



FIREFIGHTER I AND II CERTIFICATION REQUIREMENTS

Firefighter I and II Course - General Course Information, Certification Requirements, and Course Objectives

EFFECTIVE JANUARY 1, 2018

Course Overview

The Firefighter I and II Course is designed to give new firefighters basic practical and cognitive training needed to operate safely and effectively on the fireground as well as advanced firefighting concepts related to incident report writing, flammable liquid fires, fire ground command, evidence preservation, pre-incident survey, and equipment maintenance. The course meets the training and education standards for Firefighter I and II as identified in the National Fire Protection Association (NFPA) Standards, NFPA 1001, Firefighter Professional Qualifications, and is the minimum level of training recommended to function as a career firefighter in the State of Ohio. This firefighter training course focuses on an intense hands-on approach to firefighting, which promotes both skill competency and an understanding of the fireground.

Successful completion of the course is required to be eligible to sit for the state examination to be certified at the Firefighter II level.

Upon successful completion of the course and certification as a Firefighter II, the candidate will be eligible to receive a Pro Board certification, a nationally recognized certification acknowledging the individual has measured against peers and meets rigorous national standards. The Pro Board certification improves uniformity of training and state-to-state portability of qualifications, as well as adding credibility to the individual's fire organization by having members certified to national consensus standards.

Course Objectives

The Firefighter I and II Course Objectives are required to meet the industry standard for firefighter training as determined by the National Fire Protection Association (NFPA) 1001 Standard (2013 edition). The hours assigned to each course objective are recommendations based on national averages identified by the National Fire Protection Association (NFPA). Chartered fire training programs may reallocate topic hours to meet student needs so long as all course objectives are met.

However, deviation of more than 25% of the recommended hours must be justified on the course request form.

Proper documentation of students meeting course objectives is required.

Course Requirements

The firefighter I and II training course, required to obtain a Firefighter II certificate, shall consist of **at least two hundred forty-four (244) hours⁽¹⁾⁽²⁾** and shall include all of the following:

1. A **minimum of two hundred sixteen (216) hours⁽¹⁾⁽²⁾** of firefighter training that meets the general knowledge requirements, general skill requirements, and the job performance requirements for Firefighter I and II as set forth in NFPA 1001, "Standard for Fire Fighter Professional Qualifications", and in the "Firefighter I and II Course Objectives" approved by the executive director, with advice and counsel of the committee and;
2. A **minimum of twenty four (24) hours⁽¹⁾⁽²⁾** of hazardous materials awareness and operations level training that meets the general knowledge and skills requirements as specified in NFPA 1072 "Standard for Hazardous Materials / Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications"; all the objectives in the NFPA 1001 for firefighter I; and the objectives as set forth in the "Hazardous Materials Awareness and Operations Course Objectives" approved by the Executive Director, with advice and counsel of the committee;
3. A **minimum of four (4) hours⁽¹⁾⁽²⁾** on the "Courage to be Safe: Sixteen Life Safety Initiatives" Course(s).

Contact Hours

Student contact hours: 50 – 60 minutes = 1 hour; 25 – 30 minutes = ½ hour; full days (0800 – 1600) = 7 hours (assuming 1 hour for lunch unless otherwise documented). Instructional hours may include topic instruction, material review, and testing for knowledge, e.g. quizzes. Instructional hours shall not include practical skill testing, written testing for certification, or instruction on any topic(s) not listed on this guide.

Live Fire Requirements

“Live Fire Training” means time in personal protective equipment (PPE) performing actual fire suppression activities. Lecture time covering fire behavior, fire attack, etc. is not considered “Live Fire Training.”

The required live fire training hours (FFI Transition: 15 hours, FFI: 15 hours, FFII Transition: 22 hours, FF II: 37 hours) are now included in the practical skills portions of each “Fire Control” objective.

Prior to being permitted to participate in live fire training students shall be trained to meet the minimum Job Performance Requirements (JPRs) for Firefighter I as set forth in NFPA 1403, Chapter 4: Safety, Fire Behavior, Portable Extinguishers, Personal protective equipment (PPE), Ladders; Fire hose, Appliances, and Streams; Overhaul, Water Supply, Ventilation, Forcible Entry, and Building Construction.

- (1) Course hours are restricted to curriculum instruction and shall not include time attributed to course administration, course prerequisites or examinations required for state certification (practical skills and written examinations).
- (2) Each hour shall include a minimum of fifty (50) minutes of instruction.

FIREFIGHTER I AND II CERTIFICATION REQUIREMENTS

STANDARD / DIRECTIVE	O.A.C. REFERENCE	FIREFIGHTER I AND II COURSE ADMISSION REQUIREMENTS
NFPA 1001	4765-24-13 4765-20-02	Individuals shall be at least eighteen (18) years of age, except that a chartered program may admit a student who is seventeen (17) years old provided that the student has graduated or is enrolled in the twelfth (12th) or final grade in a secondary school program. A chartered program may admit a student into a secondary school firefighter I course who is sixteen (16) years old provided that the student is enrolled in the eleventh (11th) or twelfth (12th) grade in a secondary school public safety program. In the eleventh (11th) grade participation shall be limited to classroom and practical skills activities associated with firefighter I course objectives; students in the eleventh (11th) grade are prohibited from participation in any training involving immediately dangerous to life and health (IDLH) environments to include any live fire training.
NFPA 1001	4765-24-13	Individuals shall meet "NFPA 1001" chapter 4 entrance requirements. **
N/A	4765-24-13	Individuals shall demonstrate a pre-determined level of cognitive proficiency by one of the following methods: successful completion of a cognitive-based pre-admission assessment or test such as the ACT, SAT, Work Keys, Compass, Accuplacer, TABE, or equivalent, documentation of high school or college GPA.
N/A	4765-24-13	Individuals shall meet all admission requirements established by the chartered fire training program.
STANDARD / DIRECTIVE	O.A.C. REFERENCE	QUALIFICATIONS FOR FIREFIGHTER I AND II CERTIFICATION
N/A	4765-20-02	An applicant for a firefighter certificate shall be at least eighteen (18) years of age.
HSPD-5,8	4765-20-02	Completion of National Incident Management System, IS 100
HSPD-5,8	4765-20-02	Completion of National Incident Management System, IS 700
NFPA 1001	4765-24-13	Successful completion of a Firefighter I and II training course consisting of a minimum of two hundred forty-four hours (244) through an Ohio chartered fire training program.
N/A	4765-24-13	Successful completion of "Courage to be Safe: Sixteen Life Safety Initiatives Course."
NFPA 1002 NFPA 1452	4765-20-02	Successful completion of an emergency vehicle operator course meeting the following: <ul style="list-style-type: none"> (a) The course shall consist of a minimum of sixteen hours; (b) The course shall be consistent with the intent of "NFPA 1002" and "NFPA 1451"; (c) The course shall meet course objectives established by the executive director, with advice and counsel of the committee; (d) The course shall be completed prior to application for certification, but not more than twelve months prior to the firefighter training course start date.
NFPA 1001	4765-20-02	Shall successfully complete emergency medical care training in accordance with the following: <ul style="list-style-type: none"> (a) The training shall consist of a minimum of eight hours; (b) The training shall meet the performance capabilities specified in NFPA 1001 chapter 4.3.

STANDARD / DIRECTIVE	O.A.C. REFERENCE	QUALIFICATIONS FOR FIREFIGHTER I AND II CERTIFICATION (continued)
NFPA 1072	4765-20-02 4765-24-13	Shall successfully complete hazardous materials and operations level training in accordance with the following: <ul style="list-style-type: none"> (a) The training shall consist of a minimum of twenty-four hours; (b) The training shall meet the mission-specific competencies specified in "NFPA 1072" as required by "NFPA 1001"; (c) The training shall meet the objectives as set forth in the "Hazardous Materials Operations Course Objectives" approved by the executive director, with advice and counsel of the committee.
N/A	4765-20-02	Shall pass the knowledge and practical skills examinations as set forth in rule 4765-20-06 of the Administrative Code within one hundred-eighty (180) days of firefighter I and firefighter II training course completion.
N/A	4765-20-02	Shall submit a completed application within ninety (90) days of passing the knowledge examination.
N/A	4765-20-02	Applicants shall not have been convicted of any of the following: <ul style="list-style-type: none"> (a) Any felony; (b) A misdemeanor committed in the course of practice; (c) A misdemeanor involving moral turpitude.
N/A	4765-20-02	Applicants shall not have committed fraud, misrepresentation, or material deception in applying for or obtaining a certificate issued under section 4765.55 of the Ohio Revised Code and this chapter.
N/A	4765-20-02	Applicants shall not have been previously revoked or denied a certificate by the executive director or the licensing organization in another state.

****NFPA 1001 Entrance Requirements include:**

- 1) Minimum educational requirements established by the AHJ
- 2) Age requirements established by the AHJ
- 3) Essential Job Tasks of NFPA 1582, Standard on Comprehensive Occupational Medical Program for Fire Departments, Chapter 5, Subsection 5.1.1, **as determined by the medical authority of the AHJ.**
- 4) Fitness Requirements. Physical fitness requirements for entry-level personnel shall be developed and validated by the AHJ.
- 5) Emergency Medical Care. Minimum emergency medical care performance capabilities for entry-level personnel shall be developed and validated by the AHJ to include infection control, CPR, bleeding control, and shock management.

FIREFIGHTER I AND II COURSE OBJECTIVES AND RECOMMENDED HOURS GUIDE

NFPA 1001 FF I Standard	COURSE OBJECTIVES	FIREFIGHTER I and II JOB PERFORMANCE REQUIREMENTS	Cognitive Hours	Practical Hours	Total Hours
5.1.1	Fire Dept. Organization & Safety	Describe Fire Dept. organization, SOPs, NFPA 1500, cancer awareness, and Life Safety Initiatives	4	0	4
5.1.2	Fire Dept. Organization & Safety	Don and Doff Personal Protective Clothing	1	2	3
5.2.1	Fire Alarm and Communications	Initiate the response to a reported emergency	0.5	0.5	1
5.2.2	Fire Alarm and Communications	Receive a business or personal telephone call	0.5	0.5	1
5.2.3	Fire Alarm and Communications	Transmit and receive messages via the fire department radio	0.5	0.5	1
5.2.4	Communication	Activate an emergency call for assistance	1	1	2
5.3.1	Personal Protective Equipment / SCBA	Use SCBA during emergency operations	2	8	10
5.3.2	Response Safety & Scene Control	Respond on apparatus to an emergency scene	1	1	2
5.3.3	Response Safety & Scene Control	Operate in established work areas at emergency	1	0	1
5.3.4	Forcible Entry	Force entry into a structure	3	4	7
5.3.5	Exit Hazard	Exit a hazardous area as a team	2	4	6
5.3.6	Ground Ladders	Set up ground ladders	2	8	10
5.3.7	Fire Control	Attack a passenger vehicle fire	2	3	5
5.3.8	Fire Control	Extinguish fires in exterior Class A materials	1	2	3
5.3.9	Rescue	Conduct a search & rescue in a structure, Victim drags and carries	2	6	8
5.3.10	Fire Control	Attack an interior structure fire	4	8	12
5.3.11	Ventilation and Tools	Perform horizontal ventilation on a structure, modern fire behavior, flow path	2	6	8
5.3.12	Ventilation and Tools	Perform vertical ventilation on a structure	2	6	8
5.3.13	Overhaul	Overhaul a fire scene	1	1	2
5.3.14	Salvage	Conserve property as a member of a team	1	3	4
5.3.15	Water Supplies	Connect a fire department pumper to a water supply	2	5	7
5.3.16	Fire Extinguishers	Extinguish incipient Class A, Class B, and Class C fires	1	1	2
5.3.17	Scene Safety	Illuminate the emergency scene	1	0	1
5.3.18	Secure building utilities	Turn off building utilities	2	1	3
5.3.19	Fire Control	Combat a ground cover fire operating as a member of a team	2	2	4
5.3.20	Ropes	Tie a knot appropriate for hoisting tool	2	5	7
5.5.1	Clean / Check Equipment	Clean and check ladders, SCBA, ropes, equipment, & hand tools	0.5	0.5	1
5.5.2	Fire Hose	Clean, inspect, and return fire hose to service	0.5	0.5	1
	TOTAL FFI (NFPA 1001)		44.5	79.5	124

NFPA 1001 FF II Standard	COURSE OBJECTIVES	FIREFIGHTER II JOB PERFORMANCE REQUIREMENTS	Cognitive Hours	Practical Hours	Total Hours
6.1.1	General	Organize, assume and transfer command	2	4	6
6.2.1	Reports	Complete basic incident report	1	3	4
6.2.2	Communications	Communicate the need for team assistance	1	3	4
6.3.1	Liquid Fire	Extinguish an ignitable liquid fire	2	4	6
6.3.2	Interior Attack	Coordinate an interior attack line team's accomplishment of an assignment in a structure fire	6	14	20
6.3.3	Flammable Gas	Control a flammable gas cylinder fire operating as a member of a team	2	4	6
6.3.4	Fire Cause	Protect evidence of fire cause and origin	2	2	4
6.4.1	Extricate a victim	Extricate a victim entrapped in a motor vehicle as part of a team	4	12	16
6.4.2	Assist Team	Assist rescue operation teams	2	2	4
6.5.1	Prepare Survey	Perform a fire safety survey in a occupied structure	1	3	4
6.5.2	Present Materials	Present fire safety information to station visitors or small groups	1	1	2
6.5.3	Pre-incident Survey	Prepare a pre-incident survey	2	2	4
6.5.4	Clean / Check Equipment	Maintain power plants, power tools, and lighting equipment	1	3	4
6.5.5	Annual test	Perform an annual service test on fire hose	1	7	8
	TOTAL FF II (NFPA 1001)		28	64	92
	TOTAL FFI & II (NFPA 1001)		72.5	143.5	216

ADDITIONAL FIREFIGHTER I AND II COURSE REQUIREMENTS

NFPA 1072	COURSE OBJECTIVES	HAZMAT AWARENESS AND OPERATIONS	Cognitive Hours	Practical Hours	Total Hours
4.2.1	Recognition and Identification	Recognize / identify hazardous materials / WMD and hazards involved in a Haz Mat / WMD incident,	2	0	2
4.3.1	Initiate Protective Actions	Isolate the hazard area and deny entry at a hazardous materials / WMD incident	1.5	0.5	2
4.4.1	Notification	Initiate required notifications at a hazardous materials / WMD incident	1.5	0.5	2
5.2.1	Identify Potential Hazards	Identify the scope of the problem at a hazardous materials / WMD incident	1.5	0.5	2
5.3.1	Identify Action Options	Identify the action options for a hazardous materials / WMD incident	1.5	0.5	2
5.4.1	Action Plan Implementation	Perform assigned tasks at a hazardous materials / WMD incident,	2	4	6
5.5.1	Emergency Decontamination	Perform emergency decontamination at a hazardous materials / WMD incident	2	4	6
5.6.1	Progress Evaluation and Reporting	Evaluate and report the progress of the assigned tasks for a hazardous materials / WMD incident	1	1	2
	TOTAL HAZMAT		13	11	24
	COURSE OBJECTIVES	LIFE SAFETY INITIATIVES			
4765-20-02	Life Safety Initiatives	Courage to Be Safe: 16 Life Safety Initiatives	4	0	4
	TOTAL		89.5	154.5	244

FIREFIGHTER I AND II COURSE OBJECTIVES

5.1 GENERAL

For qualification at Level I, the fire fighter candidate shall meet the general knowledge requirements in 5.1.1; the general skill requirements in 5.1.2; the JPRs defined in Sections 5.2 through 5.5 of this standard; and the general knowledge and skills requirements defined in Chapter 4, Awareness, and Chapter 5 Operations of NFPA 1072, "Standard for Hazardous Materials / Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications".

5.1.1

GENERAL KNOWLEDGE REQUIREMENTS

The organization of the fire department; the role of the Fire Fighter I in the organization; the mission of fire service; the fire department's standard operating procedures (SOPs) and rules and regulations as they apply to the Fire Fighter I; the value of fire and life safety initiatives in support of the fire department mission and to reduce fire fighter line-of-duty injuries and fatalities; the role of other agencies as they relate to the fire department; aspects of the fire department's member assistance program; the importance of physical fitness and a healthy lifestyle to the performance of the duties of a fire fighter; the critical aspects of NFPA1500, Standard on Fire Department Occupational Safety and Health Program.

COGNITIVE

1. Discuss the critical aspects of fire department's member assistance program, the critical aspects of NFPA 1500, Fire Department Occupational Safety and Health Program.
2. State the mission of the fire service.
3. Describe the organization of the fire department.
4. Discuss the role of the Firefighter I within the organization.
5. Explain a fire department's standard operating procedures, rules, and regulations as they apply to firefighters.
6. Discuss the roles of other agencies as they relate to the fire department.

5.1.2

GENERAL SKILL REQUIREMENTS

The ability to don personal protective clothing, doff personal protective clothing and prepare for reuse, hoist tools and equipment using ropes and the correct knot, and locate information in departmental documents and standard or code materials.

COGNITIVE

1. Identify the parts of a rope and the consideration in tying a knot.
2. Explain the characteristics of knots commonly used in the fire service.
3. Describe commonly used rope hardware for specific applications.
4. Discuss hoisting safety considerations.

PSYCHOMOTOR

1. Perform donning personal protective clothing and prepare for use within one minute.
2. Perform doffing personal protective clothing and prepare for reuse.
3. Locate and clarify information in departmental documents, standards, and code materials.

5.2 FIRE DEPARTMENT COMMUNICATIONS

This duty shall involve initiating responses, receiving telephone calls, and using fire department communications equipment to correctly relay verbal or written information, according to the JPRs in 5.2.1 through 5.2.4.

5.2.1 COMMUNICATIONS

Initiate the response to a reported emergency, given the report of an emergency, fire department SOPs, and communications equipment, so that all necessary information is obtained, communications equipment is operated correctly, and the information is relayed promptly and accurately to the dispatch center.

COGNITIVE

1. Outline the procedures for reporting an emergency.
2. Clarify departmental standard operating procedures for taking and receiving alarms, radio codes or procedures, and information needs of dispatch center.

PSYCHOMOTOR

1. Demonstrate proper operation of fire department communications equipment, relaying information, and recording information.

5.2.2 COMMUNICATION

Receive a telephone call, given a fire department phone, so that procedures for answering the phone are used and the caller's information is relayed.

COGNITIVE

1. Outline a fire department's procedures for answering non-emergency telephone calls.

PSYCHOMOTOR

1. Demonstrate the ability to operate fire station telephone and intercom equipment.

5.2.3 COMMUNICATION

Transmit and receive messages via the fire department radio, given a fire department radio and operating procedures, so that the information is accurate, complete, clear, and relayed within the time established by the AHJ.

COGNITIVE

1. Describe departmental radio procedures and etiquette for routine traffic, emergency traffic, and emergency evacuation signals.

PSYCHOMOTOR

1. Demonstrate the ability to operate radio equipment and discriminate between routine and emergency traffic.

5.2.4 COMMUNICATION

Activate an emergency call for assistance, given vision obscured conditions, PPE, and department SOPs, so that the firefighter can be located and rescued.

COGNITIVE

1. Describe personnel accountability systems, emergency communication procedures, and emergency evacuation methods.

PSYCHOMOTOR

1. Demonstrate the ability to initiate a MAYDAY call and other methods of emergency calls for assistance.

5.3 FIREGROUND OPERATIONS

This duty shall involve performing activities necessary to ensure life safety, fire control, and property conservation, according to the JPRs in 5.3.1 through 5.3.19.

5.3.1	SELF-CONTAINED BREATHING APPARATUS (SCBA)	Use self-contained breathing apparatus (SCBA) during emergency operations, given SCBA and other personal protective equipment, so that the SCBA is correctly donned, the SCBA is correctly worn, controlled breathing techniques are used, emergency procedures are enacted if the SCBA fails, all low-air warnings are recognized, respiratory protection is not intentionally compromised, and hazardous areas are exited prior to air depletion.
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COGNITIVE

1. Describe the donning of personal protective equipment.
2. Describe the doffing of personal protective equipment.
3. Explain the conditions that require respiratory protection.
4. Discuss the uses and limitation of SCBA.
5. Identify each component of the SCBA.
6. List and discuss breathing techniques while wearing the SCBA.
7. Discuss the indications for and emergency procedures used with SCBA.
8. Recognize the physical requirements of the SCBA wearer.

PSYCHOMOTOR

1. Demonstrate the ability to control breathing.
2. Replace a depleted air cylinder with a full air cylinder.
3. Exit a restricted area wearing full protective gear including SCBA.
4. Demonstrate emergency procedures in the event of SCBA failure or air depletion.
5. Don all personal protective clothing and equipment correctly within two minutes; breathing air with pass device activated.

5.3.2	RESPONSE SAFETY	Respond on apparatus to an emergency scene, given personal protective clothing and other necessary personal protective equipment, so that the apparatus is correctly mounted and dismounted, seat belts are used while the vehicle is in motion, and other personal protective equipment is correctly used.
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COGNITIVE

1. Discuss the mounting and dismounting procedures for riding fire apparatus.
2. Describe the hazards and ways to avoid hazards associated with riding apparatus.
3. Describe the practices that are prohibited on the apparatus.
4. List the types of department personal protective equipment and the means for usage.

PSYCHOMOTOR

1. Demonstrate the ability to use each piece of provided safety equipment
2. Demonstrate the proper mounting and dismounting procedures for riding fire apparatus.

5.3.3	SCENE CONTROL	Establish and operate in work areas at emergency scenes, given protective equipment, traffic and scene control devices, structure fire and roadway emergency scenes, traffic hazards and downed electrical wires, an assignment, and SOPs, so that procedures are followed, protective equipment is worn, protected work areas are established as directed using traffic and scene control devices, and the fire fighter performs assigned tasks only in established, protected work areas.
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COGNITIVE

1. Explain the potential hazards involved in operating on emergency scenes including vehicle traffic, utilities, and environmental condition.
2. Describe the proper procedures for dismounting the apparatus in traffic.
3. Explain the procedures for safe operation at emergency scenes.
4. Identify protective equipment available for member's safety at designated emergency and work zones.

PSYCHOMOTOR

1. Demonstrate the ability to use personal protective clothing.
2. Deploy traffic and scene control devices.
3. Properly dismount the apparatus and operate in the protected work area as directed.

5.3.4	FORCIBLE ENTRY	Force entry into a structure, given personal protective equipment, tools, and an assignment, so that the tools are used as designed, the barrier is removed, and the opening is in a safe condition and ready for entry.
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COGNITIVE

1. Explain the basic construction of typical doors, windows, and walls within the department's community or service area.
2. Explain the operation of doors, windows, and locks.
3. Describe the dangers associated with forcing entry through doors, windows, and walls.

PSYCHOMOTOR

1. Demonstrate how to carry, operate and use hand and power tools to force entry through doors, windows, and walls while using assorted methods and tools.

5.3.5	EXIT HAZARD	Exit a hazardous area as a team, given vision-obscured conditions, so that a safe haven is found before exhausting the air supply, others are not endangered, and the team integrity is maintained.
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COGNITIVE

1. Discuss the personal accountability systems, communication procedures, emergency evacuation methods, what constitutes a safe haven, elements that create or indicate a hazard, and emergency procedures for loss of air supply.

PSYCHOMOTOR

1. Demonstrate the ability to operate as a team member in vision-obscured conditions, locate and follow a guideline, conserve air supply, and evaluate areas for hazard and identify a safe haven.

5.3.6	GROUND LADDER	Set up ground ladders, given single and extension ladders, an assignment, and team members if needed, so that hazards are assessed, the ladder is stable, the angle is correct for climbing, extension ladders are extended to the necessary height with the fly locked, the top is placed against a reliable structural component, and the assignment is accomplished.
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COGNITIVE

1. Identify the parts of a ladder.
2. Explain the hazards associated with setting up ladders.
3. Explain what constitutes a stable foundation for ladder placement.
4. Describe the different angle of various tasks.
5. Discuss the safety limits to the degree of angulations.
6. Explain what constitutes a reliable structural component for top placement.

PSYCHOMOTOR

1. Demonstrate the ability to carry a ladder, raise a ladder, extend a ladder, and lock flies.
2. Establish with certainty that a wall and roof will support the ladder.
3. Select the correct extension ladder for a given height.
4. Properly place the ladder to avoid obvious hazards.
5. Demonstrate the ability to correctly climb a ladder.

5.3.7	VEHICLE FIRE	Attack a passenger vehicle fire operating as a member of a team, given personal protective equipment, attack line, and hand tools, so that hazards are avoided, leaking flammable liquids are identified and controlled, protection from flash fires is maintained, all vehicle compartments are overhauled, and the fire is extinguished.
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COGNITIVE

1. Describe the principals of fire streams as they relate to fighting automobile fires.
2. Discuss the precautions to be followed when advancing hose lines toward an automobile.
3. Explain the observable results that a fire stream has been properly applied.
4. Identifying alternative fuels and the hazards associated with them.
5. Discuss the dangerous conditions created during an automobile fire.
6. List the common types of accidents or injuries related to fighting automobile fires and how to avoid them.
7. Explain how to access locked passenger, trunk, and engine compartment.
8. Describe the methods for overhauling an automobile.

PSYCHOMOTOR

1. Accurately identify automobile fuel type.
2. Demonstrate the ability to assess and control fuel leak.
3. Demonstrate the ability to open, close and adjust the flow and pattern on nozzles.
4. Demonstrate proper application of water for maximum effectiveness while maintaining flash fire protection.
5. Advance a 1 ½ inch (38mm) or larger diameter attack line.
6. Perform the steps of exposing hidden fires by opening all automobile compartments.

5.3.8	EXTERIOR FIRE	Extinguish fires in exterior Class A materials, given fires in stacked or piled and small unattached structures or storage containers that can be fought from the exterior, given attack lines, hand tools, and master stream devices, and an assignment, so that exposures are protected, the spread of fire is stopped, collapse hazards are avoided, water application is effective, the fire is extinguished, and signs of the origin area(s) and arson are preserved.
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COGNITIVE

1. Describe the types of attack lines and water streams appropriate for attacking Class A fires associated with stacked and piled materials, and outdoor fires.
2. Explain the dangers associated with stacked and piled materials; such as collapse.
3. Describe the various extinguishing agents and their effect on different material configurations.
4. Identify the tools and methods to use in breaking up various types of materials.
5. Explain the difficulties related to complete extinguishment of stacked and piled materials.
6. Describe the water application methods for exposure protection and fire extinguishment.
7. Explain the dangers such as exposure to toxic or hazardous materials associated with storage building and container fires.
8. Describe the obvious signs of origin and cause.
9. Describe the techniques used for the preservation of fire cause evidence.

PSYCHOMOTOR

1. Recognize inherent hazards related to the material's configuration.
2. Demonstrate the proper operation of hand lines or master streams.
3. Perform the task of breaking up material using hand tools and water streams.
4. Perform an evaluation for complete extinguishment.
5. Demonstrate the correct operation of hose lines and other water application devices.
6. Demonstrate the evaluation and modification of water application for maximum penetration.
7. Demonstrate the steps to search for and expose hidden fire.
8. Demonstrate the steps to assess burn patterns for origin determination.

5.3.9	SEARCH AND RESCUE	Conduct a search and rescue in a structure operating as a member of a team, given an assignment, obscured vision conditions, personal protective equipment, a flashlight, forcible entry tools, hose lines, and ladders when necessary, so that ladders are correctly placed when used, all assigned areas are searched, all victims are located and removed, team integrity is maintained, and team members' safety — including respiratory protection — is not compromised.
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COGNITIVE

1. Explain the use of forcible entry tools during rescue operation.
2. Describe ladder operations for rescue.
3. Discuss the psychological effects of operating in obscured conditions and ways to manage them.
4. Identify the methods to determine if an area is tenable.
5. Describe primary, and secondary search techniques.
6. Describe the team member's roles and goals.
7. Discuss the methods to use and indicators of finding victims.
8. Describe victim removal methods including various carries.
9. Explain the considerations related to respiratory protection.

PSYCHOMOTOR

1. Perform an exit through a restricted passages while wearing a SCBA.
2. Properly set up and use different types of ladders for various types of rescue operations.
3. Perform the rescue a fire fighter with functioning respiratory protection.
4. Perform the rescue a fire fighter whose respiratory protection is not functioning.
5. Perform the rescue a person who has no respiratory protection.
6. Demonstrate the ability to assess areas in order to determine tenability.

5.3.10	INTERIOR ATTACK	Attack an interior structure fire operating as a member of a team, given an attack line, ladders when needed, personal protective equipment, tools, and an assignment, so that team integrity is maintained, the attack line is deployed for advancement, ladders are correctly placed when used, access is gained into the fire area, effective water application practices are used, the fire is approached correctly, attack techniques facilitate suppression given the level of the fire, hidden fires are located and controlled, the correct body posture is maintained, hazards are recognized and managed, and the fire is brought under control.
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COGNITIVE

1. Discuss the principles of fire streams.
2. Classify and discuss each type, design, operation, nozzle pressure effects, and flow capabilities of nozzles.
3. Describe the precautions to be followed when advancing hose lines to a fire.
4. List the observable results that a fire stream has been properly applied.
5. Discuss the dangerous building conditions created by fire.
6. Explain the principles of exposure protection.
7. Describe the potential long-term consequences of exposure to products of combustion.
8. List the physical states of matter in which fuels are found.
9. Describe the common types of accidents or injuries and their causes.
10. Describe the application of each size and type of attack line.
11. Explain the role of the backup team in a fire attack situation.
12. Describe the attack and control techniques for grade level, above, and below grade levels, and exposing hidden fires.

PSYCHOMOTOR

1. Demonstrate the ability to prevent water hammer when shutting down nozzles.
2. Operate various nozzles from closed to open positions and adjust stream patterns along with flow rates.
3. Demonstrate water application techniques using direct, indirect, and combination attacks.
4. Advance and operate charged and uncharged lines 1 ½ inch (38mm) diameter or larger hose line up ladders and up and down interior and exterior stairway.
5. Demonstrate how to extend hose lines.
6. Demonstrate how to replace burst hose sections
7. Operate a charged hose line of 1 ½ inch (38mm) diameter or larger while secured to a ground ladder.
8. Demonstrate how to couple and uncouple various hand line connections.
9. Perform hose carry.
10. Perform an attack on a fire at grade level, above, and below grade levels.
11. Demonstrate the steps to locate and suppress interior wall and sub-floor fires.

5.3.11	HORIZONTAL VENTILATION	Perform horizontal ventilation on a structure operating as part of a team, given an assignment, personal protective equipment, ventilation tools, equipment, and ladders, so that the ventilation openings are free of obstructions, tools are used as designed, ladders are correctly placed, ventilation devices are correctly placed, and the structure is cleared of smoke.
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COGNITIVE

1. Explain the principles, advantages, limitations, and effects of horizontal, mechanical, and hydraulic ventilation.
2. Discuss safety considerations when ventilating a structure.
3. Discuss fire behavior within a given structure.
4. Describe the products of combustion found in a structure fire.
5. Explain the signs, causes, effect, and prevention of backdrafts.
6. Describe the relationship of oxygen concentration to life safety and fire growth.

PSYCHOMOTOR

1. Demonstrate the ability to transport and operate ventilation tools, equipment, and ladders.
2. Demonstrate the procedures for safely breaking window glass, door glass, and removing obstructions.

5.3.12	VERTICAL VENTILATION	Perform vertical ventilation on a structure as part of a team, given an assignment, personal protective equipment, ground and roof ladders, and tools, so that ladders are positioned for ventilation, a specified opening is created, all ventilation barriers are removed, structural integrity is not compromised, products of combustion are released from the structure, and the team retreats from the area when ventilation is accomplished.
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COGNITIVE

1. Discuss the methods of heat transfer.
2. Describe the principles of thermal layering within the structure on fire.
3. Discuss the techniques and safety precautions for venting flat roofs, pitched roof, and basements.
4. Explain the basic indicators of potential collapse or roof failure.
5. Describe the effects of construction type and elapsed time under fire conditions on structural integrity.
6. Discuss the advantages and disadvantages of vertical and trench / strip ventilation.

PSYCHOMOTOR

1. Demonstrate the ability to transport and operate ventilation tools and equipment.
2. Demonstrate the ability to hoist ventilation tools to a roof.
3. Demonstrate the proper technique to cut roofing and flooring materials, to vent flat roofs, pitched roofs, and basements.
4. Demonstrate the ability to sound a roof for integrity.
5. Demonstrate the ability to clear an opening with hand tools.
6. Demonstrate the proper technique to select, carry, deploy, and secure ground ladders for ventilation activities.
7. Demonstrate the deployment of a roof ladder on a pitched roof while secured to a ground ladder.
8. Carry ventilation-related tools and equipment while ascending and descending ladders.

5.3.13	OVERHAUL	Overhaul a fire scene, given personal protective equipment, attack line, hand tools, a flashlight, and an assignment, so that structural integrity is not compromised, all hidden fires are discovered, fire cause evidence is preserved, and the fire is extinguished.
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COGNITIVE

1. List the types of fire attack lines and water application devices most effective for overhaul.
2. Describe the water application methods for extinguishment that will limit water damage.
3. List the types of tools and methods used to expose hidden fires.
4. Discuss the danger associated with overhaul.
5. Discuss the obvious signs of area of origin or signs of arson.
6. List the reasons for protection of the fire scene.

PSYCHOMOTOR

1. Demonstrate the ability to deploy and operate an attack line.
2. Demonstrate the steps for removing flooring, ceiling, and wall components to expose void spaces without compromising structural integrity.
3. Perform water application for maximum effectiveness.
4. Demonstrate the steps for exposing and extinguishing hidden fires in walls, ceiling, and sub-floor spaces.
5. Demonstrate the steps to preserve evidence and obvious signs of area of origin and arson.
6. Demonstrate how to evaluate for complete extinguishment.

5.3.14	SALVAGE	Conserve property as a member of a team, given salvage tools and equipment and an assignment, so that the building and its contents are protected from further damage.
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COGNITIVE

1. Discuss the purpose of property conservation and its value to the public.
2. Describe the methods used to protect property.
3. List the types of and uses for salvage covers.
4. Discuss the salvage operations at properties protected with automatic sprinklers.
5. Describe how to stop the flow of water from automatic sprinkler head.
6. Identify the main control valves on an automatic sprinkler systems.
7. Discuss forcible entry issues related to salvage.
8. Describe procedures for protecting possible areas of origin and potential evidence.

PSYCHOMOTOR

1. Demonstrate the ability to cluster furniture.
2. Demonstrate steps to deploy covering materials.
3. Demonstrate how to roll and fold salvage covers for reuse.
4. Demonstrate methods to construct water chutes and catch-all's.
5. Demonstrate the procedures for removing water.
6. Demonstrate how to cover building openings, including doors, windows, floor opening, and roof openings.
7. Perform the steps to separate, remove, and relocate charred material to a safe location while protecting the point of origin for fire cause determination.
8. Demonstrate how to stop the flow of water from a sprinkler head with sprinkler wedges or stoppers.
9. Operate a main control valve on an automatic sprinkler systems.

5.3.15	WATER SUPPLY	Connect a fire department pumper to a water supply as a member of a team, given supply or intake hose, hose tools, and a fire hydrant or static water source, so that connections are tight and water flow is unobstructed.
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COGNITIVE

1. Discuss loading and off-loading procedures for mobile water supply apparatus.
2. Describe proper fire hydrant operation.
3. Discuss suitable static water supply sources.
4. Explain procedures, and protocols for connecting to various water sources.

PSYCHOMOTOR

1. Demonstrate the ability to hand lay a supply hose.
2. Demonstrate steps to connect and place hard suction hose for drafting operation.
3. Deploy portable water tanks along with the equipment necessary to transfer water between and draft from them.
4. Complete hydrant-to-pumper hose connections for forward and reverse lays.
5. Connect supply hose to a hydrant and fully open and close the hydrant.

5.3.16	EXTINGUISHERS	Extinguish incipient Class A, Class B, and Class C fires, given a selection of portable fire extinguishers, so that the correct extinguisher is chosen, the fire is completely extinguished, and correct extinguisher-handling techniques are followed.
<p>COGNITIVE</p> <ol style="list-style-type: none"> 1. List the classifications of fire. 2. Discuss the types of rating system for and the risk associated with each class of fire. 3. Describe the operating methods of and limitations of portable extinguishers. <p>PSYCHOMOTOR</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to operate portable fire extinguisher. 2. Demonstrate how to safely approach a fire with a portable fire extinguisher. 3. Select an appropriate extinguisher based on the size and type of fire. 4. Demonstrate how to safely carry a portable extinguisher. 		
5.3.17	LIGHT SCENE	Illuminate the emergency scene, given fire service electrical equipment and an assignment, so that designated areas are illuminated and all equipment is operated within the manufacturer's listed safety precautions.
<p>COGNITIVE</p> <ol style="list-style-type: none"> 1. Discuss the safety principles and practices. 2. Describe power supply capabilities and limitations. 3. List the methods of light deployment. <p>PSYCHOMOTOR</p> <ol style="list-style-type: none"> 1. Perform the ability to operate department power supply and lighting equipment. 2. Demonstrate steps to deploy cords and connectors, reset ground-fault interrupter (GFI) devices, and locate lights for best effect. 		
5.3.18	SCENE SAFETY	Turn off building utilities, given tools and an assignment, so that the assignment is safely completed.
<p>COGNITIVE</p> <ol style="list-style-type: none"> 1. List the properties, principles, and safety concerns for electricity, gas, and water system. 2. Explain the methods for utility disconnect and associated dangers. 3. Describe the use of required safety equipment. <p>PSYCHOMOTOR</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to identify utility control devices. 2. Operate control valves or switches. 3. Perform an assessment for related hazards. 		
5.3.19	GROUND FIRE	Combat a ground cover fire operating as a member of a team, given protective clothing, SCBA (if needed), hose lines, extinguishers or hand tools, and an assignment, so that threats to property are reported, threats to personal safety are recognized, retreat is quickly accomplished when warranted, and the assignment is completed.
<p>COGNITIVE</p> <ol style="list-style-type: none"> 1. List the types of ground cover fires. 2. Describe the parts of ground cover fires. 3. Explain the methods to contain or suppress. 4. Discuss the safety principles and practices. <p>PSYCHOMOTOR</p> <ol style="list-style-type: none"> 1. Determine exposure threats based on fire spread potential and protect exposures. 2. Demonstrate the steps necessary to construct a fire line or extinguish with hand tools and maintain integrity of established fire lines. 3. Demonstrate the steps to suppress ground cover fires using water. 		

5.3.20	ROPES AND KNOTS	Tie a knot appropriate for hoisting a tool, given personnel protective equipment, tools, ropes, and an assignment, so that the knots used are appropriate for hoisting tools securely and as directed.
<p>COGNITIVE</p> <ol style="list-style-type: none"> 1. Discuss knot types and usages. 2. Describe the differences between life safety and utility rope. 3. Explain the reasons for placing rope out of service. 4. Discuss how the different types of knots are used for given tools, ropes, or situations. 5. Describe hoisting methods for tools and equipment. 6. Discuss how rope is used to support response activities. <p>PSYCHOMOTOR</p> <ol style="list-style-type: none"> 1. Demonstrate hoisting tools and equipment using ropes and the correct knot. 		
<p>5.5 PREPAREDNESS AND MAINTENANCE This duty shall involve performing activities that reduce the loss of life and property due to fire through response readiness, according to the JPRs in 5.5.1 and 5.5.2.</p>		
5.5.1	CLEAN AND CHECK EQUIPMENT	Clean and check ladders, ventilation equipment, SCBA, ropes, salvage equipment, and hand tools, given cleaning tools, cleaning supplies, and an assignment, so that equipment is clean and maintained according to manufacturer's or departmental guidelines, maintenance is recorded, and equipment is placed in a ready state or reported otherwise.
<p>COGNITIVE</p> <ol style="list-style-type: none"> 1. Explain the proper use of various cleaning solvents. 2. Discuss manufacturers or departmental guidelines for cleaning equipment and tools. 3. Describe proper methods to inspect, clean, and store a rope. 4. Describe proper methods to inspect, clean, and maintain a ladder. 5. Describe proper methods to maintain salvage covers. 6. Describe proper methods to properly maintain PPE. 7. List the types of cleaning methods for various tools and equipment. 8. Describe the importance of inspecting, cleaning, and properly maintaining hand tools and equipment. 9. Describe the importance of inspecting, cleaning, and properly maintaining power tools and equipment. 10. Summarize safety precautions for refilling SCBA. 11. Discuss the importance of SCBA inspection and testing to ensure that it is operational. <p>PSYCHOMOTOR</p> <ol style="list-style-type: none"> 1. Demonstrate the steps for inspecting an SCBA. 2. Demonstrate the steps for cleaning and sanitizing an SCBA. 3. Demonstrate the ability to manufacturer's or departmental guidelines for cleaning equipment and tools equipment, follow guidelines, and complete recording and reporting procedures. 		
5.5.2	FIRE HOSE	Clean, inspect, and return fire hose to service, given washing equipment, water, detergent, tools, and replacement gaskets, so that damage is noted and corrected, the hose is clean, and the equipment is placed in a ready state for service.
<p>COGNITIVE</p> <ol style="list-style-type: none"> 1. Discuss procedures for noting a defective hose and removing it from service, cleaning methods, and hose rolls and loads. <p>PSYCHOMOTOR</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to clean different types of hose. 2. Operate hose washing and drying equipment. 3. Perform hose inspections, mark defective hose, replace coupling gasket, roll and reload hose. 		

FIREFIGHTER II COURSE OBJECTIVES

6.1 GENERAL

For qualification at Level II, the Fire Fighter I shall meet the general knowledge requirements in 6.1.1, the general skill requirements in 6.1.2, the JPRs defined in Sections 6.2 through 6.5 of this standard, and the requirements defined in Chapter 5.

6.1.1	GENERAL KNOWLEDGE REQUIREMENTS	Responsibilities of the Fire Fighter II in assuming and transferring command within an incident management system, performing assigned duties in conformance with applicable NFPA and other safety regulations and AHJ procedures, and the role of a Fire Fighter II within the organization.
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COGNITIVE

1. Define the role and responsibilities of a Firefighter II.
2. Describe the roles and responsibilities for assuming and transferring command within IMS.
3. Discuss the responsibilities of the first-arriving fire fighters.
4. Discuss the applicable NFPA standards and other safety regulations.

6.1.2	GENERAL SKILL REQUIREMENTS	The ability to determine the need for command, organize and coordinate an incident management system until command is transferred, and function within an assigned role in an incident management system.
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PSYCHOMOTOR

1. Demonstrate the ability to determine the need for command.
2. Organize and coordinate an incident management system until command is transferred.

6.2 FIRE DEPARTMENT COMMUNICATION

This duty shall involve performing activities related to initiating and reporting responses, according to the JPRs in 6.2.1 and 6.2.2.

6.2.1	REPORTS	Complete a basic incident report, given the report forms, guidelines, and information, so that all pertinent information is recorded, the information is accurate, and the report is complete.
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COGNITIVE

1. Describe the steps in processing and initiating an emergency response.
2. List the information that should be included in a basic incident report.
3. Explain the purpose and usefulness of accurate reports.
4. Discuss the consequences of inaccurate reports.
5. List how to obtain the necessary information and the required coding procedures.

PSYCHOMOTOR

1. Demonstrate the ability to determine necessary codes.
2. Demonstrate the ability to proof reports and use the technology necessary to complete reports.

6.2.2	FIRE DEPARTMENT COMMUNICATION	Communicate the need for team assistance, given fire department communications equipment, SOPs, and a team, so that the supervisor is consistently informed of team needs, departmental SOPs are followed, and the assignment is accomplished safely.
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COGNITIVE

1. Discuss the standard operating procedures for alarm assignments and fire department radio communication procedures.

PSYCHOMOTOR

1. Demonstrate the ability to operate fire department communication equipment.

6.3 FIREGROUND OPERATIONS

This duty shall involve performing activities necessary to ensure life safety, fire control, and property conservation, according to the JPRs in 6.3.1 through 6.3.4.

6.3.1	LIQUID FIRE	Extinguish an ignitable liquid fire, operating as a member of a team, given an assignment, an attack line, personal protective equipment, a foam proportioning device, a nozzle, foam concentrates, and a water supply, so that the correct type of foam concentrate is selected for the given fuel and conditions, a properly proportioned foam stream is applied to the surface of the fuel to create and maintain a foam blanket, fire is extinguished, re-ignition is prevented, team protection is maintained with a foam stream, and the hazard is faced until retreat to safe haven is reached.
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COGNITIVE

1. Describe the methods by which foam prevents or controls a hazard. Describe the methods by which foam prevents or controls a hazard.
2. Describe the principles by which foam is generated.
3. Explain the causes for poor foam generation and corrective measures.
4. Describe the difference between hydrocarbon and polar solvent fuels and the concentrates that work on each.
5. Describe the characteristics, uses, and limitations of firefighting foams.
6. List the advantages and disadvantages of using fog nozzles versus foam nozzles for foam application.
7. Discuss the techniques for foam stream application.
8. Describe the hazard associated with foam usage.
9. List the methods used to reduce or avoid hazards.

PSYCHOMOTOR

1. Demonstrate the ability to prepare a foam concentrate supply for use.
2. Assemble foam stream components.
3. Demonstrate various foam application techniques.
4. Demonstrate proper approach and retreat techniques from spills as part of a coordinated team.

6.3.2	INTERIOR ATTACK	Coordinate an interior attack line for a team's accomplishment of an assignment in a structure fire, given attack lines, personnel, personal protective equipment, and tools, so that crew integrity is established; attack techniques are selected for the given level of the fire (e.g., attic, grade level, upper levels, or basement); attack techniques are communicated to the attack teams; constant team coordination is maintained; fire growth and development is continuously evaluated; search, rescue, and ventilation requirements are communicated or managed; hazards are reported to the attack teams; and incident command is apprised of changing conditions.
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COGNITIVE

1. Describe the proper selection of nozzle and hose for fire attack given different fire situations.
2. Discuss the selection of adapter and appliances to be used for specific fireground situations.
3. Describe the dangerous building conditions created by the fire and fire suppression activities.
4. List the indicators of a building collapse.
5. Discuss the effects of fire and fire suppression on wood, masonry (brick, block, stone), cast iron steel, reinforced concrete, gypsum wallboard, glass and plaster on lath.
6. Describe search and rescue and ventilation procedures.
7. List the indicators of structural instability.
8. Discuss the suppression approaches and practices for various types of structural fires.
9. Describe the association between specific tools and special forcible entry needs.

PSYCHOMOTOR

1. Demonstrate the ability to assemble a team, choose attack techniques for various levels of fire (e.g., attic, grade level, upper level, basement), evaluate and forecast a fire's growth and development.
2. Select tools for forcible entry.
3. Demonstrate how to incorporate search and rescue procedures and ventilation procedures in the completion of the attack team efforts.
4. Identify developing hazardous building or fire conditions.

6.3.3	FLAMMABLE GAS	Control a flammable gas cylinder fire, operating as a member of a team, given an assignment, a cylinder outside of a structure, an attack line, personal protective equipment, and tools, so that crew integrity is maintained, contents are identified, safe havens are identified prior to advancing, open valves are closed, flames are not extinguished unless the leaking gas is eliminated, the cylinder is cooled, cylinder integrity is evaluated, hazardous conditions are recognized and acted upon, and the cylinder is faced during approach and retreat.
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COGNITIVE

1. Discuss the characteristics of pressurized flammable gases.
2. List the elements of a gas cylinder.
3. Describe the effects of heat and pressure on closed cylinders.
4. Describe the boiling liquid expanding vapor explosion (BLEVE) signs and effects.
5. List the methods for identifying contents.
6. Explain how to identify safe havens before approaching flammable gas cylinder fires.
7. Discuss the water stream usage and demands for pressurized cylinders fires.
8. Discuss what to do if the fire is prematurely extinguished.
9. Describe the valve types and their operation.
10. Explain the alternative actions related to various hazards and when to retreat.

PSYCHOMOTOR

1. Demonstrate the ability to execute effective advances and retreat.
2. Demonstrate various techniques for water application.
3. Demonstrate the ability to assess cylinder integrity and changing cylinder conditions.
4. Demonstrate the proper control valve operation and choose effective procedures when conditions change.

6.3.4	PROTECT SCENE	Protect evidence of fire cause and origin, given a flashlight and overhaul tools, so that the evidence is noted and protected from further disturbance until investigators can arrive on the scene.
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COGNITIVE

1. Discuss the methods to assess origin and cause, type of evidence, and means to protect various types of evidence.
2. Describe the role and the relationship of Firefighter II, criminal investigators, and insurance investigator in fire investigation.
3. Describe the effects and problems associated with removing property or evidence from the scene.

PSYCHOMOTOR

1. Demonstrate the ability to locate the fire origin area, recognize possible causes, and protect the evidence.

6.4 RESCUE OPERATIONS

This duty shall involve performing activities related to accessing and disentangling victims from motor vehicle accidents and helping special rescue teams, according to the JPRs in 6.4.1 and 6.4.2.

6.4.1	EXTRICATE VICTIM	Extricate a victim entrapped in a motor vehicle as part of a team, given stabilization and extrication tools, so that the vehicle is stabilized, the victim is disentangled without further injury, and hazards are managed.
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COGNITIVE

1. Describe the fire department's role at a vehicle accident.
2. Describe the points of strength and weakness in auto body construction.
3. Explain the dangers associated with vehicle components and systems.
4. Describe the uses and limitations of hand and power extrication equipment.
5. Discuss the safety procedures when using various types of extrication equipment.

PSYCHOMOTOR

1. Demonstrate the ability to operate hand and power tools used for forcible entry and rescue as designed.
2. Demonstrate the usage of cribbing and shoring material.
3. Choose and apply the appropriate techniques for moving or removing vehicle roofs, doors, windshield, windows, steering wheels, columns, and the dashboard.

6.4.2	ASSIST TEAM	Assist rescue operation teams, given standard operating procedures, necessary rescue equipment, and an assignment, so that procedures are followed, rescue items are recognized and retrieved in the time as prescribed by the AHJ, and the assignment is completed.
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COGNITIVE

1. Discuss the firefighter's role at a technical rescue operation.
2. Describe the hazards associated with technical rescue operations.
3. Explain the types and uses for rescue tools, and rescue practices and goals.

PSYCHOMOTOR

1. Demonstrate the ability to identify and retrieve various types of rescue tools.
2. Demonstrate the ability to establish public barriers and assist rescue teams as a member of the team.

6.5 FIRE AND LIFE SAFETY INITIATIVES, PREPAREDNESS, AND MAINTENANCE

This duty shall involve performing activities related to reducing the loss of life and property due to fire through hazard identification, inspection, and response readiness, according to the JPRs in 6.5.1 through 6.5.5.

6.5.1	PREPARE SURVEY	Perform a fire safety survey in an occupied structure, given survey forms and procedures, so that fire and life safety hazards are identified, recommendations for their correction are made to the occupant, and unresolved issues are referred to the proper authority.
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COGNITIVE

1. Describe organizational policies and procedures.
2. Discuss the common causes of fire and their prevention.
3. Explain the importance of a public safety survey and public fire education programs to a fire department public relations and the community including the referral procedure.

PSYCHOMOTOR

1. Demonstrate the ability to complete forms, recognize hazards, match findings to pre-approved recommendations, and effectively communicate findings to occupants or referrals.

6.5.2	PRESENT INFORMATION	Present fire safety information to station visitors or small groups, given prepared materials, so that all information is presented, the information is accurate, and questions are answered or referred.
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COGNITIVE

1. Describe parts of informational materials and how to use them.
2. Discuss basic presentation skills and departmental standard operating procedures for giving fire station tours.

PSYCHOMOTOR

1. Demonstrate the ability to document presentations and to use prepared materials.

6.5.3	PRE-INCIDENT SURVEY	Prepare a pre-incident survey, given forms, necessary tools, and an assignment, so that all required occupancy information is recorded, items of concern are noted, and accurate sketches or diagrams are prepared.
<p>COGNITIVE</p> <ol style="list-style-type: none"> 1. Describe the sources of water supply for fire protection. 2. Discuss the fundamentals of fire suppression and detection systems. 3. Discuss the common symbols used in diagramming construction features, utilities, hazards, and fire protection systems. 4. Explain the departmental requirements for a pre-incident survey and form completion and the importance of accurate diagrams. <p>PSYCHOMOTOR</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to identify components of fire suppression and detection systems, sketch the site, buildings, and special features. 2. Demonstrate the ability to detect hazards and special considerations to include in the pre-incident sketch. 3. Demonstrate the ability to complete all related departmental forms. 		
6.5.4	MAINTAIN TOOLS	Maintain power plants, power tools, and lighting equipment, given tools and manufacturers' instructions, so that equipment is clean and maintained according to manufacturer and departmental guidelines, maintenance is recorded, and equipment is placed in a ready state or reported otherwise.
<p>COGNITIVE</p> <ol style="list-style-type: none"> 1. Discuss the types of cleaning methods. 2. Explain the correct cleaning solvents. 3. Describe manufacturer and departmental guidelines for maintaining equipment and its documentation. 4. Explain problem reporting practices. <p>PSYCHOMOTOR</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to select correct tools, follow guidelines, and complete recording and reporting procedures. 2. Demonstrate the ability to operate power plants, power tools, and lighting equipment. 		
6.5.5	ANNUAL HOST TEST	Perform an annual service test on fire hose, given a pump, a marking device, pressure gauges, a timer, record sheets, and related equipment, so that procedures are followed, the condition of the hose is evaluated, any damaged hose is removed from service, and the results are recorded.
<p>COGNITIVE</p> <ol style="list-style-type: none"> 1. Discuss the procedures for safely conducting hose service testing. 2. Describe the indicators that dictate any hose be moved from service. 3. Describe recording procedures for hose test results. <p>PSYCHOMOTOR</p> <ol style="list-style-type: none"> 1. Demonstrate the ability to operate hose testing equipment and nozzles. 2. Demonstrate the ability to record the results. 		

HAZARDOUS MATERIALS / WEAPONS OF MASS DESTRUCTION EMERGENCY AWARENESS AND OPERATIONS

This course meets the requirements for Awareness and Operations Level established in NFPA 1072 "Standard for Hazardous Materials / Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications".

CHAPTER 4 OHIO HAZMAT & WMD EMERGENCY AWARENESS AND OPERATIONS

4.1 GENERAL

- 4.1.1** Awareness personnel are those persons who, in the course of their normal duties, could encounter an emergency involving hazardous materials / weapons of mass destruction (WMD) and who are expected to recognize the presence of the hazardous materials / WMD, protect themselves, call for trained personnel, and secure the area.
- 4.1.2*** Awareness personnel shall meet the job performance requirements defined in Sections 4.2 through 4.4.
- 4.1.3** **General Knowledge Requirements.** Role of awareness personnel at a hazardous materials / WMD incident, location and contents of the AHJ emergency response plan, and standard operating procedures for awareness personnel.

4.2* RECOGNITION AND IDENTIFICATION

- 4.2.1** Recognize and identify the hazardous materials / WMD and hazards involved in a hazardous materials / WMD incident, given a hazardous materials / WMD incident, and approved reference sources, so that the presence of hazardous materials / WMD is recognized and the materials and their hazards are identified.

COGNITIVE

1. Define what hazardous materials and WMD are.
2. List basic hazards associated with classes and divisions.
3. Describe the indicators to the presence of hazardous materials including container shapes, NFPA 704 markings, globally harmonized system (GHS) markings, placards, labels, pipeline markings, other transportation markings, shipping papers with emergency response information, and other indicators;
4. Explain the steps for accessing information from the Emergency Response Guidebook (ERG) (current edition) using name of the material, UN / NA identification number, placard applied, or container identification charts; and types of hazard information available from the ERG, safety data sheets (SDS), shipping papers with emergency response information, and other approved reference sources.

PSYCHOMOTOR

1. Demonstrate ability to recognize indicators to the presence of hazardous materials / WMD.
2. Identify hazardous materials / WMD by name, UN / NA identification number, placard applied, or container identification charts.
3. Demonstrate ability to use the ERG, SDS, shipping papers with emergency response information, and other approved reference sources to identify hazardous materials / WMD and their potential fire, explosion, and health hazards.

4.3* INITIATE PROTECTIVE ACTIONS

4.3.1 Isolate the hazard area and deny entry at a hazardous materials / WMD incident, given a hazardous materials / WMD incident, policies and procedures, and approved reference sources, so that the hazard area is isolated and secured, personal safety procedures are followed, hazards are avoided or minimized, and additional people are not exposed to further harm.

COGNITIVE

1. Describe steps to use the ERG, SDS, shipping papers with emergency response information, and other approved reference sources to identify precautions to be taken to protect responders and the public.
2. Explain policies and procedures for isolating the hazard area and denying entry.
3. Describe the purpose of and methods for isolating the hazard area and denying entry.

PSYCHOMOTOR

1. Demonstrate ability to recognize precautions for protecting responders and the public.
2. Identify isolation areas, denying entry, and avoiding minimizing hazards.

4.4 NOTIFICATION

4.4.1 Initiate required notifications at a hazardous materials / WMD incident, given a hazardous materials / WMD incident, policies and procedures, and approved communications equipment, so that the notification process is initiated and the necessary information is communicated.

COGNITIVE

1. Identify policies and procedures for notification, reporting, and communications.
2. List the types of approved communications equipment.
3. Describe the operation of that equipment.

PSYCHOMOTOR

1. Demonstrate ability to operate approved communications equipment and to communicate in accordance with policies and procedures.

CHAPTER 5 OHIO HAZMAT & WMD OPERATIONS LEVEL FOR THE FIRST RESPONDER

5.1 GENERAL

- 5.1.1** Operations level responders are those persons who respond to hazardous materials / weapons of mass destruction (WMD) incidents for the purpose of implementing or supporting actions to protect nearby persons, the environment, or property from the effects of the release.
- 5.1.2** Operations level responders shall meet the job performance requirements defined in Sections 4.2 through 4.4.
- 5.1.3** Operations level responders shall meet the job performance requirements defined in Sections 5.2 through 5.6.
- 5.1.4** Operations level responders shall have additional competencies that are specific to the response mission and expected tasks as determined by the AHJ.
- 5.1.5** **General Knowledge Requirements.** Role of operations level responders at a hazardous materials / WMD incident; location and contents of AHJ emergency response plan and standard operating procedures for operations level responders, including those response operations for hazardous materials / WMD incidents.

5.2 IDENTIFY POTENTIAL HAZARDS

- 5.2.1** Identify the scope of the problem at a hazardous materials / WMD incident, given a hazardous materials / WMD incident, an assignment, policies and procedures, and approved reference sources, so that container types, materials, location of any release, and surrounding conditions are identified, hazard information is collected, the potential behavior of a material and its container is identified, and the potential hazards, harm, and outcomes associated with that behavior are identified.

COGNITIVE

1. Outline various hazard classes and divisions.
2. Classify types of containers.
3. Describe container identification markings, including piping and pipeline markings and contacting information.
4. Identify types of information to be collected during the hazardous materials / WMD incident survey.
5. Determine availability of shipping papers in transportation and of safety data sheets (SDS) at facilities.
6. Outline types of hazard information available from and how to contact CHEMTREC, CANUTEC, and SETIQ, governmental authorities, and manufacturers, shippers, and carriers.
7. Describe how to communicate with carrier representatives to reduce impact of a release.
8. Summarize basic physical and chemical properties, including boiling point, chemical reactivity, corrosivity (pH), flammable (explosive) range [LFL (LEL) and UFL (UEL)], flash point, ignition (auto ignition) temperature, particle size, persistence, physical state (solid, liquid, gas), radiation (ionizing and non-ionizing), specific gravity, toxic products of combustion, vapor density, vapor pressure, and water solubility.
9. Explain how to identify the behavior of a material and its container based on the material's physical and chemical properties and the hazards associated with the identified behavior.
10. Recognize examples of potential criminal and terrorist targets.
11. Identify indicators of possible criminal or terrorist activity for each of the following: chemical agents, biological agents, radiological agents, illicit laboratories (i.e., clandestine laboratories, weapons labs, ricin labs), and explosives.
12. Recognize additional hazards associated with terrorist or criminal activities, such as secondary devices.
13. Outline how to determine the likely harm and outcomes associated with the identified behavior and the surrounding conditions.

PSYCHOMOTOR

1. Identify container types, materials, location of release, and surrounding conditions at a hazardous materials / WMD incident.
2. Demonstrate the ability to collect hazard information;
3. Practice communicating with pipeline operators or carrier representatives.
4. Anticipate the likely behavior of the hazardous materials or WMD and its container.
5. Describe the potential hazards, harm, and outcomes associated with that behavior and the surrounding conditions.

5.3 IDENTIFY ACTIONS OPTIONS

5.3.1 Identify the action options for a hazardous materials / WMD incident, given a hazardous materials / WMD incident, an assignment, policies and procedures, approved reference sources, and the scope of the problem, so that response objectives, action options, safety precautions, suitability of approved personal protective equipment (PPE) available, and emergency decontamination needs are identified.

COGNITIVE

1. Outline policies and procedures for hazardous materials / WMD incident operations.
2. Identify basic components of an incident action plan (IAP).
3. Describe modes of operation (offensive, defensive, and nonintervention).
4. Illustrate types of response objectives and types of action options.
5. Summarize types of response information available from the Emergency Response Guidebook (ERG), safety data sheets (SDS), shipping papers with emergency response information, and other resources.
6. Summarize types of information available from and how to contact CHEMTREC, CANUTEC, and SETIQ, governmental authorities, and manufacturers, shippers, and carriers (highway, rail, water, air, pipeline).
7. Outline safety procedures.
8. Discuss risk analysis concepts.
9. Categorize the purpose, advantages, limitations, and uses of approved PPE to determine if PPE is suitable for the incident conditions.
10. Differentiate between exposure and contamination.
11. Identify contamination types, including sources and hazards of carcinogens at incident scenes.
12. List the routes of exposure.
13. Define the types of decontamination (emergency, mass, and technical).
14. Describe the purpose, advantages, and limitations of emergency decontamination.
15. Outline the procedures, tools, and equipment for performing emergency decontamination.

PSYCHOMOTOR

1. Identify the response objectives and action options based on the scope of the problem and available resources.
2. Determine whether approved PPE is suitable for the incident conditions.
3. Evaluate emergency decontamination needs based on the scope of the problem.

5.4 ACTION PLAN IMPLEMENTATION

5.4.1 Perform assigned tasks at a hazardous materials / WMD incident, given a hazardous materials / WMD incident; an assignment with limited potential of contact with hazardous materials / WMD, policies and procedures, the scope of the problem, approved tools, equipment, and PPE, so that protective actions and scene control are established and maintained, on-scene incident command is described, evidence is preserved, approved PPE is selected and used in the proper manner; exposures and personnel are protected; safety procedures are followed; hazards are avoided or minimized; assignments are completed; and gross decontamination of personnel, tools, equipment, and PPE is conducted in the field.

COGNITIVE

1. Describe scene control procedures.
2. Summarize procedures for protective actions, including evacuation and sheltering-in-place.
3. Outline procedures for ensuring coordinated communications between responders and to the public.
4. Discuss evidence recognition and preservation procedures.
5. Summarize the incident command organization, its purpose, importance, benefits, and organization of incident command at hazardous materials / WMD incidents.
6. Outline policies and procedures for implementing incident command at HazMat / WMD incidents.
7. Illustrate the capabilities, limitations, inspection, donning, working in, going through decontamination while wearing, and doffing approved PPE.
8. Discuss the signs and symptoms of thermal stress.
9. Explain the safety precautions when working at hazardous materials / WMD incidents.
10. Discuss the purpose, advantages, and limitations of gross decontamination.
11. Anticipate the need for gross decontamination in the field based on the task(s) performed and contamination received, including sources and hazards of carcinogens at incident scenes.
12. Describe gross decontamination procedures for personnel, tools, equipment, and PPE.
13. Outline procedures for cleaning, disinfecting, and inspecting tools, equipment, and PPE.

PSYCHOMOTOR

1. Establish and maintain scene control.
2. Recognize and preserve evidence.
3. Demonstrate the ability to inspect, don, work in, go through decontamination while wearing, and doff approved PPE.
4. Isolate contaminated tools, equipment, and PPE.
5. Conduct gross decontamination of contaminated personnel, tools, equipment, and PPE in the field.
6. Clean, disinfect, and inspect approved tools, equipment, and PPE.

5.5 EMERGENCY DECONTAMINATION

5.5.1 Perform emergency decontamination at a hazardous materials / WMD incident, given a hazardous materials / WMD incident that requires emergency decontamination; an assignment; scope of the problem; policies and procedures; and approved tools, equipment, and PPE for emergency decontamination, so that emergency decontamination needs are identified, approved PPE is selected and used, exposures and personnel are protected, safety procedures are followed, hazards are avoided or minimized, emergency decontamination is set up and implemented, and victims and responders are decontaminated.

COGNITIVE

1. Define contamination, cross contamination, and exposure.
2. Identify contamination types; routes of exposure; types of decontamination (emergency, mass, and technical).
3. Outline the purpose, advantages, and limitations of emergency decontamination.
4. Discuss policies and procedures for performing emergency decontamination.
5. List the approved tools and equipment for emergency decontamination.
6. Summarize hazard avoidance considerations for emergency decontamination.

PSYCHOMOTOR

1. Select an emergency decontamination method.
2. Set up emergency decontamination in a safe area.
3. Utilize PPE in the proper manner.
4. Implement emergency decontamination procedures.
5. Prevent the spread of contamination.
6. Avoid hazards during emergency decontamination.

5.6 PROGRESS EVALUATION AND REPORTING

5.6.1 Evaluate and report the progress of the assigned tasks for a hazardous materials / WMD incident, given a hazardous materials / WMD incident, an assignment, policies and procedures, status of assigned tasks, and approved communication tools and equipment, so that the effectiveness of the assigned tasks is evaluated and communicated to the supervisor, who can adjust the IAP as needed.

COGNITIVE

1. Review the components of progress reports.
2. Outline policies and procedures for evaluating and reporting progress.
3. Discuss the use of approved communication tools and equipment.
4. Identify the signs indicating improving, static, or deteriorating conditions based on the objectives of the action plan.
5. Summarize the circumstances under which it would be prudent to withdraw from a hazardous materials / WMD incident.

PSYCHOMOTOR

1. Assess incident status;
2. Determine whether the response objectives are being accomplished.
3. Demonstrate proper use of approved communications tools and equipment.
4. Properly communicate the status of assigned tasks.

COURAGE TO BE SAFE SIXTEEN LIFE SAFETY INITIATIVES OBJECTIVES

1. Define and advocate the need for a cultural change within the fire service relating to safety; incorporating leadership, management, supervision, accountability and personal responsibility.
2. Discuss the personal and organizational accountability for health and safety throughout the fire service.
3. Explain the focus on integration of risk management with incident management at all levels, including strategic, tactical and planning responsibilities.
4. Describe the importance of empowering all firefighters to stop unsafe practices.
5. Explain the significance of developing and implementing national standards for training, qualifications, and certification (including regular recertification) that are equally applicable to all firefighters based on the duties they are expected to perform.
6. Discuss the importance of developing and implementing national medical and physical fitness standards that are equally applicable to all firefighters, based on the duties they are expected to perform.
7. Explain the impact of a national research agenda and data collection system that relates to the 16 Firefighter Life Safety Initiatives.
8. Describe the utilization of available technology wherever it can produce higher levels of health and safety.
9. Discuss the significance of thoroughly investigating all firefighter fatalities, injuries, and near-misses.
10. Explain how grant programs should support the implementation of safe practices and procedures and / or mandate safe practices as an eligibility requirement.
11. Explain how national standards for emergency response policies and procedures should be developed and championed.
12. Discuss how national protocols for response to violent incidents should be developed and championed.
13. Describe why firefighters and their families must have access to counseling and psychological support.
14. Discuss how public education must receive more resources and be championed as a critical fire and life safety program.
15. Explain why advocacy must be strengthened for the enforcement of codes and the installation of home fire sprinklers.
16. Discuss how safety must be a primary consideration in the design of apparatus and equipment.