<tr>
<td>Describe the advantages and disadvantages of fog streams. (4.3.10)</td>
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<thead>
<tr>
<th>Section 5: Nozzle Types &amp; Maintenance</th>
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</thead>
<tbody>
<tr>
<td>Describe different types of fire hose nozzles and their uses. (4.3.10)</td>
</tr>
<tr>
<td>Describe inspection and maintenance procedures for nozzles. (5.5.5)</td>
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</table>

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<tr>
<th>Section 6: Preventing Water Hammer</th>
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<tbody>
<tr>
<td>Describe water hammer and understand how to prevent it. (4.3.7; 4.3.8; 4.3.10)</td>
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<thead>
<tr>
<th>Section 2: Tool Basics: Cutting Tools</th>
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<tbody>
<tr>
<td>Identify basic types of forcible entry tools and describe the uses for cutting tools. (4.3.4; 4.3.9)</td>
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<thead>
<tr>
<th>Section 3: Prying, Pushing/Pulling &amp; Striking Tools</th>
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<tbody>
<tr>
<td>Describe the uses for Prying, Pushing/Pulling, and striking tools in forcible entry. (4.3.4; 4.3.9)</td>
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<thead>
<tr>
<th>Section 4: Through-the-Lock Entry on Doors</th>
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<tbody>
<tr>
<td>In this title on &quot;Forcible Entry,&quot; you will learn about the types of</td>
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<tr>
<td>tools used for forcible entry and how to open locked doors. (4.3.4; 4.3.9)</td>
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<tr>
<td>119 Fire Detection, Alarms &amp; Communications</td>
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<td>120 Lighting &amp; Power Sources</td>
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</table>

120 Lighting & Power Sources

Describe types of lighting and auxiliary electrical equipment used in the fire service. (4.3.17)
| **In this title on “Lighting & Power Sources,” you will learn about different types of lighting equipment, basic safety considerations for using lighting and electrical equipment, including ways to safely light for emergency scene operations. You will also learn the characteristics and maintenance requirements of portable power plants.** | **Section 3: Power Plants**
Describe types of power plants and their use at an emergency scene. (4.3.17) |
| **Section 4: Lighting & Electrical Equipment Safety**
Describe basic safety considerations for using lighting and electrical equipment during emergency scene operations. (4.3.17) |
| **Section 5: Maintaining Portable Power Plants**
Demonstrate routine maintenance procedures for portable power plants. (4.3.17; 5.5.4) |
| **121 Property Conservation: Salvage** | **Section 2: Benefits of Salvage Operations**
Describe the benefits of good salvage operations to both the public and the fire department. (4.3.8; 4.3.10; 4.3.14) |
| **121 Property Conservation: Salvage** | **Section 3: Common Salvage Equipment**
Describe the types and uses of common equipment used in salvage. (4.3.14) |
| **121 Property Conservation: Salvage** | **Section 4: Salvage Covers / 1-Firefighter Spreads**
Describe how to store and deploy salvage covers for one firefighter. (4.3.14) |
| **121 Property Conservation: Salvage** | **Section 5: Salvage Covers / 2-Firefighter Spreads**
Describe how to store and deploy salvage covers for two firefighters. (4.3.14) |
| **121 Property Conservation: Salvage** | **Section 6: Water Chutes & Catch-Alls**
Describe how to construct a water chute and a catch-all using salvage covers. (4.3.14) |
| **121 Property Conservation: Salvage** | **Section 7: Covering Openings**
Describe how to protect property from secondary damage by covering openings in the roof, doors and windows. (4.3.14) |
| **122 Property Conservation: Overhaul** | **Section 2: Indicators of Structural Instability**
Recognize and describe important indicators of structural instability. (5.3.2) |
| **122 Property Conservation: Overhaul** | **Section 3: Finding Hidden Fires**
Describe procedures and safety precautions for finding hidden fires. (4.3.10; 4.3.13) |
| **122 Property Conservation: Overhaul** | **Section 4: Opening Concealed Spaces & Extinguishing Hidden Fires**
Describe procedures for opening concealed spaces and for extinguishing hidden fires. (4.3.10; 4.3.13) |
will learn the important indicators of structural instability, how to find and extinguish hidden fires, how to preserve evidence of fire cause and origin, and how to restore the premises after a fire.

Section 5: Preserving Evidence
Describe procedures to preserve evidence of fire cause and origin. (4.3.14; 5.3.4)

Section 6: Restoring the Premises
Describe procedures for restoring the premises after a fire. (4.3.14)

123 Sprinkler Systems

In this title on “Sprinkler Systems,” you will learn how sprinklers work, the different types of sprinkler systems, components of sprinkler systems and the locations and appearance of control and operating valves. You will also learn considerations to take when responding to an alarm at a protected building.

Section 2: How Sprinklers Work
Describe how sprinkler systems work. (4.3.14)

Section 3: Components of Sprinkler Systems
Identify the basic components of an automatic sprinkler system. (4.3.14)

Section 4: Sources of Water Supply
Identify water sources for automatic sprinkler systems (4.3.14; 5.5)
Describe the minimum water supply requirements for a sprinkler system. (4.3.14)

Section 5: Control & Operating Valves
Describe the functions of different types of sprinkler system main water-control and operating valves. (4.3.14)

Section 6: Sprinkler Types & Release Mechanisms
Identify types of sprinkler heads. (4.3.14)
Describe how automatic sprinkler release mechanisms operate. (4.3.14)

Section 7: Dry-Pipe & Wet-Pipe Sprinkler Systems
Describe dry-pipe and wet-pipe sprinkler systems. (4.3.14)

Section 8: Deluge, Pre-Action & Residential Sprinkler Systems
Describe pre-action, deluge and residential sprinkler systems. (4.3.14)

Section 9: Responding to Fires in Protected Buildings
Describe basic procedures for responding to protected buildings (4.3.14)
Describe how to stop the flow of water from a single sprinkler. (4.3.14)
<table>
<thead>
<tr>
<th>Firefighter II Title</th>
<th>Training Objectives &amp; NFPA Standard</th>
</tr>
</thead>
</table>
| **201 Building Construction** | **Section 2: Construction Classifications**  
Describe construction classifications used in most building codes and the role of fire resistance ratings. (4.3.12)  
**Section 3: Five Types of Construction**  
To describe the characteristics and fire behavior of five types of construction; (4.3.4; 4.3.12)  
**Section 4: Building Construction Terms**  
Define common building construction terms; (4.3.12)  
**Section 5: Fire Effects on Wood & Masonry**  
Describe the effects of fire and fire suppression activities on wood and masonry (4.3.10; 4.3.11; 5.3.2)  
**Section 6: Fire Effects on Steel & Reinforced Concrete**  
Describe the effects of fire and fire suppression activities on steel and reinforced concrete (4.3.10; 4.3.11; 5.3.2)  
**Section 7: Fire Effects on Gypsum & Glass**  
Describe the effects of fire and fire suppression activities on gypsum board and glass. (4.3.10; 4.3.11; 5.3.2)  
**Section 8: Dangerous Building Conditions**  
Identify the signs of dangerous building conditions, such as heavy fire loads and building collapse. (5.3.2) |
| **202 Rescue Operations** | **Section 2: Moving Injured Victims**  
Demonstrate how to move injured victims using carries and drags. (5.4.2)  
**Section 3: Rescue Tools**  
Identify and describe tools commonly used to perform rescue and extrication procedures. (5.4.1; 5.4.2)  
**Section 4: Hazards of Vehicle Components & Systems**  
Describe potential dangers of vehicle components and systems. (5.4.1)  
**Section 5: Vehicle Extrication Procedures**  
Identify three basic methods for gaining access to a trapped victim.  
Describe procedures for extricating a trapped victim |
| 203 Advanced Ventilation | Section 2: Ventilation Decision Factors  
Present the factors that affect the decision to ventilate. (4.3.11; 4.3.12; 5.3.2)  
Section 3: A Decision-Making Sequence  
Describe a typical decision-making sequence about how and where ventilation should be performed (4.3.11; 4.3.12; 5.3.2)  
Section 4: Precautions for Vertical Ventilation  
Describe precautions that must be taken when performing vertical ventilation. (5.3.2)  
Section 5: Basements & Windowless Buildings  
Identify the special ventilation concerns and procedures for basement fires and fires in windowless buildings. (4.3.11; 4.3.12; 5.3.2)  
Section 6: High-Rise Buildings  
Describe the special ventilation problems encountered with fires in high-rise buildings. (4.3.11; 5.3.2) |
|---|---|
| 204 Water Supply | Section 2: Components of a Water System  
Identify the components of a water system. (4.3.15)  
Identify three methods for moving water in a water supply system. (4.3.15)  
Describe the concerns water treatment facilities present to fire departments. (4.3.15)  
Section 3: Parts of a Distribution System  
Describe the role of a distribution system in a water supply system. (4.3.15)  
Identify the components of a “grid system” in a water distribution system. (4.3.15)  
Section 4: Valves in Water Distribution Systems  
Describe the role of valves in water supply systems. (4.3.15)  
Identify two main groups of valves found in water distribution systems. (4.3.15)  
Describe how gate valves and butterfly valves operate. (4.3.15)  
Section 5: Measuring Pressure  
Describe how pressure is measured in water supply systems. (4.3.15)  
Describe three different types of water pressure. (4.3.15) |

In this course on “Advanced Ventilation,” you will learn about many of the factors affecting ventilation decisions. You will learn precautions against upsetting vertical ventilation, methods for ventilating a basement or windowless building, and special ventilation considerations of high-rise buildings.  

In this course on “Water Supply,” you will learn the components of water systems, valves used in water distributions systems, how pressure is measured in fire service water supply, the operation of different types of hydrants and how to service test fire hose.
<table>
<thead>
<tr>
<th>Section 6: Operating Hydrants</th>
<th>Identify two types of hydrants, and describe the components of dry-barrel and wet-barrel hydrants. (4.3.15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 7: Static &amp; Mobile Water Supply</td>
<td>Describe the use of a static and mobile water supply. (4.3.15)</td>
</tr>
</tbody>
</table>
| Section 8: Service Testing Fire Hose | Describe how to prepare fire hose for service testing. (4.3.15)  
Describe how to conduct a service test for fire hose with a fire apparatus pump. (5.5.5) |

### 205 Fire Control 2

In this course, "Fire Control 2," you will learn 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.

- **Section 2: Using Foam on a Large Class B Fire**  
  Describe methods for extinguishing a large, exterior Class B fire using a foam fire stream. (5.3.1; 5.3.2)

- **Section 3: Fires in Upper Levels**  
  Describe control tactics for fires in upper levels of structures (5.3.1; 5.3.2; 4.3.8; 4.3.10; 4.3.11; 4.3.13)

- **Section 4: Fires Below Grade**  
  Describe special control tactics for extinguishing a below-grade structure fire. (5.3.1; 5.3.2; 4.3.11)

- **Section 5: Strategies for Energized Electrical Fires (Class C)**  
  Describe safety considerations and procedures when responding to fires in energized electrical equipment. (4.3.18)

- **Section 6: Fire in a Flammable Gas Cylinder**  
  Describe control tactics for a fire involving a flammable gas cylinder. (5.3.3)

### 206 Foam Fire Streams

In this course on "Foam Fire Streams," you will learn 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 foam management techniques.

- **Section 2: How Foam Extinguishes or Prevents Fire**  
  Describe how Class A and Class B foam extinguishes or prevents fire. (4.3.15)

- **Section 3: Generating & Proportioning Foam**  
  Identify the elements necessary to produce finished foam.  
  Describe terms used in the foam-making process.  
  Describe different types of foam proportioners (5.3.1)

- **Section 4: Nozzles & Foam Delivery Devices**  
  Describe how foam is delivered to the fire scene. (5.3.3)
types of foam. You will learn how to assemble a foam fire stream using an eductor and how to troubleshoot problems that can occur when creating fire-fighting foam.

<table>
<thead>
<tr>
<th>Section 5: Foam Types &amp; Concentrates</th>
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<tbody>
<tr>
<td>Describe the different types of foam and foam concentrates.</td>
</tr>
<tr>
<td>Describe the importance of matching foam concentrates to the fuels to which they will be applied. (5.3.1)</td>
</tr>
</tbody>
</table>

Section 6: Foam Fire Stream Assembly
Describe how to correctly assemble a foam fire stream system. (5.3.1)

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## 207 Fire Hose Appliances

In this course on “Fire Hose Appliances,” you will learn about different types of fire hose appliances including: valves, valve devices, fittings and intake devices. You will learn how to identify the correct type of appliances to be used in specific fireground operations. You will also learn how to clean and maintain fire hose appliances.

<table>
<thead>
<tr>
<th>Section 2: Fire Hose Appliance Basics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define fire hose appliances and list different types of appliances. (4.5.2; 4.3.10)</td>
</tr>
</tbody>
</table>

Section 3: Valves
Identify types of valves and describe how each type works. (4.3.10)

Section 4: Valve Devices
Describe different types of valve devices and the uses for each type. (4.3.7; 4.3.8; 4.3.10; 5.3.2)

Section 5: Fittings & Intake Devices
Describe fittings and intake devices. (4.3.7; 4.3.8; 4.3.10)

Section 6: Maintaining Hose Appliances
Demonstrate how to clean and maintain hose appliances. (4.5.2; 4.3.8; 5.5.4; 5.5.5)

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## 208 Fire Origin & Cause

In this course on “Fire Origin & Cause,” you will learn the firefighter’s role in fire-cause determination from first alarm to overhaul. You will learn how to recognize and report suspicious circumstances, to be aware of abnormal fire behavior, how to secure the scene pending an investigation, understand legal considerations and how to safeguard evidence at the scene.

<table>
<thead>
<tr>
<th>Section 2: Fire-Cause Determination</th>
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<tbody>
<tr>
<td>Describe the firefighter’s role in fire-cause determination. (5.3.4)</td>
</tr>
</tbody>
</table>

Section 3: Observations Enroute & Upon Arrival
Describe important firefighter observations enroute to the fire and upon arrival at the scene. (5.3.4)

Section 4: Observations During Fire Fighting
Describe specific observations of the scene to make during firefighting operations that might indicate suspicious activity or possible fire cause. (5.3.4)

Section 5: Salvage & Overhaul Considerations
Present salvage and overhaul responsibilities in fire-cause determination. (5.3.4)
<table>
<thead>
<tr>
<th>209 Pre-Incident &amp; Fire Safety Surveys</th>
<th>Section 6: Securing the Scene</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this title on “Pre-Incident &amp; Fire Safety Surveys,” you will learn the firefighter’s role in fire prevention and preparedness. You will also learn the steps for conducting pre-incident surveys, the common hazards found in occupancies and how to inspect fire protection systems for readiness.</td>
<td>Describe how to react to questions from the media and civilians at a fire scene, outline procedures to take if a fire investigator is not immediately available. Demonstrate how to secure the fire scene pending an investigation. (5.3.4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 7: Legal Considerations &amp; Evidence Preservation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe the legal considerations in fire-cause determination. (5.3.4)</td>
<td>Describe how to safeguard evidence at the scene, including the importance of post incident reporting. (5.3.4)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>210 Fire Prevention &amp; Public Education</th>
<th>Section 1: Prevention &amp; Preparedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>In this title on “Fire Prevention &amp; Public Education,” you will be shown many of the basic components of residential fire prevention and public education programs. You will learn the importance of community risk reduction programs and public relations in your community. Details include the components of a home fire safety survey program and identifying specific hazards inside and outside the home.</td>
<td>Identify the reasons for conducting building surveys and describe the firefighter’s role in preparedness activities. (5.5.1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 2: Conducting Pre-Incident Surveys</th>
<th>Section 3: Common Fire Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe basic steps for conducting pre-incident surveys. (5.5.1)</td>
<td>Identify common hazards found in occupancies. (5.5.1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 4: Fire Protection Systems</th>
<th>Section 2: Community Risk Reduction Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>To show how to inspect fire protection systems for readiness. (5.5.1)</td>
<td>Describe the importance community risk reduction programs. (5.5.1)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 3: Home Fire Safety Surveys</th>
<th>Section 4: Hazards in the Home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Describe how to conduct a residential fire safety survey. (5.5.1)</td>
<td>Describe special fire and life safety hazards in the home. (5.5.3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Section 5: Presenting Fire Safety Information</th>
<th>Section 6: Conducting Station Tours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate how to present fire safety information to small groups. (5.5.2)</td>
<td>Describe how to conduct station tours. (5.5.2)</td>
</tr>
</tbody>
</table>